GUIDE TO EMERGENCY MANAGEMENT AND RELATED TERMS, DEFINITIONS, CONCEPTS, ACRONYMS, ORGANIZATIONS, PROGRAMS, GUIDANCE, EXECUTIVE ORDERS & LEGISLATION

A Tutorial on Emergency Management, Broadly Defined, Past and Present

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"Not until terms and concepts have been clearly defined can one hope to make any progress in examining the question clearly and simply and expect the reader to share one's views."
(**Carl Von Clausewitz**, *On War*, Princeton University Press, 1976, p. 132)

NOTE: This is not a comprehensive, definitive, exhaustive or official treatment of "emergency management" and related terms, definitions, acronyms, programs or legislation. It is simply a collection of terms, definitions, acronyms, and program and legislative descriptions and pulled together into a single document as time and opportunity have allowed to be assembled.

The original "Emergency Management-Related Terms and Definitions Guide" was developed as a student handout in an Introduction to Emergency Management college course taught by the author in 1999 and has been maintained as time allows for the authors' own purposes, one of which is to continue supporting collegiate emergency management courses. Another is as an aid to quickly accessing hard-to-remember terms, definitions and acronyms, etc., particularly when not used on a regular basis.

At the time of original development the primary purpose was to demonstrate to the students the very wide range of definitions and meanings given to such words as "hazards," disasters," "emergencies," "risk," "vulnerability," and "emergency management." In the classroom productive time was spent trying to come to a group consensus on the variables comprising a definition of each word.

The thought then and now was that words make a difference and that an indicator of a profession and of professionalism is a shared understanding of (better yet, general consensus on) key terms, definitions, concepts and principles that are part of a body of knowledge for a profession. A shared understanding of key terms, definitions, concepts and principles is also a constituent element for the development of the academic discipline of Emergency Management.

The reception by Emergency Management collegiate faculty and students (as well as Emergency Management Professionals), over time, was such that a decision was made to expand the scope of the handout into other, mostly U.S. specific, emergency management and related terms and definitions.

After the creation of the Department of Homeland Security, and FEMA's incorporation into the DHS, the scope broadened again and also changed to incorporate references to relevant legislation, programs and organizations.

More recently, as discussion of the development of international principles of disaster/emergency management seems to have gained momentum, a modest effort has been extended to the incorporation of international terms and definitions, particularly those originating from hazards-related United Nations organizations and bodies.

Note 1: Obsolete and historical terms, definitions, etc. are included as an aid to understating such terms when encountered.

Note 2: A bibliography of sources cited is at that the end of the document. All within-text citation sources have been included in this bibliography.

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Terms, Definitions, Acronyms, Programs, Concepts, Organizations, Guidance, Legislation Alphabetically Organized – Full References at the End

A Zone: "A Zone is defined as the Special Flood Hazard Area shown on a community's Flood Insurance Rate Map. The A Zone is the area subject to inundation during a 100-year flood, which is the flood elevation that has a 1-percent chance of being equaled or exceeded each year. There are several categories of A Zones, including AO (shallow sheet flow or ponding; average flood depths are shown); AH Zones (shallow flooding; base flood elevations are shown); numbered A and AE Zones (base flood elevations are shown); and unnumbered A Zones (no base flood elevations are provided because detailed hydraulic analyses were not performed)." (**FEMA**, *Reducing Damage from Localized Flooding – A Guide for Communities* (FEMA 511), 2005, vii)

AAC: After Action Conference, HSEEP. (**FEMA**, *About HSEEP*, 2008)

AAC: Applicant Assistance Center. (**FEMA**, *FAAT List* (FEMA 524), 2005, p. 1)

AAR: After Action Report. (**DHS**, *TCL*, 2007, p. 30)

AAR: After Action Review. (**Dept. of Army**, *WMD-CST Operations*, Dec. 2007, Glossary 1)

AAR/IP: After Action Report/Improvement Plan. (**FEMA**, *About HSEEP*, 2008)

ABCP: Associate Business Continuity Planner, DRII.

ABM: Anti-Ballistic Missile.

ABO: Agents of Biological Origin. (**FEMA**, *FAAT List* (FEMA 524), 2005, p. 2)

A-Bomb: "An abbreviation for atomic bomb." (**Glasstone**, *Effects of Nuclear Weapons*, 1977, Glossary, p. 629)

ACADA: Automatic Chemical Agent Detection and Alarm. (**FEMA**, *FAAT List*, 2005, p. 2)

ACAMS: Automated Critical Asset Management System. (**DHS,** *NIPP*, 2006, p. 101)

ACBIRC: Advanced Chemical and Biological Integrated Response Course, DOD.

ACC: Acute Care Center. (**CA EMSA**. *Hospital Incident Command Sys. Guidebook*, 2006, 206)

ACC: Agency Command Center. (**FEMA**, *FAAT List* (FEMA 524), 2005, p. 2)

Acceleration: "A change in velocity with time; in seismology and in earthquake engineering, it is expressed as a fraction of gravity (g), with reference to vibrations of the ground or of a structure." (**UN DHA**, *Glossary, Disaster Management*, 1992, p. 16)

Acceptable Down Time: "The period of time a function or activity can be disrupted without significant impact to production, customer service, revenue, or public confidence. Each business activity must develop its individual maximum allowable down time. Also referred to as Maximum Allowable Recovery Time." (Jones, *Critical Incident Protocol*, 2000, p. 37)

Acceptable Risk: "**AN ACCEPTABLE LEVEL OF RISK** for regulations and special permits is established by consideration of risk, cost/benefit and public comments. Relative or comparative risk analysis is most often used where quantitative risk analysis is not practical or justified. Public participation is important in a risk analysis process, not only for enhancing the public's understanding of the risks associated with hazardous materials transportation, but also for insuring that the point of view of all major segments of the population-at-risk is included in the analyses process. Risk and cost/benefit analysis are important tools in informing the public about the actual risk and cost as opposed to the perceived risk and cost involved in an activity. Through such a public process PHMSA [Pipeline and Hazardous Materials Safety Administration] establishes hazard classification, hazard communication, packaging, and operational control standards." (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

Acceptable Risk: That level of risk that is sufficiently low that society is comfortable with it. Society does not generally consider expenditure in further reducing such risks justifiable. (**Australian National** 1994)

Acceptable Risk: Degree of humans and material loss that is perceived as tolerable in actions to minimize disaster risk. (**Nimpuno** 1998)

Acceptable Risk: Risk tolerance.

Given that the provision of absolute safety is impossible, there is great sense in trying to determine the level of risk which is acceptable for any activity or situation. Thus, when a hazard is being managed, the financial and other resources allocated to the task should theoretically match the degree of threat posed by the hazard, as indicated by the rank of the risk….

One must always specify acceptable *to whom* and that implies a conscious decision based on all the available information….

The 1993 floods in the upper Mississippi river basin had an estimated return period of more than one in 200 years, yet some people who were flooded asserted that this event should now be regarded as an unacceptable risk. Such arguments ignore both the economic and social benefits derived by those communities from their floodplain location over the previous 100 years or so, when few flood losses occurred, and the cost to the taxpayer implied in protecting floodplain basins against a flood of the 1993 magnitude. (**Smith** 1996, 57)

Acceptable Risk: Degree of human and material loss that is perceived by the community or relevant authorities as tolerable in actions to minimize disaster risk. (**UN DHA**, *Internationally Agreed Glossary of Basic Terms Related to Disaster* Management, 1992, p.16)

Acceptable Risk: "The level of loss a society or community considers acceptable given existing social, economic, political, cultural, technical and environmental conditions." (**UN ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, 2004, p. 1)

Accepted Risk: "An approach that does nothing with a risk, but rather prepares for and deals with the consequences of a risk should it occur. No risk management resources are expended in dealing with accepted risks." (**DOA**, *Infrastructure Risk Management (Army)*, 2004, p. 12)

Access Disaster Risk Assessment Model: "A model that explores how an individual or groups relative resilience to disasters is impacted by differences in access to the economic or political resources needed to secure a livelihood. The strengths of the model are that it provides a broad view of vulnerability including root causes, it gives weight to natural hazards, and it provides a framework for looking at livelihoods and vulnerability. The limitation of the model, is that it is a tool for explaining vulnerability, not for measuring it. The model cannot be applied operationally without a great deal of data collection and analysis." (**UN Disaster Assessment Portal**, *Techniques Used in Disaster Risk Assessment*, 2008)

Accident: "The word 'accidental' carries with it the connotations of both something that occurs by chance and something non-essential or incidental…. The thesis that 'accidents will happen' and that therefore nothing can be done to prevent their occurrence reaches its logical fulfillment in the thesis of Charles Perrow that accidents are so inevitable and therefore non-preventable that we are even justified in calling them 'normal'" (**Allinson** 1993 15-16).

Accident: "Unintended damaging event, industrial mishap" (**D&E Reference Center** 1998).

Accident: "An unexpected or undesirable event, especially one causing injury to a small number of individuals and/or modest damage to physical structures. Examples would be automotive accidents or damage from lightning striking a house." (**Drabek** 1996, Session 2, p. 3)

Accident: "…situations in which an occasion can be handled by…emergency organizations. The demands that are made on the community are within the scope of domain responsibility of the usual emergency organizations such as police, fire, medical and health personnel. Such accidents create needs (and damage) which are limited to the accident scene and so few other community facilities are damaged. Thus, the emergency response is delimited in both location and to the range of emergency activities. The primary burden of emergency response falls on those organizations that incorporate clearly deferred emergency responsibility into their domains. When the emergency tasks are completed, there are few vestiges of the accident or lasting effects on the community structure" (**Dynes** 1998, 117).

Accident: "An unexpected occurrence, failure or loss with the potential for harming human life, property or the environment." (**European Environment Agency**, *EEA Environmental Glossary)*

Accident: "The very language used to describe the [TMI] accident revealed the very diverse perceptions that enter such interpretations. Was it an accident or an incident? A catastrophe or a mishap? A disaster or an event? A technical failure or a simple mechanical breakdown?" (**Nelkin** 1981, 135).

Accident: An event which only requires the response of established organizations – expansion or actions such as going to extra shifts is not called for. (**Quarantelli** 1987, 25)

Accident: "The evidence…suggests that accidents are not the product of divine caprice, nor of a set of random chance events which are not likely to recur, but that they are incidents, created by people, which can be analyzed, and that the lessons learned from that analysis, if implemented, will help to prevent similar events from taking place again." (**Toft** 1992, 58)

Accident, Technological: "Technological accidents…are almost never understood as the way the world of chance sorts itself out. They provoke outrage rather than acceptance or resignation. They generate a feeling that the thing ought not have happened, that someone is at fault, that victims deserve not only compassion and compensation but something akin to what lawyers call punitive damages." (**Erikson**, 1989, 143)

Accountability: "Everyone, including private individuals and organizations and government agencies and officials, should be accountable for their actions before, during and after an emergency." (**ACLU**, *Pandemic Preparedness*, 2008, 7)

Accreditation: "Empowers certifying/qualifying organizations with the authority to declare an individual/organization capable of performing critical tasks and capabilities." (**Capital Health Region**, *ICS100: Incident Command System Training Student* Manual, March 2007, p. 50)

ACE: Army Corps of Engineers (correct acronym usage is USACE).

ACECenter: Assessment of Catastrophic Events Center, Defense Threat Reduction Agency, Fort Belvoir, VA. (**DTRA/DOD**, *ACECenter Public Page*)

ACEHR: Advisory Committee on Earthquake Hazards Reduction.

ACEP: American College of Emergency Physicians.

ACF: Alternate Care Facility. (**FEMA**, *FAAT List* (FEMA 524), 2005, p. 2)

ACFM: Advanced Certified Floodplain Manager. (**FEMA**, *FAAT List* (FEMA 524), 2005, 2)

AC/IC: Area Command/Incident Command. (**DHS**, *JFO Activation and Operations*, 2006, 1)

Acid Rain: "Rain containing dissolved acidic compounds, resulting from chemical pollution of the atmosphere by sulphur and nitrogen compounds. When deposited these increase the acidity of the soil and water causing agricultural and ecological damage." (**UNDHA**, *DM Glossary*, 1992, 16)

ACP: Alternate Command Post. (**FEMA**, *FAAT List* (FEMA 524), 2005, p. 3)

ACP: Area Command Post. (**FEMA**, *FAAT List* (FEMA 524), 2005, p. 3)

ACP: Area Contingency Plan. (**FEMA**, *FAAT List* (FEMA 524), 2005, p. 3)

ACP: Association of Contingency Planners.

ACPSEM: Advisory Council on Professional Standards for Emergency Managers. (**FEMA**, *FAAT List* (FEMA 524), 2005, p. 3)

ACS: Alternative Care Sites. (**Trust for America's Health**, *Ready or Not? 2007*, p. 64)

ACT: Area Command Team. (**Little Hoover Com**., *Safeguarding the Golden Gate*, 2006, 22)

ACTFAST: Agent Characteristics and Toxicity – First Aid and Special Treatment. (**FEMA**, *Compendium of Federal Terrorism Training Courses*, 2003, p. 6)

ACTIC: Arizona Counter-Terrorism InforCenter.

Action Officer (AO): "An individual assigned by a Federal agency to manage a specific mission assignment issued to that Federal agency." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007. p. 55)

Action Request Form (ARF): "The Action Request Form (ARF) is the form that the State, Federal agencies, and FEMA managers use for requesting Federal assistance that may result in a mission assignment, the amendment of an existing mission assignment, or the issuance of a mission assignment task order." (**FEMA**, *Mission Assignment SOPs…Draft*, July 2007. p. 16)

Action Tracker (AT): "The AT is assigned to the Operations Section (NRCC, RRCC and JFO) and is responsible for maintaining a log of all Action Request Forms (ARFs) that are submitted to the Operations Section." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, 6)

Actions: "Actions are specific actions that help you achieve your goals and objectives. For example:

- Elevate three historic structures located in the downtown district.
- Sponsor a community fair to promote wildfire defensible space.
- Retrofit the police department to withstand high wind damage." (**FEMA**, *Developing the Mitigation Plan* (FEMA 386-3), 2003, p. 1-1)

Activation: "The implementation of business continuity capabilities, procedures, activities, and plans in response to an emergency or disaster declaration; the execution of the recovery plan. Similar terms: Declaration, Invocation." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 45)

Activity Process Flow Map: "An Activity Process Flow Map shows the major activities that are performed with the capability and how the capability links to other capabilities." (**DHS**, *TCL*, 2007, p. 8)

Acts of God: Natural disasters or freak accidents. (**Birkland** 1997, 2.)

> "When society seems to have formed a consensus that the event was an 'act of God,' such as a natural disaster or freak accident, our attention turns to what we can do to help the victims. But when the disaster is the result of human failings – poor design, operator error, 'corporate greed,' or 'government neglect' – our attention turns to the voluntary acceptance of responsibility for an event or to the more coercive process of fixing blame. Boards of inquiry are formed, legislatures hold hearings, and reports are issued, all in hopes of 'learning something from this incident' to ensure that something similar does not happen again or in the case of 'unavoidable' disasters, in hopes of improving our preparation for and response to disasters" (**Birkland** 1997, 2).

Acts of God: A fatalistic "syndrome whereby individuals feel no personal responsibility for hazard response and wish to avoid expenditure on risk reduction" (**Smith** 1996, 70).

Actual Event: "A disaster (natural or man-made) that has warranted action to protect life, property, environment, public health or safety. Natural disasters include earthquakes, hurricanes, tornadoes, floods, etc.; man-made (either intentional or accidental) incidents can include chemical spills, terrorist attacks, explosives, biological attacks, etc." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 1)

Actual Risk: "Actual risk reflects the combination of…two factors…(1) probability, the likelihood, quantitative or qualitative, that an adverse event would occur; and (2) consequences, the damage resulting from the event, should it occur." (**GAO**, *Protection of Chemical and Water Infrastructure*, 2005, p. 24-25)

Acute Exposure: "A contact between an agent and a target occurring over a short time, generally less than a day." (**European Environment Agency**, *EEA Environmental Glossary*)

Acutely Toxic Chemicals: "Chemicals that can cause severe short- and long-term health effects after a single, brief exposure (short duration). These chemicals (when ingested, inhaled, or absorbed through the skin) can cause damage to living tissue, impairment of the central nervous system, severe illness, or, in extreme cases, death." (**EPA**, *Technical Guidance for Hazards Analysis: Emergency Planning for Extremely Hazardous Substances*, 1987, p. A-4)

ADA: Americans with Disabilities Act.

ADAMS: Automated Disaster Assistance Management System. (Defunct)

Adaptive Planning: ADAPTIVE PLANNING allows combatant commanders to produce plans significantly faster and to a higher level of quality. Rapid planning and greater efficiency are achieved through clear, "up-front" strategic guidance; iterative dialogue among senior leaders; parallel plan development and collaboration across multiple planning levels; and a suite of net-centric and execution tools with real-time access to relevant data. Participation by the Joint Planning and Execution Community (JPEC) is still a requirement (**Figure 1-1)** so development of the plan, in-progress reviews (IPRs), coordination among supporting commanders, agencies, and Services, reviews by the Joint Staff, and conferences of JPEC members can take as few as four months, or the full two- year planning cycle." (**JFSC**, *Joint Transition Course: Planning Primer*, 2005, p. 1-9)

Adaptive Planning: "*Adaptive Planning* is the joint capability to create and revise plans rapidly and systematically, as circumstances require. It occurs in a networked, collaborative environment, requires the regular involvement of senior leaders, and results in plans containing a range of viable options that can be adapted to defeat or deter an adversary to achieve national objectives. At full maturity, AP will form the backbone of a joint adaptive system supporting the development and execution of plans, preserving the best characteristics of present-day contingency and crisis planning with a common process."

[Background] "On December 13, 2005, Secretary of Defense Donald Rumsfeld approved the Adaptive Planning (AP) Roadmap and directed its "expeditious implementation." This act represented a significant shift in the way the Department of Defense (DOD) thinks about military planning. The impetus for change was a recognition that the accelerating pace and complexity of military operations require that the President, Secretary of Defense, and combatant commanders have the ability to respond quickly to new threats and challenges."] (**Klein**, "Adaptive Planning," 2007, p. 84)

ADDIE Model of Instructional Design: Analysis, Design, Development, Implementation, and Evaluation. (ODP, *Approach for Blended Learning*. Washington, DC: ODP, DOJ.

ADPC: Asian Disaster Preparedness Center, Bangkok, Thailand.

ADRC: Asian Disaster Reduction Center, Kobe Japan.

Advance Readiness Activities (NRF): "There are times when we are able to anticipate impending or emergent events that will require a national response, such as an upcoming hurricane season, a potential pandemic, or a period of heightened terrorist threat. We must capitalize on this critical window of opportunity to increase readiness activities. For example, we can pre-identify needs and fill gaps in our current capabilities or resources that will be required to address the specific nature of the forthcoming incident. We also will pre-position commodities such as water, ice, emergency meals, tarps, and other disaster supplies so they will be readily available for use. Additional advance readiness activities include establishing contracts with the private sector prior to an incident and developing pre-negotiated agreements with Federal departments and agencies to ensure that appropriate Federal resources are available during a crisis." (**White House**, *National Strategy for Homeland Security*, October 2007, p. 34)

Advanced National Seismic System (ANSS): "The mission of ANSS is to provide accurate and timely data and information products for seismic events, including their effects on buildings and structures, employing modern monitoring methods and technologies. This mission serves a basic function of the National Earthquake Hazards Reduction Program (NEHRP), and drives the four basic goals of the planned system:

- Establish and maintain an advanced infrastructure for seismic monitoring throughout the United States that operates with high performance standards, gathers critical technical data, and effectively provides information products and services to meet the Nation's needs. An Advanced National Seismic System should consist of modern seismographs, communication networks, data processing centers, and well-trained personnel; such an integrated system would constantly record and analyze seismic data and provide timely and reliable information on earthquakes and other seismic disturbances.

- Continuously monitor earthquakes and other seismic disturbances throughout the United States, including earthquakes that may cause a tsunami or precede a volcanic eruption, with special focus on regions of moderate to high hazard and risk.

- Thoroughly measure strong earthquake shaking at ground sites and in buildings and critical structures. Focus should be in urban areas and near major active fault zones to gather greatly needed data and information for reducing earthquake impacts on buildings and structures.

- Automatically broadcast information when a significant earthquake occurs, for immediate assessment of its impact. Where feasible, for sites at distance from the epicenter, broadcast an early warning seconds before strong shaking arrives. Provide similar capabilities for automated warning and alert for tsunamis and volcanic eruptions.

"To achieve these goals, ANSS will establish nationwide network of over 7000 earthquake sensor systems, serving all areas of the country subject to earthquake hazards and providing dense coverage in 26 at-risk urban areas (see map). Sensors will be located both in the ground and in buildings and other structures. The system will provide real-time earthquake information for emergency response personnel, provide engineers with information about building and site

response to strong shaking, and provide scientists with high-quality data needed to understand earthquake processes and structure and dynamics of the solid earth." (**USGS**, *ANSS*, 2007)

Adverse Selection, Insurance: "…only the customers posing the highest risks purchase the insurance." (*Financial Services Roundtable*, *Nation Unprepared for Mega-CATS*, 2007, 45)

Adverse Selection, Insurance: "Adverse selection' occurs when insurers cannot distinguish between less risky and more risky properties, although homeowners can. When premiums do not reflect differences in risk that are known to potential policyholders, those who buy insurance are often at greatest risk for the hazards covered. Adverse selection in the market for natural catastrophe suggests that homeowners who are at the highest risk of experiencing a natural catastrophe will buy available insurance." (**GAO**, *Natural Disasters: Public.…*, Nov 2007, 3)

ADVISE: Analysis, Dissemination, Visualization, Insight, and Semantic Enhancement.

Advisory Committee on Earthquake Hazards Reduction: "This Committee is charged with assessing trends and developments in the science and engineering of earthquake hazards reduction; the effectiveness of NEHRP; the need to revise NEHRP; and the management, coordination, and implementation of NEHRP." (**NEHRP**, *Annual Report*, 2007, p. 3)

Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction (Gillmore Commission). Established by Section 1405 of the National Defense Authorization Act for Fiscal Year 1999, Public Law 105–261 (H.R. 3616, 105th Congress, 2nd Session) (October 17, 1998). Led to publication of: *I. Assessing the Threat*. December 15, 1999, 123 pages, and, *II. Toward a National Strategy for Combating Terrorism*. December 15, 2000, 191 pages.

From 2nd annual report on five imperatives:

> We are impelled by the stark realization that a terrorist attack on some level inside our borders is inevitable and the United States must be ready. We are similarly convinced, however, that much of the legitimate fear associated with the prospect of a terrorist attack can be substantially reduced…. Specifically, we must:
> • craft a truly "national" strategy to address the threat of domestic terrorism—conventional, cyber, chemical, biological, radiological and nuclear—from the perspectives of deterrence, prevention, preparedness and response;
> • empower a senior authority to be in charge of our overall planning and preparation in the Federal Executive Branch, with special emphasis on preserving our civil liberties in a time of emergency;
> • consolidate the Congressional approach to legislation governing domestic preparedness for such attacks;
> • concentrate much more serious attention on state and local concerns and capabilities; and
> • strengthen functional capabilities across all levels of government for intelligence collection and information sharing; planning; training, equipping and exercising;

> research and development; health and medical; and across all first responder stakeholders—fire, law enforcement, emergency medical services and emergency management." (Note "To Our Readers.")

On "Enhanced" FEMA:

> "We considered the prospect of providing additional authority and responsibility to the Federal Emergency Management Agency. The "FEMA Option" was appealing because of its designation as the Lead Federal Agency for "consequence management," and its existing statutory and regulatory authority for disaster response. But we likewise discounted that option for three reasons:
>
> ♦ Domestic Only Responsibility—FEMA has a domestic-only focus. Once we made the determination that the Federal coordinating entity should have both foreign and domestic responsibility, this is not a viable option.
> ♦ Autonomy and Neutrality Issues—Even if FEMA were given additional authority to oversee the programs and budgets of other Federal agencies for combating terrorism (including the authority to direct other agencies to detail personnel to FEMA), it is likely be the case that the exercise of that authority would be viewed by other agencies as parochial, creating the type of interagency "turf" issues that have arisen in other contexts. By the same token, the person in FEMA with the responsibility for this coordination would be answerable to an internal hierarchy and not likely, therefore, to have the requisite autonomy.
> ♦ Lack of Visibility and Access—Injecting the responsibility for coordinating programs to combat terrorism into an existing agency with other programs was an issue. FEMA's responsibilities are much broader than simply consequence management for domestic terrorist attacks. Terrorism issues might be subordinated to FEMA's other programs. Moreover, the "director" of this activity in FEMA would not have the same measure of direct access to the President, as would the director of an entity in the Executive Office." (pp. E-1, E-2)

ADVON: Advanced Element, National Guard WMD Civil Support Teams. (**DA**, *WMD CST Operations*, 2007, p. 2-1)

AEC: Agency Emergency Coordinators. (**USACE**, *CDRP, Anchorage*, 2005, p. Y-1-3)

AEL: Authorized Equipment List. (**DHS**, *FY 2005 Homeland Security Grant Program: Introduction to Program Guidance*, 8 Dec 2004, slide 13)

AEM: Associate Emergency Manager (IAEM managed credential).

AER: Animal Emergency Response. (**FEMA**, *AER Positions Credentials*, 25 Oct 2007)

AFG: Assistance to Firefighters Grant. (**FEMA**, *FEMA Region III Annual Report FY 2007*)

AFIMS: Air Force Incident Management System. (**McGuire AFB**, *AF Implements IMS*, Feb 16, 2007)

AFMIC: Armed Forces Military Intelligence Center.

AFO: Area Field Office. (DHS *Joint Field Office Activation and Operations: Interagency Integrated Standard Operating Procedure, Appendixes and Annexes Version 8.3*, April 2006, 1)

AFR: Analysis of Federal Requirements.

AFRRI: Armed Forces Radiobiology Research Institute, DOD.

After Action Report/Improvement Plan (AAR/IP): "An After Action Report/Improvement Plan (AAR/IP) is the final product of an exercise. The AAR/IP has two components: an AAR, which captures observations and recommendations based on the exercise objectives as associated with the capabilities and tasks; and an IP, which identifies specific corrective actions, assigns them to responsible parties, and establishes targets for their completion. The lead evaluator and the exercise planning team draft the AAR and submit it to conference participants prior to an After Action Conference (see below). The draft AAR is distributed to conference participants for review no more than 30 days after exercise conduct. The final AAR/IP is an outcome of the After Action Conference and should be disseminated to participants no more than 60 days after exercise conduct." (**FEMA**, *About HSEEP*, 2008)

After Action Reports: "Reports that summarize and analyze performance in both exercises and actual events. The reports for exercises may also evaluate achievement of the selected exercise objectives and demonstration of the overall capabilities being exercised." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 1)

After Action Reports: "While after action reports can help emergency responders and managers tune their strategies, experienced emergency managers assert privately that these reports have become pro forma. Few officials are willing to publicly highlight their mistakes. None are authorized to question the wisdom of local or state policies that may have increased threats, vulnerabilities and consequences." (**Little Hoover**, *Safeguarding Golden*…, 2006, 58)

[Note: See, also, "Post Incident Critique"]

Aftershock: "Earthquakes that follow the largest shock of an earthquake sequence. They are smaller than the "mainshock" and can occur over a period of weeks, months, or years. In general, the larger the mainshock, the larger and more numerous the aftershocks and the longer they will continue." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

AGAUS: Adjutants General Association of the United States.

Agency for Toxic Substances and Disease Registry (ATSDR): "The Agency for Toxic Substances and Disease Registry is a federal public health agency. Its mission is to prevent exposure and adverse human health effects and diminished quality of life associated with

exposure to hazardous substances from waste sites, unplanned releases, and other sources of pollution present in the environment." (**CDC/ATSDR**, *Principles of Community Engagement*, 1997, Contributors section)

Agenda 21 (United Nations Conference on Environment and Development, 1992): "*Agenda 21* was adopted by more than 178 Governments at the popularly named Earth Summit held in Rio de Janerio, Brazil, in June 1992. As the whole of Agenda 21 is about the linkages between environment and development it is not surprising that there are many relevant sections in the document relating to disaster management: from addressing the uncertainties of climatic change (Chapter 9), to specific actions to manage fragile environments (i.e. Chapter 13 on Mountains, which includes an objective, paragraph 13.5, to generate information to establish databases and information systems to facilitate an evaluation of environmental risks and natural disasters in mountain ecosystems). Overall the most relevant chapter is the one on Promoting Sustainable Human Settlement Development (Chapter 7) which refers to *developing a "culture of safety" in all countries, especially those that are disaster-prone* (paragraph 7.60). Specific activities include, for example,: *7.29. All countries should consider, as appropriate, undertaking a comprehensive national inventory of their land resources in order to establish a land information system in which land resources will be classified according to their most appropriate uses and* ***environmentally fragile or disasterprone areas will be identified for special protection measures***." (WWF, Natural Security, 2008, p. 103)

Agents of Mass Injury: "Chemical, biological, and radiological agents should not be regarded as weapons of mass destruction, but potential agents of mass injury. In this respect, they differ completely from nuclear weapons. The link between injury caused by CBR agents and loss of life can be broken or mitigated by the provision of equipment, organization and training for emergency responders." (**World Association for Disaster and Emergency Medicine**, "The Provision of Care for Victims of Chemical, Biological, Radiological, and Nuclear Releases…,: Jan-Feb 2008, pp. 95-96)

AGR: Active Guard and Reserve.

Agroterrorism: "Agroterrorism is the deliberate introduction of a chemical or a disease agent, either against livestock/crops or into the food chain, for the purpose of undermining stability and/or generating fear." (**Florida Office of Agricultural Emergency Preparedness**, *About Us*, Accessed October 23, 2007; see, also, **CRS**, *Agroterrorism: Threats and Preparedness*, 2004)

AHA: American Hospital Association.

AHIMT: All Hazard Incident Management Team. (**USFA**, *AHIMT Technical Assistance Pgm*.)

AHRQ: Agency for Health Research and Quality.

AI: Area of Interest. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, p. 1-3)

Aidmatrix: "Aidmatrix – a nationwide donations management system designed to organize and track goods and resources. In cooperation with FEMA since 2006, the Aidmatrix Foundation

launched its web-based system to support states and members of the Voluntary Organizations Active in Disaster (VOAD). The network connects government, the private sector and nonprofit organizations to a database which tracks available resources in real time. (**FEMA**, *Preventing the "Second Disaster" – Aidmatrix Streamlines Post-Disaster Donations Process*, Jan 30, 2008)

Aidmatrix Foundation: "Leveraging leading-edge technologies from the corporate world, the Aidmatrix Foundation created a system which provides a simple but effective means of connecting donors with relief organizations. The system communicates offers and needs up and down the humanitarian relief supply chain, helping to get the right aid where it is needed at the appropriate time. The basic system was provided grant funding by FEMA/DHS and made available to States at no cost. States are encouraged to set up and be trained on the system before the need arises. Additional customizations can be performed at a reduced cost to the State or their designated foundation. Aidmatrix's training and customization services will be provided at discounted rates. To further reduce costs, States may seek private corporate sponsorships.

FEMA also is providing each State with the standard FEMA design. States also have the option of customizing and branding their website. Basic program functionality is available at no cost to each State's donations management lead agency and its voluntary networks as outlined above. Each State will have autonomy over its installation. Recognizing that connecting to the nonprofits on the ground is critical, the system includes links to the State Voluntary Organizations Active in Disaster (VOAD) member organizations. Customization options allow States to add additional nonprofit organizations, cities, and governmental agencies. Aidmatrix provides onsite user training, documentation, and demo environments. Aidmatrix Network provides several modules that cover a wide range of humanitarian aid relief donations coordination. These features will be phased in over time, and include:

• *In-Kind Donations Management* – The System allows States to establish a call center and national in-kind and State portals via the web.

• *Unaffiliated Volunteer Management* **–** the tool helps States manage the volunteer response and connects offers to agencies with needs efficiently and effectively. It enables smaller, often overlooked agencies to take advantage of the supply of volunteers and alleviate the pressure on the larger agencies and governments to provide more opportunities to help. (This feature is funded by FEMA in Phase II.)

• *Online Relief Warehouse Management* – Based on nonprofit warehouse management best practices, the tool leverages leading edge technology in a simple, user-friendly way to provide real-time visibility into relief warehouse activity and status for all stakeholders involved in a relief effort.

• *Financial Donations Management* **–** Allows States to quickly fundraise in response to specific disasters. The tool promotes the offering of financial donations by individuals and educates the general public on the most critical needs. In addition, the tool facilities workplace and group-based giving campaigns and can easily be customized for rapid response. This component is optional and intended to support a State's disaster cash donations plan. Each of these aspects of the Aidmatrix system for donations and volunteer management offers specific advantages to

consumers and end users." (**FEMA**, *Statements of William Eric Smith and Carlos J. Castillo,* July 31, 2008, pp. 9-10)

Aiming Area Concept: "A new planning concept of area vulnerability, the 'Aiming Area Concept,' was developed by FCDA during 1957. It is a more realistic basis for planning nonmilitary defenseive measures in line with the destructive power of nuclear weapons. It recognizes the fact that many geographical areas in the United States contain multiple potential targets. Advisory Bulletin 214 defined an 'aiming area' as a geographical area in which an emeny would probably place one or more nuclear weapons to assure the destruction of the target." (**FCDA**, *1957 Annual Report*, p. 1)

Air and Marine Operations Center, DHS. See Department of Homeland Security, A&MOC.

Air Burst: "The explosion of a nuclear weapon at such a height that the expanding fireball does not touch the earth's surface when the luminosity is a maximum (in the second pulse)." (**Glasstone**, *The Effects of Nuclear Weapons* (3rd Edition), 1977, Glossary, p. 629)

Air Domain: "Air Domain" is defined as the global airspace, including domestic, international, and foreign airspace, as well as all manned and unmanned aircraft operating, and people and cargo present in that airspace, and all aviation-related infrastructure" (DHS, *Domestic Outreach Plan*, 2007, 2)

Air Force Emergency Management (EM) Program: "Protection of Air Force personnel and operational resources is essential to successful Air Force operations. The primary missions of the Air Force Emergency Management (EM) program (formally known as full-spectrum threat response) are to save lives; minimize the loss or degradation of resources; and continue, sustain, and restore operational capability in an all-hazards physical-threat environment at Air Force installations worldwide. Ancillary missions of the EM program are to support homeland defense civil support operations and to provide support to civil and host-nation authorities IAW DOD directives and through the appropriate COCOM. Major program elements of the EM program include warning and reporting, command and control (C2), planning, equipping, organizing, training, exercising, evaluating, response operations, and incident management." (**Maxwell AFB**, *AU-2: Guidelines for Command*, Sep 5, 2007 Draft, p. 19)

Air Force Incident Management System (AFIMS): "In 2006, Secretary of the Air Force Michael W. Wynne issued the memorandum introducing the AFIMS. This action was a direct response to two initiatives created under HSPD-5 -- the National Response Plan and the National Incident Management System -- work together to unify emergency management practices at all governmental levels. NRP and NIMS create a comprehensive approach to incident management that enhances the nation's ability to plan for, prevent, prepare for, respond to, and recover from terrorist attacks, major disasters and other emergencies. Secretary Wynne's memorandum outlined an all-hazards approach to organization and integration of emergency responders at Air Force installations throughout the world. Implementing AFIMS will involve the revision of Air Force directives to parallel existing NIMS and NRP policies and procedures and will require close coordination and communication within our responder community to ensure support to civil authorities. The Air Force will fully implement AFIMS by December 2009. The initial step

is application of the Air Force Emergency Management program by Air Force personnel. This newly designated program replaced the Full Spectrum Threat Response program Jan. 1, 2006; AFEM incorporates and applies key elements of NIMS and NRP across the Air Force.

The present practice of response agencies conducting individual tasks will change. AFIMS employs a unified response between responders at all levels, both civilian and military, and applies to Air Force installations and responders located within and outside the continental United States. (**McGuire AFB**, *AF Implements IMS*, Feb 16, 2007)

Alabama Insurance Underwriting Association (Alabama Beach Pool): "Alabama Insurance Underwriting Association (Alabama Beach Pool) is a voluntary unincorporated nonprofit association established to provide essential residential and commercial insurance coverage to the beach area counties of Baldwin and Mobile. Twelve percent of Alabamans live on the coast. Every licensed property insurer in the state is a member of the Alabama Beach Pool. The Beach Pool offers two types of policies: fire and extended coverage, and wind and hail. The Beach Pool offers coverage limits on residential buildings up to a maximum of $500,000, combined dwelling and contents. A hurricane deductible of 5 percent ($1,000 minimum) is applicable in the event of a named storm. Policies covering property located in certain areas may opt for a 2 percent hurricane deductible for an additional premium. The standard deductible for all other perils is $500. Buildings must conform to the Southern Standard Building Code…" (**GAO**, *Natural Disasters, Public Policy Options…*, Nov 2007, p. 69; see, also, p. 70)

ALARA: As low as reasonably achievable (relates to decontamination). (**Dept. of the Army**, *WMD-CST Operations*, December 2007, p. B-3)

Alarm: "Signal giving warning of danger." (**UNDHA**, *DM Glossary*, 1992, p. 17)

ALE: Annual Loss Exposure/Expectancy. (**DigitalCare**, *State of OR BC Workshop*, 2006, 47)

Alert: "Notification that a potential disaster situation exists or has occurred; direction for recipient to standby for possible activation of disaster recovery plan. A formal notification that an incident has occurred, which may develop into a disaster." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 46)

Alert: "The term 'alert' refers to any text, voice, video, or other information provided by an authorized official to provide situational awareness to the public and/or private sector about a potential or ongoing emergency situation that may require actions to protect life, health, and property. An alert does not necessarily require immediate actions to protect life, health, and property and is typically issued in connection with immediate danger." (**DHS**, *TCL*, 2007, 421)

Alert: "Advisory that hazard is approaching but is less imminent than implied by warning message. See also 'warning'." (**UNDHA,** *Disaster Management Glossary*, 1992, p. 17)

Alert America Convoy Program: "…developed during the later months of 1951. Operated by the Valley Foundation, Inc., in cooperation with FCDA, they are intended to carry civil defense information directly to the American people and to spearhead local civil defense education and

participation for recruitment. The exhibits offer highly dramatic visualizations of the entire civil defense problem. Through photographs, movies, three-dimensional mock-ups, and scientific action-dioramas they depict the possible uses of atomic energy in both peace and war…. Three of these exhibits, each mounted on a 10-truck convoy, will visit target cities in many States." (**FCDA**, *Annual Report 1951*, 1952, p. 27)

All-Effects Survey: "During the fiscal year [1973], an all-effects survey was developed and tested. This all-effects survey, which includes direct weapons effects and natural disaster protection, is being implemented during the summer of 1973. Also during the year, contracts were negotiated with several States to fund engineering personnel to conduct State shelter surveys. This action was in keeping with the adjusted national program designed to better meet State and local needs." (**DCPA**, *Foresight, DCPA Annual Report FY 73*, 1974, pp. 15-16)

All Disasters/Emergencies Are Local: "In recognition that all incidents begin locally, the agency must particularly work to strengthen the all-hazards response, planning, preparedness, mitigation and prevention capabilities at the local level." (**FEMA**, *FEMA Strategic Plan, Fiscal Years 2008-2013,* January 2008, p. 8)

All Disasters/Emergencies Are Local: "Local officials – more so than their state or federal counterparts – are familiar with the culture and needs of their community, where vulnerable residents reside, the resources and geography of the area and the threats and vulnerabilities facing their region…. The emergency plan recognizes that most emergency events truly are local and do not require more than the support of neighboring jurisdictions." (**Little Hoover Commission**, *Safeguarding the Golden State*…, 2007, 7)

All Hands Network: "All Hands is both an emergency management community and consulting consortium. All Hands was developed to support a network of emergency management, homeland security, and business continuity professionals who join together to share information and resources. The All Hands community includes public sector employees, consultants, volunteers and other professionals involved in emergency management, homeland security and business continuity." (**All Hands Consulting – All Hands Network**, *About All Hands*, 2006)

All-Hazard: "Any incident or event, natural or human caused, that requires an organized response by a public, private, and/or governmental entity in order to protect life, public health and safety, values to be protected, and to minimize any disruption of governmental, social, and economic services." (**USCG**, *IM Handbook*, 2006, Glossary 25-1)

All Hazard Civil Preparedness: "In keeping with President Nixon's desire to make the Federal Government more responsive to the needs of State and local governments, the Defense Civil Preparedness Agency (DCPA) program takes into account all of the hazards and dangers which confront the Nation's population today." (**DCPA**, "All-Hazard Civil Preparedness," *Foresight*, **1974**, p. 1)

All Hazard Incident Management Team (AHIMT): "A multi-agency/multi-jurisdiction team for extended incidents formed and managed at the State, regional or metropolitan level. Deployed as a team of 10-20 trained personnel to manage major and/or complex incidents

requiring a significant number of local, regional, and state resources, and incidents that extend into multiple operational periods and require a written IAP. May be utilized at incidents such as a tornado touchdown, earthquake, flood, or multi-day hostage/standoff situation, or at planned mass-gathering events. May initially manage larger, more complex incidents prior to arrival of and transition to a Type 2 or Type 1 IMT." (**USFA**, *About Incident Management Teams*, 2007)

All Hazard Incident Management Team (AHIMT) Technical Assistance Program: "The goal is to support the development of one All-Hazard IMT in each DHS Urban Area Security Initiative (UASI) region, each State, and other high-risk areas. DHS has identified the UASI regions as high-threat areas, and generally are comprised of major metropolitan areas. Those UASI regions setting up Multi-agency, multi-jurisdictional IMTs can request the training, as can States setting up similar IMTs. Funding, delivery support, and appropriate student cadre availability are also considerations. In addition, any area falling under the guidelines that have been addressed by DHS as having an immediate potential threat or hosting a National Special Security Event will get immediate consideration." (**USFA**, *AHIMT Technical Assistance Program*, 2007)

All Hazard Survey: This "activity conducted on-site (at the locality) consists of surveying local needs and making an 'all-hazard' evaluation, i.e., determining what type of natural or other disaster the locality has experienced or might experience in the future." (**DCPA**, *On-Site Assistance* (MP 63), 1974, p. 10)

All-Hazards: "The spectrum of all types of hazards including accidents, technological events, natural disasters, terrorist attacks, warfare, and chemical, biological including pandemic influenza, radiological, nuclear, or explosive events." (**DHS**, *Fed. Cont. Direct. 1*, 2007, p. P-1)

All-Hazards: "Definition. Grouping classification encompassing all conditions, environmental or manmade, that have the potential to cause injury, or death; damage to or loss of equipment, infrastructure services, or property; or alternately causing functional degradation to societal, economic or environmental aspects. Annotation: All hazards preparedness ensures that if disaster occurs, people are ready to get through it safely, and respond to it effectively. FEMA began development of an Integrated Emergency Management System with an all-hazards approach that included 'direction, control and warning systems which are common to the full range of emergencies from small isolated events to the ultimate emergency – war." (**DHS**, *Lexicon*, October 23, 2007, p. 1)

All-Hazards: "Our fire services are the original "all-hazards" agencies – responding to everything from forest fires to toxic chemical spills to medical emergencies. Your unparalleled experience has been a critical asset as we have worked to shape our own "all-hazard" Department and build capacities to prepare, prevent and respond to all manner of threats – whether man-made or natural disasters." (**DHS**, *Remarks by Secretary Michael Chertoff, U.S. Department of Homeland Security at the International Association of Fire Chiefs Leadership Summit*, November 4, 2005)

All-Hazards: "An approach for prevention, protection, preparedness, response, and recovery that addresses a full range of threats and hazards, including domestic terrorist attacks, natural and manmade disasters, accidental disruptions, and other emergencies." (**DHS,** *NIPP*, 2006, p. 103)

All Hazards: "Any incident, natural or manmade, that warrants action to protect life, property, environment, public health or safety, and minimize disruptions of government, social, or economic activities." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 147; see as well. National Response Framework Resource Center Glossary/Acronyms, September 2007 draft.)

All Hazards: "All-Hazards refers to preparedness for domestic terrorist attacks, major natural or man-made disasters, and other emergencies." (**NCR**, *National Capital Region Homeland Security Strategic Plan 2007-2009 – Overview*, August 2006, p. 4)

All Hazards Approach: Since 9/11, the…Administration has adopted an all-hazards, one-size-fits-all approach to disaster planning. By assuming that the same preparedness model can be applied to any kind of disaster —whether biological, chemical, explosive, natural or nuclear— the all-hazards approach fails to take into account essential specifics of the nature of the virus or bacteria, how it is transmitted, and whether infection can be prevented or treated." (**ACLU**, *Pandemic Preparedness*, 2008, 6)

"Unfortunately, this approach is virtually useless, if not counterproductive. That is because each hazard has its own unique features. Planning for levee protection in New Orleans will not help prepare for an earthquake in San Francisco or a terrorist explosion in New York or Washington, D.C., anymore than planning for a chemical or nuclear attack will help prepare us for a bird flu pandemic or a smallpox attack. Nor are generic all-hazards plans for a public health emergency, including "model" laws to implement mass quarantines, of any use in a storm, flood, fire, earthquake, chemical attack, or nuclear or conventional arms attack. The effect of the one-size-fits-all approach is to suggest that no matter what happens, be it flu or bioterrorism, a law enforcement/national security approach is required…. In principle, the idea that the country should be prepared for all types of potential emergencies is sound. In practice, however, planning for "all hazards" has failed to take into account the most important factor that drives disasters—the particular hazard itself, whether biological, chemical, explosive or nuclear." (**ACLU**, *Pandemic Prep*., 2008, 16)

All Hazards Approach: "The Civil Preparedness program of the seventies will emphasize the total spectrum of activities that local jurisdictions require and will place greater stress on the use and development of resources applicable to peacetime as well as wartime emergencies. The emphasis of the Defense Civil Preparedness Agency will be to help local governments improve their readiness for any type of emergency. This includes an all-hazards approach to emergency planning with consideration of all contingencies that a disaster may generate, including sudden or gradual onset of the disaster." (**DCPA**, *Local Disaster Preparedness Course Syllabus*, June **1973**, Preface)

All-Hazards Approach: "Emergency management must be able to respond to natural and manmade hazards, homeland security-related incidents, and other emergencies that may threaten the safety and well-being of citizens and communities. An all-hazards approach to emergency

preparedness encourages effective and consistent response to any disaster or emergency, regardless of the cause." (**DHS/ODP**, *FY2006 EMPG Program Guidance*, 2005, p. 6)

All-Hazards Approach: "The "all-hazards" approach to preparedness means we need to weigh the likelihood and consequences of a broad array of threats. These include, but are not limited to: extremes in weather, industrial hazards, viral pathogens, and of course, terrorism that can take many forms." (**Metropolitan Washington Council of Governments**, *National Capital Region Homeland Security Strategic Plan 2007-2009*, August 2006)

All-Hazards Approach: "An integrated hazard management strategy that incorporates planning for and consideration of all potential natural and technological hazards." (**National Science and Technology Council** 2005, 17)

All-Hazards Approach: "ALL-HAZARDS APPROACH.—In carrying out the responsibilities under this section, the Administrator shall coordinate the implementation of a risk-based, all-hazards strategy that builds those common capabilities necessary to prepare for, protect against, respond to, recover from, or mitigate against natural disasters, acts of terrorism, and other man-made disasters, while also building the unique capabilities necessary to prepare for, protect against, respond to, recover from, or mitigate against the risks of specific types of incidents that pose the greatest risk to the Nation." (**Post-Katrina Emergency Management Reform Act of 2006**, Title VI, Sec. 503, pp.1399-1400 of DHS Appropriations Act, 2007)

All-Hazards Approach: "The commonalities among all types of technological and natural disasters suggest that many of the same management strategies can apply to all such emergencies." (**Zymanek**, *Comprehensive Emergency Management*, 2007, p. 4)

All-Hazards Focus: "*Employ an "all-hazards" focus.* Hospitals must be prepared to respond to any type of emergency or disaster facing their communities, not just bioterrorism. Therefore, the title of and provisions in the law regarding how hospital readiness funding may be used should reflect this "all-hazards" planning focus." (**American Hospital Association**, *Protecting and Improving Care for Patients and Communities: Emergency Readiness*, 2006, p. 1)

All-Hazards Preparation: "As is often the case, what we predicted, worried about, doesn't come to pass; and what we don't think about, does come to pass -- which underscores the importance of all-hazards preparation. You're not necessarily going to know what the hazard is, but there will be a hazard, and you've got to be ready to deal with it." (**DHS**, *Remarks by Secretary Michael Chertoff to the National Congress for Secure Communities*, December 17, 2007)

All-Hazards Preparedness: "The term 'all-hazards preparedness' refers to preparedness for domestic terrorist attacks, major disasters, and other emergencies." (**WH,** *HSPD-8*, p.1, Dec. 2003)

All-Hazards Public Health System: "An all-hazards public health system is one that is able to respond to and protect citizens from the full spectrum of possible public health emergencies, including bioterrorism and naturally occurring health threats. An all-hazards system recognizes that preparing for one threat can have benefits that will help prepare public health departments for all potential threats. Under an all-hazards approach, the public health system prepares for and

is able to respond to unique concerns posed by different threats." (**Trust For America's Health**, *Ready or Not?* 2007, 11)

All-Hazards Taxonomy: (See, also Four Phases)

- Prevent
  - Detect Terrorist Threats
  - Control Access
  - Eliminate Threats
- Protect
  - Protect Physical/Cyber Assests & Systems
  - Mitigate Risks to Human & Animal Health
- Respond
  - Evaluate Incident
  - Minimize Impact
    - Manage Incident
    - Respond to Hazard
    - Implement Protective Acrtions
    - Conduct Search and Rescue
  - Care for Public
- Recover
  - Assist Public
  - Restore Environment
  - Restore Infrastructure. (FEMA, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 7)

All Perils Homeowners Insurance: An "all-perils homeowners insurance policy—would help create broad participation and could provide a private sector solution. But this option could also require subsidies for low-income residents and thus potentially create substantial costs for the federal government that would have to be balanced against money saved from reduced disaster relief." (**GAO**, *Natural Disasters: Public Policy Options*…, Nov 2007, 33)

All Risks: "…attack, man-made, and natural, in a federal-state-local partnership." (**NGA**, *CEM: A Governor's Guide*, 1979, p. 11)

All-WME: All Weapons of Mass Effect. (**DHS/OIG**, *ADVISE Report*, June 2007, Abbreviations)

Alluvial Fan: "An area at the base of a valley where the slope flattens out, allowing the floodwater to decrease in speed and spread out, dropping sediment over a fan-shaped area." (**ASFPM**, *National Flood Programs and Polices in Review—2007*, 2007, p. 92)

Alluvial Fan Flooding: "Flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flowpaths. Alluvial fan flooding is depicted on a Flood Insurance Rate Map (FIRM) as Zone AO, with a flood depth and velocity." (**FEMA**, *Alluvial Fan Flooding*, 2007)

Alpha Particle: "A particle emitted spontaneously from the nuclei of some radioactive elements. It is identical with a helium nucleus, having a mass of four units and an electric charge of two positive units." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, Gloss., 629)

ALS: Analytical Laboratory System. (**DA**, *WMD-CST Operations*, Dec. 2007, Glossary 1)

Alternate Facilities: "Locations, other than the primary facility, used to carry out essential functions, particularly in a continuity situation. "Alternate facilities" refers to not only other locations, but also nontraditional options such as working at home ("teleworking"), telecommuting, and mobile-office concepts." (**DHS**, *Fed. Cont. Direct. 1*, Nov 2007, p. P.1)

Alternate Site: "An alternate operating location to be used by business functions when the primary facilities are inaccessible. 1) Another location, computer center or work area designated for recovery. 2) Location, other than the main facility, that can be used to conduct business functions. 3) A location, other than the normal facility, used to process data and/or conduct critical business functions in the event of a disaster. Related Terms: Cold Site, Hot Site, Interim Site, Internal Hot site, Recovery Site, Warm Site." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 46)

Alternate Work Area: "Office recovery environment complete with necessary office infrastructure (desk, telephone, workstation, and associated hardware, communications, etc.); also referred to as Work Space or Alternative work site." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 46)

Alternative Care Sites: "Alternative care sites generally are defined as "locations, preexisting or created, that serve to expand the capacity of a hospital or community to accommodate or care for patients or to protect the general population from infected individuals during mass casualty incidents." [1]The Joint Commission on Accreditation of Healthcare Organizations lists 3 types of alternative care sites:

■**Facilities of opportunity**, which are defined as non-medical buildings which, because of their size or proximity to a medical center, can be adapted into surge hospitals;
■ **Mobile medical facilities**, which are mobile surge hospitals based on tractor-trailer platforms with surgical and intensive care capabilities; and
■ **Portable facilities**, which are mobile medical facilities that can be set up quickly and are fully equipped, self-contained, turnkey systems usually stored in a container system and based on military medical contingency planning."[2] (Trust for America's Health, Ready or Not 2007, p. 64)

AMAS: Alabama Mutual Aid System.

Amateur Radio Disaster Services (ARDS). Previously Amateur Radio Emergency Services.

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[1] Cites: C. Lam, et al. "The Prospect of Using Alternative Medical Care Facilities in an Influenza Pandemic." *Biosecurity and Bioterrorism* 4, no. 4 (2006): 385-392.
[2] Cites: Joint Commission on Accreditation of Healthcare Organizations. *Surge Hospitals: Providing Safe Care in Emergencies.* Tennessee: The Joint Commission, 2006.

American Homeland: "'American homeland' or 'homeland' means the United States, in a geographic sense." (**Homeland Security Act of 2002**, p. 3)

American Red Cross: "The American Red Cross is a supporting agency to the mass care functions of Emergency Support Function (ESF) #6. While it does not direct other NGOs, the American Red Cross takes the lead in integrating the efforts of the national NGOs that provide mass care services during response operations." (**DHS**, *NRF*, Jan 2008, 20)

American Red Cross: "The American Red Cross serves as the primary support agency to DHS for coordinating mass care support with other non-government organizations during disaster relief and CM operations. Support may include shelter, feeding, emergency first aid, disaster welfare information, bulk distribution, supportive counseling, blood, and blood products." (**JCS/DoD**, *Homeland Security* (JP 3-26)), 2005, p. II-21)

American Society for Testing and Materials (ASTM): ASTM International is one of the largest voluntary standards development organizations in the world….originally known as the American Society for Testing and Materials (ASTM), was formed over a century ago... Today, ASTM continues to play a leadership role in addressing the standardization needs of the global marketplace. Known for its best in class practices for standards development and delivery, ASTM is at the forefront in the use of innovative technology to help its members do standards development work, while also increasing the accessibility of ASTM International standards to the world." (**ASTM**, *About ASTM International*, 2007)

AMP: Acquisition Management Process. (**DHS**, *IPG FY 2011-2015 Draft*, Oct 2008, p. 6)

Amplitude: "The difference between zero level and peak of any wave such as a seismic wave." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 17)

AMS: Area Maritime Security.

AMSC: Area Maritime Security Committee. (**GAO**, *Maritime Security*, December 2007, p. iv)

AMSP: Area Maritime Security Plan. (**GAO**, *Maritime Security*, December 2007, p. 55)

Analysis: "An appraisal of the information and conclusions drawn from one or more assessments." (**DOA**, *Infrastructure Risk Management (Army)*, 2004, p. 12)

Analysis: "The comprehensive and systematic examination, assessment and evaluation of collected, processed and exploited information/data in order to identify significant facts and derive valid conclusions." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 34)

Analysis, Dissemination, Visualization, Insight, and Semantic Enhancement System. See Department of Homeland Security, ADVISE.

Analytical Laboratory System (ALS): "A C-130 air-transportable system that uses commercial, off-the-shelf equipment to conduct analysis of chemical warfare agents, toxic

industrial materials, and biological warfare agents at the incident site. It has the capability of establishing communications to local, state, and federal laboratories and other agencies for confirmatory analysis of the suspect agent." (**DA**, *WMD-CST Operations*, 2007, Glossary-7)

Analytical Red Teaming: "In *Prevention* Exercises, analytical red teaming is a *discussion-based* technique used to employ an adversary's perspective to advance security by providing an alternative view of threats, vulnerabilities, and countermeasures." (**FEMA**, *HSEEP Glossary*)

Anemometer: "Instrument which measures wind speed or wind speed and direction." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 17)

ANGI: Air National Guard Instruction. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary 1)

Animal Emergency Response Credentials (AER): (**FEMA**, *AER… Credentials*, 25 Oct 2007)

Annual Flood: "Highest peak discharge in a year." (**UNDHA**, *DM Glossary*, 1992, p. 18)

Annualized Loss Expectancy (ALE): "The Annualized Loss Expectancy (ALE) is the expected monetary loss that can be expected for an asset due to a risk over a one year period. It is defined as: ALE = SLE * ARO -- where SLE is the Single Loss Expectancy and ARO is the Annualized Rate of Occurrence.

An important feature of the Annualized Loss Expectancy is that it can be used directly in a cost-benefit analysis. If a threat or risk has an ALE of $5,000, then it may not be worth spending $10,000 per year on a security measure which will eliminate it.

One thing to remember when using the ALE value is that, when the Annualized Rate of Occurrence is of the order of one loss per year, there can be considerable variance in the actual loss. For example, suppose the ARO is 0.5 and the SLE is $10,000. The Annualized Loss Expectancy is then $5,000, a figure we may be comfortable with." (**Risky Thinking** (Risk Management, Disaster Recovery, and Business), *A Glossary of Risk Related Terms*, 2007)

Annualized Loss Exposure/Expectancy (ALE): "A risk management method of calculating loss based on a value and level of frequency." (**DigitalCare**, *State of OR BC Wkshop*, 2006, 47)

Annualized Rate of Occurrence: "The probability that a risk will occur in a particular year. For example, if insurance data suggests that a serious fire is likely to occur once in 25 years, then the annualized rate of occurrence is 1/25 = 0.04." (**Risky Thinking** (Risk Management, Disaster Recovery, and Business), *A Glossary of Risk Related Terms*, 2007)

Annex I to Homeland Security Presidential Directive 8, National Planning. "This Annex is intended to further enhance the preparedness of the United States by formally establishing a standard and comprehensive approach to national planning. It is meant to provide guidance for conducting planning in accordance with the Homeland Security Management System in the National Strategy for Homeland Security of 2007. (**White House**, *Annex I to HSPD*-8, 2007)

Anniversary Effect: "`As often happens immediately following a major flood event, the number of flood insurance policies in force… [increase]… But our experience…has shown many

of those new policies are not renewed after the first year or two if no new floods occur… People tend to forget how bad it was or think that something that bad couldn't possibly occur in the same place again. But they are sadly mistaken. These big flood events will happen again'." [Quote is that of FEMA NFIP Deputy Administrator Howard Leikin in 2002] "NFIP studies have documented the drop-off in policy counts when these policies reach their first or second anniversary of purchase, a phenomenon that has been termed the "anniversary effect." In many cases, the policy count returns to its pre-disaster level or below… flood insurance policies in force in the upper Midwest increased by an astounding 60.7 percent within a few months after the Upper Midwest Flood of April 1997, but a year later dropped dramatically to less than the number of policies in force the month before the flood." (**FEM**A, *FEMA Warns*…, 2002)

ANSS: Advanced National Seismic System. (**USGS**, *ANSS*, 2007)

Antecedent Precipitation Index: "Weighted summation of past daily precipitation amounts, used as an index of soil moisture." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 18)

Anticyclone: "(area of high pressure, high): A region where barometric pressure is high or relative to that in the surrounding regions at the same level." (**UNDHA**, *DM Glossary*, 1992, 17)

Antimicrobial: "An antimicrobial is a substance that kills or inhibits the growth of microbes such as bacteria, fungi, or viruses." (**GAO**, *Homeland Security: First Responders*, June 2008, 10)

Anti-Social Behavior: "With the exception of one suicide which was attributed to Hurricane Audrey [July 1957], there is no positive evidence of self-destructive acts. However, there is an abundance of evidence of anti-social behavior associated with the disaster

Anti-Terrorism: "AntiTerrorism - preventive in nature. I t entails using "passive and defensive measures... such as education, foreign liaison training, surveillance, and countersurveillance, designed to deter terrorist activities." It is an "integrated, comprehensive approach … to counter the terrorist threat The concept has two phases: proactive and reactive. The proactive phase encompasses the planning, resourcing, preventive measures, preparation, awareness education, and training that take place before a terrorist incident. The reactive phase includes the crisis management actions taken to resolve a terrorist incident."[3] (**DHS**, *The ODP Guidelines*…, 2003, Glossary, p. 1 (28))

Antiterrorism: "…generally used to describe passive or defensive measures against terrorism…" (**Sauter & Carafano** 2005, 261) See, also, Counterterrorism.

Anti-Terrorism CPTED Target Hardening:

- Assess threat, risk, and vulnerability;
- Balance CPTED strategies against the threat, risk, and
- vulnerability;
- Employ the appropriate CPTED [Crime Prevention through Environmental Design] measures, given the level of threat, risk, and vulnerability. Measures may include:

[3] Cites: Joint Tactics, Techniques, and Procedures for Antiterrorism Joint Pub 3-07.2. 17 March 1998.

- Install adequate security lighting;
- Use planters and bollards as impediments or obstacles to prevent cars or trucks from driving into or parking close to potential targets;
- Use security cameras in key locations;
- Increase police presence at sensitive locations;
- Use random inspection of trucks/vans entering target-rich environments;
- Establish protocol for searches of people and their possessions when entering large gatherings;
- Adopt biometric technology, where applicable, to enhance access control and identification. (**DHS**, *The ODP Guidelines*…, 2003, p. 15)

AO: Area of Operation. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, p. 1-3)

AO: Action Officer. (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 17)

AOR: Area(s) of Responsibility.

AP: Adaptive Planning.

APA: American Planning Association.

APCO. Association of Public Safety Communications Officials.

APHL: Association of Public Health Laboratories.

APHS/CT: Assistant to the President for Homeland Security and Counterterrorism (also serves as the National Continuity Coordinator). (**White House,** *HSPD-20*, May 9, 2007)

APIC: Association for Professionals in Infection Control and Epidemiology.

APIO: Advanced Public Information Officer Course. FEMA resident course taught at the Emergency Management Institute, Emmitsburg, MD.

APNSA: Assistant to the President for National Security Affairs. (**DHS**, *FCD 1*, Nov 2007, 13)

APO: Accountable Property Officer. (**FEMA**, *Mission Assignment SOPs Draft*, July 2007, 6)

Application Recovery: "The component of Disaster Recovery that deals specifically with the restoration of business system software and data after the processing platform has been restored or replaced. Similar terms: Business System Recovery." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 46)

Applied Technology Council (ATC): "…an organization which develops engineering resources for use in mitigating the effects of natural and other hazards on the built environment…" (**NEHRP**, *Annual Report*, 2007, p. 13; ATC, http://www.atcouncil.org/)

APTS: Association of Public Television Stations. (**FEMA**, *IPAWS Update*, June 2007, 4)

ARC: American (National) Red Cross.

Architects and Engineers Professional Development Program: "In recognition of the greater need for preparedness to meet the full spectrum of disasters – natural as well as nuclear – DCPA initiated a broader program during fiscal year 1973. A new professional development course titled Multi-Protection Design was developed and pilot-tested during the year, with a total of more than 600 architects and engineers in attendance. These courses emphasized slanting techniques to be used during the design phase in new construction or in the remodeling of existing structures at little or no additional cost to the building owner. Application of these techniques could result in lifesaving shelters to protect people from the effects of natural disasters such as hurricanes, earthquakes, and tornadoes, as well as from the effects of nuclear attack…. To provide architects, engineers, and others with technical information on environmental hazards and natural disasters as well as the effects of nuclear weapons, new technical reports were developed and disseminated. New buildings providing protection against such hazards as vandalism, noise or pollution, floods, tornadoes, hurricanes, as well as fallout radiation, and electromagnetic pulse (EMP) were illustrated and described in various technical publications to show architects and their consulting engineers how protection against these hazards can be accomplished at little cost." (**DCPA**, *Foresight, Annual Report FY73*, 1974, 16)

Ardent Sentry 2006: US Northern Command Exercise based on Category III hurricane in the eastern United States. (**DHS**, *Statement by Peter Verga*, July 19, 2007, p. 13

Ardent Sentry 2007: "…during the month of May 2007, OPS and other DHS components participated in the DOD exercise Ardent Sentry which was designed to test and validate DOD Homeland Defense operations and Defense Support to Civil Authorities (DSCA) operations. Ardent Sentry consisted of numerous scenarios for which OPS had established roles and responsibilities. Two scenarios provided significant OPS participation including a hurricane making landfall in Rhode Island and a 10 kiloton nuclear detonation in Indianapolis, Indiana." (**DHS**, *Statement of Frank DiFalco, Director, National Operations Center*, June 20, 2007, 9)

Ardent Sentry-Northern Edge 07 (AS-NE 07): "…a Joint Chiefs of Staff-directed, U.S. Northern Command (USNORTHCOM) sponsored homeland defense and Defense Support of Civil Authorities (DSCA) exercise that…[took] place 30 April – 17 May 2007. The Homeland Security Council has designated ARDENT SENTRY-NORTHERN EDGE (and associated exercises VIGILANT GUARD, ALASKA SHIELD, INDIANA SENTRY, BLUE FLAG, POSITIVE RESPONSE, and the 2007 National Hurricane Preparedness Exercise) as a National Level Exercise for 2007. This exercise includes Canada Command as a full partner, and is the largest (number of personnel, length of exercise, number of venues, and cost) and most complex exercise undertaken in the exercise series.
Purpose: To provide local, state, federal, Department of Defense (DOD), and non-governmental organizations and agencies involved in homeland security emergency management the opportunity to participate in a full range of training scenarios that will better prepare participants to respond to a national crisis. The participating organizations will conduct a multi-layered, civilian-led response to a national crisis.

Objectives:
- Demonstrate multi-agency, multi-jurisdictional unity of effort in support of a civilian-led response to a national crisis through collaboration with local, state, and federal responders.
- State leaders are provided an opportunity to orchestrate and lead response efforts within their state to include the use of state assets, emergency management assistance compacts, and support from federal resources, including active duty military forces.
- The National Guard is provided with an opportunity to exercise with USNORTHCOM, other federal agencies, and representatives from local, state, and non-governmental organizations involved in homeland security.
- USNORTHCOM is provided an opportunity to exercise support of civil authorities in the execution of DOD Chemical, Biological, Radiological, Nuclear, or High-yield Explosive (CBRNE) response plans and Joint Task Force operations.
- North American Aerospace Defense Command (NORAD) will exercise against a variety of threats.
- Improve coordination with Canadian partners in cross-border events.

- Explore seams in homeland defense and DSCA processes with DOD, U.S. Pacific Command, U.S. Strategic Command, and non-DOD government agencies.
- Build on previous exercises and real-world lessons learned." (**NORTHCOM**, *Fact Sheet*, 2007)

Area Command (Unified Area Command): An organization established (1) to oversee the management of multiple incidents that are each being handled by an ICS organization or (2) to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure that incidents are properly managed, and ensure that objectives are met and strategies followed. Area Command becomes Unified Area Command when incidents are multijurisdictional. Area Command may be established at an emergency operations center facility or at some location other than an incident command post." (**DHS**, *NIMS*, 2004, p. 127)

Area Command. An element of the Incident Command System. "If necessary, an Area Command may be established to oversee the management of multiple incidents being handled by separate Incident Command Posts or to oversee management of a complex incident dispersed over a larger area. The Area Command does not have operational responsibilities and is activated only if necessary, depending on the complexity of the incident and incident management span-of-control considerations. The Area Command or Incident Command Post provides information to, and may request assistance from, the local emergency operations center." (**DHS,** *National Response Framework* (Comment Draft), September 10, 2007**,** p. 48)

Area Command: "An organization established to: (1) oversee the management of multiple incidents that are each being handled by an ICS Incident Management Teams (IMT) organization or (2) oversee the management of large or multiple incidents to which several IMTs have been assigned. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure that incidents are properly managed, and ensure

that objectives are met and strategies followed. (See also: Unified Area Command). (**USCG**, *IM Handbook*, 2006, Glossary 25-2)

Area Command Team (ACT): "An Area Command Team is an organization established to assist an Agency Administrator by: Overseeing the management of multiple incidents that are each being handled by an incident management team organization (IMT); Overseeing the management of a very large incident that has multiple IMTs assigned to it; Assisting an agency administrator due to the complexity of incidents(s)/issues; and/or Reducing a span of control that has exceeded the local agency administrator(s) ability or desire to manage while still overseeing their unit." (Wild Fire Lessons Learned Center)

Area Contingency Plan (ACP): "Describes what needs to be protected in the event of an emergency and how to protect it, what resources are available to respond, and the desired outcomes from the spill response." (**GAO**, *Maritime Security*, Dec 2007, p. 56)

Area Joint Information Center (JIC): "An area JIC supports multiple-incident ICS structures that are spread over a wide geographic area. It is typically located near the largest media market and can be established on a local, State, or multi-state basis. Multiple States experiencing… damage may participate in an area JIC." (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, 16)

Areal Precipitation: "The average amount of precipitation which has fallen over a specific area." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 18)

ARES: Amateur Radio Disaster Services (previously Amateur Radio Emergency Services)

ARF: Action Request Form. (Senate HSGA, *Hurricane Katrina: A Nation Still Unprepared*, p. 631)

Arid Zone: "An area in which the water resources from ground water and rainfall are insufficient to counterbalance the evaporation." (**UNDHA**, *DM Glossary*, 1992, p. 18)

ARIO: Advanced Radiation Incident Operations. (**FEMA**, *Compendium of Federal Terrorism Training Courses*, 2003, p. 252)

ARNG: Army National Guard.

A-ROC: Alternate Regional Operations Center. (**FEMA**, *FAAT List*, 2002. p. 4)

ARS: Acute radiation syndrome. (See "Ionizing Radiation")

As Low As Reasonably Achievable (ALARA): "A radiation safety principle for minimizing radiation doses and releases of radioactive materials by employing all reasonable methods." (DA, WMD-CST Operations, 2007, Glossary-8)

ASCE: American Society of Civil Engineers.

Aseismic: "Nonseismic; used to designate an area free from seismic activity or a tectonic deformation process not accompanied by seismic events. (**UNDHA**, *DM Glossary*, 1992, p. 19)

ASPH: Association of Schools of Public Health.

ASFPM: Association of State Floodplain Managers.

Ash Flow: "Pyroclastic flow including a liquid phase and a solid phase composed mainly of ashes." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 19)

ASIS: American Society for Industrial Security.

ASIS International: "ASIS International (ASIS) is…for security professionals, with more than 35,000 members worldwide. Founded in 1955, ASIS is dedicated to increasing the effectiveness and productivity of security professionals by developing educational programs and materials that address broad security interests, such as the ASIS Annual Seminar and Exhibits, as well as specific security topics. ASIS also advocates the role and value of the security management profession to business, the media, governmental entities, and the public." (**ASIS**, *About ASIS*, 2007)

ASP: Advanced Spectroscopic Portal. (**DHS**, *Remarks of DHS Secretary Chertoff*, July 14, 2007)

ASPR: Assistant Secretary for Preparedness and Response, HHS.

Assembly Area: "The designated area at which employees, visitors, and contractors assemble when evacuated from their building/site." (**DigitalCare**, *State of OR BC Workshop* 2006, 46)

Assessment: "The process of compiling and examining information and data from various sources and drawing conclusions about the object of the assessment." (**DOA**, *Infrastructure Risk Management (Army)*, 2004, p. 12)

Assessment: Survey of a real or potential disaster to estimate the actual or expected damages and to make recommendations for preparedness, mitigation and relief action. (**Ref. Center** 1998)

Assessment: "Survey of a real or potential disaster to estimate the actual or expected damages and to make recommendations for prevention, preparedness and response." (**UNDHA,** *DM Glossary*, 1992, p. 19)

Assessment: "The evaluation and interpretation of measurements and other information to provide a basis for decision-making." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, Jan. 2001, Appendix B: Definitions, p. 1); see also **DHS**, *NIMS*, 2004, p. 127; **FEMA,** *NIMS* (Draft), August 2007, p. 147)

Asset: "An item of property and/or component of a business activity/process owned by an organization. There are three types of assets: physical assets (e.g. buildings and equipment),

financial assets (e.g. currency, bank deposits and shares) and non-tangible assets (e.g. goodwill, reputation)." (**DigitalCare**, *State of OR BC Workshop* 2006, 46)

Asset: "For the purpose of infrastructure risk management, there are four types of assets: infrastructure, non-infrastructure, mission-essential, and symbolic. Infrastructure assets are public, private, and governmental (Federal and military) interdependent cyber and physical networks and systems available to support national security. Non-infrastructure assets are units, individuals, and materiel required to support Army missions. Mission-essential assets are infrastructure and non-infrastructure systems and assets fundamental to the accomplishment of the Army core competencies. Symbolic assets are those national objects having cultural significance and the capacity to excite or objectify a response." (**DOA**, *Infrastructure Risk Management (Army)*, 2004, p. 12)

Asset: "Property (tangible or intangible) which is owned by an organization. Assets are generally divided into three classes: Physical Assets (buildings, equipment, inventory); Financial Assets (cash, bank deposits, accounts receivable); Intangible Assets (reputation, brand names, etc.)." (**Risky Thinking**, *A Glossary of Risk Related Terms*, 2007)

Asset (Infrastructure): "A distinguishable network entity that provides a service or capability. Assets are people, physical entities, or information located either within or outside the United States and owned or operated by domestic, foreign, public, or private sector organizations." (**DoD**, *DCIP*, 2005, p. 11)

Assistance to Firefighters Grant Program (AFG): "The purpose of these grants is to enhance the safety of the public and firefighters with respect to fire and fire-related hazards. The primary goal of the AFG Program's Fire Prevention and Safety Grant is to reach high-risk target groups in order to mitigate the high incidences of death and injuries. Additionally, the authorization remains that includes funding for Firefighter Safety Research and Development." (**DHS/ODP**, *FY 2006 EMPG Program Guidance*, November 2005, p. 11)

Assistant Secretary for Preparedness and Response (ASPR), HHS: "ASPR is headed by the Assistant Secretary for Preparedness and Response who reports directly to the Secretary and whose office includes the following components: Immediate Office (IO); Biomedical Advanced Research & Development Authority (BARDA); Office of Medicine, Science and Public Health (OMSPH); Office of Preparedness and Emergency Operations (OPEO); and the Office of Policy and Strategic Planning (OPSP). ASPR is a component of the Public Health Service (PHS) and is responsible for ensuring a One-Department approach to developing public health and medical preparedness and response capabilities and leading and coordinating the relevant activities of the HHS Operating Divisions (OPDIVs). The principal areas of program emphasis are (1) enhancement of State and local public health and medical preparedness - primarily health departments and hospitals; (2) development and use of National and Departmental policies and plans relating to the preparedness for and response to public health and medical threats and emergencies (e.g. Emergency Support Function (ESF) 8 of the National Response Plan (NRP), Homeland Security Presidential Directives (HSPD) 5 and 10, HHS' Concept of Operations Plans (CONOPS) for Public Health and Medical Emergencies and for the Incident Response Coordination Team (IRCT); (3) coordination with relevant entities inside and outside HHS such

as State, local and Tribal public health and medical officials, the private sector, the Departments of Homeland Security (DHS), Defense (DOD), Veterans Affairs (VA), Justice (DOJ), the Homeland Security Council (HSC), and the National Security Council, (NSC), other ESF 8 partner organizations and others within the National security community; (4) rapid public health and medical support to Federal, State, local and Tribal governments who may be responding to incidents of national significance or public health and medical emergencies; (5) coordination, support of, and participation in research, development and procurement activities related to public health emergency medical countermeasures destined for the Strategic National Stockpile, including under Project BioShield; (6) leadership in international programs, initiatives, and policies that deal with public health and medical emergency preparedness and response related to naturally occurring treats such as infectious diseases and deliberate threats for biologic, chemical, nuclear and radiation sources and (7) leadership and oversight on medical, science, and public health policies, issues, and programs." (**HHS**, Job Announcement HHS-OS-2008-0169, Program Specialist (Watch Officer), Dec 2007.

Assistant Secretary of Defense for Homeland Defense: "The Office of ASD(HD) is within the office of the Under Secretary of Defense for Policy [USD(P)]. ASD(HD) is responsible for the overall supervision of all DOD HD related activities. Within CS, ASD(HD) has been delegated the duties and authorities associated with principal staff assistant for MSCA and MACDIS. ASD(HD) ensures internal coordination of DOD policy direction, assists SecDef in providing guidance, through the Joint Staff, to combatant commanders for MSCLEA and conducts coordination with DHS…..The principal duty of ASD(HD) is to provide overall supervision of the HD and CS mission areas within DOD. In that role, ASD(HD) serves as the principal staff assistant and advisor to the USD(P) and Secretary and Deputy Secretary of Defense on HD and CS on matters including, but not limited to:
(a) Preparedness to execute the national security missions of DOD pertaining to the defense of US sovereignty, territory, domestic population, and defense critical infrastructure against direct threats and aggression.
(b) Military support to civil authorities.
(c) Defense Critical Infrastructure Program.
(d) DOD domestic antiterrorism and force protections in accordance with DOD Directive 2000.12.
(e) DOD installation preparedness.
(f) DOD domestic counterterrorism activities, less those involving special operations forces.
(g) DOD continuity-related activities, to include COOP, COG, and Enduring Constitutional Government managed under the Defense Continuity Program.
(h) Domestic crisis management including planning and response to man-made and natural disasters including the consequences of incidents involving weapons of mass destruction.
(i) Policy guidance on homeland defense-related education, training, and professional development programs." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. II-5)

Assistant Secretary Level Domestic Readiness Group (A/S DRG, DHS): "The A/S DRG develops and coordinates implementation of preparedness and response policy and in anticipation of or during crises such as natural disasters and domestic terrorist attacks to address issues that cannot be resolved at lower levels and provide strategic policy direction for the Federal response." (**DHS**, *National Planning and Execution System*, 2007 Draft, p. 3-5)

Assistant to the President for Homeland Security and Counterterrorism: The first such Assistant was Frances Fragos Townsend, appointed by President George W. Bush on May 28, 2004. From White House release:

> Ms. Frances Fragos Townsend was appointed Homeland Security Advisor by the President on May 28th, 2004. Ms. Townsend chairs the Homeland Security Council and reports to the President on United States Homeland Security policy and Combating Terrorism matters. She previously served as Deputy Assistant to the President and Deputy National Security Advisor for Combating Terrorism.
>
> Ms. Townsend came to the White House from the U. S. Coast Guard, where she had served as Assistant Commandant for Intelligence. Prior to that, Ms. Townsend spent 13 years at the U. S. Department of Justice in a variety of senior positions, her last assignment as Counsel to the Attorney General for Intelligence Policy. Ms. Townsend began her prosecutorial career in 1985, serving as an Assistant District Attorney in Brooklyn, New York. (**White House**, *Ms. Frances Fragos Townsend*…)

Assistant to the President for Homeland Security and Counterterrorism: Currently, Kenneth L. Wainstein. President Bush announced Mr. Wainstein's appointment in a March 19, 2008 White House Press Release:

> I am pleased to announce that I have selected Kenneth L. Wainstein to serve as Assistant to the President for Homeland Security and Counterterrorism. Ken is a proven leader and a dedicated public servant with nearly two decades of law enforcement experience, including as United States Attorney for the District of Columbia. As Assistant Attorney General for National Security, he helped improve our ability to confront the threats of a new era. His experience at the Federal Bureau of Investigation as General Counsel and Chief of Staff has provided him with a clear understanding of the dangers we face and the importance of ensuring that we have the necessary tools to protect America.
>
> In his new role, Ken will coordinate our Nation's homeland security efforts to ensure that we continue to make progress on combating terrorism, securing our borders, and strengthening our emergency preparedness. I look forward to working with Ken to make America safer. (**White House**, *President Bush Announces*…, March 19, 2008)

Associate Business Continuity Planner (ABCP): "The Associate Business Continuity Planner (ABCP) or Associate level [offered by DRII], is for individuals with at least a specified minimum level of knowledge in business continuity/disaster recovery planning, but who have not yet attained the two years of experience required for CBCP. Individuals can also qualify if they work in positions related to--but not actually in--business continuity/disaster recovery planning." (**ISSA**, *Certifications*, 2007)

Association of Contingency Planners. ACP is a "non-profit trade association dedicated to the advancement of business continuity professionals. ACP provides…peer-to-peer networking and

learning environment for its members through chapters across the country." **ACP Website**: http://www.acp-international.com/

Association of State Floodplain Managers (ASFPM): "The Association of State Floodplain Managers is an organization of professionals involved in floodplain management, flood hazard mitigation, the National Flood Insurance Program, and flood preparedness, warning and recovery. ASFPM has become a respected voice in floodplain management practice and policy in the United States because it represents the flood hazard specialists of local, state and federal government, the research community, the insurance industry, and the fields of engineering, hydrologic forecasting, emergency response, water resources, and others." (**ASFPM**, 2007)

Assurance: "Proactive risk management actions intended to mitigate or prevent the destruction or incapacitation of the infrastructure." (**DOA**, *Infrastructure Risk Mgmt. (Army)*, 2004, p. 12)

ASTHO: Association of State and Territorial Health Officials.

ASTM: American Society for Testing and Measurement.

Asynchronous Replication: "Data replication or mirror in which the application is allowed to continue while the data is mirrored to another site. In this case, the application data can represent a prior state of the application. It is critical to use ordered asynchronous mirroring for real-time applications. This means that each write is applied in the same order at the second or backup site as it was written in the primary site, even if the network has re-ordered the arrival of the data. Associated term: synchronous replication." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, 46)

AT: Action Tracker. (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 6)

At-Risk Individuals: "…the term `at-risk individuals' means children, pregnant women, senior citizens and other individuals who have special needs in the event of a public health emergency, as determined by the Secretary [HHS]." (***Pandemic and All-Hazards Preparedness Act,*** January 3, 2006, Sec. 2802, (b) (4).)

At Risk Populations: "At-risk populations include groups whose needs are not fully addressed by traditional service providers or those who feel they cannot comfortably or safely use the standard resources offered in disaster preparedness, relief, and recovery. They include those who are physically or mentally disabled (blind, deaf, hard-of-hearing, cognitive disorders, or with mobility limitations), people with limited English language skills, geographically or culturally isolated people, homeless people, elderly individuals, and children.

"Following a widespread emergency, people may find themselves stranded, displaced, destitute, homeless, or sick; or they may experience challenges from the emergency that leave them newly vulnerable or suddenly outside of mainstream communications in ways they did not experience before the emergency. These factors can create *new* at-risk populations during an emergency." (**CDC/HHS**, *Locating and Reaching At-Risk Populations in an Emergency*, 2007, p. 3)

This report identifies "five broad, descriptive groupings for characteristics that put people at risk:

- Economic Disadvantage
- Limited Language Proficiency
- Disability (physical, mental, cognitive, or sensory)
- Isolation (cultural, geographic, or social)
- Age

The key to this approach is that it allows you to examine the nature of the vulnerability that might put someone at higher risk in an emergency. You avoid defining an individual or group based upon their vulnerabilities or using terminology to describe people as being vulnerable - a label that no one wants to have." (Ibid)

ATD: Advanced Technology Demonstration. (**DHS**, *Statement of Vayl Oxford*, 8Mar07, p. 5)

Atmospheric Pollution: "Contamination of the atmosphere by large quantities of gases, solids and radiation produced by the burning of natural and artificial fuels, chemicals and other industrial processes and nuclear explosions. (**UNDHA**, *Disaster Mgmt Glossary*, 1992, p. 19)

ATSDR: Agency of Toxic Substances and Disease Registry, CDC.

Attack (Nuclear or Conventional): "Any hostile action taken against the United States by foreign forces which results in destruction of military and/or civilian targets through use of nuclear or conventional weapons." (**FEMA**, *HICA MYDP* (CPG 1-34), 1985, p. A-2)

Attack Tree: "The attack tree is a tool used during *Prevention* Exercises that provides the *exercise planning team* with a visual representation of the anticipated and potential paths an adversary can take to execute an attack. It is useful for both planning and evaluating exercises. **(FEMA**, *HSEEP Glossary*, 2008)

Audit: "The process by which procedures and/or documentation are measured against pre-agreed standards." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, 46)

Authority: "A right or obligation to act on behalf of a department, agency or jurisdiction. (Capital Health Region, Edmonton Area, *ICS100: Incident Command System Training Student Manual.* Edmonton, Canada: CHR Office of Emergency Preparedness, March 2007, p. 50)

Authority Having Jurisdiction (AHJ). "The phrase "authority having jurisdiction," or its acronym AHJ, is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at

government installations, the commanding officer or departmental official may be the authority having jurisdiction." (**NFPA 1600**, 2007. p. 11)

Autonomous Pathogen Detection System (APDS): "About seven years ago, Livermore researchers received seed funding from the Laboratory Directed Research and Development Program to develop an instrument that counters bioterrorism by providing a rapid early warning system for pathogens, such as anthrax. (See *S&TR,* January/February 2002, Rapid Field Detection of Biological Agents.) That instrument, the Autonomous Pathogen Detection System (APDS), is now ready for deployment to better protect the public from a bioaerosol attack, and the development team has been honored with a 2004 R&D 100 Award.

The lectern-size APDS can be placed in airports, office buildings, performing arts centers, mass transit systems, sporting arenas—anywhere an attack might be launched. APDS was designed to get results fast and get them right, without false positives. Biological scientist Richard Langlois, who spearheaded the APDS development effort, explains, "The system provides results on the spot. Faster results allow a faster emergency response, which in the end means saving lives.

The Autonomous Pathogen Detection System (APDS) monitors the air continuously for biological threat agents and uses two identification technologies to reduce the probability of false alarms. It can measure up to 100 different agents per sample and reports identified agents within an hour." (**Lawrence Livermore National Laboratory**, "Detecting Bioaerosols When Time Is of the Essence," *Science & Technology*, October 8, 2004)

Avalanche: "A moving mass of snow or ice typically occurring in mountainous terrain on slopes of 20 degrees or more. Extensive avalanche hazard areas exist in the western States and Alaska. The 6800 avalanche flows estimated to occur yearly in these areas result in a mean annual death toll of seven and property losses in excess of $500,000. Changes in land cover and continued development in avalanche hazard areas are expected to result in an increase in loss of life and property." (**FEMA**, *IEMS HICA MYDP* (CPG 1-34, 1985, p. A-1)

Avalanche: "The rapid and sudden sliding and flowage of masses of usually incoherent and unsorted mixtures of snow/ice/rock material. (**UNDHA**, *DM Glossary*, 1992, p. 20; cites OFDA)

Avalanche: Mass of snow and ice falling suddenly down a mountain slope and often taking with it earth, rocks and rubble of every description. (**WMO** 1992, 66)

Avoidance: "A mitigation strategy that eliminates the threat of a specific risk, usually by eliminating its potential cause." (**DOA**, *Infrastructure Risk Management. (Army)*, 2004, p. 12)

AWAP: All-Hazard Web Alert Portal. (**FBO** [FedBizOps] *Daily.com*, 27Aug05, FBO #1370)

Awareness: "The continual process of collecting, analyzing, and disseminating intelligence, information, and knowledge to allow organizations and individuals to anticipate requirements and to react effectively." (**DHS**, *National Response Plan* (Draft #1), 25Feb04, p. 73 (Glossary)

AWN: Alerts, Warnings and Notifications. (**DHS**, *IPG FY 2011-2015 Draft*, 2008, p. 22)

B Zone, NFIP: "B Zone is defined as an area of moderate flood hazard, usually depicted on Flood Insurance Rate Maps as between the limits of the base flood and 500-year flood of the primary source of flooding. B Zones may have local, shallow flooding problems. B Zones are also used to designate areas protected by levees and base floodplains of little hazard, such as those with average flood depths of less than 1 foot." (**FEMA**, *Reducing Damage from Localized Flooding – A Guide for Communities*, 2005, vii)

Backup (Data): "A process by which data, electronic or paper based, is copied in some form so as to be available and used if the original data from which it originated is lost, destroyed or corrupted." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 47)

Backwater: "A rise of water level in a stream caused by a natural or artificial obstruction." (**UNDHA**, *DM Glossary*, 1992, p. 20)

BARDA: Biomedical Advanced Research and Development Authority, Office of the Assistant Secretary for Preparedness and Response (ASPR), Office of the Secretary of Health and Human Services, HHS.

Barometer: "Instrument for measuring atmospheric pressure." (**UNDHA**, *DM Gloss.*, 1992, 20)

Barometric Pressure: "The pressure exerted by the atmosphere as a consequence of the force of gravity." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 20)

Barrage: "Barrier across a stream provided with a series of gates or other control mechanisms to control the water-surface level upstream, to regulate the flow or to divert water supplies into a canal." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 20; cites OFDA)

Base: "The location at which primary Logistics functions for an incident are coordinated and administered. There is only one Base per incident. (Incident name or other designator will be added to the term Base.) The Incident Command Post may be co-located with the Base." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p. 148)

Base Flood: A term used in the National Flood Insurance Program to indicate the minimum size flood to be used by a community as a basis for its floodplain management regulations; presently required by regulation to be "that flood which has a one-percent chance of being equaled or exceeded in any given year." Also known as a 100-year flood or one-percent chance flood.

Base Flood: "The flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood." The base flood is the national standard used by the NFIP and all Federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development. Base Flood Elevations (BFEs) are typically shown on Flood Insurance Rate Maps (FIRMs)." (**FEMA**, *Base Flood*, 2007)

Base Flood Elevation (BFE): "…the elevation of the crest of the base or 100-year flood, which is the level of flood that has a 1% chance of being equaled or exceeded in any given year. Also referred to as BFE." (**ASFPM,** *National Flood Programs and Polices in Review—2007*, p. 92)

Base Flood Elevation (BFE): "The computed elevation to which floodwater is anticipated to rise during the base flood. Base Flood Elevations (BFEs) are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles. The BFE is the regulatory requirement for the elevation or floodproofing of structures. The relationship between the BFE and a structure's elevation determines the flood insurance premium." (**FEMA**, *Base Flood Elevation*, 2007)

Base Flood Elevation (BFE): "Elevation of the base flood in relation to a specified datum, such as the National Geodetic Vertical Datum of 1929. The Base Flood Elevation is used as a standard for the National Flood Insurance Program." (**FEMA**, *Developing the Mitigation Plan* (FEMA 386-3), 2003, p. a-1)

Baseline Assessment: "The initial set of probability and impact assessments usually made when risks are first identified. Initial assessments describe risks under the initial baseline plan and may indicate areas for needed risk management. Subsequent events, risk management actions, and new information will always change the assessment, which will ultimately be adopted as the baseline." (**DOA**, *Infrastructure Risk Management. (Army)*, 2004, p. 12)

Basic Public Information Officers Course The FEMA Emergency Management Institute *Basic Public Information Officers Course* "is aimed at the new or less experienced PIO including those individuals who have function as a secondary responsibility. Course topics include an overview of the job of the PIO, understanding the media, interview techniques, writing a news release and conducting public awareness campaigns. This course is conducted by the States. Contact your State Emergency Management Agency to find out when and where the course will be offered." (FEMA, http://training.fema.gov/EMIWeb/EMICourses/E388.asp, January 18, 2007 update)

Basic Responsibilities Paper: "The *Basic Responsibilities Paper*, outlining the roles of the Department of Defense, Office of Defense Mobilization, and FCDA, and an accompanying Memorandum of Understanding on the regional roles of ODM and FCDA in an emergency, was developed and distributed as [FCDA] Advisory Bulletin 210, dated March 1, 1957." (**FCDA**, *1957 Annual Report*, p. 1)

Basic Responsibilities Paper: "There is a document in the Government now, known as our Basic Responsibilities Paper, that was approved by the President. For a long time it was available only in a classified form and with a limited circulation. In effect we tried to operate it in 1956 without having circulated it, and that's a good trick if you can do it.l That's one of the reasons we have some confusion. This paper is an agreement between the Secretary of Defense and the Director of ODM and the Administrator of FCDA, approved by the President. So in effect it's a Presidential order. FCDA becomes a claimant, among its other responsibilities, for the entire civilian economy in the United States following the attack. DOD claims for the military in the United States. ODM acts as the umpire for the President." (**ICAF**, *Civil Defense Today*, 1957, p. 21)

Battle Rhythm in Emergency Response Communications Modeling: "Information flow has a rhythm that reflects the battle rhythm." (**Jain and Corley**, *User Requirements Working Group*, March 13, 2003, slide 9)

Battle Rhythm in Long War on Terror: "…I think there's no question that the tide is turning, and as the President said, al Qaeda is diminished, but is not destroyed. Tides that turn also have a way of trying to return so they can continue to spread whatever waves they can. And that is why there is an ebb and flow to wars. There is a battle rhythm to wars. And in this long battle against terrorism, the United States has been very successful in rounding up and arresting such prominent leaders of the al Qaeda organization as Khalid Sheik Mohammed, many of the other top operators around the world. The fact of the matter is, the situation has been made much more dire, much more difficult for the terrorists, but it is not impossible for the terrorists" (**White House** Press Briefing with Ari Fleischer, May 20, 2003)

Battle Rhythm in Pandemic Preparedness: A reporters question during White House Press Conference on Pandemic Preparedness: "I was just wondering in the different areas that you work in whether or not you're seeing any preparedness fatigue, given that we're two years into it and will probably go -- continue for a few more years before anything probably happens. But just wondering if you've seen any preparedness fatigue, and if you haven't, what are your thoughts about how you should deal with it, once it starts surfacing in years to come?" Answer from Dr. Jeff Runge, DHS Chief Medical Officer: "I appreciate you pointing this out… you know, we need to reach a battle rhythm of a state of preparedness that is higher than it was before the President made this a priority, and the absence of any hyperventilation but more as a marathon." (**White House**, *Press Briefing on National Strategy for Pandemic Influenza Implementation Plan: One Year Summary*, July 17, 2007)

Battle Rhythm in Reporting in Hurricane Katrina Response: From US Coast Guard Incident Action Plan for Operational Period 0700 12Sep05 to 0700 13Sep05: "Continue to build and maintain adequately staffed 24/7 operations/planning organization to ensure all reporting and battle rhythm requirements are met."

Battle Rhythm Management: "The purpose of battle rhythm management is the maintenance of synchronized activity and process among distributed warfighters. It is most critical in rapidly evolving situations or in highly distributed operations. Successful battle rhythm implies the synergism of procedures, processes, technologies, individual activities and collective actions at warfighter, staff level, command node, and unit levels in order to facilitate military operations. The concept is ubiquitous in daily military operations (particularly at the operational level of command), but little exists to define it at the tactical level or substantiate its existence in the experimental or analytical literature." (**Duffy**, *A Model of Tactical Battle Rhythm*, June 04, 170)

BC: Business Continuity. (**DigitalCare**, *State of Oregon BC Workshop*, 2006, p. 8)

BCCP: Business Continuity Certified Planner.

BCEGS: Building Code Effectiveness Grading Schedule.

BCM: Business Continuity Management.

BCP: Business Continuity Planning/Plans. (Digital Care, Inc., State of OR BC Trng., 2006)

BCPR: Bureau for Crisis Prevention and Recovery, United Nations Development Programme.

Beaufort Scale: Numerical scale from 0 to 12, indicating wind force.

0-calm
1-light air
2-light breeze
3-gentle breeze
4-moderate breeze
5-fresh breeze
6-strong breeze
7-strong wind
8-gale
9-strong gale
10-storm
11-violent storm
12-hurricane (**Gunn** 1990, 376; **Reference Center** 1998)

BENS: Business Executives for National Security.

BEOP: Basic Emergency Operations Plan.

BERM: Bioterrorism and Epidemic Outbreak Response Model. (**AHRQ**, *Computer Staffing Model for Bioterrorism Response*, September 2005)

Best Practices: "Best practices are peer-validated techniques, procedures, and solutions that prove successful and are solidly grounded in actual experience in operations, training, and exercises." (**FEMA**, *HSEEP Glossary*, 2008)

BFE: Base Flood Elevation. (**FEMA**, *Base Flood*, 2007)

BIA: Business Impact Analysis. (**DHS**, *FCD 1*, Nov. 2007, p. D-4)

Biodefense for the 21st Century (HSPD-10): "…we conducted a comprehensive evaluation of our biological defense capabilities to identify future priorities and actions to support them. The results of that study provide a blueprint for our future biodefense program, Biodefense for the 21st Century, that fully integrates the sustained efforts of the national and homeland security, medical, public health, intelligence, diplomatic, and law enforcement communities….

The United States will continue to use all means necessary to prevent, protect against, and mitigate biological weapons attacks perpetrated against our homeland and our global interests. Defending against biological weapons attacks requires us to further sharpen our policy, coordination, and planning to integrate the biodefense capabilities that reside at the Federal, state, local, and private sector levels. We must further strengthen the strong international dimension to our efforts, which seeks close international cooperation and coordination with friends and allies to maximize our capabilities for mutual defense against biological weapons threats.

While the public health philosophy of the 20th Century .- emphasizing prevention .- is ideal for addressing natural disease outbreaks, it is not sufficient to confront 21st Century threats where adversaries may use biological weapons agents as part of a long-term campaign of aggression and terror. Health care providers and public health officers are among our first lines of defense. Therefore, we are building on the progress of the past three years to further improve the preparedness of our public health and medical systems to address current and future BW threats and to respond with greater speed and flexibility to multiple or repetitive attacks.

Private, local, and state capabilities are being augmented by and coordinated with Federal assets, to provide layered defenses against biological weapons attacks. These improvements will complement and enhance our defense against emerging or reemerging natural infectious diseases.

The traditional approach toward protecting agriculture, food, and water .- focusing on the natural or unintentional introduction of a disease -- also is being greatly strengthened by focused efforts to address current and anticipated future biological weapons threats that may be deliberate, multiple, and repetitive.

Finally, we are continuing to adapt United States military forces to meet the biological weapons challenge. We have long recognized that adversaries may seek biological weapons to overcome our conventional strength and to deter us from responding to aggression. A demonstrated military capability to defend against biological weapons and other WMD strengthens our forward military presence in regions vital to United States security, promotes deterrence, and provides reassurance to critical friends and allies. The Department of Defense will continue to ensure that United States military forces can operate effectively in the face of biological weapons attacks, and that our troops and our critical domestic and overseas installations are effectively protected against such threats." (**White House**, HSPD-10, April 28, 2004.)

Biodefense for the 21st Century Pillars: "The essential pillars of our national biodefense program are: Threat Awareness, Prevention and Protection, Surveillance and Detection, and Response and Recovery." (**White House**, HSPD-10, April 28, 2004.)

Biodefense Knowledge Center (BKC), DHS (at Lawrence Livermore National Laboratory). "The Laboratory is home to the Biodefense Knowledge Center (BKC) for the Department of Homeland Security (DHS). This national resource provides rapid-turnaround and in-depth analyses of biodefense issues. BKC assessments and knowledge-discovery tools help the homeland security community understand scientific trends that may be exploited by adversaries to develop biological weapons. Assessments also assist in the development of an integrated national effort to respond to emerging threats and help guide the prioritization of national investments in biodefense-related R&D, planning, and preparedness." (**LLNL**, *Global Threats and Security*, 2007, p. 19 (5))

Biological Agent(s): "(1) Biological agents are microorganisms that cause disease in personnel, plants, or animals or cause the deterioration of material. Biological agents are divided into two broad categories; pathogens and toxins.

(a) Pathogens are infectious organisms that cause disease or illness in their host and include bacteria, viruses, rickettsias, protists, fungi, or prions.
(b) Toxins are biologically derived poisonous substances produced as by-products of microorganisms, plants, or animals. They can be naturally or synthetically produced.

"(2) Examples of biological agents and their associated diseases are Bacillus anthracis (anthrax), AIV H5N1 (avian influenza), Clostridium botulinum (botulism), Shigella species (food borne illness), Hantavirus (pulmonary syndrome), Legionella pneumophila (Legionnaire's disease), Histoplasma capsulatum (histoplasmosis), Yersinia pestis (bubonic and pneumonic plague), Variola virus (smallpox), Francisella tularensis (tularemia), and Ebola virus (viral hemorrhagic fever).

"(3) Infectious biological organisms represent one of the greatest potential threats due to their reproductive ability and the time delay from infection to symptom. An infectious biological attack may remain undetected for several days to weeks after release due to the incubation periods that biological agents may have. Diagnosis may be slow as many infectious agents have a slow onset and present with nonspecific symptoms that rapidly escalate in severity. Another compounding problem is that patients may simultaneously present in geographically separated areas. Depending on the pathogen, preventive measures and treatment will be difficult to implement due to factors such as large number of casualties, restriction of movement, and quarantine. Finally, first responders may be among the first casualties, rapidly overwhelming local and state support systems." (**JCS/DoD**, *CBRNE CM* (JP 3-41), 2006, p. I-6)

Biological Agent (s): "Biological agents are organisms or toxins that can kill or incapacitate people, livestock and crops. The three basic groups of biological agents that would likely be used as weapons are bacteria, viruses and toxins. Most biological agents are difficult to grow and maintain. Many break down quickly when exposed to sunlight and other environmental factors, while others, such as anthrax spores, are very long lived. Biological agents can be dispersed by spraying them into the air, by infecting animals that carry the disease to humans and by contaminating food and water." (**FEMA**: *Biological Fact Sheet*, June 2007, p. 1)

Biological Attack, 1953 Assessment: "It is accepted that the Soviet Union is now capable of striking any target within the United States. It is assumed for planning purposes that such an attack, if it comes, will consist principally of nuclear weapons delivered by air, and detonated above ground during normal working hours. It is further assumed that high explosive and incendeiary bombs will also be used, that sabotage will be employed, and that biological and chemical weapons will be used. Psychological warfare techniques of all kinds also will be used to disrupt defense programs, impair production, create panic, and weakin our will to resist overt attacks." (**FCDA**, *1953 Annual Report*, p. 9)

Biological Common Operating Picture (BCOP): "HSPD-9 dated 30 January 2004 and HSPD-10 dated 21 April 2004 directs DHS to establish a National Biosurveillance Integration System (NBIS) to provide early detection and situational awareness of biological events of potential national consequence by acquiring, integrating, analyzing, and disseminating existing human, animal, plant, and environmental biosurveillance system data into a common operating picture (COP) that represents a comprehensive depiction of the global biosurveillance security

environment (GBSE). The National Biosurveillance Group (NBSG), comprising of representatives from all member agencies, will integrate and analyze all-agency/source biosurveillance information to recognize unusual biological events and provide situational awareness to the NBIS community and decision-makers through the development of a biosurveillance COP (BCOP) and targeting reporting. The BCOP will augment the DHS National Operation Center's COP, which provides a consistent, integrated picture of biosurveillance situational awareness throughout the country. The NBIS will facilitate collaborative interagency analysis to ensure fully-integrated biosurveillance situational awareness and provide near-real time awareness to the Incident Management Group (IMG) and the DHS National Operations Center (NOC). The resulting improved information sharing and enhanced situational awareness facilitates national decision-making to enable timely response." (**DHS**, *DHS Exhibit 300 Public Release BY09…NBIS…(2009)*, 8Feb08)

Biological Hazard: "Processes of organic origin or those conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation." (UN/ISDR, *Terminology: Basic Terms of Disaster Risk Reduction*, 2004, p. 1)

Biological Warfare Agents, Categories of: There are four basic categories of biological warfare agents... They are—

- *Pathogens.* Pathogens are disease-causing bacteria, viruses, and rickettsiae. These agents could be used to target food supplies, port facilities, or population centers. Of particular concern is the threat of contagious diseases such as smallpox. Agents that have a long incubation period can infect a large number of people in a short period of time without immediate symptoms or warning signs.
- *Toxins.* Toxins are poisons formed as specific secreting products by vegetable or animal organisms such as plants, snakes, spiders, and sea creatures. Toxins act faster and are more stable than live pathogens. Many toxins can be easily produced.
- *Bioregulators.* Bioregulators are chemical compounds that are essential for normal psychological and physiological functions. A wide variety of bioregulators is normally present in the human body in extremely minute concentrations. However, these compounds can produce a wide range of harmful effects if they are introduced into the body at higher than normal concentrations or if they are altered. Psychological effects could include exaggerated fear and pain; physiological effects could include rapid unconsciousness and—depending on factors such as dose and route of exposure—could even be lethal. Unlike pathogens that take hours or days to act, bioregulators can produce reactions in minutes.
- *Prions.* Prions are composed entirely of microscopic proteins similar to viruses, but without nucleic acid. They are believed to be the infectious agents responsible for degenerative diseases of the nervous system. They infect and propagate by abnormally refolding into a structure which is able to convert normal molecular proteins into abnormally structured forms. Mad cow disease is an example of the effect of prions." (**Dept. of the Army**, *WMD-CST Operations*, December 2007, pp. 3-5, 3-6)

Biological Warfare Defense: Section in the 1951 FCDA Annual Report: "An Epidemic Intelligence Service has been set up by the Public Health Service for the prompt detection of biological warfare attacks…The public has been warned of the possibility of such attacks in an information booklet entitled 'What You Should Know About Biological Warfare'….By recommendation of the National Advisory Council of the Public Health Service, 12 civilian laboratories will be set up throughout the United States to coordinate laboratory diagnosis and research facilities for defense against biological warfare." (**FCDA**, *Annual Report 1951*, 1952, pp. 54-55)

Biological Warfare Defense: "Biological Warfare Defense. The Federal Civil Defense Administratin, the Department of Health, Education, and Welfare, and the Department of Agriculture in the summer of 1953 entered into an agreement to implement a system for improving the reporting of diseases of man, animals, and cropss, to make a joint evaluation of the unusual occurrence, in number or in kind, of diseases of man, animals, and crops, and to make a joint decision as to biological warfare implications. A civil defense technical manual TM-11-10, *Civil Defense Against Biological Warfare*, was prepared and distributed. This manual contains an appraisal of the biological warfare hazards and details a program of defense for man, animal, and crops. This is the first technical manual on biological warfare published by FCDA. Stockpiles of wide-spectrum antibiotic, biologic, and chemotherapeutic drugs have been increased to provide treatment for biological warfare casualties. Progress has been made with the collaboration of the Sectional Research Program of the National Institute of Microbiology in developing a nationwide system to provide for laboratory identification of biological warfare agents and for the rapid diagnosi of disease. Some of the supplies and equipment needed for training health laboratory technicians in this field have been made available through the Federal contributions program. Close liaison has been maintained with the Department of Defense; Department of Health, Education, and Welfare; Department of Agriculture; Central Intelligence Agency; and other Federal agencies in problems related to biological warfare defense…." (**FCDA**, *1953 Annual Report*, pp. 135-136)

Biomedical Advanced Research and Development Authority (BARDA): "The Biomedical Advanced Research and Development Authority (BARDA), within the Office of the Assistant Secretary for Preparedness and Response in the U.S. Department of Health and Human Services, provides an integrated, systematic and approach to the development and purchase of the necessary vaccines, drugs, therapies, and diagnostic tools for public health medical emergencies. BARDA manages Project BioShield, which includes the procurement and advanced development of medical countermeasures for chemical, biological, radiological, and nuclear agents, as well as the advanced development and procurement of medical countermeasures for pandemic influenza and other emerging infectious diseases that fall outside the auspices of Project BioShield. In addition, BARDA manages the Public Health Emergency Countermeasures Enterprise (PHEMCE)." (**HHS**, *Biomedical Advanced Research and Development Authority*, November 2, 2007)

Bio Restoration Demonstration Project: "In January 2006, a two-day demonstration held at the San Francisco International Airport (SFO) laid out the response and restoration protocols that would be undertaken if a biological attack occurred. This demonstration was the culmination

of the three-year, $10 million DHS Bio Restoration Demonstration Project. In this project, researchers from Lawrence Livermore and Sandia national laboratories developed restoration plans that integrated technologies and procedures so that airports hit by a biological terrorist attack could be quickly decontaminated and reopened. As part of this effort, scientists developed a test for determining within a few hours the viability of the biological agent (e.g., anthrax spores)." (**LLNL**, *Global Threats and Security*, 2006, p. 19) "Included in the airport restoration templates are: protocols for characterizing an area through sampling and analysis after an attack; decontamination options; approaches for allowing public re-use of facilities and the possible application of longer-term monitoring." (**Sandia National Laboratories**, *Bio-Restoration Demonstration*, 2006)

BioShield: See "Project BioShield."

Biosurveillance: "The term "biosurveillance" means the process of active data-gathering with appropriate analysis and interpretation of biosphere data that might relate to disease activity and threats to human or animal health – whether infectious, toxic, metabolic, or otherwise, and regardless of intentional or natural origin – in order to achieve early warning of health threats, early detection of health events, and overall situational awareness of disease activity." (**White House**, *HSPD 21*, October 18, 2007)

Bioterrorism: "A bioterrorism attack is the deliberate release of viruses, bacteria, or other germs (agents) used to cause illness or death in people, animals, or plants. These agents are typically found in nature, but it is possible that they could be changed to increase their ability to cause disease, make them resistant to current medicines, or to increase their ability to be spread into the environment. Biological agents can be spread through the air, through water, or in food. Terrorists may use biological agents because they can be extremely difficult to detect and do not cause illness for several hours to several days. Some bioterrorism agents, like the smallpox virus, can be spread from person to person and some, like anthrax, can not." (**CDC**, *Bioterrorism Overview*. February 12, 2007 update)

Bioterrorism Act: See Public Health Security and Bioterrorism Preparedness and Response Act of 2002.

Bioterrorism and Epidemic Outbreak Response Model (BERM), AHRQ, HHS: "This computer model predicts the number and type of staff needed to respond to a major disease outbreak or bioterrorism attack on a given population…. BERM allows planners to formulate realistic mass antibiotic dispensing and vaccination contingency plans for their target populations. Such a model provides numerical estimates and forces critical examination of assumptions about prophylaxis clinic design and about the availability of human and materiel resources." (**AHRQ**, *Computer Staffing Model for Bioterrorism Response*, 2005)

Bioterrorism Training and Curriculum Development Program (BTCDP), HRSA/HHS: "The Bioterrorism Training and Curriculum Development Program (BTCDP) provides support to health professions schools, health care systems, and other educational entities to equip a workforce of health care professionals to address emergency preparedness and response issues. The program consists of two discrete foci: (1) provision of continuing

education for practicing health care providers; and (2) curriculum development and enhancement and training in health professions schools." (**DHS/ODP**, *FY06 EMPG*, p. 11)

BioThrax: An anthrax vaccine.

BioWatch. See Department of Homeland Security, BioWatch.

BKC: Biodefense Knowledge Center**,** DHS (at Lawrence Livermore National Laboratory).

Blackout: "Complete loss of commercial electrical power, lasting for hours or days over a large geographical area." (**Businessdictionary.com**)

Blast Wave: (See Shock Wave). "A shock wave in the air is generally referred to as a 'blast wave' because it resembles and is accompanied by a very strong wind." (**Glasstone**, *The Effects of Nuclear Weapons* (3rd Ed.), 1977, p. 1, Chapter I)

Blended Learning: "…a "Blended Learning" approach…provide{s} modular training content in a variety of mediums (including, but not limited to, traditional, Web-based, Computer-based, and Interactive Video Teletraining) to keep pace with current needs. By balancing distributed learning with traditional training methods, Blended Learning will improve support for First Responders in measurable ways. Office for Domestic Preparedness." (**ODP**, *Approach for Blended Learning*)

Blended Learning: "Blended Learning technologies:

- Increase the quality, consistency, and accessibility of training (any time, any place)
- Maximize content sharing and reuse among sister organizations
- Reduce classroom time by providing prerequisite learning materials via alternative media
- Increase training effectiveness and throughput by institutionalizing best practices

Blended Learning will ultimately provide the means to sustain First Responder performance levels over time." (**ODP**, *ODP Approach for Blended Learning*, 2 Feb 2003, p. 3)

BLEVEs: "Boiling Liquid Expanding Vapor Explosions (BLEVEs) are among the most feared events when tanks of hazardous materials are exposed to fire or physical damage or other events that cause excessive pressures within the tank. A BLEVE could occur when flames impinge upon the vapor space (unwetted internal surface) of the tank where there is no liquid to absorb heat. As the vapor space is heated, the pressure inside the tank (even after the relief valve opens) becomes so great that it eventually vents itself through the weakest area of the tank. As the pressure inside is increasing, the flames weaken the structural integrity of the tank, thus creating the conditions for venting. This sudden venting of pressure and vaporization of product involves the violent rupture of the container, with rocketing fragments. If the container stored a flammable liquid or gas, a large rising fireball will form, the size of which will vary with the amount of hazardous material present." (**EPA**, *Technical Guidance for Hazards* Analysis, 1987. p. F-1)

Blister Agents (Vesicants): "Substances that cause blistering of the skin. Exposure is through liquid or vapor contact with any exposed tissue (eyes, skin, lungs). Mustard (H), Distilled Mustard (HD), Nitrogen Mustard (HN) and Lewisite (L) are blister agents. Symptoms: Red

eyes, skin irritation, burning of skin, blisters, upper respiratory damage, cough, hoarseness." (**DOT**, *Emergency Response Guidebook*, 2004, p. 358)

Blizzard: "A blizzard is defined by the U.S. National Weather Service as winds over 16 m s^{-1} [35 mph] and falling or blowing snow causing visibility less than 400 m lasting for at least 3 h." (**Schwartz and Schmidlin**, Climatology of Blizzards, July 2002)

Blizzard: Violent winter storm, lasting at least 3 hours, which combines below freezing temperatures and very strong wind laden with blowing snow that reduces visibility to less than 1 km. (**WMO** 1992, 86)

Blood Agents: "Substances that injure a person by interfering with cell respiration (the exchange of oxygen and carbon dioxide between blood and tissues). Hydrogen cyanide (AC) and Cyanogen chloride (CK) are blood agents. Symptoms**:** Respiratory distress, headache, unresponsiveness, seizures, coma." (**DOT**, *Emergency Response Guidebook*, 2004, p. 358)

Blue Cascades I: A regional interdependencies tabletop exercise held June 12, 2002 in Welches, OR. "The exercise focused on the linkages between and among infrastructures that could make the Pacific Northwest vulnerable to cascading impacts in the event of an attack or disruption, and which could complicate expeditious response and recovery. Critical infrastructures participating in the exercise included energy (electric power, oil, and natural gas), telecommunications, transportation, water supply systems, banking and finance, emergency services, and government services. Federal, state/provincial, and local government agencies, including emergency management organizations, were also well-represented. BLUE CASCADES was expressly designed to help stakeholders assess the current state of their understanding and preparedness, particularly from the perspective of infrastructure interdependencies. It also was aimed at identifying their needs, priorities, and resource requirements for incorporation into an Action Plan to assist the eight jurisdictions within PNWER to become a disaster-resistant/resilient region." (**PNWER**, *"Blue Cascades" Infrastructure Interdependencies Tabletop*, 2002, p. 1, Executive Summary)

Blue Cascades II: A regional interdependencies tabletop exercise held September 8, 2005 in Seattle WA. "The overall goal of BLUE CASCADES II was to raise awareness of interconnections among the region's critical infrastructures and organizations and associated vulnerabilities… centered on cyber events as well to meet stakeholder needs to learn more about cyber threats, disruptions and impacts." (**PNWER**, *Blue Cascades II*. 2004, p. 2)

Blue Cascades III: A regional interdependencies tabletop exercise held March 1-2, 2006 in Bellevue, WA focused on a 9.0 magnitude earthquake along the Cascadia Subduction Zone. (**PNWER**, *Blue Cascades III: Managing Extreme Disasters – Infrastructure Interdependencies Tabletop Exercise*, March 1-2, 2006, p. i)

Blue Cascades IV: A "regional interdependencies tabletop exercise, held January 25, 2007 in Seattle, WA. Participants included more than 250 representatives from public, private sector, non-profit, academic, community and other organizations. The overall goal of the exercise was to

raise awareness of impacts on critical infrastructures and essential services from a pandemic and of stakeholder preparedness plans and resources; illuminate issues related to roles and missions; and gauge the effectiveness of regional communications and coordination. A major objective of Blue Cascades IV was to enable participants to identify shortfalls and potential solutions that could be incorporated into a regional pandemic preparedness Action Plan." **(PNWER**, *Blue Cascades IV: Critical Infrastructure and Pandemic Preparedness*…, 2007, p. ii)

Blue Team: "In *prevention* exercises, the Blue Team consists of briefed players and other organizations and agencies participating in a prevention-focused exercise that are not part of the *Red Team*." (**FEMA**, *HSEEP Glossary*, 2008)

BOCA: Building Officials and Code Administrators International, Inc.

BoO: Base of Operations. (**FEMA**, *US&R IST In Federal Disaster Operations,* Jan 2000, p. 1)

BOS: Basic Operating Situations. (**DCPA**, *Attack Environment Manual*, 1973, Panel 20)

BPA: Blanket Purchase Agreement. (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 55)

BPA: Business Process Analysis. (**DHS**, *FCD 1*, Nov. 2007, p. 16)

BPAT: Building Performance Assessment Team, FEMA.

Brainstorming: Brainstorming techniques are free-flowing, non-attribution discussions. The following are brainstorming rules in a 2006 Pandemic Tabletop Exercise:

- Non-attribution is in effect
- Promote maximum group interaction
- Keep issues on a high level
- Offer imputs based on facts; avoid hearsay
- Non-constructive criticism is not permitted
- Focus on solutions, not blame
- Respect all ideas and comments
- Participate **(FEMA,** *Determined Accord Tabletop Exercise November 2006*, Office of National Security Coordination, slide 12)

Branch (ICS/NIMS): "The organizational level having functional or geographical responsibility for major aspects of incident operations. A branch is organizationally situated between the section and the division or group in the Operations Section, and between the section and units in the Logistics Section. Branches are identified by the use of Roman numerals or by functional area." (**DHS**, *NIMS*, 2004, pp. 127-128)

Breach: "When a levee or structure loses its normal crest elevation (fails). A breach can be a 1 ft depression or a big gap in a levee. Breaches can occur through erosion or foundation failure; water flows through the breach until it equalizes (a breach causes much deeper water than simple overtopping)." (**USACE/IPET**, *Definitions*, 2008)

BRP: Business Resumption Planning. (**Paul Rosenthal**, *BRP*)

BSI: Build Security In, DHS. (**DHS**, *Build Security In Home*)

BSIR: Bi-annual Strategy Implementation Report. (**DH**S, *BZPP* Update, March 2005, p. 3)

BSL: Biosafety Level.

BSSC: Building Seismic Safety Council.

BTCDP: Bioterrorism Training and Curriculum Development Program.

Buffer Zone Protection Program (BZPP): See Department of Homeland Security Buffer Pgm.

Build Security In Home (BSI), DHS: "Build Security In (BSI) contains and links to best practices, tools, guidelines, rules, principles, and other resources that software developers, architects, and security practitioners can use to build security into software in every phase of its development. BSI content is based on the principle that software security is fundamentally a software engineering problem and must be addressed in a systematic way throughout the software development life cycle. Build Security In is a project of the Software Assurance program of the Strategic Initiatives Branch of the National Cyber Security Division (NCSD) of the U.S. Department of Homeland Security. The Software Engineering Institute (SEI) was engaged by the NCSD to provide support in the Process and Technology focus areas of this initiative. The SEI team and other contributors develop and collect software assurance and software security information that helps to create secure systems." (**DHS**, *BSI*, 18Feb2008)

Building Block Approach: "The building-block approach focuses on exposing participants to a cycle of training and exercises that escalates in complexity, with each exercise designed to build upon the last, in terms of scale and subject matter. For example, a building-block series of exercises may include a *seminar*, which leads to a *tabletop exercise (TTX)*, which leads to a *full-scale exercise (FSE)*." (**FEMA**, *HSEEP Glossary*, 2008)

Building Code: "Codes that architects, builders, and developers use that are in compliance with agreed upon safety standards in a specific area. A building code is a regulation that determines the design, construction, and materials used in building." (**MortgageLoan.com**, 2007)

Building Code Effectiveness Grading Schedule (BCEGS): "The Building Code Effectiveness Grading Schedule (BCEGS) assesses the building codes in effect in a particular community and how the community enforces its building codes, with special emphasis on mitigation of losses from natural hazards. The concept is simple: municipalities with well-enforced, up-to-date codes should demonstrate better loss experience, and insurance rates can reflect that. The prospect of lessening catastrophe-related damage and ultimately lowering insurance costs provides an incentive for communities to enforce their building codes rigorously — especially as they relate to windstorm and earthquake damage. The anticipated upshot: safer buildings, less damage, and lower insured losses from catastrophes. The BCEGS program

assigns each municipality a BCEGS grade of 1 (exemplary commitment to building-code enforcement) to 10. ISO develops advisory rating credits that apply to ranges of BCEGS classifications (1-3, 4-7, 8-9, 10). ISO gives insurers BCEGS classifications, BCEGS advisory credits, and related underwriting information. ISO began implementing the program in states with high exposure to wind (hurricane) hazards, then moved to states with high seismic exposure, and then continued through the rest of the country." (**ISO**, *ISO's BCEGS*, 2008)

Building Partnership Capacity: "Targeted efforts to improve the collective capabilities and performance of the Department of Defense and its partners." (DOD, *Building Partnership Capacity: QDR Execution Roadmap*, May 22, 2006, p. 4)

Building Performance Assessment Teams (BPAT) and Process: "In response to hurricanes, floods, earthquakes, and other disasters, the Federal Emergency Management Agency (FEMA) often deploys Building Performance Assessment Teams (BPATs) to conduct field investigations at disaster sites. The members of a BPAT include representatives of public and private sector entities who are experts in specific technical fields such as structural and civil engineering, building design and construction, and building code development and enforcement. BPATs inspect disaster induced damages incurred by residential and commercial buildings and other manmade structures; evaluate local design practices, construction methods and materials, building codes, and building inspection and code enforcement processes; and make recommendations regarding design, construction, and code issues. With the goal of reducing the damage caused by future disasters, the BPAT process is an important part of FEMA's hazard mitigation activities." (**FEMA**, B*uilding Performance Assessment Report: Hurricane Georges in Puerto Rico*, March 1999, p. 2)

Building Seismic Safety Council (BSSC): "The BSSC was established in 1979 as a Council of the National Institute of Building Sciences. Developed as an entirely new type of instrument, the BSSC deals with the complex regulatory, technical, social, and economic issues involved in developing and promulgating building earthquake risk mitigation regulatory provisions that are national in scope. By bringing together all of the needed expertise and relevant public and private interests, it was believed that issues related to the seismic safety of the built environment could be resolved and jurisdictional problems overcome through authoritative guidance and assistance backed by a broad consensus." (**BSSC**, *About BSSC*, http://www.bssconline.org/ab/index.html)

Business Continuity: "The ability of an organization to continue to function before, during, and after a disaster." (**DHS,** *NIPP*, 2006, p. 103)

Business Continuity: "The process of identifying the impact of potential losses on an organization's functional capabilities; formulating and implementing viable recovery strategies; and developing recovery plans, to ensure the continuity of organizational services in the event of an event, incident, or crisis." (**DOA**, *Infrastructure Risk Management. (Army)*, 2004, p. 12)

Business Continuity: "The ability of an organization to ensure continuity of service and support for its customers and to maintain its viability before after and during an event. (DRII and OR-DAS [Oregon Depart. Of Admin Services] definitions are identical)." (**DigitalCare**, *State of OR Business Cont. Workshop*, 2006, 47)

Business Continuity: Business continuity – emphasis on "continuity" – is the ability of a business to continue operations in the face of a disaster condition…. Business continuity means:

- identifying critical business functions
- identifying risks to critical functions
- identifying ways to avoid or mitigate the risks
- having a plan to continue business in the event of a disaster condition
- having a plan to quickly restore operations to 'business as usual'.

Disaster recovery is an integral part of business continuity. Business continuity does not replace insurance. It is a form of insurance, and should include insurance for life, health, facilities, product and business interruption." (**Glenn**, *What Is BC Planning?* 2002)

Business Continuity: "An ongoing process supported by senior management and funded to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies, recovery plans, and continuity of services." (**NFPA 1600**, 2007, p.7)

"In the public sector, this phrase is also known as *continuity of operations* or *continuity of government*. Mission, vision, and strategic goals and objectives are used to focus the program. (**NFPA 1600**, 2007, p.11)

Business Continuity: "…the term business continuity encompasses the gamut of mechanisms that maintain continuity in business, including all forms of problem resolution and preventive mechanisms like quality assurance and security." (**Wainschel** 2006, 54)

Business Continuity, Disaster Recovery & Contingency Planning Differences: "A person builds a house on an ocean beach. A storm washes away the beach. The house collapses.

Business continuity would suggest building a barrier reef or moving the house farther inland.

Disaster recovery rebuilds the house in time for the next storm.

Contingency planning takes the same scenario and says: 'A storm will come ashore and damage the house; make sure there is someplace to live while the house is rebuilt'." (**Glenn**, *What Is BC Planning?* 2006, p. 18)

Business Continuity Certified Planner (BCCP): "The BCCP recognizes practitioners who are involved in developing, implementing and maintaining BC procedures and processes for their business sub-units; as well as for senior and middle management involved in BCM." (**ISSA,** *Certifications*, 2007)

Business Continuity Coordinator: "Designated individual responsible for preparing and coordinating the business continuity process. Similar term: disaster recovery coordinator, business recovery coordinator." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 47)

Business Continuity Management (BCM): "Business Continuity Management is an holistic management process that identifies potential impacts that threaten an organisation and provides a framework for building resilience and the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value creating activities." (**BCI,** *Good Practice Guidelines*, 2007)

Business Continuity Management (BCM): "Business Continuity Management (BCM) planning focuses on assuring continuous business processes and is a major factor in an organization's survival during and after a disruption. BCM is a key component of Comprehensive Emergency Management. Companies that don't have good business continuity plans often fail to survive a business disruption. Good continuity planning can make the difference -- and in the long run make you more profitable." (**Davis Logic**, *BCM*, 2005)

Business Continuity Management (BCM): "A holistic management process that identifies potential impacts that threaten an Organization and provides a framework for building resilience with the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value creating activities. The management of recovery or continuity in the event of a disaster. Also the management of the overall program through training, rehearsals, and reviews, to ensure the plan stays current and up to date." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 47)

Business Continuity Management (BCM): "Business continuity management is the process by which an organization prepares for future incidents that could jeopardize the organization's core mission and its long-term viability. Such incidents include local events like building fires, regional events like earthquakes, or national events like pandemic illnesses." (**IIA**, *Business Continuity Management*, July, 2008, p. 3)

Business Continuity Management (BCM): "The process of developing plans to cope with disruptive incidents…" (**UK Cabinet Office**, *The Risk Register*, 2008, 31)

Business Continuity Management (BCM) Components: "The Key Components of the BCM are:

- **Management Support** — Management must show support to properly prepare, maintain, and practice a business continuity plan (BCP) by assigning adequate resources, people, and budgeted funds.
- **Risk Assessment and Risk Mitigation** — Potential risks due to threats such as fire, flood, etc., must be identified, and the probability and potential impact to the business must be determined. This must be done at the site and division level to ensure the risks
- of all credible events are understood and appropriately managed.
- **Business Impact Analysis (BIA)** — The BIA is used to identify business processes that are integral to keeping the business unit functioning in a disaster and to determine how soon these integral processes should be recovered following a disaster.
- **Business Recovery and Continuity Strategy** — This strategy addresses the actual steps, people, and resources required to recover a critical business process.
- **Awareness and Training** — Education and awareness of the BCM program and BC plans are critical to the execution of the plan.

- **Exercises** — Employees should participate in regularly scheduled practice drills of the BCM program and BC plans.
- **Maintenance** — The BCM capabilities and documentation must be maintained to ensure that they remain effective and aligned with business priorities." (**IIA**, *Business Continuity Management*, July, 2008, p. 3)

Business Continuity Management (BCM) Goal: "The goal of BCM is to enable an organization to restore critical business processes after a disaster has been declared. BCM is a simple matter of risk management designed to create business continuity capabilities to match likely risks based on business value." (**IIA**, *Business Continuity Management*, July, 2008, p. 1)

Business Continuity Management (BCM) Process: "The Business Continuity Institute's BCM process (also known as the BC Life Cycle) combines 6 key elements: 1) Understanding Your Business 2) Continuity Strategies 3) Developing a BCM Response 4) Establishing a Continuity Culture 5) Exercising, Rehearsal & Testing 6) The BCM Management Process." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 47)

Business Continuity Management (BCM) Program: "An ongoing management and governance process supported by senior management and resourced to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies and plans, and ensure continuity of products/services through exercising, rehearsal, testing, training, maintenance and assurance." (**DigitalCare**, *State of OR BC Workshop*, 2006, pp. 47-48)

Business Continuity Management (BCM) Program Maintenance: "One of the most common obstacles preventing organizations from obtaining BC readiness is neglect. Frequently, organizations invest great time and expense in developing plans that are never maintained thereafter. Like any operational plan, BC and CM plans atrophy over time and become less effective as changes in business priorities, people, processes, technology, and operating environment fail to be reflected in the plans. In some cases, "maintenance" is limited to changing the dates on a plan without changing the content. In all cases, the focus of the internal audit group should be on the maintenance of the BC/CM capability, not simply updating a document." (**IIA**, *Business Continuity Management*, 2008, p. 14)

Business Continuity Management (BCM) Program Maintenance Evaluation: "Some techniques to evaluate the maintenance of BC include:

- Evaluating the document change history to determine whether updates to the document are recorded.
- Reviewing maintenance requirements to ensure component maintenance is assigned to specific individuals and management provides guidance to enable the individuals to be effective at maintaining BC capabilities.
- Reviewing BC assumptions to ensure they align well with current operating requirements. BC assumptions should change to address new issues such as additional locations, new concentrations of risk (e.g., a new disaster scenario becomes credible), reliance on new/different third parties, or operations in new countries.
- Reviewing changes in BC assumptions to ensure each change has a basis.

- Reviewing the date of the BIA to ensure the foundation for the BC plans is current enough to provide adequate direction.
- Contacting people responsible for tasks in the plan to determine their understanding of the requirements and confidence that they can perform well. In many cases, people named in plans (especially plans that have existed for several years) are simply replacements for their predecessors in name only and have not been provided the same training as when the BCM program and/or BC plan was initially introduced.
- Reviewing the BC document structure/setup to determine how accurately it reflects the current organizational model and structure.
- Scanning for words such as "current" and "today's" and evaluating whether the associated content is truly keeping pace with the organization, especially if a document is available electronically.
- Reviewing exercise/test results and associated action reports for exceptions (e.g., gaps) requiring remediation.
- Assessing the BCM program and BC recovery capabilities to ensure they have been updated to correct necessary gaps and have been implemented effectively." (**IIA**, *Business Continuity Management*, 2008. pp. 14-15)

Business Continuity Plan: "The Business Continuity Plan pulls together the response of the whole organisation to a disruptive incident. Those using the plan should be able to analyze information from the response team concerning the impact of the incident, select and deploy appropriate strategies from those available in the plan and direct the resumption of business units according to agreed priorities. The components and content of a Business Continuity Plan will vary from organisation to organisation and will have a different level of detail based on the culture of the organisation and the technical complexity of the solutions." (**BCI**, *Good Practice Guide* 2007)

Business Continuity Plan (BCP): "Advance arrangements and procedures that enable an organization to respond to an event in such a manner that critical business functions continue with planned levels of interruption or essential change. SIMILAR TERMS: Contingency Planning, Planning, Business Resumption Planning, Continuity Planning, Continuity of Operation Plans (COOP)." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 48)

Business Continuity Plan (BCP) Testing: "Exercise/test requirements should be documented either inside the plan itself or in the entity-level BCM policy. Most of the standards used to govern BCM programs require three basic elements of a testing regime:

- Tests must be held at periodic intervals. The actual period between the events is determined by the BCM Steering Committee and is based on the program goals and objectives.
- Tests should address a variety of threats/scenarios and different elements within the BCM program. It is possible to address these issues in a series of broadly-based annual exercises or through more targeted site or component-level testing.
- There must be some method to track issues and gaps uncovered in the test and track their resolution." (**IIA**, *Business Continuity Management*, 2008, p. 15)

Business Continuity Plan Administrator: "The designated individual responsible for plan documentation, maintenance, and distribution." (**DigitalCare**, *State of OR BC Wkshop*, 2006, 47)

Business Continuity Planning (BCP): "Business continuity planning involves ensuring that a business is sustainable through a period of significant business interruption caused by a disaster or any other unforeseen disruptive event. It is essential for all types of scenarios ranging from system or component failure caused by a software upgrade to a man-made or natural disaster that broadly impacts a firm's physical assets, buildings and/or people." (**AT&T**, *Business Continuity Preparedness Handbook*, April 2007, p. 2)

Business Continuity Planning (BCP): "Process of developing advance arrangements and procedures that enable an organization to respond to an event in such a manner that critical business functions continue with planned levels of interruption or essential change. SIMILAR TERMS: Contingency Planning, Disaster Recovery Planning, Business Resumption Planning, Continuity Planning." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, 48)

Business Continuity Planning (BCP): "Business continuity planning (BCP) is a technique that is designed to help organizations quickly return to normal operations after a crisis. Originally, BCP largely focused on ensuring that an organization's data stores would be preserved in the event of a crisis. Now, however, many view BCP as including all essential aspects of the organization." (**Light**, *Predicting Organizational Crisis Readiness*, 2008, 20)

Business Continuity Planning (BCP): "Assessment of risk to an organization's processes, and the creation of policies, plans, and procedures to minimize the impact of those risks." (**Risky Thinking**, *A Glossary of Risk Related Terms*, 2007)

Business Continuity Planning Options: "Once critical functions and risks to those functions are identified, planners have three options:

- Avoid a risk, typically through redundancy.
- Mitigate a risk by implementation of 'work-arounds'.
- Absorb the risk.

The decision to avoid, mitigate, or absorb is a management decision. The planner makes recommendations based on cost vs. effectiveness and efficiency." (**Glenn**, *What is BC Planning*, 2002)

Business Continuity Planning Phases:

- Project Initiation
- Business Analysis
- Design and Development (Designing the Plan
- Implementation (Creating the Plan)
- Testing
- Maintenance (Updating the Plan) (**DigitalCare,** *State of OR BC Workshop*, 2006, p. 20)

Business Continuity Practice Subject Areas and DRII Professional Practices:

1. Project Initiation and Management

2. Risk Evaluation and Control
3. Business Impact Analysis
4. Developing Business Continuity Strategies
5. Emergency Response and Operations
6. Developing and Implementing Business Continuity Plans
7. Awareness and Training Programs
8. Maintaining and Exercising Business Continuity Plans
9. Public Relations and Crisis Coordination
10. Coordination with Public Authorities.
(**DRJ & DRII**, *GAP for BC Practitioners*, 2007, p. 3)

Business Continuity Program: "An on-going program to ensure business continuity and recovery requirements are addressed, resources are allocated, and processes and procedures are completed and rehearsed. Most effective with management sponsorship and through regular rehearsals." (**DigitalCare,** *State of OR Business Continuity Workshop*, 2006, p. 48)

Business Continuity (BC) Risk Mitigation Strategies: "Developing and deploying BC risk mitigation strategies will help to minimize the impact of disruptive events and will improve response capabilities. Examples of risks and their corresponding mitigation strategies include:

- **Safety risks for various disasters:** Leverage ER and/or Health, Safety, and Environmental team and/or operational plans.
- **Operational failures:** Leverage standard operating procedures and normal maintenance activities.
- **Loss of primary office:** Arrange to move staff members to an alternative office or enable them to work at home, assuming their home is likely to be functional (i.e. not damaged if the event is regional, and home has necessary resources like equipment, computer, network connection, etc.)
- **Loss of IT network connectivity:** Develop IT system and information recovery (disaster recovery) plans to create network redundancy or recovery.
- **Loss of IT data center:** Develop plan to manually perform work processes until IT systems can be restored. Also, develop IT disaster recovery plans to restore IT systems at alternative site." (**IIA**, *Business Continuity Management*, July, 2008, pp. 9-10)

Business Continuity Steering Committee: "A committee of decision makers, business owners, technology experts and continuity professionals, tasked with making strategic recovery and continuity planning decisions for the organization." (**DigitalCare,** *State of OR BC Workshop*, 2006, p. 48)

Business Continuity Strategy: "An approach by an organization that will ensure its recovery and continuity in the face of a disaster or other major outage. Plans and methodologies are determined by the organizations strategy. There may be more than one solution to fulfill an organization's strategy. Examples: Internal or external hot-site, or cold-site, Alternate Work Area reciprocal agreement, Mobile Recovery, Quick Ship / Drop Ship, Consortium-based solutions, etc." ." (**DigitalCare,** *State of OR BC Workshop*, 2006, p. 48)

Business Crisis: "Any problem or disruption that triggers negative stakeholder reactions that could impact the organization's financial strength and ability to do what it does." (**Institute for Crisis Management**, *Annual ICM Crisis Report*, March 2008, p. 1)

Business Emergency Preparedness: "Emergency preparedness is no longer the sole concern of businesses located in earthquake- or tornado-prone areas of the world. Preparedness must now account for man-made disasters, such as terrorist attacks, in addition to pandemics and natural disasters. Knowing what to do during an emergency is an important part of being prepared and may make all the difference when seconds count. The goal of preparedness is to resume business operations with as much transparency, from the customer's perspective, as possible." (**IIA**, *Business Continuity Management*, July, 2008, p. 4)

Business Executives for National Security (BENS): "Business Executives for National Security, a nationwide, non-partisan organization, is the primary channel through which senior business executives can help enhance the nation's security. BENS members use their business experience to drive our agenda, deliver our message to decision makers and make certain that the changes we propose are put into practice. BENS has only one special interest: to help make America safe and secure." (**BENS**, *Mission Statement*, 2006)

Business Impact Analysis (BIA): "The Business Impact Analysis is the foundation on which the whole BCM [Business Continuity Management] process is built. It identifies, quantifies and qualifies the business impacts of a loss, interruption or disruption of business processes so that management can determine at what point in time these become intolerable (after an interruption). This is called the 'Maximum Tolerable Period of Disruption' (MTPD). It therefore provides the data from which appropriate continuity strategies can be determined." (**BCI**, *Good Practice Guide* 2007)

Business Impact Analysis (BIA): "A risk management methodology…" (**FEMA**, *MEF*, 70)

Business Impact Analysis (BIA): "The BIA:
• identifies business functions critical to the business' survival
• identifies risks to those functions
• rates (prioritizes) risks by probability of occurrence and impact on the business
• identifies ways to avoid or mitigate identified risks
• prioritizes recommended avoidance and mitigation options." (**Glenn**, *What is BC Planning*, 2002)

Business Impact Analysis (BIA): "A method of identifying the effects of failing to perform a function or requirement." (**HSC**, *National Continuity Policy Implementation Plan,* 2007, 60)

Business Impact Analysis (BIA) — "The BIA is used to identify business processes that are integral to keeping the business unit functioning in a disaster and to determine how soon these integral processes should be recovered following a disaster. (**IIA**, *Business Continuity Management*, July, 2008, p. 3)

Business Impact Analysis (BIA): "Business impact analysis, a component of the business continuity program, assesses the potential impact on business operations resulting from damage to, interruption of, or failure of processes, systems, utilities, or equipment from a natural or manmade hazard." (**NFPA**, *Implementing NFPA 1600*, 2007, p. 6)

Business Impact Analysis (BIA): "Analysis which identifies the resources critical to an organization's continued existence, identifies threats posed to those resources, assesses the likelihood of those threats occurring, and the impact of each of those threats on the organization. One output of a business impact analysis is a prioritized list of the risks which should be addressed." (**Risky Thinking**, *A Glossary of Risk Related Terms*, 2007)

Business Impact Analysis (BIA) Factors: "Some of the factors that must be evaluated to better understand the scope and impact of the potential event include the:

- **Geographic extent of the impact:** A single building (e.g., fire), entire facility complex (e.g., chemical spill), metropolitan area (e.g., transportation strike), large region (e.g., earthquake), or potentially the world (e.g., pandemic flu).
- **Days of impact:** Number of days before operations will likely return to 75 percent functionality, which means 75 percent of people, resources, and production are functioning. Days of impact may be the period before the organization can replace lost resources, like renting a new building and making it functional after a building fire.
- **Availability of staff (by days):** Percentage of staff that likely would be able to work based on each likely disaster event (by days: 0, 3, 7, 14, or 30). Staff may need to go home for an extended period for some disasters like earthquakes that may damage homes.
- **Availability of operations and/or offices:** Likely percentage of operations and/or office space that is functional (during the days of impact).
- **Availability of IT (during the days of impact):** Likely availability of key IT components for each disaster event. This includes IT infrastructure (logon capabilities), IT network, IT applications, etc." (**IIA**, *Business Continuity Management*, 2008, p. 9)

Business Impact Analysis (BIA) Risk Assessment: "The Business Impact Analysis/ Risk Assessment is a process designed to identify critical business functions and workflow determine the qualitative and quantitative impacts of a disruption, and to prioritize and establish recovery time objectives. SIMILAR TERMS: Business Exposure Assessment, Risk Analysis." (**DigitalCare,** *State of OR Business Continuity Workshop*, 2006, pp. 47-48)

Business Impact Analysis (BIA) Steps:

- *Identifying the Business Processes* -- The first step in a BIA is to identify the business processes performed by the functional team, the resources needed to perform the function, and the critical staff performing the work….
- *Determining RTO and RPO Based on Business Impact* -- The second step in a BIA is to identify the type of business impact if the business process cannot be performed. Below are some types of business impacts:
    - Health and safety (e.g., injury).
    - Environmental (e.g., spill).
    - Customer service (e.g., loss of customers).
    - Financial (e.g., penalties).

  - Regulatory/legal (e.g., governmental action).
  - Reputation (e.g., loss of image)….
- *Identifying the Other Parties and Physical Resources* -- The third step of the BIA is to identify the other parties and physical resources that are critical to the business process, which could include other departments, vendors, other third parties, critical equipment, and physical records.
- **Obtaining Sponsor and Manager Approval of BIA** -- The BCM sponsor and managers of each team must review and approve the BIA for their scope of operations. Since managers throughout the organization are responsible for ensuring the business continuity and recovery solutions are implemented, they must own the BIA for their team." (**IIA**, *Business Continuity Management*, 2008, pp. 10-11)

Business Interruption: "Any event, whether anticipated (i.e., public service strike) or unanticipated (i.e., blackout) which disrupts the normal course of business operations at an organization's location. Similar terms: outage, service interruption. Associated terms: business interruption costs, business interruption insurance." (**DigitalCare,** *State of OR Business Continuity Workshop*, 2006, p. 48)

Business Interruption Coverage: "Commerical property insurance policies often provide "business interruption" coverage that protects against many economic losses, including those from hurricanes. Business interruption coverage usually includes the costs that you incur when you have to relocate your business for a specified period of restoration.." (*Insure.com.* "Hurricane Gustav Losses at Least $4 Billion." September 2, 2008)

Business Interruption Civil Authority Coverage: "*Civil Authority* coverage often applies whenever you lose business income because access to your premises is prohibited as the direct result of damage to or destruction of property belonging to others, as long as it's caused by a covered peril." (*Insure.com.* "Hurricane Gustav Losses at Least $4 Billion," September 2, 2008)

Business Interruption Extra Expense Coverage: "*Extra Expense* coverage indemnifies your business for any increased cost of business operations above the norm because of a peril covered by your policy. One example would be the purchase of a generator to continue to operate because of an interruption of power caused by the hurricane." (*Insure.com.* Sept. 2, 2008)

Business Interruption Gross Earnings Coverage: "*Gross Earnings* coverage reimburses you for the amount of gross earnings minus normal expenses that you would have earned but for the interruption of its business (profits). Insurers may reduce the amount to be paid by any savings that your business gains because of the business interruption." (*Insure.com.* September 2, 2008)

Business Interruption Profit and Commission Coverage: "*Profit and Commission* coverage applies when your business inventory has been destroyed or damaged and you have been deprived of the opportunity to sell that inventory to the public." (*Insure.com.* Sept. 2, 2008)

Business Process Analysis (BPA): "The method of examining, identifying, and mapping the functional processes, workflows, activities, personnel expertise, systems, data, and facilities inherent to the execution of a function or requirement.

- When preparing the BPA for your organization consider the following:
- The four pillars of continuity capability (leadership, staff, facilities and communications)
- Necessary resources
- External interdependencies
- Internal interdependencies." (**FEMA**, *MEF/PMEF Workshop, Unit 5*, 2008, slide 131)

Business Process Analysis (BPA): "A method of examining, identifying, and mapping the functional processes, workflows, activities, personnel expertise, systems, data, and facilities inherent to the execution of a function or requirement." (**HSC**, *National Continuity Policy Implementation Plan*, August, 2007, p. 60)

Business Process Mapping (BPM): A business process map is a visual representation of a process – sequentially illustrating each step in the process, who completes each step, and the time taken to complete each step… The basic steps to process mapping are:

- Establish the scope or your project
- Map the current business process
- Identify opportunities to improve
- Redesign the business process
- Identify assumptions and tools required for success (these will be the starting point for implementation planning. (**Government of British Columbia**, *Regulatory Reform Initiative*, no date)

Business Recovery and Continuity Strategies: "Business recovery and continuity strategies must be developed for critical business processes identified during the BIA….The business recovery and continuity strategies may include some of the following types of solutions:

- **Manual work processes:** Work can be done manually while IT systems are down.
- **Outsourcing:** Some work can be performed by external companies, competitors (reciprocal agreement), or secondary vendors.
- **Disaster recovery for IT:** An IT recovery solution will be needed for critical systems, but because these can be very expensive, manual work processes may be used initially following a disaster.
- **Alternative staffing:** Identify other staff members who can perform the job function.
- **Alternative facilities:** Identify alternative facilities where the primary staff can work." (**IIA**, *Business Continuity Management*, 2008, p. 11)

Business Resilience: "The ability to rapidly adapt and respond to risks and opportunities in order to maintain continuity of business operations, remain a trusted partner and enable growth." (**iJET** Intelligent Risk Systems, "Business Resiliency for the Global Marketplace: Transorming Operating Risk into Competitive Advantage," 2008)

Business Resumption Planning (BRP): "The BRP is a plan activated during or immediately after an emergency and is aimed at permitting the rapid and cost effective resumption of an organization's essential operations in order to maintain continuity of service to its clients. (**Manitoba Emergency Measures Organization**, *Business Resumption Planning*, 1996, p. 9)

Business Resumption Planning (BRP): "Modern organizations have a large variety of operational and managerial functions whose continuous operations are critical to the organizations continuing viability. Business Resumption Planning (BRP) involves arranging for emergency operations of these critical business functions and for resource recovery planning of these functions following a natural or man-made disaster. Business Resumption Plans are needed for all such organizational units, including data centers, information systems (IS) supported functions, and those organizational functions which are performed manually…. Business resumption planning should be an integrated portion of a total security program. The security program should cover physical security of facilities and equipment, data security of automated files and manual records, protection of all levels of personnel, and business resumption planning." (**Paul Rosenthal**, *BRP*)

Business Risk Assessment: "BU [business unit] or regional management should complete a BC [business continuity] risk assessment for each of its business functions and associated sites (city or region). The purpose of this exercise is to identify likely risks that could disrupt critical business processes performed at specific locations of operation. The BC risk assessment is used to shape the overall BCM program scope by providing a list of likely events and associated consequences that should be addressed in a risk mitigation plan (e.g., prevention) and the BCM program. There is no way to predict all risks or to mitigate all known risks that may need to be accepted. Participants in the BC risk assessment should include individuals such as staff from the business as well as staff from the health, safety, and environment group; facilities management; legal; human resources; and personnel from the medical field…. When evaluating disruptive events, it's important to identify those that are credible and look for all potential events that may impact business operations. Possible methods for predicting future disruptive events include:

- Looking at historical data associated with similar organizations in the same region.
- Using government or industry data concerning possible risks.
- Using subject matter experts when the business model changes or limited data is available to perform a detailed risk assessment. (**II**A, *Business Continuity Management*, July, 2008, pp. 8-9)

BWEEP: BioWatch Exercise and Evaluation Program. (**DHS/OIG**, *DHS' Management of BioWatch*, 2007, p. 12)

BW IRP: Biological Weapons Improved Response Program. (**Skidmore**, *Acute Care*, 2003, v)

BY: Budget Year. (**DHS**, *DHS Exhibit 300 Public Release BY08…JAC*, Feb 12, 2007)

BZP: Buffer Zone Plan. (**DHS**, *FY 2007 IPP: BZPP-Program Guidance…*, 2007, p. 2)

BZPP: Buffer Zone Protection Program. (**DHS,** *NIPP*, 2006, p. 101)

C2: Command and Control. (**JCS/DOD**; **DA**, *WMD-CST Operations*, Dec 2007, Glossary 1)

C3: Command, Control, and Communications. (Defense Science Board, 2007)

C3I: Command, Control, Communications, and Intelligence. (**DSB**, *Protecting the Homeland*, 2001, p. F-3)

C4: Command, Control, Communications, and Coordination. (**DHS**, *TCL*, 2007, p. 447)

C4: Command, Control, Communications and Computers. (**DOD**, *BG John Thomas Testimony*, 2004)

C Zone, NFIP: "C Zone is defined as an area of minimal flood hazard, usually depicted on the Flood Insurance Rate Map as above the 500-year flood level of the primary source of flooding. C Zones tend to have local, shallow flooding problems. B and C Zones may have flooding that does not meet the criteria to be mapped as a Special Flood Hazard Area, especially ponding, localized drainage problems, and streams that drain smaller watersheds." *(***FEMA,** *Reducing Damage from Localized Flooding – A Guide for Communities*, 2005, vii)

CAAP: Critical Asset Assurance Program (DoD Directive No. 5160.54, January 20, 1998). ; [Note: Replaced "DoD Key Asset Program (KAPP)," June 26, 1989.]

CAC: Civil Applications Committee. (**USGS**, *NCAP*, 2002)

CADRI: Capacity for Disaster Reduction Initiative (**UNDP/BCPR**, 2007)

CAEIAE: Centers of Academic Excellence in Information Assurance Education. (**DHS,** *NIPP*, 2006, p. 101)

CAER: Community Awareness and Emergency Response, Chemical Manufacturers Association.

CAG: Continuity Advisory Group. **HSC**, *National Continuity Policy IP*, 2007, p. 22)

Calamity: "A massive or extreme catastrophic disaster that extends over time and space." Notes the Black Death of the 14th century as an example. (**Drabek** 1996, Session 2, p.4)

California Catastrophic Earthquake Readiness Response Plan (CCERP), FEMA: "The planning for California Catastrophic Earthquake Readiness Response Plan (CCERRP) started in July, 2007. This endeavor, which will include the contribution and participation of Federal, State and local government as well as other critical emergency management partners, will create an overall operational plan for a response to a catastrophic event in the State of California. The first phase will produce a Concept of Operations (CONOP) that will clarify authorities between Federal and State partners, integrate the doctrine and policy of the National Incident Management System and California's State Emergency Management System, and provide a statewide all hazards framework for responding to a catastrophic event that exceeds California's considerable capabilities. (**Maxwell**, *Report to NEMA*, October, 2007)

California Earthquake Authority (CEA): "The CEA is structured with many different layers of capital:

• Initial layers from private insurers who were permitted not to offer earthquake coverage in exchange for their voluntary participation in capitalizing the CEA and covering the next limited layer of earthquake losses
• Various layers of reinsurance
• A layer financed by state revenue bonds
• A top layer funded by post-event assessments on participating private insurers. The coverage provided by the CEA is capped, currently at approximately $8.2 billion. This means that in a future earthquake, insured parties would bear any losses exceeding the CAT limit (unless they bought additional coverage on their own)."[4] (**Financial Services Roundtable**, *Nation*, 2007, 47)

California Earthquake Authority (CEA): "…the California Earthquake Authority was formed in 1996 in response to a crisis in the residential property insurance market following the Northridge earthquake in 1994. According to the Insurance Information Institute, California insurers had collected only $3.4 billion in earthquake premiums in the 25-year period prior to the Northridge earthquake but had paid out more than $15 billion on Northridge claims alone. Moreover, insurers representing about 95 percent of the homeowners insurance market in California began to limit their exposure to earthquakes by writing fewer or no new homeowners insurance policies, triggering a crisis that threatened California's housing market and stalled the state's recovery from recession." (**GAO**, *Natural Disasters: Public Policy Options*…, Nov 2007, 18 see, also, pp. 57-59)

Call Tree: "A document that graphically depicts the calling responsibilities and the calling order used to contact management, employees, customers, vendors, and other key contacts in the event of an emergency, disaster, or severe outage situation." (**DigitalCare,** *State of OR Business Continuity Workshop*, 2006, p. 48)

CAMEO (Computer-Aided Management of Emergency Operations): "CAMEO ® is a system of software applications used widely to plan for and respond to chemical emergencies. It is one of the tools developed by EPA's Chemical Emergency Preparedness and Prevention Office (CEPPO) and the National Oceanic and Atmospheric Administration Office of Response and Restoration (NOAA), to assist front-line chemical emergency planners and responders. They can use CAMEO to access, store, and evaluate information critical for developing emergency plans. In addition, CAMEO supports regulatory compliance by helping users meet the chemical inventory reporting requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA, also known as SARA Title III). CAMEO also can be used with a separate software application called LandView ® to display EPA environmental databases and demographic/economic information to support analysis of environmental justice issues.

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[4] The FSR notes, however, that "Unlike the vast majority of homeowners in states exposed to hurricanes who purchase coverage for this risk (and are typically required to do so by their lenders), no more than a third of California homeowners have purchased earthquake insurance. Currently, the take-up rate is less than 14 percent. Two reasons are generally given for this low rate of purchase: Californians generally don't believe they will suffer from significant earthquake damage while they own their homes, or if they do, that the loss will be small. In addition, the standard deductible under the CEA policy is 15 percent of the replacement cost of the structure, which for many homes is a large sum of money. Given the price even for this coverage (and the even higher premiums for a policy with a lower 10 percent deductible), most homeowners choose not to purchase the insurance.") (Ibid)

The CAMEO system integrates a chemical database and a method to manage the data, an air dispersion model, and a mapping capability. All modules work interactively to share and display critical information in a timely fashion. The CAMEO system is available in Macintosh and Windows formats." (**EPA**, *What is CAMEO?*, February 12 2007 update)

Camp: "A geographic site, within the general incident area, separate from the Incident Base, equipped and staffed to provide food, water, sleeping and sanitary facilities for incident personnel." (Capital Health Region, Edmonton, *ICS100: Incident Command System Training Student Manual*, Canada: CHR Office of Emergency Preparedness, March 2007, p. 50)

Camps (ICS): "Camps are separate from the Incident Base and are located in satellite fashion from the Incident Base where they can best support incident operations. Camps provide certain essential auxiliary forms of support, such as food, sleeping areas, and sanitation. Camps may also provide minor maintenance and servicing of equipment. Camps may be relocated to meet changing operational requirements." (**DHS**, *NIMS*, 2004, ICS Annex, p. 94)

Canada/United States Agreement on Emergency Planning (1987): *The Agreement Between the Government of Canada and the Government of United States of America on Cooperation in Comprehensive Civil Emergency Planning and Management,* 28 April 1986 is designed to strengthen cooperation between Canada and the United States, encouraging a more effective response to peacetime emergencies. The agreement sets out principles of cooperation and establishes a joint consultative group to foster comprehensive emergency planning and management. The Treaty can be found at the following address: http://www.treaty-accord.gc.ca/ViewTreaty.asp?Treaty_ID=103615 (**Transport Canada**, *Cross-Border Emergency Response Guide* (3rd Edition), 2007, p. 10)

CANUS: Canada-United States. (**JCS/DOD**, *CBRNE CM*, 2006, p. IV-16)

CANUS Joint Radiological Emergency Response Plan (JRERP): "After the nuclear accidents at Three Mile Island, Pennsylvania in 1979 and at Chernobyl, Ukraine in 1986, Canada and the US recognized the need for cooperation in development of a response plan for radiological events. Consequently, the two countries developed a joint plan to deal effectively with a potential or actual peacetime radiological event that could affect both countries or be of a magnitude that would require assistance from the neighboring country. The CANUS JRERP is currently being rewritten to incorporate the Department of Homeland Security and Public Safety and Emergency Preparedness Canada. The CANUS JRERP, is designed to do the following:

(a) Alert the appropriate federal authorities within each country of the existence of a threat from a potential or actual radiological event.

(b) Establish a framework of cooperative measures to reduce, to the extent possible, the threat posed to public health, safety, property, and the environment.

(c) Facilitate coordination between the federal government in each country in providing support to provinces and states affected by a potential or actual radiological event." (**JCS/DOD**, *CBRNE Consequence Management* (JP 3-41), 2006, p. IV-16)

CAP: Capabilities Assessment Pilot(s). (**DHS**, 2006)

CAP: Capabilities Assurance Process. (**FEMA**, *CHER-CAP Fact Sheet*, May 8, 2007)

CAP: Civil Air Patrol.

CAP: Common Alerting Protocol. (**FEMA**, *IPAWS Update*, 2007, slide 17)

CAP: Community Assistance Program. (**FEMA**, *Community Assistance Visit*, 2007)

CAP: Corrective Action Program: (**FEMA**, *HSEEP Toolkit: Overview*, 2008)

CAP: Crisis Action Planning. (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

CAP: Crisis Action Process. DOD.

CAP-SSSE: Community Assistance Program – State Support Services Element**.** (**FEMA**)

Capabilities: "Capabilities are defined as providing: *…the means to accomplish a mission or function and achieve desired outcomes by performing critical tasks, under specified conditions, to target levels of performance*." (**DHS**, *NPG, Appendix B, Capabilities-Based Preparedness Overview*, 2007, p. 30)

Capabilities: "Capabilities…

- provide the means to achieve measurable outcomes
- through the performance of critical tasks
- under specified conditions
- to target levels of performance
- with any combination of properly planned, organized, equipped, trained and exercised personnel that achieves the desired outcome." (**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 4)

Capabilities-Based Planning: "**Capabilities-Based Planning…is All-Hazards Planning."** (**DHS** {Gruber}, *HSPD-8 "National Preparedness" Status Update*, December 7, 2004, slide 6)

Capabilities-Based Planning: "Capabilities-based planning is defined as planning, under uncertainty, to build capabilities suitable for a wide range of threats and hazards while working within an economic framework that necessitates prioritization and choice. It addresses uncertainty by analyzing a wide range of realistic *scenarios* to identify required *capabilities*, and it is the basis for guidance such as the *National Preparedness Goal*, *Target Capabilities List (TCL)*, and *Universal Task List (UTL)*." (**FEMA**, *HSEEP Glossary*, 2008)

Capabilities-Based Planning: "This planning approach focuses on available personnel and resources that can be applied to address significant incidents. Requirements and capabilities are

derived from the National Planning Scenarios, the *National Homeland Security Plan,* strategic planning, risk assessments, concepts of operations, and threat information. This capabilities-based planning approach and the *National Preparedness Guidelines* foster vertical and horizontal integration of Federal, State, local, and Tribal plans allowing State, local and Tribal capability assessments to inform Federal requirements and capabilities planning." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, pp. 2-10, 2-11)

Capabilities-Based Planning Process:

1. Convene Working Group
2. Determine Capability Requirements
3. Assess Current Capabilities Levels
4. Identify Needs and Methods to Fill Gaps
   a. Develop Options
   b. Analyze Options
   c. Choose Options
5. Update Strategies/Submit Investment Justifications
6. Review Justifications/Allocate Funds
7. Update and Execute Program Plans
   a. Plan
   b. Equip
   c. Train
   d. Exercise
8. Assess and Report
   a. Capability
   b. Compliance
   c. Performance (**DHS**, *Development of the Capabilities Assessment Pilots*, 2006)

Capabilities-Based Planning Process and Tools:

- Threat Analysis – National Planning Scenarios
- Mission Area Analysis – Task Taxonomy
- Task Analysis – Universal Task List
- Capabilities Development -- Target Capabilities List
- Assessment and Strategy Development -- Assessment, Exercises, Nantional Prep Stm

(**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 5)

Capabilities-Based Planning Process: A process "…"that integrates strategic planning with activities such as threat and vulnerability assessment, mission analysis, risk assessment, investment strategy development, resource allocation, program planning performance-based assessment, and system requirements analysis." (**HSI,** *HS Strategic Planning*, March 2007, 3)

Capabilities-Based Preparedness: "The *Guidelines* establish a capabilities-based approach to preparedness. Simply put, a capability provides the means to accomplish a mission. The

Guidelines address preparedness for all homeland security mission areas: prevention, protection, response, and recovery." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 4)

Capabilities-Based Preparedness: "Capabilities-Based Preparedness encourages flexibility and requires collaboration. More importantly, it helps to ensure that operations planners and program managers across the Nation can use common tools and processes when making planning, training, equipment, and other investments, and can produce measurable results." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 10)

Capabilities-Based Preparedness: "Capabilities-Based Preparedness is a form of all-hazards planning…. Capabilities-Based Preparedness is defined as:

> *…preparing, under uncertainty, to provide capabilities suitable for a wide range of challenges while working within an economic framework that necessitates prioritization and choice.*

Capabilities-Based Preparedness is a way to make informed choices about how to manage the risk and reduce the impact posed by potential threats. It focuses decision making on building and maintaining *capabilities* to prevent and protect against challenges (e.g., intelligence analysis, critical infrastructure protection, etc.) and to respond and recover when events occur (e.g., onsite incident management, medical surge, emergency public information, and economic recovery). The process rests on a foundation of multi-disciplinary, cross-governmental, and regional collaboration to determine measurable capability targets, to assess current levels of capabilities, and to find ways to close the gaps. As entities make choices in preparedness programs and activities, they will be able to improve their own preparedness, focus available assistance on areas of greatest need, and collaborate with others using a common reference framework." (**DHS**, *NPG, Appendix B, Capabilities-Based Preparedness Overview*, 2007, p. 30)

Capabilities-Based Preparedness Process: "The Capabilities-Based Preparedness process…involves homeland security partners in a systematic and prioritized effort to accomplish the following:

- Convene working groups;
- Determine capability requirements;
- Assess current capability levels;
- Identify, analyze, and choose options;
- Update plans and strategies;
- Allocate funds;
- Update and execute program plans; and
- Assess and report.

The process emphasizes collaboration to identify, achieve, and sustain target levels of capability that will contribute to enhancing overall national levels of preparedness…. The core of the Capabilities-Based Preparedness approach is the comparison of current capabilities with risk-based target capability levels." (**DHS**, *National Preparedness Guidelines, Appendix B*, 2007, pp. 32-34)

Capabilities-Based Preparedness Working Groups: "The preparedness process should begin with formation of a chartered, representative working group. It is strongly encouraged that, wherever possible, previously established working groups be used for this process. The working group should be multi-disciplinary, multi-agency, and multi-jurisdictional. Where appropriate, working groups should include the private sector and nongovernmental partners. The intent is to bring together regional practitioners from across disciplines so that they can be effective advisors to the senior decision-makers who formulate strategies, set priorities, and allocate funds." (**DHS**, *National Preparedness Guidelines, Appendix B*, 2007, p. 34)

Capability: "…a capability provides the means to accomplish a mission." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 4) "A capability consists of the combination of elements required to deliver the desired outcome. (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 5) "A capability provides the means to accomplish a mission or function resulting from the performance of one or more critical tasks, under specified conditions, to target levels of performance. A capability may be delivered with *any* combination of properly planned, organized, equipped, trained, and exercised personnel that achieves the desired outcome." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 40)

Capability: "A capability is provided with proper planning, organization, training, equipment, and exercises." (**DHS**, *TCL*, 2007, p. 8)

Capability: "A capability provides the means to accomplish one or more tasks under specific conditions and to specific performance standards. A capability may be delivered with any combination of properly planned, organized, equipped, trained, and exercised personnel that achieves the intended outcome." (**DHS**, *Universal Task List, 2.1*, 2005, p. B-1 (142))

Capability Analysis: "The process of identifying and drawing conclusions about the functional capabilities of an adversary's ability to disrupt the infrastructure and the Army's capabilities to ensure continuity of business operations under all conditions." (**DOA**, *Infrastructure Risk Management. (Army)*, 2004, p. 13)

Capability and Hazard Identification Program (CHIP), FEMA: "Instituted in 1989 to replace IEMS [Integrated Emergency Management System], FEMA established a national database of information on the status of emergency preparedness and the impact of FEMA funds on State and local government operations. Emergency management data were collected for 3,300 communities and maintained in a comprehensive and easily accessible database. However, a drawback of the 'self-assessment' was the lack of consistent criteria for reporting, which resulted in incomplete and inaccurate information. Through regular updates of the CHIP database, local government officials provided information on natural hazards in their areas, including the likelihood and frequency of events and the impacts on local population and property. They also provide information on local emergency management expenditures, including totals expended and the sources of funding. By answering questions separated into five topic areas, local governments provided information to allow assessment of their capability to deal with disasters. The five topic areas are: planning, logistics, training and education, operations, and administration. On the Federal level, the information from CHIP was used to prepare reports to the U.S. Congress on the status of emergency management capabilities. It also

was used to evaluate the effectiveness of FEMA programs in delivery of financial and technical assistance to State and local governments. At the local level CHIP was used as a planning tool, guiding local jurisdictions through a logical sequence: identify hazards; assess capabilities to address those hazards; set priorities for improving those capabilities; and schedule process activities to improve those capabilities." (**FEMA**, *Multi Hazard Identification and Risk Assessment*, 1997, p. xxii)

Capability and Resource Availability: Capability and resource availability fall into four categories: *Organic, Assigned, Earmarked*, and *Potential*.

- *Organic Capabilities*. Organic capabilities are those that are an integral part of the basic structure of an organization, and are thus immediately responsive to the leadership of that organization. Organization leadership is responsible for developing, sustaining, and employing these organic capabilities.

- *Assigned Capabilities*. Assigned capabilities are those that supporting entities have agreed to allocate to a supported organization for agreed upon purposes in agreed upon situations. Assignment to supported organizations is automatic once predetermined and pre-agreed situation thresholds are reached. Assignment agreements are regarded as binding.

- *Earmarked Capabilities*. Earmarked capabilities are those that organizations *intend* to allocate to a supported organization at some future time and situation. Earmarked capabilities are allocated to support other organizations as the situation permits, but their commitment has not been prearranged. These capabilities are often formed into a pool of available resources, none of which have been allocated to a given organization. Resources and assistance available under the Emergency Management Assistance Compact (EMAC) are an example of earmarked capabilities.

- *Potential Capabilities*. Potential capabilities are those that *might* be allocated to a supported organization in specified circumstances. Potential capabilities should not be regarded as a highly reliable resource. Their accessibility is determined on a case-by-case basis. (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008, pp. 2-3. 3-4)

Capability Assessment: After conducting a Hazards Analysis, **"**[t]he next step for the jurisdiction is to assess its current capability for dealing with the hazards that have been identified… Current capability is determined against standards and criteria FEMA has established as necessary to perform basic emergency management functions, e.g., alerting and warning, evacuation, emergency communications. The resulting information provides a summary of the capabilities that exist and upon which current plans should be prepared…and leads to the identification of the jurisdiction's weaknesses." (**FEMA**, *IEMS Process Overview*, 1983, p. 7)

Capability Assessment for Readiness (CAR): "The Federal Emergency Management Agency (FEMA) and the National Emergency Management Association (NEMA) are working together aggressively to reduce losses from disasters. As an important component of this effort, FEMA

and NEMA joined together in 1997 to develop the CAR, an assessment process and tool that States, Territories, and Insular Areas can use to evaluate their own operational readiness and capabilities in emergency management. The CAR was implemented first in 1997 and has matured into a sophisticated and accepted, automated, self-assessment tool that helps the States, Territories, and Insular Areas establish sound mitigation, preparedness, response, and recovery practices, establish priorities, and analyze program performance.
"The CAR was revised after its initial implementation in 1997, and a second self-assessment is underway this year. The CAR is available in automated or manual versions and is divided into 13 Emergency Management Functions (EMF) common to emergency management programs: 1) laws and authorities; 2) hazard identification and risk assessment; 3) mitigation; 4) resource management; 5) planning; 6) direction, control, and coordination; 7) communications and warning; 8) operations and procedures; 9) logistics and facilities; 10) training; 11) exercises, evaluation, and corrective actions; 12) crisis communications, public education, and information; and 13) finance and administration.
"Each EMF is divided into broad criteria called attributes, and the attributes are subdivided further into more detailed criteria called characteristics, to facilitate the self-assessment. Using the CAR, the States will develop a self-profile of strengths and weaknesses in their emergency management programs that then can be used for strategic planning and budgeting. The FEMA uses the aggregate data from this process to produce a national report. Work is underway to develop a CAR process for local jurisdictions and Indian Tribal Governments to use in assessing their emergency management programs." (**Hampton**, *CAR, Prehospital Dis. Med., 15(3)*, 2000)

Capability Assessments: "Capability assessments measure the current level of capability against the target levels of capability from the TCL [Target Capabilities List] applicable to the respective level of government." (**DHS**, *National Preparedness Guidelines*, 2007, p. 34)

Capability Elements: "…capability elements define the resources needed to perform the critical tasks to the specified levels of performance, with the recognition that there is rarely a single combination of capability elements that must be used to achieve a capability." (**DHS**, *TCL*, 2007, p. 8)

"The Capability Elements serve as a guide for identifying and prioritizing investments when working to establish a capability. Further, existing programs and activities represented as Capability Elements have been included for reference purposes only, and are subject to change in response to an evolving threat environment and competition for scarce resources." (**DHS**, *TCL*, 2007, p. 9)

Capability Elements (TCL):

Planning
Organization and Leadership
Personnel
Equipment and Systems
Training
Exercises, Evaluations, and Corrective Actions. (**DHS**, *TCL*, 2007, p. 9)

Capability Shortfall: "The difference between current capability…and the optimum capability…" (**FEMA**, *IEMS Process Overview*, 1983, p. 8)

Capacity: "A combination of all the strengths and resources available within a community, society or organization that can reduce the level of risk, or the effects of a disaster. Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability. (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, 2004, p. 1)

Capacity, Adaptive: "…a combination of a society's ex ante vulnerability to damages from natural hazards and its ex post resilience or ability to cope with the damages that result." (**Dayton-Johnson**, *Natural Disasters and Adaptive Capacity,* 2004)

Capacity, Adaptive and Coping: "While the concept of coping capacity is more directly related to an extreme event (e.g. a flood or a winter storm), the concept of adaptive capacity refers to a longer time frame and implies that some learning either before or after an extreme event is happening. The higher the coping capacity and adaptive capacity, the lower the vulnerability of a system, region, community or household. Enhancement of adaptive capacity is a necessary condition for reducing vulnerability, particularly for the most vulnerable regions and socioeconomic groups." (**Peltonen**, *Coping Capacity and Adaptive Capacity*, 2006)

Capacity, Coping: "…a function of: perception (of risk and potential avenues of action… the ability to cope is information contingent); possibilities (options ranging from avoidance and insurance, prevention, mitigation, coping); private action (degree to which special capital can be invoked); and public action…" (**IPCC**, *Climate Change 2001. Synthesis Report. A Contribution of Working Groups I, II, and III to the Third Assessment Report of the Intergovernmental Panel on Climate Change*, 2001)

Capacity, Coping: "The manner in which people and organisations use existing resources to achieve various beneficial ends during unusual, abnormal and adverse conditions of a disaster phenomenon or process." (**UNDP**, *Reducing Disaster Risk…Global Report*, 2004)

Capacity, Coping: "The ability to cope with threats includes the ability to absorb impacts by guarding against or adapting to them. It also includes provisions made in advance to pay for potential damages, for instance by mobilizing insurance repayments, savings or contingency reserves. (**UNEP,** *Global Environment Outlook 3 Past, Present and Future Perspectives*, 2002)

Capacity, Coping: "The coping capacity of human society is a combination of all the natural and social characteristics and resources available in a particular location that are used to reduce the impacts of hazards (IATFDR 2001). These include factors such as wealth, technology, education, information, skills, infrastructure, access to resources and management capabilities." (**UNEP**, *Global Environment Outlook (GEO-3)*, Chapter 3, Human Vulnerability to Environmental Change, p. 303)

Capacity, Coping: "The means by which people or organizations use available resources and abilities to face adverse consequences that could lead to a disaster. In general, this involves managing resources, both in normal times as well as during crises or adverse conditions. The strengthening of coping capacities usually builds resilience to withstand the effects of natural and human-induced hazards." (**UN/ISDR**, *Living with Risk*... 2004 version)

Capacity Building: "Improving and building the technical and managerial skills and resources within an organisation." (**European Environment Agency**, *EEA Environmental Glossary*, 2007)

Capacity Building: "Building capacities for prevention, preparation and recovery means learning to assess vulnerabilities, reinforcing expertise in relevant technical, social and scientific institutions, and establishing partnerships of mutual learning that extend from communities and districts to central authorities…" (**Fagen and Martin** 2005, 12)

Capacity Building: "Efforts aimed to develop human skills or societal infrastructures within a community or organization needed to reduce the level of risk. *In extended understanding, capacity building also includes development of institutional, financial, political and other resources, such as technology at different levels and sectors of the society.*" (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004, p. 1)

Capacity for Disaster Reduction Initiative (CADRI): "CADRI was created in 2007 as a joint programme of the United Nations Development Programme's Bureau for Crisis Prevention and Recovery (UNDP/BCPR), the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA), and the secretariat of the International Strategy for Disaster Reduction (ISDR)…. CADRI succeeds the UN Disaster Management Training Programme (DMTP), a global learning initiative, which trained United Nations, government and civil society professionals between 1991-2006. DMTP is widely known for its pioneering work in developing high quality resource materials on a wide range of disaster management and training topics. More than twenty trainers' guides and modules were developed and translated. CADRI's design builds upon the success and lessons learned from the DMTP. While the importance of capacity is now widely recognized, lessons of experience have demonstrated that the development of capacity is far more complex than previously thought. Capacity development goes beyond training or the transfer of technology, requiring local ownership and political leadership.

CADRI's design also reflect the significant growth in training and related organizational learning throughout the world and it is these resources that CADRI seeks to draw upon and expand, thereby making effective use of the wealth of capacity development experience and expertise that resides within the broader ISDR system and making use of the advances in technology for networking and learning purposes. CADRI's design also recognizes the critical role that the UN system plays at the national level in supporting government's efforts to advance disaster risk reduction. …The three organizations that comprise CADRI provide oversight for its strategic direction and management." (**Capacity for Disaster Reduction Initiative**, *Who We Are*, 2007)

CAPRA: Critical Asset and Portfolio Risk Analysis. (**Ayyub**, *CAPRA*, 2007, 789)

CAR: Capability Assessment for Readiness.

Cargo Advanced Automated Radiography System (CAARS): Provides "Automatic detection of high density shielding that might be used to avoid passive detection." (**DHS/DNDO**, *DNDO Overview*, April 20, 2006, slide 13)

Cargo Advanced Automated Radiography System (CAARS) Goals:

- Develop and deploy a radiography system that automatically detects threat materials in mixed commerce without impeding the flow of commerce
- Conduct radiographic inspection of 50% of all incoming cargo
- Improved penetration capability. (**DHS/DNDO**, *DNDO Overview*, April 2007, slide 15)

CARRI: Community and Regional Resilience Initiative. (**ORNL**, *CARRI*, 2007)

CARRS: Cargo Advanced Automated Radiography System. (**DHS**, *Opening Statement of Vayl Oxford*, March 2007, p. 3)

Cascadia Region Earthquake Workgroup (CREW): "The Cascadia Region Earthquake Workgroup (CREW) is a coalition of private and public representatives working together to improve the ability of Cascadia Region communities to reduce the effects of earthquake events…. In less than 50 years, a number of great Cascadia-like earthquakes have occurred around the Pacific Rim, including Chile (1960), Alaska, (1964) and Mexico (1985). A unique aspect of a great Cascadia earthquake is the strong likelihood that the three greater metropolitan areas of Portland, Seattle, and Vancouver will simultaneously feel the effects of strong and sustained ground shaking. This wide-spread ground shaking combined with accompanying elevation changes and the likely generation of a tsunami along the Pacific coast, will cause loss of life, property damage, and business interruption in vulnerable locations through out southwestern British Columbia, Washington, Oregon, and northwestern California. The broad geographic distribution of damaging impacts will generate special challenges and severely stress the response and recovery resources of the three Pacific states and British Columbia.
of Pacific Rim trade involving Ports like Vancouver, Seattle, Tacoma, and Portland.

Goals

- *Promote* efforts to reduce the loss of life and property.
- *Conduct* education efforts to motivate key decision makers to reduce risks associated with earthquakes.
- *Foster* productive linkages between scientists, critical infrastructure providers, businesses and governmental agencies in order to improve the viability of communities after an earthquake event." (**CREW**, *About CREW*," accessed November 4, 2007)

CAT: Catastrophe.

CAT: Crisis Action Team. (**DHS**, *DHS Ops. Coordination: IMP: CAP*, Jan 2008, slide 20)

Catastrophe: An event in which a society incurs, or is threatened to incur, such losses to persons and/or property that the entire society is affected and extraordinary resources and skills are required, some of which must come from other nations.

Catastrophe: "A catastrophic disaster is one that so overwhelms response agencies that local, state, and federal resources combined are insufficient to meet the needs of the affected public." "**Bissell**, Catastrophe Workshop, EM Hi-Ed Conference, 2005)

Catastrophe: "In catastrophic disasters, tens-or-hundreds of thousands of lives are immediately at risk, State and local resources may well be exhausted from the onset, and government leaders unable to determine or communicate their priority needs." (**Carafano** 2005, 2)

Catastrophe: "Mark Brandenburg, MD, FACEP, FAAEM, Associate Professor, Director of Emergency Medicine Student Programs, University of Oklahoma College of Medicine-Tulsa… noted a difference between disasters (such as the Oklahoma City bombing) and complex emergencies/catastrophes (such as Hurricane Katrina) which are events that overwhelm resources. Looking back on response performance, one must put the hurricane catastrophe in context. This catastrophe was along the lines of Hiroshima and by mere definition as a catastrophe was expected to overwhelm resources." (**Center for Community Research and Development**, 2005)

Catastrophe: "You see, one of the lessons I think we have learned from last year's hurricanes is, we've got to look at the challenge of the catastrophic event, not only at the point where the catastrophe hits, but in all the areas around that point that are going to receive the collateral or cascading effects of that catastrophe.

When we have a major event, whether it be a terrorism event or a natural disaster, that causes a lot of people to move out of a particular area, they're going to go someplace. And a lot of them are going to go to your cities or your towns, and you're going to have to be able to deal with that challenge.

So one dramatic change we've made in the wake last year's hurricanes and in anticipation of this hurricane season and whatever else is coming in the course of this coming year, is we're looking now at planning not only for managing the emergency in the location where the emergency occurs, but managing the emergency all over the country. **(Chertoff,** *Remarks by Secretary Michael Chertoff at the National League of Cities Congressional City Conference*, Washington, DC: League of Cities, March 2\14, 2006)

Catastrophe: "How is "catastrophic" different than all other major disasters? There are fundamental differences in all respects between disasters that impact a business, a group of businesses or even businesses across a region, and a disaster that involves all businesses to varying degrees across a nation and the world. As evidenced with major natural disasters including, Hurricanes Andrew and Katrina, and the tsunami in Southeast Asia in 2004, a natural disaster can quickly evolve from a local or regional event into a national or international tragedy in a matter of hours or minutes. These devastating major natural disasters demand planning and response capabilities far beyond most natural disasters. While these major disasters affected businesses well beyond their impact zone, their impacts still pale to the potential catastrophic effects from a major terrorist event with weapons of mass destruction or a pandemic influenza.

There is a fundamental difference in the preparation, complexity, quality of effort, and scope of catastrophic disaster as opposed to a major natural disaster. For a catastrophic disaster, the CI/KR business not only must strive to sustain itself, but as impacts worsen it may be called upon to adjust and consolidate its typical essential processes so that it may survive as an economic entity. Yet, through good planning and an agile response, it will adapt and cope sufficiently to continue providing the most essential goods and services necessary to sustain the community and the nation." (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p. 30)

Catastrophe: An example would be the 1985 Earthquakes in Mexico City and other Mexican cities. Thousands of people—estimates vary markedly—died and tens of thousands were injured. At least 100,000 building units were damaged; reconstruction costs exceeded five billion dollars (with some estimates running as high as $10 billion). Over sixty donor nations contributed to the recovery through programs coordinated by the League of Red Cross and Red Crescent Societies." (**Drabek** 1996, Session 2, p. 4; citing Russell R. **Dynes**, E.L. Quarantelli, and Dennis Wenger. 1990. *Individual and Organizational Response to the 1985 Earthquake in Mexico City, Mexico. Newark, Delaware: Disaster Research Center, University of Delaware*)

Catastrophe: "…any disaster that overwhelms the ability of state, local, and volunteer agencies to adequately provide victims with such life-sustaining mass care services as food, shelter, and medical assistance within the first 12 to 24 hours." (**GAO**, *Disaster Management*, 1993, p. 1)

Catastrophe: "Catastrophic events are different in the severity of the damage, number of persons affected, and the scale of preparation and response required. They quickly overwhelm or incapacitate local and/or state response capabilities, thus requiring coordinated assistance from outside the affected area. Thus, the response and recovery capabilities needed during a catastrophic event differ significantly from those required to respond to and recover from a 'normal disaster'." (**GAO**, *Emergency Preparedness and Response*, 2006, p. 15)

Catastrophe: "Hurricane Rita caused a major disaster, Hurricane Katrina caused a catastrophe. The difference between the two was a matter of the scale of the natural phenomena, the size and vulnerability of the population at risk, the preparedness of the public and government, and the effectiveness of decision-making prior to and during the crisis stages of the event. Henry Quarantelli, the founder of the University of Delaware, has pointed out that a catastrophe and disaster are qualitatively different. A catastrophe such as Katrina damages the physical infrastructure systems, government systems, and social systems to the extent that local officials cannot function and mutual aid from neighboring communities and states is impossible." (**Harrald**, 2005)

Catastrophe: "The term "catastrophe" in the property insurance industry denotes a natural or man-made disaster that is unusually severe. An event is designated a catastrophe by the industry when claims are expected to reach a certain dollar threshold, currently set at $25 million, and more than a certain number of policyholders and insurance companies are affected." (III, *Catastrophes: Insurance Issues* (Update), Jan 2008)

Catastrophe: "…an event that causes $25 million or more in insured property losses and affects a significant number of property-casualty policyholders and insurers." (**Insurance Services Office** 2000, 2)

Catastrophe: "One of the most important issues that Hurricane Katrina revealed…the difference between catastrophe planning and disaster planning. In catastrophes, there is a need for a more agile, adaptable and creative emergency management. Following the "rule-book" (bureaucratic pattern) will inevitably bring a slow response, problematic communication, and finally great frustration to the people for not meeting their needs and their expectations. Extreme events are better managed when responding authorities are able to adjust promptly their response efforts to the environment, fine tune their communication channels (according to the severity of the event), and also modify the decision making process for the immediate life saving interventions. That does not imply that the NRP should be ignored in the event of a catastrophe or that the ICS should be detoured. The challenging concepts of improvisation, adaptability, creativity and agility do not encompass anarchy or chaos (2). The structured control and command system will not be affected negatively; it will be simplified for better response and recovery. And these changes are indispensable for making clear that emergency responders do not manage catastrophes just as being simply big disasters.

In addition, success or failure of managing a catastrophe is based largely on leadership. In the case of Katrina, the lack of presence of a leader who was or seemed to be in control of the situation, who showed interest in getting the best to people, following a code of values-ethics and indicating unquestionably integrity was obvious; and that stigmatized the gloomy picture of the devastated New Orleans. What is needed is a leader who will have those qualities and competencies to agonize the Scylla of overwhelming disasters and the Charybdis of media. A leader who "recognizes the threats" in time, "prioritizes those threats appropriately" and "mobilizes effectively" is not a leader who will be blamed for failure (3). A leader who puts people first, builds very good teams by getting the "right people on the bus" (4), establishes good communication networks in multiple levels, promotes a learning process from past events, evaluates and improves the system on an ongoing basis, and is not reluctant when it comes to self criticism, is the one who can guide and introduce the required changes that need to be adopted for improving the emergency management system." (**Kastrioti**, 2006

Catastrophe: "Despite no consensus on definitions for these terms, experts report that emergencies, disasters and catastrophes differ on more than just scale. Each requires unique response strategies as a consequence of their impact on communities and how emergency responders and resources must be mobilized. The most challenging of events are catastrophes.

Catastrophes stand apart. During catastrophes, most or all infrastructure is damaged and may be inoperable. Residents in impacted communities – including emergency responders – are unable to undertake normal roles. Large numbers of residents and responders are victims. Most or all traditional functions – including government operations – are completely or partially shut down. Local mutual aid strategies are ineffective, because of the distribution of impacts on neighboring jurisdictions and communities. The loss of water and sewer services and local law enforcement and interruptions in the supply of shelter, food and medical care create additional victims even beyond those impacted by the original event.

Catastrophes require different operating procedures. The loss of functional infrastructure halts the use of traditional communication, transportation and power networks. Local responders familiar with community needs and resources often are unavailable, necessitating reliance on external responders with little knowledge of local geography, cultures and possibly languages. Resource demands far outstrip supplies, creating competition and political pressure for scarce response capacity. Reliance on an expanding circle of mutual aid networks results in far more complex management challenges to integrate disparate areas of expertise, equipment, policies and procedures, and response strategies. The scale of impacts and the number of responders involved increases errors in assessments and conflicting information regarding needs and resources.

Catastrophes require regional, statewide or federal authority. The scale of impacts during catastrophes, the number of responders required, the political jurisdictions affected and the range of organizations called upon to respond, require a regional, statewide or national authority to manage. Local officials generally cannot manage catastrophic response because the authority needed to do so exceeds their jurisdiction." (**Little Hoover Com**., *Safeguarding*…, 2007, 14)

Catastrophe: "Catastrophes, by definition, tend to occur in large metropolitan regions due to the concentration of people and infrastructure. For example, a category 5 hurricane striking an undeveloped coast will generate less damage than a category 3 hurricane hitting a major city. Recent catastrophes include the 1989 Loma Prieta Earthquake (San Francisco), the 1994 Northridge Earthquake (Los Angeles), Hurricane Hugo (1989), Hurricane Andrew (1992), Hurricanes Katrina and Rita (2005), the Midwest Floods of 1993, and the September 11 attacks of 2001." (**Moss and Shalhamer**, *The Stafford Act: Priorities for Reform.*…, 6Sep2007, p. 14)

Catastrophe: "Unfortunately, one of the biggest shortcomings of the Stafford Act is that it only recognizes two levels of disasters – emergencies and major disasters. Emergencies are normally smaller, limited scale events. The second category - major disasters – is intended for larger events, but this can run the gamut from a blizzard in Buffalo to a major earthquake in California that impacts millions. A third category should be created to differentiate catastrophes from major disasters." (**Moss and Shalhamer**, *The Stafford Act: Priorities for Reform.*…, 6Sep2007, p. 15)

Catastrophe: "The group discussed the definition of catastrophe. After reviewing many variables, it was determined that a catastrophe is defined by the magnitude of the event on an area, the capacity and ability to respond, and the time to recover. Several stressed that catastrophes don't just happen to large numbers of people. A catastrophe can occur in a small area. It was discussed that having a clear definition of catastrophe determines the process of response." (**NHSC**, *National Homeland Security Consortium* Meeting, December 1-2, 2005)

Catastrophe: An event of such impact upon a community that new organizations must be created in order to deal with the situation. (**Quarantelli** 1987, 25)

Catastrophe: "Even two decades ago some researchers were saying that there were "disasters" and that there were "disasters that were beyond typical disasters." The latter came to be called "catastrophes."…. The distinction we draw between catastrophes and disasters is not just an academic exercise… What is crucial is that catastrophes require some different kinds of planning

and managing than do even major disasters. This is true whether the focus is on the planning for mitigation, preparedness, response or recovery…. The differences that appear between disasters and catastrophes can be especially seen at the organizational, community and societal levels. For our purposes here, let us illustrate at least six general ways in which disasters and catastrophes differ. In a catastrophe compared to a disaster:

1. Most or all of the community built structure is heavily impacted…. In addition, in catastrophes, the facilities and operational bases of most emergency organizations are themselves usually hit.

2. Local officials are unable to undertake their usual work role, and this often extends into the recovery period. Related to the observation just made, local personnel specializing in catastrophic situations are often unable for some time, both right after impact and into the recovery period, to carry out their formal and organizational work roles. This is because some local workers either are dead or injured, and/or unable to communicate with or be contacted by their usual clients or customers and/or are unable to provide whatever information, knowledge or skills, etc. they can usually provide….

3. Help from nearby communities cannot be provided. In many catastrophes not only are all or most of the residents in a particular community affected, but often those in nearby localities are also impacted…. In short, catastrophes tend to affect multiple communities, and often have a regional character. This kind of crisis, for instance, can and does affect the massive convergence that typically descends upon any stricken community after a disaster. In a disaster there is usually only one major target for the convergence after a disaster. In a catastrophe many nearby communities not only cannot contribute to the inflow, but they themselves can become competing sources for an eventual unequal inflow of goods, personnel, supplies and communication….

4. Most, if not all, of the everyday community functions are sharply and concurrently interrupted. In a catastrophe, most if not all places of work, recreation, worship and education such as schools totally shut down and the lifeline infrastructures are so badly disrupted that there will be stoppages or extensive shortages of electricity, water, mail or phone services as well as other means of communication and transportation…. In such kinds of situations, the damage to residential areas tends to be correlated with similar destruction of nonresidential areas. Among other things, it means that there are far more "social" facilities and activities that need to be restored to "normal" functioning after a catastrophe than after a disaster. Even in major disasters, there is no such massive-across the board disruption of community life even if particular neighborhoods may be devastated….

5. The mass media system especially in recent times socially constructs catastrophes even more than they do disasters. All disasters evoke at least local mass media coverage. Some major disasters can attract attention from outside the community media, but usually only for a few days…. In catastrophes compared to disasters, the mass media differ in certain important aspects. There is much more and longer coverage by national mass media. This is partly because local coverage is reduced if not totally down or out. There is a shift from the command point of view

that prevails in disasters to an Ernie Pyle approach ("six feet around the foxhole") in catastrophes, especially by the electronic media….

6. Finally, because of the previous five processes, the political arena becomes even more important. All disasters of course involve, at a minimum, local political considerations. But it is a radically different situation when the national government and the very top officials become directly involved. Even in very major disasters, a symbolic presence is often all that is necessary. In catastrophes, that symbolism is not enough, particularly for the larger society. Part of this stems from the fact that catastrophes as happened in Katrina force to the surface racial, class and ethnic differences that are papered over during routine times. It is easy to take partisan political advantage of such uncoverings especially when they go against widely held cultural values and norms in democratic societies. Another reason is that organizational weaknesses of responding organizations come even more to the surface. The structural weakness of the Federal Emergency Management Agency (FEMA) as a result of its subordinate position in the Department of Homeland Security (DHS), as some disaster researchers had predicted for at least three years, became a major problem in the response. The considerable expertise that still existed in the lower level professional ranks in FEMA could not make up for the badly organized FEMA-DHS interface.

"…the qualitatively different demands and needs that surface in catastrophes compared to disasters means that innovative and creative actions and measures will be required far more in the former than the latter. Actually any kind of crisis requires imagination in responding. But the most is required by a catastrophe because there will be more contingencies and unusual aspects in such occasions." (**Quarantelli**, *Catastrophes are Different from Disasters*, 2006)

Catastrophe: "The difference between a disaster and a catastrophe is that while disaster is when needs exceed resources, catastrophe is when needs exceed all ability to respond." (**Ramirez** 2007)

Catastrophe: "The difference between a catastrophe and a disaster is crucial: State and local officials can be counted on to assess their needs and direct federal response to a disaster. A catastrophe, however, over-whelms state and local governments and requires a federal response that anticipates needs instead of waiting for requests from below." (**Rood**, 2005)

Catastrophe: "…for a given society might be defined as an event leading to 500 deaths or $10 million in damages. These figures, however, are arbitrary since levels of impact mean different things to different people in different situations. Furthermore, we cannot ignore the element of scale. It would be a catastrophe for a small community if every building were totally destroyed by flooding (as occurred in 1993 in Valmeyer, Illinois), but at the global scale, it would be an insignificant event if only 350 houses were involved…Similarly, $10 million in damage to some communities would be devastating…, especially in less wealthy societies, but others would be able to cope relatively easily" (**Tobin and Montz** 1997, 7).

> "…a catastrophe not only disrupts society, but may cause a total breakdown in day-to-day functioning. One aspect of catastrophes, is that most community functions disappear; there is no immediate leadership, hospitals may be damaged or destroyed, and the damage may be

> so great and so extensive that survivors have nowhere to turn for help (Quarantelli, 1994).[5] In disaster situations, it is not unusual for survivors to seek help from friends and neighbors, but this cannot happen in catastrophes. In a disaster, society continues to operate and it is common to see scheduled events continue…" **Tobin and Montz** 1997, 31).

Catastrophe, Routine: "…tornadoes, most floods, forest fires, and the like – which inevitably adversely affect many Americans in every part of the country throughout every year. (**FSR**, *Nation Unprepared*, 2007, 3)

Catastrophe Bonds: "Catastrophe bonds are risk-based securities that pay relatively high interest rates and provide insurance companies with a form of reinsurance to pay catastrophe losses, such as those caused by a major hurricane. They allow insurance risk to be sold to institutional investors in the form of bonds, thus spreading risk." (**GAO**, *Natural Disasters: Public Policy Options*…, Nov 2007, 43)

Catastrophe-Linked Bonds: "…unsecured obligations that pay substantially higher interest rates than government or high-grade corporate bonds of equivalent maturity, but whose principal or interest is cancelable upon certain events or "triggers": those based on catastrophe claims paid by the specific insurer (indemnity CAT bonds) and those based on some general indicator of catastrophe losses (index CAT bonds). The cancellation feature is what gives the insurer protection and can make the bond the functional equivalent of capital or reserves. The issuer puts the proceeds of the bond issue "in the bank", as it were, and doesn't have to pay the money back if a catastrophe trips the trigger." (**Financial Services Roundtable** *Nation Unprepared* 2007, 50)

Catastrophe Planning (1955): "This assumption is a major premise in the operation of civil defense. The capabilities of nuclear and other weapons are so great that an attack, if successful, will result in damage and casualties far beyond the resources of any community. Assistance to attacked communities must come from outside and possibly from great distances. It must be organized in advance of an attack in order to be available when required. This means that available resources of the entire country, outside potential target areas as well as within them, must be geared into the civil defense system." (**FCDA**, *1955 Annual Report*, 1956, p. 17)

Catastrophic Disaster: An event that results in large numbers of deaths and injuries; causes extensive damage or destruction of facilities that provide and sustain human needs; produces an overwhelming demand on State and local response resources and mechanisms; causes a severe long-term effect on general economic activity; and severely affects State, local, and private-sector capabilities to begin and sustain response activities. Note: the Stafford Act provides no definition for this term. (**FEMA,** *FRP Appendix B*, 1992)

Catastrophic Disaster: "A Catastrophic Disaster is defined by: a sudden event which results in tens of thousands of casualties and tens of thousands of evacuees; response capabilities and resources of the State and local jurisdiction will be overwhelmed; characteristics of the

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[5] E.L. Quarantelli. 1994. *Disaster Stress*. Paper presented at the After Everyone Leaves: Preparing for, Managing and Monitoring Mid- and Long-Term Effects of Large-Scale Disasters Conference, Minneapolis Minnesota.

precipitating event will severely aggravate the response strategy and further tax the capabilities and resources available to the area; and life saving support from outside the area will be required, and time is of the essence; and likely to have long-term impacts within the incident area as well as, to a lesser extent, on the Nation." (**Maxwell**, *Report to NEMA on Disaster Operations Catastrophic Disaster Planning*, October 2007, 1)

Catastrophic Disaster: "…the term `catastrophic incident' means any natural disaster, act of terrorism, or other man-made disaster that results in extraordinary levels of casualties or damage or disruption severely affecting the population (including mass evacuations), infrastructure, environment, economy, national morale, or government functions in an area;…" (**Public Law 109-295** (120 Stat. 1394), *Department of Homeland Security Appropriations Act, 2007*, p. 40)

Catastrophic Disaster Planning: "Planning for catastrophic disasters that would immediately overwhelm existing capabilities. Key Objectives:

- Identify highest risk areas
- Examine loss estimates
- Assess current disaster response capabilities
- Identify anticipated response shortfalls and gaps
- Develop comprehensive planning strategies." (**FEMA**, *Disaster Operations Directorate Briefing: Joint Task Force State Commanders',* Jan 2008, Slide 27)

Catastrophic Disaster Planning Initiative, FEMA: "The Catastrophic Disaster Planning initiative is focused solely on catastrophic disasters and, in cooperation with affected state and local governments will identify the highest risk areas and examine loss estimates, current response capabilities, anticipated response shortfalls, and comprehensive planning strategies for addressing the shortfalls, to include new legislative and executive action if necessary…. Information technology and modeling are being leveraged as part of the project to develop interactive tools, services, and products to assist federal, state, and local officials in catastrophic planning and operational response. Products will include incident-specific response plans for pre-selected geographic regions, based upon loss estimating models and capability inventories of affected local, state and federal responders, as well as planning templates that can be used for planning for catastrophic incidents in other areas." (**Maxwell**, *Report to NEMA on Disaster Operations Catastrophic Disaster Planning*, October 2007, pp. 1-2) [See CDRP Initiative]

Catastrophic Disaster Response Group (CDRG): "The Catastrophic Disaster Response Group (CDRG) — represents all FRP signatory departments and agencies at the senior headquarters policy level." (**FEMA**, *US&R Incident Support Team Training* (Instructor Guide Module 1), p.7; see also, **USACE**, *Response Planning Guide*, 1995, p. 1-4)

Catastrophic Disaster Response Plan/Planning (CDRP): "HQUSACE will: **…**Establish policies and procedures in support of requirements for Catastrophic Disaster Response Planning (CDRP) for scenario specific events." (**USACE**, *Response Planning Guide*, 1995, p. 1-2)

Catastrophic Disaster Response Planning Initiative: The "FEMA Catastrophic Disaster Response Planning Initiatives are currently focused on four specific geographic areas: Southeast

Louisiana, New Madrid Seismic Zone (NMSZ), the State of Florida, and the State of California." (**FEMA**, "Catastrophic Disaster Planning." FEMA Disaster Operations Directorate, 10May07)

Catastrophic Disaster Response Planning Initiative: "Using funding appropriated for catastrophic planning in Fiscal Year 2006 and 2007, FEMA implemented a Catastrophic Disaster Response Planning Initiative (Initiative) that is designed to ensure that FEMA and its Federal, Tribal, State, and local partners plan and prepare to effect an appropriate, timely, and efficient response to a catastrophic disaster. This Initiative will significantly enhance Federal disaster response planning activities by focusing on catastrophic disasters: those disasters that by definition will immediately overwhelm the existing disaster response capabilities of Tribal, local and State governments. In cooperation with State and local governments, this initiative will identify high risk areas, develop loss estimates for such incidents, assess and inventory current disaster response capabilities, anticipate response shortfalls, and develop comprehensive planning strategies for addressing such shortfalls and enhancing capabilities. Products developed by the Initiative will include incident-specific response plans for pre-selected geographic regions, based upon loss estimating models and capability inventories of affected Tribal, local, State, and Federal responders." (**FEMA**, *Statement of Glenn Cannon*, December 3, 2007, p. 1)

Catastrophic Earthquake National Policy, 1982: "It is the policy of the United States to develop systems and plans to reduce the loss of life, destruction of property, economic instabilities, and the adverse impact on our national defense capability that would result from a catastrophic earthquake. The program can reduce the effects of a catastrophic earthquake by improving earthquake prediction, hazard and risk assessment, warning systems, public education and awareness, response and recovery; by developing further and applying earthquake resistant design and construction techniques, and land use planning. The initial action will be focused on California, but attention will be focused later on other regions in consideration of their relative risk from an earthquake. The program will increase capabilities to:

- Evaluate current earthquake prediction activities, foster the application of advanced scientific and engineering techniques for prediction and mitigation, increase and accelerate basic and applied research efforts;
- Develop a coordination and integration mechanism between Federal and State governments;
- Identify and allocate financial, medical, transportation, shelter, communications, and other resources necessary to assist recovery operations;
- Reduce the negative effects on military installations and defense related industries;
- Ensure more effective public awareness programs to equip all levels of the populace with specific information to help them survive;
- Promote international cooperation to increase scientific and engineering knowledge in applying mitigation measures;
- Provide for the preparation, implementation, and exercising of preparedness procedures; and
- Ensure the adequacy of current Federal legislation and regulations to facilitate an effective response." (**White House**, *NSDD-47*, July 22, 1982, pp. 8-9)

Catastrophic Emergency: "Any incident, regardless of location, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the U.S. population, infrastructure, environment, economy, or government functions." (**HSC**, *National Continuity Policy Implementation Plan*, August 2007, p. 60; **DHS**, *FCD 1*, Nov 2007, p. P-1))

Catastrophic Emergency: "Catastrophic Emergency' means any incident, regardless of location, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the U.S. population, infrastructure, environment, economy, or government functions." (**White House,** *HSPD-20*, May 9, 2007)

Catastrophic Event: "For purposes of this plan [NRP 2004], a catastrophic event is any natural or manmade incident, including terrorism, which leaves extraordinary levels of mass casualties, damage and disruption severely affecting the population, infrastructure, environment, and economy. A catastrophic event results in sustained national impacts over a prolonged period of time; exceeds resources normally available in the local, State, Federal, and private sectors; and significantly interrupt governmental operations and emergency services to such an extent that national security could be threatened. In contrast to a Major Disaster or Emergency as defined in the Stafford Act, a catastrophic event is characterized as an incident of low or unknown probability but extremely high consequences." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 60)

Catastrophic Event: "Any natural or man-made incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Catastrophic Event: "What is a Catastrophic Event?

- Tens of thousands of casualties and tens of thousands evacuees
- Over taxed response capabilities and resources of numerous State and local jurisdictions
- Significant need for life saving support from outside the immediate area.
- Long term recovery impacts within the incident area as well as on the nation." (**FEMA**, *Planning for the "Big One,"* November 28, 2007, slide 4)
- "Will have National Economic Impacts
- A catastrophic event can not be address by pedaling faster…
- Current Policies will inhibit a cohesive & unified response across all disciplines
- A catastrophic event requires ALL stakeholders
    - To change the way business in conducted
    - To be better prepared for longer (citizens)
    - To utilize solutions from unexpected sources." (**FEMA**, *Catastrophic Disaster Planning IAEM Presentation*, November 12, 2007, slides 24-25)

Catastrophic Health Event: "The term "catastrophic health event" means any natural or manmade incident, including terrorism, that results in a number of ill or injured persons sufficient to overwhelm the capabilities of immediate local and regional emergency response and health care systems." (**White House**, *HSPD 21*, October 18, 2007)

Catastrophic Incident: "The NRP identifies catastrophic incidents as high-impact, low-probability incidents, including natural disasters and terrorist attacks that result in extraordinary levels of mass casualties, damage, or disruption and severely affect the population, infrastructure, environment, economy, national morale, and/or government functions." (**DHS**, 2007)

Catastrophic Incident: "Any natural or manmade incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, and national morale and/or government functions. A catastrophic event could result in sustained national impacts over a prolonged period of time; almost immediately exceeds resources normally available to State, local, tribal, and private sector authorities; and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened. All catastrophic incidents are considered Incidents of National Significance." (**DHS** *National Response Plan*, 2004, x)

According to DHS National Response Plan:

"A catastrophic incident results in large numbers of casualties and/or displaced persons;

The incident may cause significant disruption of the area's critical infrastructure, including transportation, telecommunications, and public health and medical systems;

Response activities may have to begin without the benefit of a detailed or complete situation and needs assessment because a detailed, credible operating picture may not be possible for 24 to 48 hours of longer after the incident;

The federal government may have to mobilize and deploy assets before local and state governments request them via normal protocols because timely federal support may be necessary to save lives, prevent suffering, and mitigate severe damage; and,

Large numbers of people may be left temporarily or permanently homeless and require temporary or longer-term interim housing." (**DHS** *National Response Plan* 2004, at CAT-3)

Catastrophic Incident: "An urban or metropolitan area, or more expansive geographical area encompassing a large aggregate population, suffers a sudden, catastrophic incident resulting (either immediately or over time) in tens of thousands of casualties (dead, dying, and injured) and producing tens of thousands of evacuees and/or affected-in-place. The response capabilities and resources of the local jurisdiction (to include mutual aid from surrounding jurisdictions and response support from the State) will be profoundly insufficient and quickly, if not immediately, overwhelmed. In addition, characteristics of the precipitating event, such as severe damage to critical and public infrastructure and contamination concerns or other public health implications, will severely aggravate the response strategy and further tax the capabilities and resources available to the venue. Life saving support from outside the area will be required, and time is of the essence. A catastrophic incident is also likely to have long-term impacts within the incident area as well as, to a lesser extent, on the Nation." (**DHS**, (NRP) *Catastrophic Incident Supplement to the National Response Plan*, April 2005, p. 6)

Catastrophic Incident: "A Catastrophic Incident is defined by:
• A sudden event which results in tens of thousands of casualties and tens of thousands of evacuees
• Response capabilities and resources of the state and local jurisdictions will be overwhelmed
• Characteristics of the precipitating event will severely aggravate the response strategy and further tax the capabilities and resources available to the area
• Life saving support from outside the area will be required, and time is of the essence
• Likely to have long-term impacts within the incident area as well as, to a lesser extent, on the Nation." (**FEMA**, *New Madrid Seismic Zone Catastrophic Planning: Project Overview*, 2007)

Catastrophic Incident: "A catastrophic incident is a sudden event that results in tens of thousands of casualties and tens of thousands of evacuees. Due to the magnitude of the event, State and local resources will be automatically overwhelmed and the precipitating event will severely aggravate the response strategy and further tax the capabilities and resources available to the area. The event will likely have long-term impacts within the incident as well as, to a lesser extent, on the Nation." (**FEMA**, *Strategic Plan*, October 10, 2007 Draft, p. 1)

Catastrophic Incident: "…the term 'catastrophic incident' means any natural disaster, act of terrorism, or other man-made disaster that results in extraordinary levels of casualties or damage or disruption severely affecting the population (including mass evacuations), infrastructure, environment, economy, national morale, or government functions in an area." (**Post-Katrina Emergency Management Reform Act of 2006**, Title VI, Sec. 602 October 4, 2006, p. 1394)

Catastrophic Incident: "State and local governments are the first line of emergency response in disasters. State and local governments have fire, police, emergency medical services (EMS) and emergency management agencies dedicated to disaster response. The recent White House report on the Federal response to Hurricane Katrina described the situation when normal emergency response to a disaster becomes a response to a catastrophic incident:

> "However, in some instances, the State and local governments will be overwhelmed beyond their ability to satisfy their traditional roles in this system. Indeed, in some instances, State and local governments and responders may become victims themselves, prohibiting their ability to identify, request, receive, or deliver assistance. This is the moment of catastrophic crisis—the moment when 911 calls are no longer answered; the moment when hurricane victims can no longer be timely evacuated or evacuees can no longer find shelter; the moment when police no longer patrol the streets, and the rule of law begins to break down." (**White House**, *The Federal Response to Hurricane Katrina – Lessons Learned*. February 2006, p. 18)

(**DOT,** *Catastrophic Hurricane Evacuation Plan Evaluation: Report to Congress*, 2006, p. 2-1)

Catastrophic Incident Annex (NRP 2004), Federal Response Guiding Principles: "Guiding principles for a proactive Federal catastrophic incident response include the following:

a. The primary mission is to save lives, protect property and critical infrastructure, contain the event, and protect the national security;
b. Standard procedures regarding requests for assistance may be expedited, or under extreme

circumstances, suspended in the immediate aftermath of an event of catastrophic magnitude;

c. Pre-identified Federal response resources deploy and begin necessary operations as required to commence life-safety activities; and

d. Notification and full coordination with States will occur, but disruptions in the coordination process will not delay or impede the rapid deployment of critical resources." (**DHS**, *Catastrophic Incident Annex* July 7, 2004 Draft, pp. 4-5)

Catastrophic Incident Annex (National Response Plan, July 2004), Planning Assumptions:

"1. A catastrophic event will result in large quantities of casualties and/or displaced persons, possibly in the tens of thousands.

2. A catastrophic mass casualty/mass evacuation incident will trigger a Presidential disaster declaration, immediately or otherwise.

3. The Secretary of Homeland Security will immediately designate the event and Incident of National Significance and direct implementation of the NRP-CIA.

4. The nature and scope of such an event may include chemical, biological, radiological, nuclear or high-yield explosive (CBRNE) attacks, disease epidemics, major earthquakes/major hurricanes in densely populated areas, and/or other natural or manmade hazards.

5. Multiple events may occur simultaneously or sequentially in contiguous and/or noncontiguous areas. Some incidents, such as a biological WMD attack, may be dispersed over a large geographic area, and lack a defined incident site.

6. A catastrophic incident may occur with little or no warning. Some incidents, such as rapid disease outbreaks, may be well underway before being detected.

7. The event will cause significant disruption of the area's critical infrastructure to power, transportation, utilities, and communications systems.

8. The response capabilities and resources of the local jurisdiction (to include mutual aid from surrounding jurisdictions and response support from the State) may be insufficient and quickly overwhelmed. Many local emergency personnel who normally respond to incidents will be among those affected and unable to perform their duties.

9. A detailed and credible common operating picture may not be achievable for 24- 38 to 48 hours (or longer) after the incident. As a result, response activities must begin without the benefit of a detailed or complete situation and critical needs assessment.

10. Federal support must be provided in a timely manner to save lives, prevent human suffering, and mitigate severe damage. This may require deploying assets before they are requested via normal NRP protocol.

11. Large-scale evacuations, organized or self-directed, may occur. More people initially will flee and seek shelter for attacks involving CBRN agents than for natural events. The health-related implications of an incident will aggravate attempts to implement a coordinated evacuation management strategy.

12. Large numbers of people may be left temporarily or permanently homeless and may require prolonged temporary housing.

13. A catastrophic incident may produce environmental impacts (e.g., persistent chemical, biological, or radiological contamination) that severely challenge the ability and capacity of governments and communities to achieve a timely recovery.

14. A catastrophic incident will have unique dimensions/characteristics requiring that response plans/strategies be flexible enough to effectively address emerging needs and requirements.

15. A catastrophic incident may have international dimensions. These include potential impacts on cross-border trade, transit, law enforcement coordination and other areas.

16. If the incident is the result of terrorism, the Homeland Security Advisory System (HSAS) level will likely be raised regionally, and perhaps nationally. Elevation of the HSAS level carries additional local, State, and Federal security enhancements that may affect the availability of certain response resources." (**DHS**, *Catastrophic Incident Annex* July 7, 2004 Draft, pp. 3-4)

C**atastrophic Incident Annex (NRF, July 2007 Comment Draft), Planning Assumptions:**

- "A catastrophic incident may result in large numbers of casualties and/or displaced persons, possibly in the tens to hundreds of thousands. During an incident response, priority is given to human life-saving operations.
- The nature and scope of a catastrophic incident may immediately overwhelm State, tribal, and local response capabilities and require immediate Federal support.
- A detailed and credible common operating picture may not be achievable for 24 to 48 hours (or longer) after the incident. As a result, response activities must begin without the benefit of a detailed or complete situation and critical needs assessment.
- A catastrophic incident will trigger a Presidential disaster declaration, immediately or otherwise. The Secretary of Homeland Security or a designee implements the NRF-CIA/CIS.
- The nature and scope of the catastrophic incident may include chemical, biological, radiological, nuclear, or high-yield explosive attacks, disease epidemics, cyber attacks, and major natural or manmade hazards.
- A catastrophic incident has unique dimensions/characteristics requiring that response plans/strategies be flexible enough to effectively address emerging needs and requirements.
- A catastrophic incident may occur with little or no warning. Some incidents, such as rapid disease outbreaks, may be well underway before detection.
- Multiple incidents may occur simultaneously or sequentially in contiguous and/or non-contiguous areas. Some incidents, such as a biological WMD attack, may be dispersed over a large geographic area and lack a defined incident site.

- A catastrophic incident may produce environmental impacts (e.g., persistent chemical, biological, or radiological contamination) that severely challenge the ability and capacity of governments and communities to achieve a timely recovery.
- Federal support must be provided in a timely manner to save lives, prevent human suffering, and mitigate severe damage. This may require mobilizing and deploying resources before they are requested via normal NRF protocols.
- Large-scale evacuations, organized or self-directed, may occur. More people initially are likely to flee and shelter outside of areas involving chemical, biological, radiological, or nuclear agents than for natural events. The health related implications of these incidents may aggravate attempts to implement a coordinated evacuation management strategy.
- Large numbers of people may be left temporarily or permanently homeless and may require prolonged temporary housing.
- A catastrophic incident may have significant international dimensions. These include impacts on the health and welfare of border community populations, cross-border trade, transit, law enforcement coordination, and other areas." (**DHS**, *National Response Framework, Catastrophic Incident Annex*, July 2007 Draft, pp. 4-5)

Catastrophic Incident Annex (National Response Plan, July 2004), Purpose: "The Catastrophic Incident Annex to the National Response Plan (NRP-CIA) establishes the strategy for implementing and coordinating an accelerated, proactive national response to a catastrophic incident." (**DHS**, *Catastrophic Incident Annex*, July 7, 2004 Draft, p. 1)

Catastrophic Incident Annex (National Response Plan, December 2004), Purpose: "The Catastrophic Incident Annex to the National Response Plan (NRP-CIA) establishes the context and overarching strategy for implementing and coordinating an accelerated, proactive national response to a catastrophic incident." (**DHS**, *Catastrophic Incident Annex*, Dec. 2004, p. 1)

Catastrophic Incident Annex (National Response Framework 2007), Purpose and Scope: "Purpose: The Catastrophic Incident Annex to the National Response Framework (NRF-CIA) establishes the context and overarching strategy for implementing and coordinating an accelerated, proactive national response to a catastrophic incident. A more detailed and operationally specific National Response Framework Catastrophic Incident Supplement (NRF-CIS) is published independently of the NRF and annexes.

Scope…. Recognizing that Federal and/or national resources are required to augment overwhelmed State, tribal, and local response efforts, the NRF-CIA establishes protocols to preidentify and rapidly deploy key essential resources (e.g., medical teams, urban search and rescue teams, transportable shelters, medical and equipment caches, etc.) that are expected to be urgently needed/required to save lives and contain incidents. Accordingly, upon designation by the Secretary of Homeland Security of a catastrophic incident, Federal resources, organized into incident-specific "packages," deploy in accordance with the NRF-CIS and in coordination with the affected State and incident command structure.

Where State, tribal, or local authorities are unable to establish or maintain an effective incident command structure due to catastrophic conditions, the Federal Government, at the direction of the Secretary of Homeland Security may establish a unified command structure to save lives,

protect property, secure critical infrastructure/key resources, contain the event, and protect national security. The Federal Government shall transition to its normal role supporting incident command through State, tribal, or local authorities when their command is reestablished." (**DHS**, *National Response Framework, Catastrophic Incident Annex*, July 2007 Draft, p. 1)

Catastrophic Incident Annex (National Response Framework July 2007 Draft), Scope: "The Catastrophic Incident Annex is primarily designed to address no-notice or short-notice incidents of catastrophic magnitude, where the need for Federal assistance is obvious and immediate, where anticipatory planning and resource pre-positioning were precluded, and where the exact nature of needed resources and assets is not known. Appropriately tailored assets and responses identified in the NRF-CIS, as well as other select Federal resources and assets, also may be deployed in support of a projected catastrophic event (e.g., a major hurricane) with advance warning in support of the anticipated requests of State, tribal, and local authorities." (**DHS**, *National Response Framework, Catastrophic Incident Annex*, July 2007 Draft, p. 2)

Catastrophic Incident Planning: "…planning for major catastrophic events sponsored by FEMA is underway [Florida, New Madrid Seismic Zone, California South, California North, Hawaii]. Subject matter experts, planners and operators are deployed at the Federal, Regional, and State levels. Their mission is to identify capability assessments, identify planning seams, and achieve solutions. FEMA is developing and will continue to enhance scenario-driven catastrophic planning that combines planning and exercises that are realistic and reasonable and that simulate the conditions and demands responders would face following a catastrophic disaster." (**FEMA**, *Strategic Plan*, October 10, 2007 Draft, p. 5)

Catastrophic Incident Planning Strategy: "Achieving a robust and sustainable national capability to rapidly and successfully meet the immense challenges posed by an incident of catastrophic magnitude will require a unified strategy supported by aggressive leadership, joint collaboration, innovative thinking, significant funding, and national resolve. To that end, this Strategy for Catastrophic Incident Planning (SCIP) establishes a comprehensive and ambitious set of unified goals and objectives, and will provide a baseline against which to identify, validate, align and prioritize necessary capability-building initiatives." (**FEMA**, *Strategic Plan*, October 10. 2007 Draft, p. 4)

Catastrophic Incident Planning Strategic Goals: "The SCIP shall accomplish the following goals:

- Creation of an ongoing operational framework consisting of collaborative partnerships among all FEMA directorates, other NRF agencies, non-governmental organizations (NGOs and private sector entities at the National, Regional, State, metropolitan, local and tribal levels.
- Development on a continuing basis of comprehensive catastrophic planning solutions for selected natural hazards by working with the other Federal agencies, regions, and other Federal partners and under the auspices of the Post-Katrina Emergency Management Reform Act of 2006. In addition to the current planning efforts already underway, review additional scenarios for catastrophic planning development including all 15 National Planning Scenarios.

- Establishment of clear-cut legal authorities, roles and responsibilities, lines of communication and coordination at all levels of government.
- Implementation of state-of-the-art technology providing information management and document control for the dissemination, exchange, and transfer of plans, lessons learned, best practices, workshop schedules and related products.
- Creation of an integrated, scenario-driven catastrophic planning methodology that combines planning and exercise phases.
- Implementation of standardized plan templates and a planning developmental methodology at the National, Regional, State, metropolitan, local, and tribal levels.
- Development of a Joint Catastrophic Disaster Steering Group (JCDSG) of representatives from key directorates (Disaster, Operations, Disaster Assistance, Mitigation, National Preparedness) that develops and revises goals, policies, doctrines, funding, and long-range plans, and provides integration and coordination with new initiatives within FEMA and with other Federal agencies, as well as NGOs.
- Creation of an annual national conference fro all stakeholders to provide a forum for the reporting of research results and planning efforts in order to support, inform, integrate and enhance catastrophic plans.
- Creation of a five-year plan, developed by the JCDSG (in conjunction with other stakeholders). This plan will address the identified goals and objectives, funding, selected metropolitan areas, scenarios, and specific target dates for local jurisdictions to achieve self-sustaining programs." (**FEMA**, *Strategic Plan*, October 10, 2007 Draft, pp. 6-7)

Catastrophic Incident Planning Vision: "By end of fiscal year 2013, functional planning annexes will prepare the nation to respond to the unique characteristics of all-hazard catastrophic events on a national level and for 21 regional locales around the nation. These will facilitate a coordinated national preparedness and response capability which integrates operations and resources at all levels of government and the private sector." (**FEMA**, *Strategic Plan*, October 10, 2007, p.6)

Catastrophic Task Force (CATF) Exercises: "…in the months before Hurricane Katrina, the HSC [Homeland Security Council] created some confusion at the interagency level by launching the Catastrophic Assessment Task Force (CATF) exercises, which competed with the NEP [National Exercise Program] exercises. The CATF exercises were Cabinet-level exercises aimed at challenging the federal government's ability to respond to a major event. The procedural problem with the CATF exercises was that other departments and agencies, except for the Defense Department with its massive planning staff, simply did not have enough qualified personnel to participate fully in both the NEP and the CATF exercises.

"The substantive problem with the CATF exercises was that they were so complex and catastrophic (and largely implausible) that the lessons learned from them were either obvious without the exercise or too expensive to the point that no President would request the required resources and no Congress would pay for them. For example, a CATF scenario might indicate that the nation needed 20,000 surge hospital beds for third-degree burn victims, the supplies to treat the 20,000 burn victims, and the large numbers of medical personnel to treat the victims. This would require billions of dollars, an enormous increase in the number of college and medical school

students specializing in burn treatment, and other costly changes just for one element of the CATF response.

"The CATF exercises simply demonstrated that the United States could not deal with two nearly simultaneous nuclear detonations followed closely by a Category Five hurricane on the East Coast and an earthquake on the West Coast measuring 8.0 on the Richter scale. This is not a surprise. One senior official referred to the CATF scenarios as the "Book of Revelations" because of their apocalyptic nature.

'The CATF frustrated rather than accelerated the interagency planning effort. Subsequently, the DHS was able to fold the CATF exercises into the NEP schedule and to construct more realistic scenarios based on the NPS so that Cabinet members could constructively explore strategic policy issues that needed to be resolved." (**Mayer and Carafano**, October 24, 2007)

Categories of Hazardous Diseases/Agents: "The Centers for Disease Control and Prevention classifies potential dangers to public health and safety by dividing them into three categories, based on their potential for harm.

Category A Diseases/Agents:

The U.S. public health system and primary healthcare providers must be prepared to address various biological agents, including pathogens that are rarely seen in the United States. High-priority agents include organisms that pose a risk to national security because they can be easily disseminated or transmitted from person to person; result in high mortality rates and have the potential for major public health impact; might cause public panic and social disruption; and require special action for public health preparedness.

Category B Diseases/Agents:

Second highest priority agents include those that are moderately easy to disseminate; result in moderate morbidity rates and low mortality rates; and require specific enhancements of CDC's diagnostic capacity and enhanced disease surveillance.

Category C Diseases/Agents:

Third highest priority agents include emerging pathogens that could be engineered for mass dissemination in the future because of availability; ease of production and dissemination; and potential for high morbidity and mortality rates and major health impact." (**HHS**, *Pandemic and All-Hazards Preparedness Act Progress Report*, November 2007, Appendix 3, p. 1)

CATF: Catastrophic Assessment Task Force exercises.

CATS: Consequence Assessment Tool Set, ACECenter/DTRA/DOD. (**DTRA**, *CATS*)

CAV: Community Assistance Visit. (**FEMA**, *CAV*, 2007)

CB: Citizen's Band.

CBCP. Certified Business Continuity Professional. (**DigitalCare**, *State of OR BC Workshop*)

CBDP: Community Based Disaster Preparedness.(**Walia**, Australian Journal of EM, 2008, 68)

CBDRM: Community Based Disaster Risk Management. (**ProVention Consortium**, 2006)

CBF: Critical Business Functions. (DigitalCare, Inc., State of OR BC Workshop 2002, 42)

CBIRF: Chemical/Biological Incident Response Force, USMCorps. (**DoD**, *Verga*, 2007, p. 6)

CBO: Community Based Organization. (**CA OES**, *SEMS Guidelines*, 2006, Glossary, p. 5)

CBP: U.S. Customs and Border Protection, DHS.

CBR: Chemical, Biological, and Radiological. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-1)

CBRA: Coastal Barrier Resources Act of 1982. (**FEMA**, *CBRS History*, 2006)

CBRNE: Chemical, Biological, Radiation, Nuclear and Explosive Weapons. (**HSC**, *NCPIP*, 66)

CBRNE Consequence Management: "CBRNE CM encompasses CM actions taken to address the consequences from all deliberate and inadvertent releases of chemical, biological, radiological, nuclear agents or substances, and high-yield explosives with potential to cause mass casualties and large levels of destruction. An exception is response to accidents or incidents involving US nuclear weapons in DOD or Department of Energy custody. CBRNE CM, is normally managed at the national level (US or HN governments), with DOD providing support as directed. During combat operations, DOD leads the operational response in reaction to an incident involving US forces and allies…. CBRNE CM includes those measures and methods of responding to CBRNE events to alleviate damage, loss of life, hardship or suffering caused by the incident, protect public health and safety, emergency restoration of essential government services and infrastructure, and provide emergency relief to governments, businesses, and individuals affected by the consequences of a CBRNE situation. The method of response will include use of standing contingency plans and procedures to determine what forces and capabilities are required and committed in support of requests for assistance." (**JCS/DoD**, *CBRNE CM* (JP 3-41), 2006, p. vi; see, also, p. I-2)

CBRNE Consequence Management Chain of Command: "**The joint force chain of command and civilian oversight within DOD will be clear.** The joint task force (JTF)-CBRNE CM commander reports directly to the supported combatant commander (CCDR), who in turn reports to the SecDef and the President. Within DOD, the Assistant Secretary of Defense (Homeland Defense) (ASD[HD]) is the principal civilian advisor to the SecDef on domestic CM activities for CBRNE incidents." (**JCS/DoD**, *CBRNE CM* (JP 3-41), 2006, p. I-3) [Bold emphasis in the original.]

CBRNE Consequence Management Command and Control: "The joint force conducting CBRNE CM will usually be in support of a Federal agency. The SecDef always retains control of Federal (Title 10) military forces providing CBRNE CM. The state governors, through the adjutants general, control National Guard forces when those forces are performing active duty in their state role and when performing active duty under Title 32, United States Code (USC). The JFC remains within the normal chain of command for military forces from the President, as Commander in Chief, to the SecDef, to the CCDR. If the JFC is a National Guardsman, the individual can maintain dual Title 10/Title 32 authority over forces, if agreed to by the President and the state governor. National Guard soldiers and airmen may serve either in a Federal status like other reserve soldiers, or in a state status (state active duty or Title 32 status) under the command of the governor. When serving in their home state for disaster relief, they typically will serve in state status. National Guard soldiers and airmen serving in state status are not subject to the Posse Comitatus Act (PCA), (18 USC Section 1385), which generally prohibits Service members in Title 10/Federal status from engaging in civilian law enforcement activities (unless constitutional or statutory exceptions apply). Some state laws, however, also restrict the law enforcement activities that can be performed by National Guard members even when in state status. Statutory exceptions to the PCA include the Insurrection Act and Federal laws that allow the Attorney General to ask the SecDef to authorize the use of active duty forces to assist in law enforcement activities after a CBRN incident. The JFC normally provides support when civil authorities request DOD support, evaluated by DOD authorities and approved by SecDef or designated representative. The evaluation criteria used by DOD authorities includes legality (compliance with laws), lethality (potential use of lethal force by or against DOD forces), risk (safety of DOD forces), cost (who pays, impact on DOD budget), appropriateness (whether the requested mission is in the interest of DOD to conduct), and readiness (impact on DOD's ability to perform its primary mission). Planning an effective, proactive response to mitigate a CBRNE event includes considerations that contribute to saving lives, preventing injuries, reducing human suffering, providing temporary critical life support, and providing shelter to the affected populace." (**JCS/DOD**, *CBRNE Consequence Management* (JP 3-41, 2006, p. II-1)

CBRNE Consequence Management Response Force, DoD (CCMRF): "personnel organized in force packages to perform missions across the CBRNE spectrum. CCMRF capabilities include medical, decontamination, command and control, communications, logistics, transportation and public affairs assets." (FEMA, Statement of Glenn Cannon, 2007, p. 11)

CBRNE Detection Capability Definition: "The preventative Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Detection capability provides the ability to detect CBRNE materials at points of manufacture, transportation, and use. It is important to note that the activities and tasks described in this capability will be carried out individually for each specific agent, rather than for all agents at the same time. Therefore, when considering critical tasks and preparedness measures, each task and measure should be applied separately to each CBRNE agent. For example, in considering whether technical support (or "reachback") is available, rad/nuc "reachback" is considerably different from chemical, biological, or explosive "reachback". Preparedness in one or more of the CBRNE areas does not equate to preparedness across the entire CBRNE detection spectrum.

"This capability includes the detection of CBRNE material through area monitoring, but does not include detection by their effects (i.e., signs or symptoms) on humans and animals. Such population level monitoring is addressed, respectively, in the Epidemiological Surveillance and Investigation and Animal Disease Emergency Support capabilities. The CBRNE Detection capability includes the identification and communication of CBRNE threats, but does not include actions taken to prevent an incident or respond to the consequences of a CBRNE incident, which are also addressed in other capabilities.

"The CBRNE Detection capability includes technology, as well as the capacity to recognize potential CBRNE threats through equipment, education, and effective protocols. Training, communication, close coordination with key partners, including intelligence, law enforcement, public safety, public health, and international partners, and public and private sector awareness of CBRNE threats are all recognized as critical enablers for this capability. However, only CBRNE detection-specific tasks within these crosscutting elements have been identified in the discussion of this capability." (**DHS**, *TCL*, 2007, p. 115)

CBRNE Enhanced Response Force Package (CERFP): "The CERFP is composed of four elements staffed by personnel from already established National Guard units. The elements are search and extraction, decontamination, medical, and command and control. The CERFP command and control team directs the overall activities of the CERFP and coordinates with the Joint Task Force - State and the Incident Commander. The CERFP search and extraction element mission is assigned to an Army National Guard Engineering Battalion, the decontamination element mission is assigned to an Army National Guard Chemical Battalion, and the medical element mission is assigned to an Air National Guard Medical Group. The security duties are performed by the state National Guard Quick Response Force. The initial establishment of CERFPs placed at least one in each FEMA Region. There are currently 12 validated CERFPs. An additional five CERFPs have been authorized and funded by Congress, to include full-time manning and equipment. When an incident occurs within a team's response area, they are alerted through their State Headquarters and mobilized on State Active Duty. If the incident is located within their state, they would proceed to the incident when directed by their JFHQ. If the incident is located outside of their state, their State Headquarters would coordinate with the receiving state under the terms agreed to in the Emergency Mutual Aid Compact or EMAC. After arriving at the incident site, the command and control team and element commanders coordinate with the incident commander and JTF Commander to determine how to most effectively employ the CERFP." (**NGB**, *CERFP Fact Sheet*, 2007; see, also **DoD**, *Statement of Verga*, July 19, 2007, p. 5, and **Blum**, July 19, 2007, p. 5)

CBRNE Incidents. "During a CBRNE incident, CBRNE CM [Consequence Management] efforts must make the preservation of life a priority. This is a significant shift in mindset for JFCs [Joint Force Commands], staff personnel, and CBRNE CM planners." (**JCS/DoD**, *CBRNE CM* (JP 3-41), 2006, p. I-4) "Regardless of the nature of the toxic chemical, CBRNE CM operations will focus on life saving and prevention of further injury tasks to include: responding immediately to treat identified casualties; securing and decontaminating the area to prevent spreading of the chemical; decontaminating people possibly exposed; and providing support to a displaced populace. In many instances, chemical warfare individual protective equipment does

not provide protection from toxic materials nor is it certified for use in support of civilian authorities outside of a battlefield environment." (**JCS/DoD**, *CBRNE CM* (JP 3-41), 2006, p. I-6)

CBRS: Coastal Barrier Resource System. (**FEMA**, *CBRS*, 2007)

CbT: Combating Terrorism. (*DOD Dictionary of Military and Related Terms*, 2007)

CBZP: Chemical Buffer Zone Protection Program, DHS.

CCA: Comprehensive Cooperative Agreements.

CCA: Continuity Communications Architecture. (**HSC**, *NCPIP*, August 2007, p. 60)

CCAB: Continuity Communications Architecture Board. (**DHS**, *FCD 1*, Nov. 2007, p. 18)

CCCU: Congregate Care Coordination Unit. (**FEMA**, *Statement of Paulison, Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath…"* 26Jun08, 12)

CCDR: Combatant Commander. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-1)

CCERP: California Catastrophic Earthquake Readiness Response Plan. (**Maxwell**, *Report to NEMA*, 2007)

CCID: Coordinating Center for Infectious Diseases, CDC.

CCIR: Commander's Critical Information Requirement. (**DA**, *WMD-CST Ops*, 2007, Gloss-1)

CCMRF: CBRNE Consequence Management Response Force, DoD.

CCP: Citizen Corps Program.

CCROA: Corporate Crisis Response Officers Association.

CD V-715: Radiological Survey Meter (0-500 r/hr). (**USACE**, *ERS Annex B*, 1985, p. B-7)

CD C-700: Radiological Survey Meter (0-150 mr/hr) (**USACE**, *ERS Annex B*, 1985, p. B-7)

CD V-750: Dosimeter Charger. (**USACE**, *ERS Annex B*, 1985, p. B-7)

CD-V-717: Remote Survey Meter, (0-500 r/hr). (**USACE**, *ERS Annex B*, 1985, p. B-7)

CD-V-742: Dosimeter (**USACE**, *ERS Annex B*, 1985, p. B-7)

CDBG: Community Development Block Grant, Depart. of Housing and Urban Development.

CDC: Centers for Disease Control and Prevention, HHS.

CDC: Certain Dangerous Cargo. (**GAO**, *Maritime Security*, December 2007, p. iv)

CDMHA: Center for Disaster Management and Humanitarian Assistance, USF.

CDP: Center for Domestic Preparedness.

CDRARNORTH: Commander, US Army North.

CDRP: Catastrophic Disaster Response Plan. (**DOA/USCOE**, *Anchorage Earthquake CDRP*, January 11, 2005)

CDRUSJFCOM: Commander, US Joint Forces Command.

CDRUSNORTHCOM: Commander U.S. Northern Command (NORTHCOM).

CDRUSPACOM: Commander, US Pacific Command.

CDRUSSOCOM: Commander, US Special Operations Command.

CDRUSSOUTHCOM: Commander, US Southern Command.

CDRUSSTRATCOM: Commander, US Strategic Command.

CDRUSTRANSCOM: Commander, US Transportation Command.

CDS: Civil Defense System (s).

CDUEP: Civil Defense University Extension Program, DCPA. Defunct.

C/E: Controller/Evaluator. (**FEMA**, IS 120.A, *An Introduction to Exercises*, 2 Feb 2008, p. 34)

CEA: California Earthquake Authority.

CEDAP: Commercial Equipment Direct Assistance Program. (**DHS**, *FY07 CEDAP*, 20Dec07

CEEP: Critical Employee Emergency Planning. (GSRCPI, *Critical Employee Emergency Planning (CEEP) Training – DHS*, 2008)

CEM: Certified Emergency Manager (IAEM managed credential).

CEM: Comprehensive Emergency Management.

CEMP: Comprehensive Emergency Management Plan. (**DHS**, *TCL*, 2007, p. 23)

Center for Advancing Microbial Risk Assessment (CAMRA): A Department of Homeland Security funded Center of Excellence "led by Michigan State University and established jointly with the U.S. Environmental Protection Agency, fills critical gaps in risk assessments for decontaminating microbiological threats — such as plague and anthrax — answering the question, 'How Clean is Safe?'" (**DHS**, *Homeland Security Centers of Excellence*, 20March07)

Center for Domestic Preparedness (Anniston, Alabama.): "The Center for Domestic Preparedness (CDP) provides a unique environment and opportunity to offer specialized advanced training to state and local emergency responders in the management and remediation of incidents of domestic terrorism, especially those involving chemical agents and other toxic substances…. The Center was created by a Congressional directive to:
Establish a National, State, and Local Public Training Center for First Responders to domestic terrorist acts at Fort McClellan. The Center will serve as a training facility for all relevant federally supported training efforts that target state and local law enforcement, firefighters, emergency medical personnel, and other key agencies such as public works and state and local emergency management agencies. The focus of the training is to prepare relevant state and local officials to deal with chemical, biological, or nuclear terrorist acts and handle incidents dealing with hazardous materials." (**DOJ**, *ODP Fact Sheet*)

Center for Domestic Preparedness (Anniston, Alabama.): "The CDP operates a Federal training center for the delivery of high-quality, comprehensive preparedness training programs for the nation's emergency responders." (**FEMA/NPD/NIC**, slide 4)

Center for Homeland Defense and Security (SHDS): "The Naval Postgraduate School Center for Homeland Defense & Security (CHDS) has been the nation's premier provider of homeland security graduate and executive level education since 2002. NPS and the U.S. Department of Homeland Security are partnering to pioneer the development and delivery of homeland security education programs for governors, mayors and senior homeland security leaders from across a wide spectrum of disciplines in local, tribal, state and federal government, and the military." (**CDHS**, 2007)

Centers for Public Health Preparedness (CPHP): "The CDC-funded Centers for Public Health Preparedness (CPHP) are a national network of academic institutions working in collaboration with state and local public health departments and other community partners to provide life-long learning opportunities to the public health workforce, in order to handle the next public health crisis." (**ASPH**, *CPHP*, 2008)

Centers for Public Health Preparedness (CPHP): "The CPHPs originated in 1999, when former CDC Director Dr. Jeffrey Koplan instructed the then-Public Health Practice Program Office to develop an agency-wide plan to address the CDC's training and continuing education needs.1 The plan was to establish a cohesive, integrated approach to training that focused on the domestic public health workforce, a group that was found to have little formal training in public health, particularly in bioterrorism. This led to the establishment of CPHPs, whose purpose was to leverage existing expertise and educational materials developed by academic public health institutions and create linkages to public health practice (Council on Linkages between

Academia and Public Health Practice, 2000). In December 2007, 27 CPHPs were located within accredited schools of public health (CDC, 2007)." (**Altevogt**, *Research Priorities in Emergency Preparedness and Response for Public Health Systems: A Letter Report*, January 2008, p. 7)

Center of Gravity Analysis: Joint Publication (JP) 5-0 (Draft 2), *Doctrine for Joint Planning Operations*: "The most important task confronting campaign planners in this process is being able to identify friendly and adversary strategic centers of gravity; that is, the sources of strength, power, and resistance." (**JCS/DOD**, *DJPA*, December 2002, p. IV-12)

Centers of Gravity: "Those characteristics, capabilities, or localities from which a military force derives its freedom of action, physical strength, or will to fight." (**NDP**, *Transforming Defense*, 1997, 89)

Central HAZUS Users Group (CHUG): The CHUG (Central HAZUS Users Group) provides a means of collaboration between HAZUS-MH users within FEMA Region 5. This group looks at software challenges, HAZUS-MH projects, and the overall general use of HAZUS-MH software. The main goal of the CHUG is to maximize the potential of HAZUS-MH within the region. Sharing the successes and challenges between users helps bring the entire region together in planning for natural disasters." (**FEMA**, "HAZUS User Groups Success Story: CHUG, Expanding HAZUS Use in FEMA Region 5," October 22, 2007)

Central Training School (Civil Defense), Stillwater, OK: Opened July 30, 1951 to serve 20 States. (**FCDA**, *Annual Report 1951*, 1952, p. 23). Closed on August 15, 1952 due to reduced Congressional funding. (**FCDA**, *Annual Report for 1952*, p. 169)

Central United States Earthquake Consortium: "The Central U.S. Earthquake Consortium is a partnership of the federal government and the eight states most affected by earthquakes in the central United States. Those states are: Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee. Established in 1983 with funding support from the Federal Emergency Management Agency, CUSEC's primary mission is, '... the reduction of deaths, injuries, property damage and economic losses resulting from earthquakes in the Central United States.' CUSEC serves as a 'coordinating hub' for the region, performing the critical role of coordinating the multi-state efforts of the central region. Its coordinating role is largely facilitative and not as the primary implementer of emergency management functions which is the responsibility of each individual state." (**CUSEC**, *CUSEC Mission and Goals*, webpage)

CEPIN: Community Emergency Preparedness Information Network. http://www.cepintdi.org/

CEPP: Chemical Emergency Preparedness Program. (**EPA**, *Technical Guidance for Hazards Analysis: Emergency Planning for Extremely Hazardous Substances*, 1987, p. 1-5)

CERC: Crisis and Emergency Risk Communication. (**DHS**, *TCL*, 2007, p. 309)

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act of 1980.

CERFP: CBRNE Enhanced Response Force Packages, National Guard. (**DoD**, *Statement of Verga*, July 19, 2007)

CERT: Citizen Emergency Response Team.

CERT: Computer Emergency Response Team. (**DSB**, *Protecting the Homeland*, 2001, p. F-3)

Certain Dangerous Cargo (CDC): A US Coast Guard designation. "CDCs are defined in 33 C.F.R. § 160.204, a section of Coast Guard regulations that addresses ports and waterways safety. The list primarily includes nonenergy products that are flammable, toxic, or explosive, such as chlorine and sulfur dioxide." LNG and LPG are also on the USCG's CDC list. (**GAO**, *Maritime Security*, December 2007, p. 43)

Certification (NIMS): "Personnel certification entails authoritatively attesting that individuals meet professional standards for the training, experience, and performance required for key incident management functions." (**FEMA**, *National Emergency Responder Credentialing System* (Fact Sheet), 26 Oct 2005, p. 2)

Certified Business Continuity Professional (**CBCP):** "DRII's CBCP certification is reserved for individuals who have demonstrated their knowledge and experience in the business continuity / disaster recovery industry. The CBCP level is designed for an individual with a minimum of two years of experience as a business continuity/disaster recovery planner." (**ISSA**, 2007)

"To apply for CBCP certification, you must:

- Possess at least two years of significant, practical, enterpise wide* experience in five of the Subject Areas of the Professional Practices for Business Continuity Planners, and focuses on your business continuity / disaster recovery planning responsibilities and accomplishments--not your position responsibilities or organizational accomplishments. - At least two of the five selected subject areas must include: subject area #3: Business Impact Analysis; subject area #4: Developing Business Continuity Strategies; subject area #6: Developing and Implementing Business Continuity Plans; or subject area #8: Maintaining and Exercising Business Continuity Plans.6 This enterprise wide experience must have occurred within a ten-year period from your application date

** Enterprise wide is defined as the development and implementation of a plan document to facilitate the resumption of critical business functions, (including, but not limited to, Human Resources, Facilities, Information Technology, Finance, Security, Engineering, and Sales and Marketing), in accordance with established formal and/or informal service level expectations. This enterprise wide planning process involves the coordination, prioritization, resource allocation, and implementation of critical business function strategies to resume normal operating capabilities.*

- Pass DRII's qualifying examination with a minimum score of 75%." (**DRI**, *Certification CBDP*, 2008)

CET: Certified Environmental, Safety and Health Trainer.

CEU: Continuing Education Unit.

CFC: Chlorofluorocarbons. (**UNDHA**, *Disaster Management Glossar*y, 1992, 21)

CFDA: Catalog of Federal Domestic Assistance.

CFI: Critical Facility Inventory. (**FL DEM**, *CFI-RSFI, SOG*, 2003)

CFO/PA&E: Chief Financial Office/Program Analysis and Evaluation. (**DHS**, *IPG FY 2011*)

CFR: Code of Federal Regulations.

CG: Commanding General. (**Dept. of the Army**, *WMD-CST Operations*, 2007, Glossary-1)

Chain of Command: "A series of command, control, executive, or management positions in hierarchical order of authority." (**DHS**, *NIMS*, 2004, p. 128)

Chain of Command: "The orderly line of authority within the ranks of the incident management organization." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 148)

Chain of Command and Unity of Command, Incidence Management: "Chain of command refers to the orderly line of authority within the ranks of the incident management organization. Unity of command means that every individual has a designated supervisor to whom they report at the scene of the incident. These principles clarify reporting relationships and eliminate the confusion caused by multiple, conflicting directives. Incident managers at all levels must be able to control the actions of all personnel under their supervision." (**DHS**, *NIMS*, 2004, p. 11)

Change Agent: "A forward-thinking and acting person who is able to deliberately and tangibly impact the mission and organizational direction or a bureaucracy from its status quo into an integrated, future state capable of contemplating and ultimately thwarting security threats, including natural hazards that might befall the United States of America." (**Forrester**, *The Government's New Breed of Change Agents: Leading the War on Terror*, 2006, p. 28)

Change Agent Practices: "Change agents attribute their success to these six key management practices:

1. Challenge the status quo
2. Frame a clear, compelling vision
3. Focus on new outcomes vs. process
4. Realign and lead within bureaucracy
5. Uncover the right talent
6. Listen intently." (**Forrester**, *The Government's New Breed of Change Agents*, 2006, 5)

CHDS: Center for Homeland Defense & Security, Naval Postgraduate School, Monterey, CA.

Check-In: "The process of first reporting in to an incident." (**Capital Health Region**, Edmonton Canada, *ICS100: Incident Command System Training Student Manual*, Mar 2007, 50)

Checklist Exercise: "A method used to exercise a completed disaster recovery plan. This type of exercise is used to determine if the information such as phone numbers, manuals, equipment, etc. in the plan is accurate and current." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 50)

Chemical Accident: "Accidental release occurring during the production, transportation or handling of hazardous chemical substances." (**UNDHA**, *Disaster Mgmt. Glossary*, 1992, 21)

Chemical Agents: "(1) Chemical agents include any chemical substance which, is intended for use in military operations to kill, seriously injure, or incapacitate through its physiological effects. In contrast, TICs [Toxic Industrial Chemicals] include any chemical substances in solid, liquid, aerosolized, or gaseous form that may be used, or stored for use, for industrial, commercial, medical, military, or domestic purposes that produce toxic impact to personnel, materials, and infrastructure.

"(2) When distinguished by their effects on human physiology, chemical agents fall into five categories: blood (cyanide compounds), blister (vesicants), choking (pulmonary agents), incapacitating, and nerve. Chemical agents may also be categorized by their persistency. Agents are described as persistent when, after release, they may remain in the environment for hours to days and nonpersistent when they remain for 10 to 15 minutes. Persistent agents are primarily contact hazards while nonpersistent agents are primarily inhalation hazards.
(3) The greatest risk with TICs lies in exposure to inhaled chemicals, but emergency responders may receive lethal or incapacitating dosage through ingestion or absorption through the eyes or skin. A variety of industries use and produce chemicals that pose hazards to individuals if exposed to sufficient quantities or concentrations. In many instances, chemical warfare individual protective equipment does not provide protection from TICs (e.g., chlorine gas, sulfuric acid)." (**JCS/DoD**, *CBNHE CM* (JP 3-41), 2006, p. I-5)

Chemical Agents: "Chemical agents are poisonous vapors, aerosols, liquids, and solids that have toxic effects on people, animals, or plants. They can be released by bombs or sprayed from aircraft, boats, and vehicles. They can be used as a liquid to create a hazard to people and the environment. Some chemical agents may be odorless and tasteless. They can have an immediate effect (a few seconds to a few minutes) or a delayed effect (2 to 48 hours). While potentially lethal, chemical agents are difficult to deliver in lethal concentrations. Outdoors, the agents often dissipate rapidly. Chemical agents also are difficult to produce." (**FEMA**, *Chemical Threats*, March 21, 2006)

Chemical Agents: "According to CDC, there are over 80 chemical agents that can kill or seriously injure a person.[6] Of these, 60 or so are toxic substances that could be used as chemical

[6] Cited is: CDC. "Chemical Emergencies: Chemical Agents." U.S. Department of Health and Human Services. http://www.bt.cdc.gov/agent/agentlistchem.asp

weapons by terrorists. Many of these are common commercial and industrial chemicals that can be easily weaponized." (**Trust for America's Health**, *Ready or Not? 2007*, p. 29)

Chemical Attack: "A chemical attack could come without warning. Signs of a chemical release include people having difficulty breathing; experiencing eye irritation; losing coordination; becoming nauseated; or having a burning sensation in the nose, throat, and lungs. Also, the presence of many dead insects or birds may indicate a chemical agent release." (**FEMA**, *Chemical Threats*, March 21, 2006)

Chemical/Biological Incident Response Force, U.S. Marines: "In the event of a chemical or biological incident, the Emergency Services Sector (ESS) can obtain support from the Chemical/Biological Incident Response Force (CBIRF), an element of II Marine Expeditionary Force (II MEF), U.S. Marine Forces Command (MARFORCOM). Located in Indian Head, MD, CBIRF forward-deploys and/or responds by land, sea, or air worldwide to credible threats of chemical, biological, radiation, and nuclear (CBRNE) events on short notice. Once on scene, CBIRF activities include reconnaissance (detecting and identifying threats), rescue and extraction (confined space rescue, trench rescue, vehicle and advanced rope rescue, and collapsed structure stabilization and rescue), medical care in "hot zones," decontamination, explosive ordnance disposal (render Improvised Explosive Devices safe), command and control (critical network communications), and logistics (self-contained, self-sufficient task-organized unit). To receive the Force's assistance at the local level, the senior elected official (e.g., mayor) must contact the governor, who formally requests CBIRF…. CBIRF personnel also have performed hundreds of evaluations of commercial off-the-shelf items that enhance personal protection equipment, detection, and decontamination of agents. CBIRF interacts with all standards-writing organizations, and works on an ongoing basis to improve research, development and acquisition of new equipment." (**EMR-ISAC**, INFOGRAM 42-07, October 25, 2007; see, also, **DoD**, *Statement of Verga*, July 17, 2007, p. 6))

Chemical/Biological Incident Response Force (CBIRF) Background: "In 1995, then Commandant of the Marine Corps, General Krulak provided planning guidance that stated the need for a strategic organization to respond to the growing chemical/biological threat. The Commandant's Warfighting Laboratory developed the concept for the establishment of CBIRF in 1996. As a result of this concept development, CBIRF was formed during the spring of 1996. CBIRF is currently located 26 miles from the District of Columbia." (**CBIRF**, "The Background of CBIRF," 2007)

Chemical/Biological Incident Response Force (CBIRF) Mission: "When direct, forward-deploy and/or respond to a credible threat of a Chemical, Biological, Radiological, Nuclear, or High Yield explosive (CBRNE) incident in order to assist local, state, or federal agencies and Unified Combat Commanders in the conduct of consequence management operations. CBIRF accomplishes this mission be providing capabilities for agent detection and identification; casualty search, rescue, and personnel decontamination; and emergency medical care and stabilization of contaminated personnel." (**CBIRF,** *CBIRF Mission*, 2007)

Chemical, Biological, Radiation, Nuclear, Explosive Weapons (**CBRNE).** (**HSC**, *NCPIP*, 66)

Chemical, Biological, Radiological, Nuclear, and High-yield Explosives Consequence Management: "The consequence management activities for all deliberate and inadvertent releases of chemical, biological, radiological, nuclear, and high-yield explosives that are undertaken when directed or authorized by the President. Also called CBRNE CM." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Chemical, Biological, Radiological, Nuclear, and High-yield Explosive Hazards: "Those chemical, biological, radiological, nuclear, and high-yield explosive elements that pose or could pose a hazard to individuals. Chemical, biological, radiological, nuclear, and high-yield explosive hazards include those created from accidental releases, toxic industrial materials (especially air and water poisons), biological pathogens, radioactive matter, and high-yield explosives. Also included are any hazards resulting from the deliberate employment of weapons of mass destruction during military operations. Also called CBRNE hazards." (*DOD Dictionary of Military and Related Terms*, 2007)

Chemical, Biological, Radiological, Nuclear, and High-yield Explosives Incident: "An emergency resulting from the deliberate or unintentional release of nuclear, biological, radiological, or toxic or poisonous chemical materials, or the detonation of a high-yield explosive. Also called CBRNE incident." (*DOD Dictionary of Military and Related Terms*, 2007)

Chemical Facility: "Any establishment that possesses or plans to possess, at any relevant point in time, a quantity of a chemical substance determined by the Secretary [DHS] to be potentially dangerous or that meets other risk-related criteria identified by the Department." (**DHS,** *Chemical-Terrorism Vulnerability Information*, November 2007, Glossary, p. 1)

Chemical Facility Anti-Terrorism Standards (CFATS): "Responsibility for chemical security is shared among federal, state, and local governments, as well as the private sector. The Department of Homeland Security has issued Chemical Facility Anti-Terrorism Standards for any facility that manufactures, uses, stores, or distributes certain chemicals above a specified quantity." (**DHS**, "Critical Infrastructure: Chemical Security." November 2, 2007.

Chemical Facility Anti-Terrorism Standards (CFATS) Background: "In 2005 and 2006, the Secretary of Homeland Security identified the need for legislation authorizing DHS to develop and implement a framework to regulate the security of high-risk chemical facilities in the United States. In October 2006, Congress passed and the President signed the Department of Homeland Security Appropriations Act of 2007, which in Section 550 authorizes DHS to require high-risk chemical facilities to complete security vulnerability assessments, develop site security plans, and implement risk-based measures designed to satisfy DHS-defined risk-based performance standards. The Act also authorized DHS to enforce compliance with the security regulations, including conducting audits and inspections of high-risk facilities, imposing civil penalties of up to $25,000 per day, and shutting down facilities that fail to comply with the regulations…. Under the rule, if a facility possesses a chemical of interest at or above the screening threshold quantity, the facility must complete and submit a consequence assessment known as a Top-Screen. A facility must do so within 60 calendar days of the publication of a final Appendix A or within 60

calendar days of coming into possession of the listed chemicals at or above the listed STQs [Screening Threshold Quantities]." (**DHS**, *Fact Sheet: CFATS: Appendix A*, Nov. 2, 2007, p. 1)

"Appendix A [CFATS] lists approximately 300 chemicals of interest and includes common industrial chemicals such as chlorine, propane and anhydrous ammonia as well as specialty chemicals such as arsine and phosphorus trichloride. Facilities that possess chemicals of interest at or above the listed screening threshold quantities are required to complete the Top-Screen within 60 calendar days of the publication of Appendix A." (**DHS**, "DHS Publishes Chemicals of Interest List for Chemical Facility Anti-Terrorism Standards," November 2, 2007)

Chemical Facility Anti-Terrorism Standards (CFATS) Risk-Based Facility Tiering: "The Department has developed a risk-based tiering structure that will allow it to focus resources on the high-risk chemical facilities. To that end, the Department [DHS] will assign facilities to one of four risk-based tiers ranging from high (Tier 1) to low (Tier 4) risk. Assignment of tiers is based on an assessment of the potential consequences of a successful attack on assets associated with chemicals of interest. [DHS] uses information submitted by facilities through the Chemical Security Assessment Tool Top Screen and Security Vulnerability Assessment processes to identify a facility's risk, which is a function of the potential impacts of an attack (consequences), the likelihood that an attack on the facility would be successful (vulnerabilities), and the likelihood that such an attack would occur at the facility (threat). All facilities that were individually requested by the Assistant Secretary or that meet the criteria in Appendix A must complete the CSAT Top Screen…. The highest tier facilities, or Phase 1 facilities, are those specifically requested by the Assistant Security to complete the Top Screen…. Preliminarily tier 1, 2, and 3 facilities must subsequently submit a CSAT Security Vulnerability Assessment. Tier 4 facilities may submit an Alternative Security Program (ASP) for [DHS] to consider… Tier 3 and 4 facilities may choose to submit an Alternative Security Plan for the Site Security Plan for consideration by the Department…." (**DHS**, "Risk for CFATS." November 1, 2007, p. 1)

Chemical Incidents: "Chemical Incidents are characterized by the rapid onset of medical symptoms (minutes to hours) and easily observed signatures (colored residue, dead foliage, pungent odor, dead insects and animals)." (**DOT**, *Emergency Response Guidebook*, 2004, 354)

Chemical Sector Buffer Zone Protection Grant Program: "The Chemical Sector Buffer Zone Protection Grant Program is a targeted effort that provides funds to build security and risk management capabilities at the state and local level for chemical sector critical infrastructure from acts of terror and other hazards. Chemical Sector Buffer Zone funding is specifically focused on enhancing the protection of facilities that, if attacked, could cause Weapons of Mass Destruction (WMD)-like effects." (**DHS**, "DHS Awards $399 Million in Grants to Secure the Nation's Critical Infrastructure" (Press Release), September 25, 2006)

Chemical Security Assessment Tool (CSAT): "The Chemical Security Assessment Tool (CSAT) is the [DHS] system for collecting and analyzing key data from chemical facilities to register for CSAT, identify facilities that present a high level of risk, support the preliminary and final tiering decisions for individual high-risk facilities, assess a facility's security vulnerabilities, and evaluate a facility's security plan to address vulnerabilities and meet risk-

based performance standards. The Chemical Security Assessment Tool comprises four secure, web-based tools:

Facility Registration Questionnaire
Consequence screening questionnaire (Top-Screen);
Security Vulnerability Assessment (SVA) tool
Site Security Plan (SSP) template.

After registering for CSAT, facilities are provided access to the Top Screen, which enables the Department to determine if they are a high risk chemical facility covered by the Chemical Facility Anti-Terrorism Standards Interim Final Rule (CFATS). For facilities that are determined to be high risk, other tools, specifically the SVA and SPP, are made available to satisfy additional CFATS requirements." (**DHS**, "CSAT," November 1, 2007, p. 1)

Chemical Stockpile Emergency Preparedness Program (CSEPP): "The Chemical Stockpile Emergency Preparedness Program (CSEPP) is a unique partnership between FEMA and the U.S. Army, given FEMA's long-standing experience in preparing for and dealing with all types of emergencies and the U.S. Army's role as custodian of the U.S. chemical stockpile. Since 1988, FEMA and the U.S. Army have assisted communities surrounding the eight chemical stockpile sites to enhance their abilities to respond to the unlikely event of a chemical agent emergency." (**FEMA**, *Chemical Stockpile Emergency Preparedness Program (CSEPP)*, May 2, 2006 update.)

Chemical Stockpile Emergency Preparedness Program (CSEPP): The U.S. Army has… stored this country's chemical warfare agents for decades at seven U.S. Army installations around the United States…. In 1985, Congress ordered the destruction of these weapons. Subsequently, in 1988 Congress ordered "maximum protection" of the public near the installations until the chemical weapons were gone. That was the beginning of the Chemical Stockpile Emergency Preparedness Program (CSEPP)." (**Umatilla/Morrow County, OR**, *What is CSEPP?*)

Chemical-Terrorism Vulnerability Information (CVI): "Information used to determine chemical facility readiness to deter, mitigate, or respond to a terrorist attack. CVI includes vulnerability assessments, site security plans, inspection findings, self-audits, sensitive portions of enforcement-related documents, and correspondence between chemical facilities and the Federal government." (**DHS**, *CVI Glossary*, November 2007, p. 1)

Chemical Warfare: "All aspects of military operations involving the employment of lethal and incapacitating munitions/agents and the warning and protective measures associated with such offensive operations. Since riot control agents and herbicides are not considered to be chemical warfare agents, those two items will be referred to separately or under the broader term "chemical," which will be used to include all types of chemical munitions/agents collectively. (**DA**, *WMD-CST Operations*, 2007, Glossary-9)

Chemical Agent: "Together or separately, (a) a toxic chemical and its precursors, except when intended for a purpose not prohibited under the Chemical Weapons Convention; (b) a munition or device specifically designed to cause death or other harm through toxic properties of those

chemicals specified in (a) above, which would be released as a result of the employment of such munition or device; (c) any equipment specifically designed for use directly in connection with the employment of munitions or devices specified in (b) above." (**DA**, *WMD-CST Operations*, Glossary-9)

CHEMPACK: "The CHEMPACK program is an ongoing initiative of the DSNS [Division for the Strategic National Stockpile, CDC], begun in 2003, that provides antidotes (three countermeasures used concomitantly) to volatile nerve agents for pre-positioning by State, local, and/or tribal officials throughout the U.S." (**HHS**, *PHEMCE Implementation Plan*, 2007, p. 18)

CHEMTREC: The Chemical Transportation Emergency Center, 24-hour contact number 1-800-424-9300 in CONUS, 202-483-7616 outside the continental United States. A service, sponsored by the chemical industry, which provides two stages of assistance to responders dealing with potentially hazardous materials. First, on receipt of a call providing the name of a chemical judged by the responder to be a potentially hazardous material, CHEMTREC provides immediate advice on the nature of the chemical product and the steps to be taken in handling it. Second, CHEMTREC promptly contacts the shipper of the material involved for more detailed information and on-scene assistance when feasible. (**DOT** 1993)

CHER-CAP: *Community Hazards Emergency Response-Capability Assurance Process*. (**FEMA**, *Community Hazards Emergency Response-Capability Assurance Process*, 8May2007)

Chief: "The ICS title for individuals responsible for management of functional Sections: Operations, Planning, Logistics, Finance/Administration, and Intelligence/Investigations (if established as a separate Section)." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 148)

Children and Disaster: "Disasters can leave children feeling frightened, confused, and insecure. Whether a child has personally experienced trauma, has merely seen the event on television, or has heard it discussed by adults, it is important for parents and teachers to be informed and ready to help if reactions to stress begin to occur. Children may respond to disaster by demonstrating fears, sadness, or behavioral problems. Younger children may return to earlier behavior patterns, such as bedwetting, sleep problems, and separation anxiety. Older children may also display anger, aggression, school problems, or withdrawal. Some children who have only indirect contact with the disaster but witness it on television may develop distress….

For many children, reactions to disasters are brief and represent normal reactions to "abnormal events." A smaller number of children can be at risk for more enduring psychological distress as a function of three major risk factors:

- Direct exposure to the disaster, such as being evacuated, observing injuries or death of others, or experiencing injury along with fearing one's life is in danger.
- Loss/grief: This relates to the death or serious injury of family or friends.
- On-going stress from the secondary effects of disaster, such as temporarily living elsewhere, loss of friends and social networks, loss of personal property, parental unemployment, and costs incurred during recovery to return the family to pre-disaster life and living conditions.

In most cases, depending on the risk factors above, distressing responses are temporary. In the absence of severe threat to life, injury, loss of loved ones, or secondary problems such as loss of home, moves, etc., symptoms usually diminish over time. For those that were directly exposed to the disaster, reminders of the disaster such as high winds, smoke, cloudy skies, sirens, or other reminders of the disaster may cause upsetting feelings to return. Having a prior history of some type of traumatic event or severe stress may contribute to these feelings.

Children's coping with disaster or emergencies is often tied to the way parents cope. They can detect adults' fears and sadness. Parents and adults can make disasters less traumatic for children by taking steps to manage their own feelings and plans for coping. Parents are almost always the best source of support for children in disasters. One way to establish a sense of control and to build confidence in children before a disaster is to engage and involve them in preparing a family disaster plan. After a disaster, children can contribute to a family recovery plan." (**FEMA**, *Helping Children Cope with Disaster*, 2006)

CHIP: Capability and Hazard Identification Program (FEMA CPG 1-35, 1985).

CHIP: Capturing Human Intelligence Project. (**FEMA**, *FEMA's "Good Stewardship Council" Meets to Serve Taxpayers' Interest*, March 27, 2008)

CHIP: Critical Homeland Infrastructure Protection. (**DSB**, *Report of DSB TF on CHIP*, 2007)

Chlorofluorocarbons (CFC): "A group of chemical compounds used in industry and in the household, of which the excessive and universal use is believed to be one of the causes of ozone depletion, with resulting environmental damage." (**UNDHA**, *DM Glossar*y, 1992, 21)

Choking Agents: "Substances that cause physical injury to the lungs. Exposure is through inhalation. In extreme cases, membranes swell and lungs become filled with liquid (pulmonary edema). Death results from lack of oxygen; hence, the victim is "choked". Phosgene (CG) is a choking agent. Symptoms: irritation to eyes/nose/throat, respiratory distress, nausea and vomiting, burning of exposed skin." (**DOT**, *Emergency Response Guidebook*, 2004. p. 358)

CHOP: Change of Operational Control. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-1)

Chronic Radiation Dose: "A dose of ionizing radiation received either continuously or intermittently over a prolonged period of time. A chronic radiation dose may be high enough to cause radiation sickness and death but, if received at a low dose rate, a significant portion of the acute cellular damage may be repaired." (*DOD Dictionary of Military and Related Terms*, 2007)

CHUG: Central HAZUS Users Group.

CHUG: Collaborative Healthcare Urgency Group, Chicago.

CHW: Community Health Worker. (**CDC**, *Locating and Reaching At-Risk Populations* 2007, 13)

CIA: Catastrophic Incident Annex (to the National Response Plan, 2004)

CIAO: Critical Infrastructure Assurance Office, DOD. (**DBS**, Protecting the Homeland, 2001, F-3)

CII: Critical Infrastructure Information. (**DHS,** *NIPP*, 2006, p. 101)

CI/KR: Critical Infrastructure/Key Resources. (**DHS,** *NIPP*, 2006, Preface)

CIP: Continuous Improvement Plan/Program/Process.

CIP: Critical Incident Protocol. (Critical Incident Protocol: A Public and Private Partnership)

CIP: Critical Infrastructure Protection.

CIPAC: Critical Infrastructure Partnership Advisory Council. (**DHS,** *NIPP*, 2006, p. 101)

CIP-DSS: Critical Infrastructure Protection – Decision Support System. (**DHS**, *PBO FY 2008*, 29)

CIP-MAA: Critical Infrastructure Program – Mission Assurance Assessments. (**Blum**, 19Jul07, 5)

CIR: Critical Information Requirements. (**FEMA**, *Fed. Interim CONPLAN: NMSZ*, Dec 2007, C-4)

CIR: Critical Infrastructure Resilience. (**FEMA/USFA**, *Infogram 3-08*, January 24, 2008)

CIS: Citizen and Immigration Services, DHS.

CIS: Community Information System (FEMA/NFIP database). (**FEMA**, *NFIP 2000 Stake Rpt*, 34)

CIS: Critical Incident Supplement (Federal Response Plan, 2005)

CISD: Critical Incident Stress Debriefing. (**Capital Health Region**, Edmonton Canada, *ICS100: Incident Command System Training Student Manual*, Mar 2007, 51)

CISM: Critical Incident Stress Management.

Cities Readiness Initiative (CRI): Announced in May 2004. "The Cities Readiness Initiative (CRI) is a federally funded effort to prepare major US cities and metropolitan areas to effectively respond to a large scale bioterrorist event by dispensing antibiotics to their entire identified population within 48 hours of the decision to do so…[The CRI]: Aids state and local officials in developing plans that support mass dispensing drugs to 100% of the identified population within 48 hours of a decision to do so; provides funding to states, whose CRI jurisdictions cover 500 counties. This means that 56% of the US population lives within a CRI jurisdiction…. The CRI project started in 2004 and has grown each year thereafter:

2004: CRI stared with 21 cities

2005: CDC funded 15 additional cities…
2006: CDC funded an additional 36 cities, for a total of 72 participating cities….

In addition, the United States Postal Service (USPS) is working with select CRI cities to develop Postal Plans, in which mail carriers will deliver antibiotics to the homes in selected zip codes. This option is only available to jurisdictions with an approved USPS Dispensing Plan." (**CDC**, *Key Facts about the Cities Readiness* Initiative July 3, 2007; also, **Kaplowitz, Lowenberg, Wagner**, *Cities Readiness Initiative: Implications for All Homeland Security Partners*. ASTHO, 2005)

Citizen Corps: "The mission of Citizen Corps is to harness the power of every individual through *education, training, and volunteer service*
to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues, and disasters of all kinds." (**Citizen Corps**, *Citizen Corps Councils*)

Citizen Corps: "Citizen Corps, administered by DHS, is a community-level program that brings government and private sector groups together and coordinates the emergency preparedness and response activities of community members. Through its network of community, tribal and State councils, Citizen Corps increases community preparedness and response capabilities through public education, outreach, training and volunteer service." (**DHS,** *National Response Framework* (Comment Draft), September 10, 2007, p. 17)

Citizen Corps Approach: "National network of state/local/tribal Citizen Corps Councils to:

- Tailor activities to the community
- Build on community strengths to develop and implement a local strategy for all to participate
- National Voice – National public awareness and media campaign" (**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide 9)

Citizen Corps Community Benefits:

- Greater sense of security, responsibility, and personal control
- Builds community pride, unity and patriotism
- Promotes risk reduction, mitigation, and preparedness practices
- Prepares us all for helping others in a crisis,"

(**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide 15)

Citizen Corps Community Benefits for Emergency Responders:

- "Year round support through volunteer programs
- Reduces burden on first responder services by promoting mitigation and preparedness measures
- Created well trained, better informed, and better prepared citizens to take care of themselves and others during times of crisis – allowing first responders to address the most critical needs."

(**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide 16)

Citizen Corps Councils: "The Citizen Corps mission is accomplished through a national network of state, local, and tribal Citizen Corps Councils. These Councils build on community strengths to implement the Citizen Corps programs and will carry out a local strategy to have every American participate." (**Citizen Corps (DHS)**, *Citizen Corps Councils*)

Citizen Corps Councils Membership:

- First responder/emergency management (law, fire, EMS/EMT, public works)
- Volunteer community
- Elected officials
- Business leaders
- School systems representatives
- Transportation sector
- Media executives
- Minority and special needs representation
- Leadership from community sub-structure. (**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide presentation, slide10)

Citizen Corps Councils Responsibilities:

- Build on community strengths to develop strategic plans for the whole community, including special needs groups
- Focus on public education, training, and volunteer opportunities for community and family safety
- Ensure citizens are connected to emergency alert systems
- Promote and oversee Citizen Corps Programs
- Provide opportunities for special skills and interests
- Organize special project/community events
- Capture smart practices and report accomplishments.

(**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide 11)

Citizen Corps Fiscal Year 2009 Appropriation Request: "FEMA is requesting $15 million for the Citizen Corps. This funding supports Citizen Corps Councils with efforts to engage citizens in personal preparedness, exercises, ongoing volunteer programs, and surge capacity response, in order to better prepare citizens to be fully aware, trained, and practiced on how to prevent, protect/mitigate, prepare for, and respond to all threats and hazards. This program provides funding by formula basis to all 50 states and 6 territories. Five years after 9/11, there are over 2,000 Citizen Corps Councils reaching 73 percent of the population and operating in all 50 states and six U.S. territories." (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*, March 11, 2008, p. 6)

Citizen Corps Local Strategy and Implementation: "Increased collaboration between government and community leaders." (**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide 14)

Citizen Corps Mission: "To have everyone in America participate in making themselves, our communities, and our nation safer. We all have a role in hometown security: a personal responsibility to be prepared; to get training in first aid and emergency skills; and to volunteer to support local emergency responders, disaster relief, and community safety." (**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide presentation, slide 2)

Citizen Corps National Council: 'Leaders of national organizations promote the Citizen Corps mission, foster collaboration, and support State, tribal, local levels. Subcommittees

- Emergency Management & Public Works
- Emergency Medical and Public Health Services
- Fire Service
- Law Enforcement
- Intergovernmental Organizations
- Volunteer Service
- Private Sector and Trade Associations
- Disabilities Advocacy Organizations."

(**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide 17)

Citizen Corps National Policy Tie-In:

- Homeland Security Presidential Directive-8 (paragraphs 22 and 23)
- National Preparedness Goal (Vision Statement and National Priorities)
- Target Capabilities List
- State and Urban Strategies
- Homeland Security Grant Program
- Homeland Security Exercise and Evaluation Program
- National Response Plan."

(**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide 19)

Citizen Corps Programs:

- Volunteers in Police Service (VIPS): works to enhance the capacity of state and local law enforcement to utilize volunteers
- Neighborhood Watch/USAonWatch: incorporated terrorism awareness education into its existing crime prevention mission
- The Community Emergency Response Team (CERT) program educates and trains citizens in basic disaster response skills
- The Medical Reserve Corps (MRC) Program helps medical, public health, and other volunteers offer their expertise
- Fire Corps promotes the use of citizen advocates to provide support to fire and rescue departments." (**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*. DHS, slide presentation, slide 6)

Citizen Disaster Education and Preparedness (1952): At the base of an adequate civil defense is the self-reliant individual, fortified with every possible training and plenty of practice, prepared to do everything he can do to protect himself in an emergency with assurance and

without panic. In addition he is prepared to extned efficient aid to his family, his neighbors, or the people down the street." (**Wadsworth**, *The National Civil Defense Plan*, 1952, p. 4)

"…in public information we are doing fairly well. We have distributed over 57 million pieces of paper; these papers have included six or seven public booklets, air raid alert cards, pamphlets describing household first-aid kits and various other things – all of them very inexpensive. Many millions of them have been bought by the general public from the Superintendent of Documents. This brings revenue to the Government. In fact, the public information part of our program has brought more into the Federal Government than the Federal Government has spent for it." (Ibid., p. 11)

Citizen Disaster Education and Preparedness (1953): "An informed people is a strong people. The Federal Civil Defense Administration will continue to bring Americans the facts about the ever-present threat to their homes and families, and practical instructions on how to meet that threat. Given the facts, no matter how harsh, I am confident tht my fellow citizens – and their elected representatives in local, State and national positions of responsibility – will know how to act promptly and courageiously for the greater security of all." (**FCDA**, *1953 Annual Report*, p. 6)

"The demonstrated usefulness of civil defense in natural disasters has helped convince many skeptics that trained, self-reliant citizens and communites organized for both self-help and mutual assistance, are tood things to have – just in case." (**FCDA**, *1953 Annual Report*, p. 67)

Citizen Disaster Education and Preparedness (1954): To be prepared against natural and man-made disasters, American must know what to expect and what to do. To these ends the Federal Civil Defense Administration devoted a major share of its efforts and funds to the development of an alert, informed, and trained citizenry…. The distinctive feature…of the civil defense effort is that, if civil defense is to work, the preparedness must have worked its way down to individuals and groups of individuals. Survival is still to a large extent a matter of individual behavior during the period of crisis and danger even when warning, directin and a certain amount of defense and protection are provided. The effective execution of the best plans and the efficient use of the most ample resources can be materially reduced if the populace, at large, does not carry out the most adaptive behavior possible during the time of disaster. Civil defense thur trequires a program of information, guidance, education, and training that results in motivation, insight, confidence, and skill on the part of the public in carryiing out its assigned task." (**FCDA**, *1954 Annual Report*, p. 75)

[See, also, "Family-Action Program," and "Public Education."]

Citizen Emergency Response Team (CERT): "Community Emergency Response Team (CERT) training is one way for citizens to prepare for an emergency. CERT training is designed to prepare people to help themselves, their families and their neighbors in the event of a catastrophic disaster. Because emergency services personnel may not be able to help everyone immediately, residents can make a difference by using the training obtained in the CERT course to save lives and protect property." (**DHS,** *National Response Framework* (Comment Draft). DHS, September 10, 2007, p. 18)

Civil Air Defense Warning System (CADW): "…disseminates warning to 200 kep point warning centers throught the United States. These key points, manned by State or local civil defense personnel, alert civil defense headquarters in their areas. Local officials in turn warn the public."

Civil Air Patrol (CAP): "The CAP, the official auxiliary of the United States Air Force, is mandated by Congress to fulfill three missions around aerospace education, youth programs, and emergency services." (Iowa Homeland Security and Emergency Management Div., "Civil Air Patrol Assists During Emergencies," *Secure & Prepared*, Vol. 3, Issue 21, December 4, 2007, 3)

Civil Applications Committee (CAC): "…established in 1975 to provide oversight and coordination of these activities [civil applications of classified remotely sensed imagery]. The CAC is composed of 11 Federal departments and independent agencies. The USGS, through the Secretary of the Interior, is delegated responsibility to chair the CAC." (**USGS**, *NCAP*, 2002)

Civil Applications Domain Working Group: "This working group will continue the efforts of the Civil Application Committee that have been ongoing for more than 30 years, including scientific, geographic and environmental research." (DHS, *Fact Sheet: NAO*, August 15, 2007)

Civil Authorities: "Those elected and appointed officers and employees who constitute the government of the United States, the governments of the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, United States possessions and territories, and political subdivisions thereof." (**JCS/DoD**, *Civil Support*, 2007, p. I-2)

Civil Damage Assessment: "An appraisal of damage to a nation's population, industry, utilities, communications, transportation, food, water, and medical resources to support planning for national recovery. See also damage assessment." (**DOD**, *DOD Dictionary of Military and Related Terms*, 2007)

Civil Defense (CD): "Like many terms, civil defense has several different connotations and communication is often impossible when different meanings are used without some agreement on usage. In its most inclusive meaning, civil defense connotes a function. Thus, civil defense is a description of any and all activities carried out by governmental or quasi-governmental agencies in preparation for and during actual emergencies. This most inclusive meaning is often associated with wartime and potential nuclear attack situations…. According to this meaning, civil defense is "civil government in emergency." The analysis which follows does not use such an inclusive meaning. The referent here is the activities and functions which are performed by the social units called civil defense within the local community. We have found that in the vocabularies of most American communities, civil defense is most commonly used not as a function, but to refer to the particular identity and activities of the "civil defense office." In American society, the local civil defense office is not exclusively concerned with problems relating to potential nuclear attack but also becomes involved in other types of community emergencies, especially disasters. To the other community organizations which become involved in these disaster operations, the civil defense office is seen as only one part of the total emergency picture." (**Anderson**, *Local Civil Defense in Natural Disaster…*, 1969, p. 4)

Civil Defense: "All those activities and measures designed or undertaken to: (a) minimize the effects upon the civilian population caused or which would be caused by an enemy attack on the United States; (b) deal with the immediate emergency conditions that would be created by any such attack; and (c) effectuate emergency repairs to, or the emergency restoration of, vital utilities and facilities destroyed or damaged by any such attack." (**Dept. of Army**, *WMD-CST Operations*, Dec. 2007, Glossary-9)

Civil Defense: "Civil defense operations are the activities and measures undertaken in event of attack…They will be undertaken in a wartime environment by the civil defense operating system…. Many of the civil defense operations needed to save lives and property in event of attack are also needed in peacetime emergencies. Therefore civil defense operational readiness can serve both wartime and peacetime purposes. However, preparedness for peacetime contingencies does not automatically ensure readiness for attack preparedness." (**DCPA,** *DCPA Attack Environment Manual, Chapter 1: Introduction to Nuclear Emergency Operations*, 1973, Panel 1)

Civil Defense (CD): "All those activities and measures designed or undertaken to: a. minimize the effects upon the civilian population caused or which would be caused by an enemy attack on the United States; b. deal with the immediate emergency conditions that would be created by any such attack; and c. effectuate emergency repairs to, or the emergency restoration of, vital utilities and facilities destroyed or damaged by any such attack." (**DOD**, *DOD Dictionary of Military and Related Terms*, 2007)

Civil Defense: "…a systematic, efficient way of dealing with attack on the home front. A strong civil defense can save fifty percent of the lives that might otherwise be lost. It can ease human suffering. It can reduce the destruction of property. It can maintain the flow of food and munitions needed by our Armed Forces. Civil defense can sustain the people and augment the will to survive against any attack by any aggressor. Civil defense is an insurance policy that will ease the effect of attack if and when it comes. Importantly, a strong civil defense, like strong armed forces, will proclaim that we are ready for anything an enemy can hurl against us and that no matter what hits us we can successfully fight back. Such readiness may actually help deter attack by making the results too small to warrant the cost, and thus serve the cause of peace in the world." (**FCDA**, *Annual Report for 1951*, 1952, pp. ix-x)

Civil Defense (CD): "All activities and measures designed or undertaken for the following reasons: (a) to minimize the effects upon the civilian population caused by, or which would be caused by, an attach upon the United States or by a natural disaster; (b) to deal with the immediate emergency conditions which would be created by any such attack or natural disaster; and (c) to effectuate emergency repairs to, or the emergency restoration of, vital utilities and facilities destroyed or damaged by any such attack or natural disaster." (**FEMA**, *Definitions of Terms*, April 4, 1990.)

Civil Defense (CD): "The system of measures, usually run by a governmental agency, to protect the civilian population in wartime, to respond to disasters, and to prevent and mitigate the consequences of major emergencies in peacetime. The term "civil defense" is now used increasingly. (**UNDHA**, *Disaster Management Glossary*, 1992, p.22)

Civil Defense, Role in National Defense: "In the words of the Secretary of Defense, civil defense is 'a partner and coequal partner' with the armed forces, 'a necessary and vital part of national defense." (**Wadsworth**, *The National Civil Defense* Plan, 1952, 3)

Civil Defense, 1951: "All State and Territories had civil defense legislation. States, Territories, and major cities have designated civil defense directors and developed operrating civil defense organizations. Twenty States completed agreements for mutual aid in a civil defense emergency. United States and Canada set up a mutual aid agremment… 1,870,199 volunteers were enlisted in civil defense throughout the Nation" (**FCDA**, *1954 Annual Report*, p. 2)

Civil Defense, 1952: Nearly 2,000 civil defense exercises wre conducted by cities and States. These involved nearly 2,000,000 civil defense workers and 42,000,000 citizens. *Operational Readiness of FCDA.* Under its plan for emergency operations, FCDA activated two operating emergency locations and installed emergency communications facilities. FCDA possessed the physical facilities for operating under attack conditions in close coordination with its regions and the States and with other key security agencies of government." (**FCDA**, *1954 Annual Report*, p. 3)

"During 1952, three 'Alert America' convoys traveled throughout the United States. More than 1,100,000 people in 82 cities attended these traveling exhibits which served as a major means of bringing civil defense information to, and increasing public interest and participation among the 67,000,000 residents in the areas visited." (**FCDA**, *1954 Annual Report*, p. 4)

"Executive Order 10346, April 1952, directs Federal agencies to consult with FCDA on plas for use of their personnel, materials, and facilities in civil defense emergencies. These plans take into consideration the essential military requirements of the Department of Defense from each agency, and the continuity of the agency's essential functions." (**FCDA**, *1954 Annual Report*, p. 21)

Civil Defense, 1953: "*Peacetime Values of Civil Defense.* Communities, cities, and States throughout the Nation learned that an organized, trained civil defense was an important asset whenever and whereever natural disaster struck. Civil defense became a recognized community service – a new dimension of peacetime citizenship." (**FCDA**, *1954 Annual Report*, p. 5)

Civil Defense, 1954: "We staged the first continental alert in history." The motion picture "Operation Ivy" on the US explosion of a hydrogen weapon was released as well as informtion on the newly "discovered" threat of long-distance radioactive fallout. FCDA moves to Battle Creek, MI. FCDA introduces evacuation planning from major cities: "The alternatives are to dig, die, or get out; and certainly we don't want to die. Civil defense's purpose is to see hom many of us can live after an attack." (**FCDA**, *1954 Annual Report*, pp. 7-8

Civil Defense, 1955: "At the close of…[1955] the Administrator summarized the Agency's position and progress as follows:

Some of the important components of the national security policy of the United Statews are: skillful diplomacy, a high degree of military preparedness, and a civil defense program for every segment of our population, from the residents of the Capital City to the citizens of the smallest township.

The civil defense role in national security planning is indispensable. In this age of terrible new weapons, a major deterrent to a potential aggressor will be precisely those programs that this Nation develops to defned its populatin. It seems logical that an ememy's temptation to attack the United States will shrink in proportion to the advance measures the Nation adopts to keep the greater part of its population alive during and after an attack.

The FCDA is working to develop a civil defense program so capable of protecting millions of people in time of danger that it will also help to convince a potential aggressor of the futility of attempting to destroy the Nation." (**FCDA**, *1955 Annual Report*, 1956, p. 1)

"Civil defense has helped to combat natural disasters since 1953, but in 1955 we faced our biggest challenge. Operations were better organized and more effective than at any time in the past. Assignments to other Federal agencies worked more smoothly. Coordination with the work of the Red Cross was excellent. Through these experiences our ability to provide speedy assistance was greatly improved.

The spirit and enterprise of the untrained volunteers who invariably are willing to help their unfortunate neighbors in time of disaster was most impressive. The volunteer spirit, however, is not always enough. There were repeated demonstrations of the need for some civil defense training for everyone. People so trained must supplement the activities of a Federal civil defense agency in emergency rehabilitation.

FCDA training has produced greater civil defense efficiency in combatting disaster and the experience gained should help materially in dealing with conditons resulting from enemy attack….

…the Administrator made on-the-scene inspection of the floods in the east last summer and fall, and those in Nevada and California in December." (**FCDA**, *1955 Annual Report*, 1956, 10)

Civil Defense, 1956: "The Federal Government cannot give the Nation civil defense. As Presidentr Eisenhower has pointed out, should an emergency occur, our Nation's survival may be dependent upon the way each of us responds to his duty. In an area attacked, survival will initially rest mainly with the individual and the community. That is why, in all out planning, we stress a partnership between the Federal Government, States, cities, and towns. During fiscal year 1956, FCDA developed closer cooperation with the States than ever before. Each program, each new decision affecting major policy, was discussed in advance with State civil defense directors." (**FCDA**, *Annual Report 1956*, 1957, p. 2)

Civil Defense, 1957: "The Federal Civil Defense Administration was guided by three major principles during fiscal year 1957:

- Civil defense is part of the inherent responsibility of government at all levels to prepare for emergencies.
- The destructive power of nuclear weapons demands that there be close cooperation among many governmental jurisdictions for effective civil defense operations.
- Close cooperation between officials responsible for the military and the civil defense of the Nation is essential." (**FCDA**, *Annual Report 1957*, page vii)

An operations plan for a hypothetical metropolitan target area was developed by FCDA and distributed to Government officials throughout the country. The plan, entitled *Batleground, USA*

shows how the principles and concepts of national civil defense planning can be applied at the local level." (**FCDA**, *Annual Report 1957*, page 1)

"Both the Department of Defense and the Federal Civil Defense Administration intensified efforts during fiscal year 1957 to improve coordination of their respective roles and operations in natural disasters and in emergencies caused by enemy action. Early in the year the Department of Defense revised its basic directive relating to the responsibilities of the armed services for civil defense and other domestic emergencies to reflect a stronger and more positive role." (**FCDA**, *Annual Report 1957*, pp. 10-11)

Civil Defense Act of 1950 (Public Law 81-875).

Civil Defense Advisory Committee on the Design and Construction of Public Fallout Shelters: "…established in April 1962." (**OCD**, *Annual Report 1962*, p. 36)

Civil Defense Alternatives (President Eisenhower, 1956): "The threat we face affords us only three basic alternatives. One extreme would be to hold our people subject to a rigid discipline, on the premise that a regimented citizenry would be better able to survive a nuclear attack. But this approach, continued, would destroy the America we are determined to preserve. The opposite extreme would be to accept the ultimate annihilation of all person in urban target areas as unavoidable or too costly to prevent, and by this unwarranted decision remove the burdens and cares of a peacetime civil defense program. Of course we reject both extremes. There is another way we must follow. We must continue to avoid Federal preemption of all civil defense programs which are so dependent upon widespread citizen participation. But it is now evident that the exigencies of the present threat require vesting in the Federal Government a larger responsibility in our national plan of civil defense…. The Federal civil defense law was written before the advent of the hydrogen bomb and the recent striking advances in methods of delivering modern weapons. This law must be realistically revised. Plans to meet post-attack situations are, of course, essential, but the Federal Civil Defense Administration needs authority to carry out necessary pre-attack preparations as well. It must be enable to assure adequate participation in the civil defense program. It must be empowered to work out logical plans for possible target areas which overlap state and municipal boundaries…." (Quoted in **Nehnevajsa**, *Civil Defense and Society*, 1964, p. 554)

Civil Defense Appropriations (1952 FCDA): ~$75M. "The 1952 appropriation was 74,950,000 dollars…we asked for 535 million dollars…Out of the roughly 75 million…"

- $56M for supplies and equipment
  - $50M for medical supplies
  - $6M for engineering equipment
- $7.5M for matching fund purpose
  - $2.5M for fire-fighting equipment
  - $2M for communications and attack warning equipment
  - ~$1M for rescue equipment (**Wadsworth**, *The National CD Plan*, 1952, 14)

Civil Defense Appropriations (1953 FCDA): $43 million.

- $8M operations
- $15M Federal contributions to the States (to match funds for supplies and equipment)

- $20M stockpiling of emergency supplies and equipment. (**FCDA**, *1953 Annual Report*, 47)

Civil Defense Appropriations (1954 FCDA): $46, 525,000.
- $8.525M operations
- $10.5M Federal contributions to States (matching funds for supplies and equipment)
- $27.5M Federal emergency supplies and equipent. (**FCDA**, *1954 Annual Report*, p. 143)

- An additional $1,373,829 "made available for natural disasters" from Disaster Relief Fund.

Civil Defense Appropriations (1955 FCDA): $49,325,000.
- $10.025M operations
- $13.3M Federal contributions to States (purchase of supplies, equipment, warning)
- $26M Federal emergency supplies and equipment. (**FCDA**, *1954 Annual Report*, p. 143)

- $12.5M from Disaster Fund to States for Disaster Assistance and Relief. (*1955 AR*, 33)

Civil Defense Appropriations (1956 FCDA): $68,675,000
- $12.125M Operations
- $12.400M Federal contributions to States
- $32.65M Fed. emergency supplies and equip. (**FCDA**, *1955 Annual Report*, 1956, 135)

- $22M from Disaster Fund to States for Disaster Assistance and Relief (Ibid, p. 33)

Civil Defense Appropriations (1959 OCDM): $64M ($58M obligated)
- $22.979M Salaries and Expenses
- $16.318M Federal Contribution to States
- $15.424M Emergency Supplies and Equipment
- $ 3.380M Research and Development (**OCDM**, *Annual Report 1959*, 7-8)

- $ 8.336M Disaster Fund to States for Natural Disasters (Ibid, p. 8)

Civil Defense Appropriations (1960 OCDM): $52.885M
- $29.555M Salaries and Expenses
- $10.000M Federal Contributions to States for Materials and Facilities
- $ 6.950M Emergency Supplies and Equipment
- $ 5.862M Research and Development
- $ 2.400M Construction of Facilities (**OCDM**, *Annual Report 1960*, p. 3)

- $ 4.539M Disaster Fund to States for Natural Disasters (Ibid, p. 3)

Civil Defense Appropriations (1961 OCDM): $61.088M
- $25.184M Salaries and Expenses
- $ 6.477M CD and Defense Mobilization Functions of Federal Agencies
- $13.951M Federal Contributions to States for Materials and Facilities, and P&E Fund
- $ 9.121M Emergency Supplies and Equipment

- $ 5.749M Research and Development
- $ 2.238M Construction of Facilities (**OCDM**, *Annual Report 1961*, p. 1)

- $13.044M Disaster Fund to States for Natural Disasters (Ibid)

Civil Defense Board: Established on November 25, 1946 by Secretary of War Patterson in the War Department to study federal civil defense. Major General Harold R. Bull was named Director. (**Gessert**, *Federal Civil Defense Organization*, 1965, p. 62)

Civil Defense Coordinating Board: Established by President Eisenhower on May 11, 1955 "to give guidance and coordination to the civil defense activities of these departments and agencies" delegated civil defense responsibilities by Executive Order – "The President has approved the delegation of 33 civil defense activities to 7 departments and agencies of the Federal Government." (**FCDA**, *1955 Annual Report*, 1956, pp. 3-4)

"Members of the Board represent each agency that has been assigned delegations, and other agencies with certain responsibilities in civil defense. The Board makes recommendations to the President and keeps him advised of progress. The Administrator of FCDA is Chairman of the Board, and an executive Secretary is stationed in Washington, D.C. Members of the Secretariat serve the Board in Washington and represent the separate FCDA services in dealing with the delegate Federal departments and agencies. The Secretariate coordinates work of specialists at the FCDA National Headquarters and counterparts in other Federal organizations." (**FCDA**, *1955 Annual Report*, 1956, pp. 46-47; see, also, p.p. 57-58)

Civil Defense Education (CDE) Program: "The mission of the Civil Defense Education Program is to establish civil preparedness instruction as a integral part of the existing school program in each State. Instruction materials developed and activities sponsored under the CDE Program are designed to get disaster preparedness and survival information before pupils in school curricula. An equally important facet of the program is to assist school districts in preparing a hazard-safe school environment augmented by a disaster plan that covers hazards common to their districts." (**DCPA** *Foresight, DCPA Annual Report FY73*, 1974, p. 21)

Civil Defense Historical Federal Organization for Civilian Civil Defense (1950-1979):

- Federal Civil Defense Administration (FCDA, Executive Office of President, 1950-1951)
- Federal Civil Defense Administration (FCDA, 1951-1958)
- Office of Defense and Civilian Mobilization (ODCM (EOP) 1958)
- Office of Civil and Defense Mobilization (OCDM, EOP, 1958-1961)
- Office of Civil Defense (OCD, Department of Defense, 1961-1964
- OCD (Department of the Army, DoD, 1964-1972)
- Defense Civil Preparedness Agency (DCPA, DoD (1972-1979)
- Federal Emergency Management Agency (FEMA, 1979-1994[7])

(**National Archives**, *Guide to Federal Records*, Records of FEMA, Record Group 311, p. 2)

Civil Defense Planning Assumptions, 1956:

[7] The Federal Civil Defense Act of 1950 was repealed in 1994, with certain functions transferred to FEMA.

- "It is accepted that a potential enemy has the capability of attacking any target within the United States or its possessions.
- It is accepted that a potential enemy has the capability of:
    - Producing nuclear weapons, biological and chemical warfare agents, as well as conventional incendiary and high explosive weapons.
    - Delivering these weapons by piloted aircraft, submarine launched missiles or mines, and by clandestine menas.
    - Supporting a large scale war effort by technical and industrial skills and organization.
- It is accepted that a potential enemy is engaged in a major effort to develop both guided and ballistic missiles, including the ICBM." (**FCDA**, *1956 Annual Report*, 1957, pp. 6-7)

….

- "It is assumed that bases of military retaliation, other important military installations, and concentrations of population and industry will be targets for nuclear attack." (Ibid, p. 8)

Civil Defense Responsibilities (1952) Federal Government: "The Federal Civil Defense Administration…is responsible for:

- Developing and standardizing the over-all plan.
- Providing financial contributions to the states on a matching funds basis for certain types of equipment and other expenditures.
- Disseminating attack warnings to the States and through them to communities and to the individual citizen.
- Stockpiling and distributing certain emergency supplies and equipement.
- Training key personnel.
- Carrying on a program of public education in civil defense matters.
- Encouraging and facilitating the signing of pacts among the states for mutual aid in event of emergency.
- Determining, after consultation with the military, the critical target areas of the country.
- Exercising very broad powers in the event of an emergncy." (**Wadsworth**, *The National Civl Defense Plan,* 1952, pp. 3-4)

Civil Defense Scientific Advisory Committee: "This Committee, which was created July 1, 1954, under authority of section 102 (b), Public Law 920, 81st Congress, meets at the call or the chairman at places designated by him… The Committee chairman and other officers are appointed by the President, National Academy of Sciences….This Committree assists the Federal Civil Defense Administration in major scientific problems affecting the civil defense program and recommends lines of investigation needed to understand scientific factors involved. It also advises whether conclusions and hypotheses reached are based on all available scientific evidence." (**FCDA**, *1955 Annual Report*, 1956, p. 59-60)

Civil Defense Staff College (1951), Olney, MD: Opened on April 30, 1951. (**FCDA**, *Annual Report 1951*, 1952, p. 21)

Civil Defense Staff College (Jan, 1952): Besides the Civil Defense Staff College at Olney, Maryland….we have opened up in the past several months two other schools over at St. Mary's

College, California, and the other at Stillwater, Oklahoma. We have had great difficulty in operating these schools, largely because we have been precluded by law from paying any part of the travel or sibsistence cost for the students who attend these schools. It was Congress' determination that the local communities and the states should be interested enough to send their representatives to the Federal school and pay their own way, because they would get free tuition. But it has not been easy to stir up interest." (**Wadsworth**, *The National Civil Defense Plan*, 1952, p. 11)

Civil Defense University Extension Program (CDUEP): "The extension divisions of land-grant colleges and universities, because of their experience in local communities and by reason of their facilities have a unique capability for civil preparedness training and education. Under contracts with DCPA, the extension divisions of the colleges and universities conduct conferences for government officials, train instructors, and give professional training courses in local communities." (**DCPA**, *Foresight, DCPA Annual Report FY73*, 1974, p. 21)

Civil Defense Workers: "The number of Civil Defense workers actively enrolled increased by nearly 10% in 1953. States and cities now report more than four and one half million civil defense personnel enrolled and currently assigned to duty." (**FCDA**, *1953 Annual Report*, p. 2; see, also, pp. 98-101)

Civil Disorder: "Any incident intended to disrupt community affairs and requiring police intervention to maintain public safety." (**FEMA**, HICA MYDP (CPG 1-34, 1985, p. A-2)

Civil Disturbance: "Group acts of violence and disorder prejudicial to public law and order." (**DOD**, *DOD Dictionary of Military and Related Terms*, 2007)

Civil Disturbance Readiness Conditions: "Required conditions of preparedness to be attained by military forces in preparation for deployment to an objective area in response to an actual or threatened civil disturbance." (***DOD** Dictionary of Military and Related Terms*, 2007)

Civil Disturbances: "Group acts of violence and disorders prejudicial to public law and order within the 50 States, District of Columbia, Commonwealth of Puerto Rico, U.S. possessions and territories, or any political subdivision thereof. As more specifically defined in DoD Directive 3025.12 (Military Support to Civil Authorities), "civil disturbance" includes all domestic conditions requiring the use of Federal Armed Forces." (**DOD,** *MACDIS,* 1994, p. 17; **Title 32 CFR 185**)

Civil Disturbance Operations. "The President has the authority to deploy troops within the United States to enforce the laws. The Enforcement of the Laws to Restore Public Order, Chapter 15 of Title 10 USC (formerly Insurrection Act) authorizes the President to employ the Armed Forces of the US, including the NG, within the United States to restore order or enforce federal law after a major public emergency (e.g., natural disaster, serious public health emergency, or terrorist attack) when requested by the state governor or when the President determines that the authorities of the state are incapable of maintaining public order. The President normally executes his authority by ordering the dispersal of those obstructing the enforcement of the laws. The President may act unilaterally to suppress an insurrection or domestic violation without the request or authority of the state/governor and to exercise his "major public emergencies" authority to direct the SecDef to provide supplies, services, and

equipment necessary for the immediate preservation of life and property. Such supplies, services, and equipment may be provided: only to the extent that the constituted authorities of the state or possession are unable to provide them; only until such authorities and other departments and agencies of the United States charged with such responsibilities are able to provide them; and only to the extent that their provision, in the judgment of the SecDef, will not interfere with the preparedness of ongoing military operations or functions. Responsibility for the coordination of the federal response for civil disturbances rests with the Attorney General. Any DOD forces employed in civil disturbance operations shall remain under military authority at all times. Forces deployed to assist federal and local authorities during times of civil disturbance follow the use-of-force policy found in CJCS Instruction (CJCSI) 3121.01B, *Standing Rules of Engagement/Standing Rules for the Use of Force for US Forces*." (**JCS/DoD**, *Civil Support*, 2007, pp. III-4-5)

Civil Emergency: "Any occasion or instance for which, in the determination of the President, federal assistance is needed to supplement state and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States." (**DOD**, *DOD Dictionary of Military and Related Terms*, 2007)

Civil Emergency: "Any natural or manmade disaster or emergency that causes or could cause substantial harm to the population or infrastructure. This term can include a "major disaster" or "emergency" as those terms are defined in the Stafford Act, as amended, as well as consequences of an attack or a national security emergency. Under 42 U.S.C. 5121, the terms "major disaster" and "emergency" are defined substantially by action of the President in declaring that extant circumstances and risks justify his implementation of the legal powers provided by those statutes." (**Title 32 CFR 185; DoD,** *MACDIS***,** 1994, p. 17)

Civil Emergency: "An emergency relating to other than the military security of the United States." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-3)

Civil Emergency Preparedness: "The nonmilitary actions taken by Federal Agencies, the private sector, and individual citizens to meet essential human needs, to support the military effort, to ensure continuity of Federal authority at national and regional levels, and to ensure survival as a free and independent nation under all emergency conditions, including a national emergency caused by threatened or actual attack on the United States." (**DoD**, *MACDIS*, 1994, p. 18)

Civil-Military Operations: "The activities of a commander that establish, maintain, influence, or exploit relations between military forces, governmental and nongovernmental civilian organizations and authorities, and the civilian populace in a friendly, neutral, or hostile operational area in order to facilitate military operations, to consolidate and achieve operational US objectives. Civil-military operations may include performance by military forces of activities and functions normally the responsibility of the local, regional, or national government. These activities may occur prior to, during, or subsequent to other military actions. They may also occur, if directed, in the absence of other military operations. Civil-military operations may be

performed by designated civil affairs, by other military forces, or by a combination of civil affairs and other forces. Also called CMO." (**DOD**, *DOD Dictionary of Military and Related Terms*, 2007)

Civil Preparedness: "`Civil preparedness' means all those activities and measures designed or undertaken (A) to minimize or control the effects upon the civilian population of major disaster, (B) to minimize the effects upon the civilian population caused or which would be caused by an attack upon the United States, (C) to deal with the immediate emergency conditions which would be created by any such attack, major disaster or emergency, and (D) to effectuate emergency repairs to, or the emergency restoration of, vital utilities and facilities destroyed or damaged by any such attack, major disaster or emergency. Such term shall include, but shall not be limited to, (i) measures to be taken in preparation for anticipated attack, major disaster or emergency, including the establishment of appropriate organizations, operational plans and supporting agreements; the recruitment and training of personnel; the conduct of research; the procurement and stockpiling of necessary materials and supplies; the provision of suitable warning systems; the construction and preparation of shelters, shelter areas and control centers; and, when appropriate, the nonmilitary evacuation of the civilian population; (ii) measures to be taken during attack, major disaster or emergency, including the enforcement of passive defense regulations prescribed by duly established military or civil authorities; the evacuation of personnel to shelter areas; the control of traffic and panic; and the control and use of lighting and civil communication; and (iii) measures to be taken following attack, major disaster or emergency, including activities for fire fighting; rescue, emergency medical, health and sanitation services; monitoring for specific hazards of special weapons; unexploded bomb reconnaissance; essential debris clearance; emergency welfare measures; and immediately essential emergency repair or restoration of damaged vital facilities." (**CT General Assembly**, P.A. 73-544), Chapter 517, *Civil Preparedness. Department of Emergency Management and HS*)

Civil Preparedness: "…civil preparedness…must be useful every day, and not just a standby program, to be used in the event of an enemy attack. The way toward readiness for any eventuality is to prepare every U.S. community as fully as possible to meet the dangers of peacetime disasters. This also lays the solid foundation for emergency operations in event on an enemy attack. In time, 'civil preparedness' is expected to become a household term – replacing 'civil defense' in the American consciousness as a more meaningful and tangible expression of the responsibility of Federal, State, and local government for the safety and protection of the public." (**DCPA**, *Civil Preparedness – A New Dual Mission*, 1972, p. 1)

Civil Preparedness: Civil Preparedness "is not a separate function set apart from the normal responsibilities of government, or a special unit or group of people standing by to save the day in case of a major disaster…the forces responsible for civil preparedness emergency operations are the normal forces of government, together with any trained auxiliaries needed – plus non-governmental personnel or groups, doctors, and hospital and news media staffs… emergency operations require coordinated action by all forces with lifesaving capabilities, under the leadership and direction of key local executives." (**DCPA**, *Standards for Local Civil Preparedness*, 1978, p. 2)

Civil Preparedness Directors/Coordinators: "The term 'civil preparedness Director/Coordinator is used in recognition of the variation in both the official title and duties of the position, is States and

localities throughout the Nation." (**DCPA,** *Standards for Local Civil Preparedness* (CPG 1-5), 1978, p. 1)

Civil Preparedness Directors/Coordinators Responsibilities: "The essence of the Director/Coordinator's job in non-emergency periods is to act on behalf of the chief executive to build readiness for coordinated operations in both peacetime and attack-caused emergencies. This requires working with the operating departments of local government, with non-governmental groups, and with the public. These are primarily staff, not 'command,' functions…. During emergencies, the Director/Coordinator acts as principal advisor or aide to the chief executive on local government emergency operations. His major responsibility is to assure coordination among the operating departments of government (and with higher and adjacent governments), primarily by seeing that the Emergency Operating Center functions effectively. He also assists the chief executive in assuring execution of operations, plans, and procedures required by the emergency." (**DCPA/DOD**, *Standards for Local Civil Preparedness* (CPG 1-5) April 1978, pp. 9-10)

Civil Preparedness Directors/Coordinators, Local Emergency Operations Readiness Duties: "The duties outlined below are typical of those performed by the local civil preparedness Director/Coordinator in non-emergency periods, to develop readiness for operations in emergencies:

1. Develop an Emergency Operating Center (EOC) facility, a protected site from which key local officials control operations
2. Develop EOC staffing and internal procedures to permit key local officials to conduct coordinated operations in emergencies.
3. Conduct tests and exercises to give key local officials practice in directing coordinated operations under simulated emergency conditions.
4. Provide expert knowledge and advice to operating departments on the special conditions and operating requirements that would be imposed by peacetime or attack disasters.
5. Develop local government emergency operations plans, outlining which local forces and supporting groups would do what, in both peacetime and attack disasters, and specifying local organization for major emergencies.
6. Establish system to warn the public of peacetime or attack disasters.
7. Establish system to alert key local officials.
8. Organize radiological monitoring and analysis system, including procurement of instruments and training and exercising of personnel.
9. Coordinate and lead emergency communications planning, secure necessary equipment, and exercise emergency communications
10. Coordinate with doctors, hospitals, and public and private sector medical personnel to develop emergency medical plans and capabilities, as part of local emergency plans.
11. Establish and maintain a shelter system.
12. Establish and exercise an emergency public information system and train personnel to utilize it.
13. Coordinate with welfare offices, and the Red Cross and other voluntary groups, to develop emergency welfare capabilities to care for people needing mass care as a result of peacetime or attack disaster.
14. Coordinate and maintain relationships with industry to develop industrial emergency plans and capabilities in support of local government emergency plans.

15. Assist local operating departments (e.g., fire, police, public works) with radiological defense and other training needs.
16. Coordinate and participate in training programs for the public on disaster preparedness.
17. Assist in the establishment of mutual aid agreements to provide needed services, equipment or other resources in an emergency.
18. Prepare, submit, and justify the annual civil preparedness budget.
19. Secure matching funds and other assistance available through the civil preparedness program, and through other Federal programs (includes preparing annual program papers and other documents required for Federal assistance programs)." (**DCPA**, *Standards for Local Civil Preparedness*, 1978, pp. 1-2)

Civil Preparedness Directors/Coordinators, Professional and Personal Skill Set: "Since the bulk of the Director/Coordinator's responsibilities will involve contacts with the heads of local government departments, as well as officials from other government levels, applicants should show leadership qualities, and an ability to manage and coordinate the civil preparedness program. In addition, applicants should have the ability to meet and deal with the public effectively, and be reliable and trustworthy. According to field studies, personal traits considered important for the civil preparedness Director/Coordinator, by chief executives and other local officials, included enthusiasm for the job, ability to work with others, integrity, friendliness, cooperativeness, ability to coordinate and expedite, administrative ability, and reputation and stature within the community. Probably the most important single personal trait is dedication to the civil preparedness program. In evaluating candidates, interview boards and chief executives should keep in mind the duties of the local Director/Coordinator in emergency periods, They should ask themselves, 'Would I place confidence in the recommendations and advice of this applicant, in making decisions that could affect the preservations of life and property, in an emergency affecting this jurisdiction." (**DCPA/DOD**, *Standards For Local Civil Preparedness* (CPG 1-5), April 1979, p. 11)

Civil Protection: "The phrase 'civil protection' has gradually come into use around the world as a term that describes activities which protect civil populations against incidents and disasters (Mauro, 1996)….Civil protection has gradually and rather haltingly emerged from the preceding philosophy of civil defense." (**Alexander**, 2002, 4)

Civil Resources: "Resources that normally are not controlled by the Government, including workforce, food and water, health resources, industrial production, housing and construction, telecommunications, energy, transportation, minerals, materials, supplies, and other essential resources and services. Such resources cannot be ordered to support needs of the public except by competent civil government authority." (**DoD**, *MACDIS*, 1994, p. 18)

Civil Search and Rescue (Civil SAR): "Search operations, rescue operations, and associated civilian services provided to assist persons and property in potential or actual distress in a non-hostile environment." (National Search and Rescue Committee, *National Search and Rescue Plan of the United States*, 2007, p. 1)

Civil Support: "Civil support is defined as 'DoD support, including the use of Federal military

forces, the Department's career civilian and contractor personnel, and DoD agency and component assets, for domestic emergencies and for designated law enforcement and other activities'."[8] (**Commission on the National Guard and Reserves**, *Transitioning*, 2008, B-1)

Civil Support: "The Secretary of Defense shall provide military support to civil authorities for domestic incidents as directed by the President or when consistent with military readiness and appropriate under the circumstances and the law. The Secretary of Defense shall retain command of military forces providing civil support. The Secretary of Defense and the Secretary [of Homeland Security] shall establish appropriate relationships and mechanisms for cooperation and coordination between their two departments." (**Homeland Security Presidential Directive-5**, 28 February 2003)

Civil Support (CS): "CS is the overarching term for DOD's support to civilian authorities. DOD's role in the CS mission consists of support to US civil authorities (Department of Homeland Security [DHS] or other agency) for domestic emergencies and for designated law enforcement and other activities. HD [Homeland Defense]and CS operations may occur in parallel and require extensive integration and synchronization." (**JCS/DoD**, *Civil Support*, vii)

Civil Support, Requests for Military Assistance: "Federal agencies or state governors request DOD capabilities to support their emergency response efforts by using a formal RFA [Requests for Assistance] process. How DOD handles RFAs depends on various factors, such as: Stafford or non-Stafford Act situation, urgency of the incident, establishment of a JFO, if a DCO or JTF has been appointed, and originator of the request (incident command, state, regional, or national). It is important to note that not all CS is provided via the RFA process. Other processes for obtaining and/or providing support are covered in more detail in Chapter III, "Operations."

(1) Civil authorities may request other CS activities in writing through various means established by the appropriate DOD policy documents. For example, support for military fly-overs may be requested using DD Form 2535 as described in DODD 5410.18, *Public Affairs Community Relations Policy*.

(2) In general…The FCO at the incident site receives RFAs from civil authorities and submits them to the Office of the Executive Secretary of the Department of Defense, who forwards them to the ASD(HD&ASA) and to the JDOMS for validation and order processing, respectively. When a DCO is at the incident site, RFAs are submitted directly to ASD(HD&ASA). Once the SecDef approves the request, an order is issued to combatant commands, Services, and/or agencies to accomplish the mission. The decision process differs significantly for approving Stafford and non-Stafford RFAs (see Figure II-2). Requests are validated at all levels within the chain of command. JDOMS prepares an order and coordinates with necessary force providers, legal counsel, and ASD(HD&ASA) to ensure asset deconfliction and recommendation concurrence. DOD evaluates all requests by US civil authorities for military assistance against six established criteria, including:

(a) Legality. Is the support in compliance with laws, Presidential directives?
(b) Lethality. Is use of lethal force by or against DOD personnel likely or expected?

[8] Cites *Strategy for Homeland Defense and Civil Support,* pp. 5–6.

(c) Risk. Safety of DOD forces. Can the request be met safely, or can concerns be mitigated by equipment or training?
(d) Cost. Who pays, and what is the impact on DOD budget?
(e) Appropriateness. Is the requested mission in the interest of DOD to conduct? Who normally performs and is best suited to fill the request?
(f) Readiness. What is the impact on DOD's ability to perform its primary mission?" (**JCS/DoD**, *Civil Support*, 2007, pp. II-3-4)

Civilian Mobilization Office: Created on March 1, 1950 within the National Security Resources Board. Paul J. Larsen named Chairman. (**Gessert**, *Federal Civil Defense Organization*, 1965, 64)

CJIS: Chairman of the Joint Chiefs of Staff, DOD. (**DA**, *WMD-CST Ops*, 2007, Glossary-1)

CJCSI: Chairman of the Joint Chiefs of Staff (DOD) Instruction. (**DA**, *WMD-CST Ops*, 2007, Glossary-1)

CJCSI 3110.16: *Military Capabilities, Assets, and Units for Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Consequence Management Operations*.

CJCSI 3121.01B: *Standing Rules of Engagement/Rules for the Use of Force for US Forces.*

CJCSI 3125.01B: *Defense Support of Civil Authorities to Domestic Consequence Management Operations in Response to a Chemical, Biological, Radiological, Nuclear, or High-Yield Explosives Incidents***.**

CJCSIM: Chairman of the Joint Chiefs of Staff (DOD) Manual. (**DA**, *WMD-CST Ops*, 2007, Glossary-1)

CJTF-CS: Commander, Joint Task Force-Civil Support. (**JCS/DOD**, *CBRNE CM*, 2006, II-10)

CLAS: Culturally and Linguistically Appropriate Services. (**CDC**, *Reaching At Risk Populations*, 2007, p. 22)

Classified National Security Information (also referred to as "classified information"): "Any data, file, paper, record, or computer screen containing information associated with the national defense or foreign relations of the United States and bearing the markings: confidential, secret, or top secret. This information has been determined pursuant to Executive Order 12958 or any predecessor order to require protection against unauthorized disclosure and is marked (confidential, secret, or top secret) to indicate its classified status. It is also referred to as classified information.

• Confidential: Information, the unauthorized disclosure of which reasonably could be expected to cause damage to the national security that the original classification authority is able to identify or describe.

• Secret: Information of which the unauthorized disclosure could reasonably be expected to cause serious damage to the national security that the original classification authority is able to identify or describe.

• Top secret: Information of which the unauthorized disclosure could reasonably be expected to cause exceptionally grave damage to the national security that the original classification authority is able to identify or describe." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 34)

CLE: Cabinet-Level Exercise (formerly Catastrophic Assessment Task Force Exercises). (**DoD**, *Statement of Verga*, 2007, p. 13)

Clear Text: "The use of plain language in radio communications transmissions." (**Capital Health Region**, Canada, *ICS100: Incident Command System Training SM*, Mar 2007, 51)

CLF: Congregate Lodging Facility. (**FEMA**, *Capability Assessment and Standards for State and Local Government (Interim Guidance)*, November, 1983, p.21)

Climate Change: "The climate of a place or region is changed if over an extended period (typically decades or longer) there is a statistically significant change in measurements of either the mean state or variability of the climate for that place or region. Changes in climate may be due to natural processes or to persistent anthropogenic changes in atmosphere or in land use. Note that the definition of climate change used in the United Nations Framework Convention on Climate Change is more restricted, as it includes only those changes which are attributable directly or indirectly to human activity." (**UN/ISDR,** *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

CLO: Chief Learning Officer, DHS. (**DHS**, *Establishing a DHS University System*, 2007, 8)

CLO: Chief Logistics Officer, FEMA Logistics Management Directorate. (FEMA 2008)

CLOSEREP: Closure Report. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, G-11)

CM: Consequence Management. (**DA**, *WMD-CST Operations*, December 2007, Glossary-2)

CM: Crisis Management. (**IIA**, *Business Continuity Management*, July, 2008, p. 2)

CM R&A: Consequence Management Response and Assessment. (**JCS/DOD**, *CBRNE CM*, III-6)

CMA: Chemical Manufacturers Association.

CMA: Comprehensive Maritime Awareness. (**USNORTHCOM**, General Renuart, Oct. 3, 2007)

CMC: Community Mitigation Classification, BCEGS. (ISO, *ISO Building Code Classifications*)

CMC: Crisis Management Center, Department of Transportation.

CMO: Civil-Military Operations. (**JCS/DOD**, *CBRNE CM*, 2006, p. III-6)

CMOC: Catastrophic Medical Operations Center. (Houston-Galveston Area Evacuation and Response Task Force. *Recommendations Report*. 2006p. 13)

CMP: Civil Monetary Penalties. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

CMP: Crisis Management Plan/Planning.

CMSA: Consolidated Metropolitan Statistical Area.

CMT: Crisis Management Team. (**USACE**, *Response Planning Guide*, 1995, p. 1-3)

CNRAF: Comprehensive Review of Commercial Nuclear Reactors. (**USCG**, *PSA Program*)

COA: Course of Action. (**DHS**, *National Planning and Execution System*, 2007 Draft; **DA**, *WMD-CST Operations*, December 2007, p. 1-3; **Army Trans School**, *Crisis Action Planning*, 5)

Coastal Barrier Improvement Act of 1990: The CBIA tripled the size of the system established by the Coastal Barrier Resources Act of 1982. The CBIA also mandated an end to the issuance of new Federal flood insurance within "otherwise protected areas," generally used for activities such as fish and wildlife research and refuges, on buildings constructed after November 16, 1991 unless the building was to be used in a manner related to the reason the area was established as an OPA. (**FEMA**, *CBRS History*, 2006)

Coastal Barrier Resources Act (CoBRA) of 1982: "CoBRA is Federal legislation identifying particular areas that are environmentally sensitive and are subject to rules prohibiting certain Federal expenditures within them." (**FEMA**, *Rebuilding for… Sustainable Future*, 2000, A-2)

Coastal Barrier Resources System (CBRS): "The Coastal Barrier Resources Act (COBRA) of 1982 and later amendments, removed the Federal government from financial involvement associated with building and development in undeveloped portions of designated coastal barriers (including the Great Lakes). These areas were mapped and designated as Coastal Barrier Resources System units or "otherwise" protected areas. They are colloquially called COBRA zones. COBRA banned the sale of NFIP flood insurance for structures built or substantially improved on or after a specified date. For the initial COBRA designation, this date is October 1, 1983. For all subsequent designations, this date is the date the COBRA zone was identified. COBRA zones and their identification dates are shown on Flood Insurance Rate Maps (FIRMs). Communities may permit development in these areas even though no Federal assistance is available, provided that the development meets NFIP requirements." (**FEMA**, *CBRS*, 2007)

Coastal High Hazard Area: "An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The coastal high hazard area is identified as Zone V on Flood Insurance Rate Maps (FIRMs). Special floodplain management requirements

apply in V Zones including the requirement that all buildings be elevated on piles or columns." (**FEMA**, *Coastal High Hazard Area*, 2007)

Coastal Zone: "The coastal zone is defined as the area along the shore where the ocean meets the land as the surface of the land rises above the ocean. This land/water interface includes barrier islands, estuaries, beaches, coastal wetlands, and land areas having direct drainage to the ocean." (**FEMA**, *Rebuilding for a More Sustainable Future*, 2000, p. A-2)

Coastal Zone Management Act (CZMA): "In recognition of the increasing pressures of over-development upon the nation's coastal resources, Congress enacted the CZMA in 1972. The CZMA encourages states to preserve, protect, develop, and, where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats. A unique feature of the CZMA is that participation by states is voluntary. To encourage states to participate, the Act makes Federal financial assistance available to any coastal state or territory, including those on the Great Lakes, that is willing to develop and implement a comprehensive coastal management program." (**FEMA**, *Rebuilding for a More Sustainable Future*, 2000, A-2)

COBRA: Coastal Barrier Resources Act (of 1982). (**FEMA/NFIP**, *Call for Issues*, 2004, 24)

COE: Corps of Engineers, United States Army. (**OCD**, *Abbreviations and Definitions*, 1971)

COG: Continuity of Government. (**DHS**, *FCD 1*, Nov. 2007, p. O-1)

COGCON: Continuity of Government Condition. (**DOE**, *DOE Order 100.1D, Subject: Secretarial Succession, Threat Level Notification, and Successor Tracking*, April 20, 2007.

COGCON: Continuity of Government Readiness Conditions. (**White House,** *HSPD-20*)

COI: Community of Interest. (**DHS**, *National Planning and Execution System*, 2007 Draft, I-1)

COIN: Community Outreach Information Network.

COIN: Counterinsurgency. (**Dept. of State**, *Counterinsurgency…*, 2006)

Cold Site: "An alternate facility that already has in place the environmental infrastructure required to recover critical business functions or information systems, but does not have any pre-installed computer hardware, telecommunications equipment, communication lines, etc. These must be provisioned at time of disaster. Related Terms: Alternate Site, Hot Site, Interim Site, Internal Hot Site, Recovery Site, And Warm Site." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 50)

Cold Zone: "Area where the command post and support functions that are necessary to control the incident are located. This is also referred to as the clean zone, green zone or support zone in other documents. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472)." (**DOT**, *Emergency Response Guidebook…Hazardous Materials Incident*, 2004, p. 358)

Collaboration. See, also, Megacommunities.

Collaboration: "At the core, success depends upon robust and adaptive collaboration—between the public and private sector, among different levels of government, among multiple jurisdictions, and among departments and agencies within a single jurisdiction. Collaboration encompasses a wide range of activities (e.g., joint planning, training, operations) aimed at coordinating the capabilities and resources of various entities (agencies, organizations, and individuals from many tiers of public and private sectors) for the common purpose of preventing, protecting against, responding to, and recovering from intentional as well as natural threats to people or property. As such a critical element, collaboration can thus be viewed as the foundation upon which success in all four mission areas [prevent, protect, respond, recover] depends." (**DHS/ODP**, *State and Urban Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, 2005, p. 4)

"Achieving full integration and interconnectedness between the public and private sector, among different levels of government, among multiple jurisdictions, and among departments and agencies within a single jurisdiction requires robust collaboration." (Ibid, p. 6)

Collaboration: "The recent focus on homeland security has fostered increasing regional collaboration. Since the establishment in 2002 of regional homeland security coordination districts in Washington, all nine regions have begun to participate in regional planning, training, and exercises. Collaboration has also increased among counties, cities and tribal nations. A growing number of tribes are participating in regional homeland security planning and developing emergency management plans consistent with other state and local plans. In general, tribes report that the new regions have provided them with an opportunity for greater participation than they have historically had with neighboring county and city jurisdictions. Additionally, a significant number of local programs are creating new mutual aid agreements and updating existing agreements with adjoining jurisdictions." (**WA State EM Council**, *A Study of Emergency Management at the Local Program Level*, 2004, p. 17)

Collaboration Challenges: There are five core challenges to sustaining collaborative efforts.

- The first is *decision rights*. Collaboration is not one entity barking out orders to other organizations. These entities must share risk, rewards, and responsibilities for collaboration to work.
- The second is *trust.* When trust is present, collaboration will flourish and resources will be shared. In its absence, the actors will start to withdraw and not collaborate.
- The third is that collaboration necessarily involves the *sharing of information* across traditional boundaries and jurisdictions. While not all information needs to be shared, that information shared must be transparent and have high fidelity.
- The fourth is *visible and committed leadership.* Our article argues that Governor Bush was able to build a megacommunity only by surrendering some of his perceived and real authority -- he was willing to sacrifice some of his authority to create a true partnership.
- The fifth is the *rewards system*. Today, our budgetary and human capital systems often dis-incentive transparent, collaborative practices, instead continuing rewards systems that

favor closed competitive behaviors." (Krill and Sulek, *The Megacommunity: A Group Discussion on Cross-Sector Collaboration for Preparedness*. EIIP Virtual Forum Presentation, 27 Feb 2008)

Collaborative, Core Principle of Emergency Management: "Collaborative: emergency managers create and sustain broad and sincere relationships among individuals and organizations to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication." (**EM Roundtable**, 2007, p. 4)

Collaborative Emergency Management: "The public sector alone cannot bear the cost of emergency preparedness. The State's emergency management leader must leverage federal, local, private sector and community resources to improve preparedness and outcomes. Specifically, the State must explore innovative market strategies to promote prevention and mitigation, preparation, response and recovery. And while emergency management currently is largely the domain for first responders, success will require new partnerships with community organizations, research institutions, the insurance and finance industries and others to expand strategies to support preparedness." (**Little Hoover Com**., *Safeguarding Golden State*, 2007, 39)

Collaborative Healthcare Urgency Group (CHUG): Metropolitan Chicago-area organization which works to coordinate evacuation planning for the area's vulnerable and disabled populations in coordination with healthcare organizations, community, state and federal plans. (**CHUG**, 2008)

Collaborative Leadership Practices: "Clearly there are a number of critical skills and capacities collaborative leaders should possess…. The work of the Turning Point Leadership Development National Excellence Collaborative, however, has illustrated six key practices that are unique to the practice of leading a collaborative process. They are:

- Assessing the Environment for Collaboration: Understanding the context for change before you act.
- Creating Clarity − Visioning & Mobilizing: Defining shared values and engaging people in positive action.
- Building Trust & Creating Safety: Creating safe places for developing shared purpose and action.
- Sharing Power and Influence: Developing the synergy of people, organizations, and communities to accomplish goals.
- Developing People − Mentoring and Coaching: Committing to bringing out the best in others and realizing people are your key asset.

Self-Reflection − Personal CQI (Continuous Quality Improvement): Being aware of and understanding your values, attitudes, and behaviors as they relate to your own leadership style and its impact on others." (**Turning Point**, *Collaborative Leadership: Self-Reflection Participant's Guide*, 2004, p. 1)

Collaborative Leadership Premise: "If you bring the appropriate people together in constructive ways with good information, they will create authentic visions and strategies for their organizations and communities." (Chrislip, *Collaborative Leadership and Community Health Governance*, p. 2)

Collection: "Gathering information through approved techniques to address and/or resolve Intelligence Requirements. The sources of information that are used during the Collection step of the Intelligence Cycle include HUMINT, SIGINT, IMINT, OSINT, MASINT." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 34)

Color-coded Threat Level System: "…used to communicate with public safety officials and the public at-large through a threat-based, color-coded system so that protective measures can be implemented to reduce the likelihood or impact of an attack. Raising the threat condition has economic, physical, and psychological effects on the nation; so, the Homeland Security Advisory System can place specific geographic regions or industry sectors on a higher alert status than other regions or industries, based on specific threat information." (**DHS,** *Homeland Security Advisory System*, December 31, 2007 Update)

Combating Terrorism: "Actions, including antiterrorism (defensive measures taken to reduce vulnerability to terrorist acts) and counterterrorism (offensive measures taken to prevent, deter, and respond to terrorism), taken to oppose terrorism throughout the entire threat spectrum. Also called CbT." (**DOD**, *Dictionary of Military and Related Terms*, 2007)

Combating Terrorism: "The full range of Federal programs and activities applied against terrorism, domestically and abroad, regardless of the source or motive." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B: Definitions, p. 1)

Command: "The act of directing, ordering, or controlling by virtue of explicit statutory, regulatory, or delegated authority." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 148)

Command and Control: "Command and control of a terrorist threat or incident is a critical function that demands a unified framework for the preparation and execution of plans and orders. Emergency response organizations at all levels of government may manage command and control activities somewhat differently depending on the organization's history, the complexity of the crisis, and their capabilities and resources. Management of Federal, State and local response actions must, therefore, reflect an inherent flexibility in order to effectively address the entire spectrum of capabilities and resources across the United States. The resulting challenge is to integrate the different types of management systems and approaches utilized by all levels of government into a comprehensive and unified response to meet the unique needs and requirements of each incident." (**FBI**, *United States Government Interagency Domestic Terrorism Concept of Operations Plan*, January 2001, p. 15)

Command and Control: "The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission." (**DoD**, *DOD Dictionary of Military and Related* Terms, 2007; **USCG** *Pub 1*, 2002, p. 60)

Command and Management (1st of Six NIMS Major Components, 2004): "NIMS standard incident command structures are based on three key organizational systems:

1. The ICS.

   The ICS defines the operating characteristics, interactive management components, and structure of incident management and emergency response organizations engaged throughout the life cycle of an incident;

2. Multiagency Coordination Systems.

   These define the operating characteristics, interactive management components, and organizational structure supporting incident management entities engaged at the Federal, State, local, tribal, and regional levels through mutual-aid agreements and other assistance arrangements; and

3. Public Information Systems.

   These refer to processes, procedures, and systems for communicating timely and accurate information to the public during crisis or emergency situations." (**DHS**, *NIMS*, 2004, p. 3; at p. 7 Command and Management is described by reference to ICS, Multiagency Coordination Systems and *the Joint Information System* (JIS) emphasis added.)

Command and Management (1st of 5 NIMS Compliance Metrics, 2005-2006): "Describes the systems used to facilitate domestic incident command and management operations, including the ICS, multi-agency coordination systems, and the Joint Information System (JIS)." (**FEMA**, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 28)

Command: "Command comprises the IC [Incident Commander] and the Command Staff. Command staff positions are established to assign responsibility for key activities not specifically identified in the General Staff functional elements. These positions may include the Public Information Officer (PIO), Safety Officer (SO), and Liaison Officer (LNO), in addition to various others, as required and assigned by the IC." (**DHS**, *NIMS*, 2004, p. 13)

Command Center: "A physical or virtual facility located outside of the affected area used to gather, assess, and disseminate information and to make decisions to effect recovery. (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 50)

Command Channel (Radio Communications): "A radio channel designated by the emergency services organization that is provided for communication between the incident commander and the tactical level management units during an emergency incident. (**Capital Health Region**, Canada, *ICS100: Incident Command System Training SM*, Mar 2007, 51)

Command Function, ICS: "The command function may be conducted in two general ways:

- **Single Command IC.**

When an incident occurs within a single jurisdiction and there is no jurisdictional or functional agency overlay, a single IC should be designated with overall incident management responsibility by the appropriate jurisdictional authority. (In some cases in which incident management crosses jurisdictional and/or functional agency boundaries, a single IC may be designated if all parties agree to such an option,) Jurisdictions should consider predesignating IC's in their preparedness plans. The designated IC will develop the incident objectives on which subsequent incident action planning will be based. The IC will approve the Incident Action Plan (IAP) and all requests pertaining to the ordering and releasing of incident resources.

- **Unified Command** (See "Unified Command")

Command Post Exercise: "An exercise in which the forces are simulated, involving the commander, the staff, and communications within and between headquarters. Also called CPX." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Command Staff: "Command Staff is responsible for overall management of the incident. This includes Command Staff assignments required to support the command function." (**DHS**, *NIMS*, 2004, p. 13)

Command Staff: Under the Incident Management System, "The Command Staff consists of a Public Information Officer, Safety Officer, Liaison Officer and other positions as required, who report directly to the Incident Commander." (**DHS,** *National Response Framework* (Comment Draft), September 10, 2007, p. 48) [Note: DHS, NIMS, 2004 lists these three positions under "Command."]

Commander's Critical Information Requirement (CCIR): "An information requirement identified by the commander as being critical to facilitating timely decision making. The two key subcomponents are critical friendly force information and priority intelligence requirements." (**DA**, *WMD-CST Operations*, 2007, Glossary-9)

Commander's Intent: "(Army) A clear, concise statement of what the force must do and the conditions the force must establish with respect to the enemy, terrain, and civil considerations that represent the operation's desired end state." (**DA**, *WMD-CST Ops*, 2007, Glossary-9)

Commercial Equipment Direct Assistance Program (CEDAP): "CEDAP helps meet the equipment needs of smaller jurisdictions by providing communications interoperability, information sharing, chemical detection, sensors, personal protective equipment, technology, and training in using the equipment, devices, and technology. Awards are made to law enforcement and emergency responder agencies not currently eligible for funding through the Department's Urban Areas Security Initiative grant program." (**FEMA**, *CEDAP*, December 20, 2007)

Commercial Equipment Direct Assistance Program (CEDAP): "Eligibility for the CEDAP is limited to law enforcement agencies, fire, and other emergency responder organizations with specific financial and capability needs. Equipment and training awards are offered in five categories: personal protective equipment; thermal imaging, night vision, and video surveillance

tools; chemical and biological detection tools; information technology and risk management tools; and interoperable communications equipment. CEDAP equipment awards are integrated with state planning processes for regional response and asset distribution. Each state's administrative agency has the opportunity to review applications submitted by first responder organizations within their state to ensure that equipment requests are consistent with their state homeland security strategy." (**FEMA**, *DHS Announces Fiscal Year 2007 CEDAP Application Period*. April 17, 2007)

Commercial Equipment Direct Assistance Program (CEDAP): "Eligible applicants included law enforcement agencies and other emergency responder agencies who demonstrate the equipment will be used to improve their capability and capacity to respond to a major critical incident or to work with other first responders." (**DHS**, *Fact Sheet: FY 2007 CEDAP*, 20Dec07)

Common Alerting Protocol (CAP): "The Common Alerting Protocol (CAP) is a simple but general format for exchanging all-hazard emergency alerts and public warnings over all kinds of communication and information networks.

- CAP allows a consistent warning message to be transmitted simultaneously over many different warning systems, thus increasing warning effectiveness while simplifying the warning task.

- CAP also can facilitate the detection of emerging patterns in local warnings of various kinds, such as might indicate an undetected natural hazard or a hostile act.

- In addition, CAP offers a template for effective warning messages based on best practices identified in academic research and realworld experience.

CAP implements the National Science and Technology Council's call in November, 2000 for "a standard method ... to collect and relay instantaneously and automatically all types of hazard warnings and reports locally, regionally and nationally for input into a wide variety of dissemination systems."

The Common Alerting Protocol (CAP) specifies an open, non-proprietary digital message format for all types of alerts and notifications. The CAP format is fully compatible with existing formats including the Specific Area Message Encoding (SAME or WR-SAME) used for NOAA Weather Radio and the Emergency Alert System, while offering enhanced capabilities that include:

• Flexible geographic targeting using latitude/longitude "boxes" and other geospatial representations in three dimensions;
• Multilingual and multi-audience messaging;
• Phased and delayed effective times and expirations;
• Enhanced message update and cancellation features;
• Template support for framing complete and effective warning messages;
• Digital encryption and signature capability; and,
• Facility for digital images, audio and video.

The chief benefit of CAP will be reduction of costs and operational complexity by eliminating the need for multiple custom software interfaces to the many warning sources and dissemination systems involved in all-hazard warning. The CAP message format can be converted to and from the "native" formats of all kinds of sensor and alerting technologies, forming a basis for a technology-independent national and international "warning internet." Distributing warning messages in a machine-readable format can also facilitate the automatic triggering of events that must be taken when a disaster threatens (e.g. automated water intake and air ventilation closures, water level adjustments, train stoppages, etc.) The CAP has undergone rigorous technical review within the OASIS standards process and final approval as a standard was received in early 2004." (**Partnership for Public Warn.**, *Protecting America's Communities*, 2004, pp. 16-17)

Common Communication Plan (CCP): "A plan designed to be utilized across multi-agency and multi-jurisdictional incident management operations. It applies standards called for under the ICS. The IC manages communications at an incident, using a CCP and an incident-based communications center established solely for use by the command, tactical, and support resources assigned to the incident. All entities involved in managing the incident will utilize common terminology, prescribed by the NIMS, for communications." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 1)

Common Operating Picture: "Activated in May 2006, the Common Operating Picture (COP) is a display of relevant information that is derived from a Common Operating Database (COD) and shared by several agencies and organizations. The COP/COD system is a situational awareness tool that can be modified for the strategic, operational and tactical levels and is active in the National Operations Center (NOC). As part of an incrementally phased development effort, the DHS COP/COD system has focused on the 2006 hurricane season and has been implemented in selected DHS offices and component and inter-agency operation centers. Subsequently, the COP/COD system will be implemented nationwide for all Homeland Security partners, for all hazards, and for all threats." (**DHS**, *Fact Sheet*: "Protecting the Homeland Post September 11," Sep. 8, 2006.

Common Operating Picture: "The COP is the principal situational awareness tool within the NOC [National Operations Center, DHS] and is the cornerstone of the National Reporting System. This real-time, web-based tool ties together key homeland security partners primarily at the Federal, State, and Joint Field Office (JFO) levels. The COP was the direct result of the Department's internal reviews following Hurricanes Katrina and Rita and the White House Katrina lessons learned report. It was initially available for the 2006 Hurricane season and has the following features:

- Is accessible through the Homeland Security Information Network (HSIN)
- Provides Federal departments and agencies with the capability to share critical information
- Establishes an inter-agency common operating database
- Develops a shared interagency understanding of the situation
- Provides information integrity for reporting requirements
- Facilitates timely decision making

The COP includes functional screens that address the National and International Situation Summaries, executive actions, requests for information, responder status, chronology of events, critical infrastructure, mapping products, media reports, streaming video from the incident site,

the latest incident updates, metrics, and other HSIN information. As part of our incremental approach, we are advancing the COP capabilities from natural disasters to all hazards and all threats. Our "next steps" are intended to further enhance the COP capabilities from exclusively an unclassified, hurricanes/natural disaster centric tool to include a classified, all-hazards capability. We are currently focusing on the "worst case" scenarios for nuclear/radiological incidents and will use national exercises and real world events to validate and continue its overall development." (**DHS**, *Statement of Frank DiFalco, Director of the NOC*, June 20, 2007, p. 4)

Common Operating Picture: "A broad view of the overall situation as reflected by situation reports, aerial photography, and other information or intelligence. (Department of Homeland Security, National Incident Management System (March 2004), 128; Department of Homeland Security, National Response Plan (December 2004), 64.)" (**FEMA**, *FY 2007 NIMS Compliance Metrics Terms of Reference*, October 23, 2006, p. 1)

Common Operating Picture: "Collating and gathering information—such as traffic, weather, actual damage, resource availability—of any type (voice, data, etc.) from agencies/organizations in order to make decisions during an incident…. A common operating picture is established and maintained by the gathering, collating, synthesizing, and disseminating of incident information to all appropriate parties involved in an incident. Achieving a common operating picture allows on-scene and off-scene personnel (e.g., those at the Incident Command Post, an Emergency Operations Center, and within a multi-agency coordination group) to have the same information about the incident, including the availability and location of resources, personnel, and the status of requests for assistance. Additionally, a common operating picture offers an overview of an incident thereby providing incident information which enables the Incident Commander (IC), Unified Command (UC), and supporting agencies and organizations to make effective, consistent, and timely decisions. In order to maintain situational awareness, communications and incident information must be updated continually. Having a common operating picture during an incident helps to ensure consistency for all emergency management/response personnel engaged in an incident." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, pp. 23-24)

Common Operating Picture: "Offers an overview of an incident thereby providing incident information enabling the IC/UC and any supporting agencies and organizations to make effective, consistent, and timely decisions." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 149)

Common Operating Picture: "Is a broad view of the overall situation as reflected by situation reports, aerial photography and other information and intelligence." (**USCG**, *IM Handbook*, 2006, Glossary 25-4)

Common Operational Picture: "(Army) A single identical display of relevant information within a commander's area of interest tailored to the user's requirements, based on common data and information shared by more than one command." (**DA**, *WMD-CST Ops*, 2007, Glossary-10)

Common Terminology (IM): "Normally used words and phrases—avoids the use of different words/phrases for same concepts, consistency, to allow diverse incident management and support organizations to work together across a wide variety of incident management functions

and hazard scenarios." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 149)

Communications: "Communications is the transmission of thoughts, messages, or information." (**DHS**, *TCL*, 2007, p. 38)

Communications: "Modern society runs on nearly instant communication. When disaster strikes and normal communications fail, the government cannot respond to the emergency unless a survivable emergency communication network is in place and ready to function. At a minimum, reliable links among Federal, State, and local governments and key private responders are required along with the ability to quickly access, process, and use emergency information." (**FEMA**, *An Introduction to SCM*, Sep 1992, 4)

Communications and Information Management: "Identify the requirements for a standardized framework for communications, information management, and information-sharing support at all levels of incident management.
• Incident management organizations must ensure that effective, interoperable communications processes, procedures, and systems exist across all agencies and jurisdictions.
• Information management systems help ensure that information flows efficiently through a commonly accepted architecture. Effective information management enhances incident management and response by helping to ensure that decision making is better informed." (**DHS**, *UTL 2.1*, 2005, p. 15)

Communications and Information Management: (NIMS 2005-2006): 4th of five Compliance Assessment Metrics. "Effective communications, information management, and information and intelligence sharing are critical aspects of domestic incident management. Establishing and maintaining a common operating picture and ensuring accessibility and interoperability are principal goals." (**FEMA**, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 28)

Communications Capability Definition, Target Capability List, DHS: "Communications is the fundamental capability within disciplines and jurisdictions that practitioners need to perform the most routine and basic elements of their job functions. Agencies must be operable, meaning they must have sufficient wireless communications to meet their everyday internal and emergency communication requirements before they place value on being interoperable, i.e., able to work with other agencies. Communications interoperability is the ability of public safety agencies (police, fire, EMS) and service agencies (public works, transportation, hospitals, etc.) to talk within and across agencies and jurisdictions via radio and associated communications systems, exchanging voice, data and/or video with one another on demand, in real time, when needed, and when authorized. It is essential that public safety has the intra-agency operability it needs, and that it builds its systems toward interoperability." (**DHS**, *TCL*, Sep. 2007, p. 29)

Communications Interoperability: "Communications interoperability is the ability of multiple entities to intermingle meaningful transmission of thoughts, messages, or information while using similar or dissimilar communications systems." (**DHS**, *TCL*, 2007 p. 39)

Communications Interoperability: "Communications interoperability allows emergency management/response personnel and their affiliated organizations to communicate within and across agencies and jurisdictions via voice, data, or video on demand, in real time, when needed, and when authorized. It is essential that these communications systems be capable of interoperability, as successful emergency management and incident response operations require the continuous flow of critical information among jurisdictions, disciplines, organizations, and agencies." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), Aug. 2007, 24)

Communications Interoperability: "Communications interoperability refers to "the ability of emergency responders to talk across disciplines and jurisdictions via communications systems and to exchange voice and/or data with one another on demand, in real time, when needed, and as authorized." (**NSTAC**, *Report to the President*, 2007, p. 1, citing DHS, SAFECOM Program)

Communities of Interest (COI), Homland Security Planning and Operations. "The following list identifies planning COIs for homeland security operations. It is not all inclusive; additional members will be added as they are identified.

Key Federal Interagency**:**

- Department of Agriculture (USDA)
- Department of Commerce (DOC)
- Department of Defense (DOD)
- Department of Education (DOEd)
- Department of Energy (DOE)
- Department of Health and Human Services (HHS)
- Department of Homeland Security (DHS)
- Federal Emergency Management Agency (FEMA)
- Infrastructure Protection Division (Executive Agent for the NIPP)
- Office of Operations Coordination
- U.S. Coast Guard (USCG)
- Department of Housing and Urban Development (HUD)
- Department of the Interior (DOI)
- Department of Justice (DOJ)
- Federal Bureau of Investigation (FBI)
- Department of Labor (DOL)
- Department of State (DOS)
- Department of Transportation (DOT)
- Department of the Treasury (TREAS)
- Department of Veterans Affairs (VA)
- Environmental Protection Agency (EPA)
- Federal Communications Commission (FCC)
- General Services Administration (GSA)
- National Aeronautics and Space Administration (NASA)
- National Transportation Safety Board (NTSB)
- Nuclear Regulatory Commission (NRC)
- Office of the Director of National Intelligence (ODNI)

- Intelligence Community (IC)
- Office of Personnel Management (OPM)
- Small Business Administration (SBA)
- Social Security Administration (SSA)
- Tennessee Valley Authority (TVA)
- U.S. Agency for International Development (USAID)
- U.S. Postal Service (USPS)

Other**:**

- State, local, and Tribal governments
- Non-Governmental and Volunteer Organizations
- American Red Cross (ARC)
- Corporation for National and Community Service
- National Organization on Disability
- National Voluntary Organizations Active in Disaster (NVOAD)
- Private Sector
- Other" (**FEMA**, *Interim Interagency Planning System for Homeland Security* (Draft 2.3), July 3, 2008 copy, pp. 3-3 – 3-4)

Community: "A political entity, within a defined boundary, having authority to adopt and enforce laws and provides services and leadership to its residents. (**Jones**, *Critical Incident Protocol*, 2000, p. 37)

Community: "A social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage." (*Webster's Unabridged Dictionary*, 2005)

Community, Functional: "A *functional* community can be defined as the associations that are required by groups of people living together within a specific geographical area." (The Joint Commission, Standing Together, 2005, p. 7, citing: Dwyer D.M. "Strengthening Community in Education -- A handbook for change." *The Progressive Educator,* January 1998.)

Community and Regional Resilience Initiative (CARRI): "CARRI is a groundbreaking program being led by the Department of Energy's Oak Ridge National Laboratory, in conjunction with a variety of other federal, regional, state and local partners. The goal of CARRI is to help develop and then share critical paths that any community or region may take to strengthen its ability to prepare for, respond to, and rapidly recover from significant man-made or natural disasters with minimal downtime to basic community, government and business services. When a community is truly resilient it should be able to avoid the cascading system failures to help minimize any disaster's disruption to everyday life and the local economy. A resilient community is not only prepared to help prevent or minimize the loss or damage to life, property and the environment, but also it has the ability to quickly return citizens to work, reopen businesses, and restore other essential services needed for a full and swift economic recovery." (**ORNL**, *Community & Regional Resilience Initiative* (CARRI). February 6, 2008)

Community Assistance Program: "FEMA created the Community Assistance Program (CAP) to provide outreach and technical support to communities participating in the NFIP. The CAP is

an integral part of the administration of the NFIP at the regional, state, and local level. Under the CAP, both Community Assistance Visits (CAVs) and Community Assistance Calls (CACs) are used to obtain input and share information. A CAV is a visit by FEMA regional staff or the State NFIP Coordinator to a community to assess whether the community's floodplain management program meets NFIP participation requirements." (**FEMA**, *Map Modernization: Guidelines and Specifications for Flood Hazard Mapping Partners, Vol. 1*, 2002, p. 1-12)

Community Assistance Program – State Support Services Element (CAP-SSSE, FEMA): "The Community Assistance Program –State Support Services Element (CAP-SSSE) program derives its authority from the National Flood Insurance Act of 1968, as amended, the Flood Disaster Protection Act of 1973, and from 44 CFR Parts 59 and 60. This program provides funding to States to provide technical assistance to communities in the National Flood Insurance Program (NFIP) and to evaluate community performance in implementing NFIP floodplain management activities. In this way, CAP-SSSE helps to:

- Ensure that the flood loss reduction goals of the NFIP are met,
- Build State and community floodplain management expertise and capability, and
- Leverage State knowledge and expertise in working with their communities.

The National Flood Insurance Act of 1968 prohibits the Director from providing flood insurance in a community unless that community adopts and enforces floodplain management measures that meet or exceed minimum criteria in 44 CFR Part 60.3. These floodplain management measures can take the form of floodplain management ordinances, building codes, or zoning provisions. FEMA Regional Offices and the designated State agency negotiate a CAP-SSSE Agreement (Agreement) that specifies activities and products to be completed by a State in return for CAP-SSSE funds. In addition, since Federal Fiscal Year (FY) 2005, each State is required to develop a Five-Year Floodplain Management Plan (Five-Year Plan) describing the activities to be completed using CAP-SSSE funding as well as how the required performance metrics will be met. Performance standards that address quality of service are to be developed and measured. There is a 25 percent non-federal match for all States receiving CAP-SSSE funds." (**FEMA**, *CAP-SSSE*, 2007)

Community Assistance Visit (CAV): "The Community Assistance Visit (CAV) is a major component of the NFIP's Community Assistance Program (CAP). The CAV is a visit to a community by a FEMA staff member or staff of a State agency on behalf of FEMA that serves the dual purpose of providing technical assistance to the community and assuring that the community is adequately enforcing its floodplain management regulations. Generally, a CAV consists of a tour of the floodplain, an inspection of community permit files, and meetings with local appointed and elected officials. If any administrative problems or potential violations are identified during a CAV the community will be notified and given the opportunity to correct those administrative procedures and remedy the violations to the maximum extent possible within established deadlines. FEMA or the State will work with the community to help them bring their program into compliance with NFIP requirements. In extreme cases where the community does not take action to bring itself into compliance, FEMA may initiate and enforcement action against the community." (**FEMA**, *CAV*, 2007)

Community Awareness and Emergency Response (CAER): "A program developed by the Chemical Manufacturers Association providing guidance for chemical plant managers to assist them in taking the initiative in cooperating with local communities to develop integrated (community/industry) hazardous materials emergency plans." (**FEMA**, *Definitions of Terms*, 1990)

Community Based Disaster Risk Management (CBDRM): "Once a community has assessed the risks it faces and an action plan has been developed, disaster risk reduction measures need to be taken. These measures might include practical disaster mitigation measures, such as building dams or dykes, forming emergency response committees, developing community based early warning systems and practicing response and evacuation, advocating at the local or national government level for policy change in favour of preventive action, or even measures to reinforce the livelihoods of the poorest in the community, hence their resources for self-protection." (ProVention Consortium, *Community Risk Assessment Toolkit*, International Federation of the Red Cross and Red Crescent Societies, May 2006)

Community Based Organizations (CBOs): "A local organization (which may or may not be an affiliate of a national organization) with a primary mission to provide services to specific groups of people. This could include services to people who are developmentally disabled, homeless, low-income elderly, non-English speaking, or others. CBOs are usually nonprofit organizations. Most have a 501 (c) (3) tax-exempt status from the Internal Revenue Service. Some may have the nonprofit status from the Franchise Tax Board. In size, they range from all-volunteer organizations that get by on virtually no budget, to multi-million dollar operations. Examples include Food Banks, Centers for Independent Living, Immigration Assistance Programs, Easter Seals, Neighborhood Clinics, and Family Centers." (**CA OES**, *SEMS Guidelines*, 2006, Glossary, p. 5)

Community Based Planning: "Most state and local emergency management plans were developed without direct involvement from the community. As a result, people tend to have little faith that these plans offer the best courses of action to protect themselves and their families. On the other hand, disaster planning that includes input from the community produces not only higher quality plans, but also far higher levels of community approval and confidence in the plans."[9] (**Carafano**, *Grassroots Disaster Response-Harnessing Capacities of Communities*, 2007)

Community Compliance Program (FEMA): "The National Flood Insurance Act of 1968 prohibits FEMA from providing flood insurance in a community unless that community adopts and enforces floodplain management regulations that meet minimum NFIP criteria. When administrative problems or potential violations are identified in a community, FEMA is committed to working with that community and providing technical assistance to help them bring their floodplain management programs into compliance with NFIP requirements. In those cases where the community does not take action to become compliant, FEMA implements its Community Compliance Program. The Community Compliance Program builds on the basic probation and suspension procedures in Section 59.24 (b) and (c) and provides an orderly sequence of enforcement options of varying severity. If all attempts at obtaining community

[9] Cites: Roz D. Lasker, "Redefining Readiness: Terrorism Planning Through the Eyes of the Public," New York Academy of Medicine, 14Sep04, at *www.healthprivacy.org/usr_doc/RedefiningReadinessStudy.pdf*

compliance are to no avail, communities will become subject to suspension from the NFIP. The availability of two separate sets of enforcement options -- one for communities and one for individuals and structures -- helps FEMA ensure that NFIP enforcement actions are targeted to the responsible party." (**FEMA**, *Community Compliance Program*, 2007)

Community Conditions in a Disaster Environment: "…disasters not only create new tasks but actually task subsystems, and these subsystems must be coordinated with one another if the response is to be effective. This requires the mobilization of resources -- particularly manpower, economic and loyalties. When this mobilization has occurred a new community structure has come into being. However, all this occurs under conditions characterized by the following:

- uncertainty,
- urgency,
- the development of an emergency consensus,
- expansion of the citizenship role,
- convergence, and
- the deemphasis of contractual and impersonal relationships." (**Dynes, Quarantelli, and Kreps,** *A Perspective on Disaster Planning*, 1981 (3rd Ed.), pp. 66-67)

Community Development Block Grant (CDBG), HUD: "HUD [US Department of Housing and Urban Development]…provides disaster recovery assistance through several programs. After the 2005 hurricanes, Congress appropriated $16.7 billion to the Community Development Block Grant (CDBG) program for disaster recovery. The CDBG program generally provides funding to metropolitan cities and urban counties that have been designated as entitlement communities and to states for distribution to other communities. Grant recipients must give maximum feasible priority to activities, including emergency-related activities, that (1) benefit low- and moderate-income families or aid in the prevention or elimination of slums or blight, or (2) meet urgent community development needs. However, HUD can waive regulatory and statutory program requirements to increase the flexibility of the CDBG funds for disaster recovery. These grants afford states and local governments a great deal of discretion to help them recover from presidentially declared disasters." (**GAO**, *Natural Disasters: Public Policy*…, Nov 2007, 16-17)

Community Emergency Response Team(s) (CERT): "CERTs are funded by Congress through Citizen Corps program grants, which are made available to local communities. A key component of Citizen Corps, the CERT program trains citizens to be better prepared to respond to emergency situations in their communities. When emergencies occur, CERT members can give critical support to first responders, provide immediate assistance to victims, and organize volunteers at a disaster site. The CERT program is a 20-hour course, typically delivered over a seven-week period by a local government agency, such as the emergency management agency or fire or police department. Training sessions cover disaster preparedness, disaster fire suppression, basic disaster medical operations, light search and rescue, and team operations. The training also includes a disaster simulation in which participants practice skills that they learned throughout the course." (**The Joint Commission**, *Standing Together*, 2005, p. v)

Community Hazards Emergency Response-Capability Assurance Process (CHER-CAP): "The Community Hazards Emergency Response-Capability Assurance Process (CHER-CAP) is

offered by Regional Offices of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to assist local communities and tribal l governments in obtaining a greater understanding of community hazard risks, identifying planning deficiencies, updating plans, training first responders, and stimulating and testing the system for strengths and needed improvements. CHER-CAP is offered as an additional tool for state and local governments to use as they develop and enhance preparedness and response capabilities that will address any hazards that communities will face throughout our Nation." (**FEMA**, *Community Hazards Emergency Response-Capability Assurance Process (CHER-CAP) Fact Sheet*, May 8, 2007 update.

Community Mapping: "Community mapping is a tool used to visualize the resources, services, vulnerabilities and risks in a community. These may include health clinics, schools, water sources, shelter as well as identifying risks such as flood areas, health hazards, indicating which locations or populations are vulnerable." (**ProVention Consortium**, *CRA Toolkit: Glossary*, 06)

Community Preparedness: "Preparedness is everyone's job. Not just government agencies but all sectors of society -- service providers, businesses, civic and volunteer groups, industry associations and neighborhood associations, as well as every individual citizen -- should plan ahead for disaster. During the first few hours or days following a disaster, essential services may not be available. People must be ready to act on their own." (**FEMA**, *About FEMA: Community and Family Preparedness Program*, April 5, 2006 update)

Community Preparedness and Participation: "There is a structure and a process for ongoing collaboration between government and nongovernmental organizations at all levels; volunteers and nongovernmental resources are incorporated in plans and exercises; the public is educated, trained, and aware; citizens participate in volunteer programs and provide surge capacity support; nongovernmental resources are managed effectively in disasters; and there is a process to evaluate progress." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 6)

Community Preparedness and Participation, Capability Definition: "The Community Preparedness and Participation capability provides that everyone in America is fully aware, trained, and practiced on how to prevent, protect/mitigate, prepare for, and respond to all threats and hazards. This requires a role for citizens in personal preparedness, exercises, ongoing volunteer programs, and surge capacity response. Specific capabilities for UNIVERSAL preparedness, including knowledge of all-hazards (technological, natural, and terrorist incidents) and related protective measures, skills, and supplies, will be determined through a collaborative process with emergency responders." (**DHS,** *TCL*, 2007, p. 55)

Community Rating System (CRS): "The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance. For CRS participating communities, flood insurance premium rates are discounted in increments of 5%; i.e., a Class 1 community would receive a 45% premium discount, while a Class 9 community would receive a 5% discount (a Class 10 is not participating in the CRS and

receives no discount). The CRS classes for local communities are based on 18 creditable activities, organized under four categories: (i) Public Information, (ii) Mapping and Regulations, (iii) Flood Damage Reduction, and (iv) Flood Preparedness." (**FEMA**, *Community Rating System*. Website: http://www.fema.gov/business/nfip/crs.shtm)

Community Readiness Survey: "The survey, as used in OSA (On-Site Assistance Program), is an assessment ["profile"] of the actual condition of the existing local emergency operational readiness capability…. A thorough understanding of the real situation is desirable before determining the course of action….The most important aspects of the survey are that it is done at the site, and requires direct local participation and involvement. The OSA team should base their recommendations on first-hand information and observations, including information gained in the give-and-take of discussion. The DCPA Standards should serve as a reference point. It should be emphasized that the objective of the survey is to determine the course of future preparedness actions and the manner in which local, State, and Federal resources can contribute most effectively to this course of action, rather than evaluate past actions or present performance. In other words, what can be done to help this civil preparedness director increase his community's emergency operating capability." (**DCPA**, *On-Site Assistance* (MP 63), 1974, p. 21)

Community Relations (Stafford Act Declaration): "Community Relations personnel work closely with disaster victims and community leaders to establish confidence in the emergency management system. They establish an early presence at the disaster site to assess and communicate critical needs. They are highly skilled in explaining the disaster relief process and programs, and set realistic expectations to limit misunderstandings about the disaster assistance process and to ensure that disaster assistance is being delivered as soon as possible. Community relations also employ a culturally diverse staff to ensure they are able to communicate, in different languages, the disaster process and to promote efficient and equitable disaster assistance for all communities and applicants." (**FEMA**, *IS 250*, *Emergency Support Function 15 (ESF15) External Affairs*, 2007, p. 40, Module 4)

Community Risk Assessment: "Community Risk Assessment (CRA) uses participatory action research methods to place communities in the lead role for the assessment, active planning, design, implementation and evaluation of activities aimed at reducing the community's risk to disaster. Whether they are rural, urban or semi-urban neighborhoods, it is crucial that communities exposed to hazards can contribute to the risk assessment and planning process. CRA focuses on identifying the most vulnerable groups in a community, and explores what local capacities can be used to enhance the resilience of the community members. The risks facing a community can include natural hazards, such as hurricanes, floods, earthquakes and droughts, as well as other threats such as environmental health risks, epidemics or conflict." (**ProVention Consortium**, *Community Risk Assessment Toolkit*, International Federation of the Red Cross and Red Crescent Societies, May 2006)

Community Shelter Plans (CSP): "In developing a Community Shelter Plan (CSP) for a given community, people are matched with specific shelters in the best possible combination, considering time and movement constraints. Development of a CSP for a large metropolitan area is a complex task, appropriate for use of computer techniques. A computer-allocation procedure has been developed and field tested in several communities…. At the end of fiscal year 1973, a cumulative

total of 2,737 communities, with a population of approximately 176 million had CSP's completed or underway." (**DCPA**, *Foresight, DCPA Annual Report FY73*, 1974, p. 18)

Community Shelter Planning (CSP): A component of the Nuclear Civil Protection program, Defense Civil Preparedness Agency. Community Shelter Planning was designed to provide fallout shelter, peacetime shelters for disasters, and in some cases blast shelter where that capability already existed, against nuclear attack in a quickly developing crisis. In this context, quickly developing was described as being within hours or a day or more. (See, **DCPA**, *Standards for Local Preparedness Capability*, 1978)

Community Shelter Planning Officers (CSPOS): "DCPA makes funds available for States to obtain the services of planners designated as Community Shelter Planning Officers (CSPOS). The CSPOS give technical assistance to city and county governments in the development of their Community Shelter Plans (CSP's) and for developing plans for dealing with peacetime disasters including natural disasters, environmental hazards and civil disorders, as well as the effects of nuclear attack" (**DCPA**, *Foresight, DCPA Annual Report FY73*, 1974, p. 18)

CoMNET: Consequence Management, News, Equipment and Training (DHS)

Compensation Unit/Claims Unit (ICS): "The unit within the Finance/Administration Section that is responsible for processing financial matters resulting from injuries, fatalities and/or property and environmental damage at the incident." (**Capital Health Region**, Canada, *ICS100: Incident Command System Training SM*, Mar 2007, 51)

Competency: "Observable, measurable skill, knowledge, ability, behavior, and other characteristics that an individual needs to perform work roles or occupational functions successfully." (**DHS**, *DHS Training Glossary*, November 2006, p. 15)

Competitive Training Grants Program (CTGP): The CTGP provides funds to support training initiatives that are national in scope and further the DHS mission of preparing the nation to prevent, protect against, respond to, and recover from incidents of terrorism and catastrophic events. In FY07, the emphasis is on the development and delivery of courses in one of the five following focus areas:

- Public communications
- Executive leadership of homeland security programs
- Intergovernmental coordination and planning
- Managing homeland security risks
- Legal issues in preparation, response, and recovery

The CTGP awards funds to competitively selected applicants to develop and deliver innovative training programs addressing high priority national homeland security training needs." (**DHS**, *DHS Announces $113 Million for National Preparedness Training Initiatives*, 28 Sep 2007)

Competitive Training Grants Program (CTGP): The CTGP is a "coordinated effort to strengthen homeland security preparedness. Through CTGP, funds are provided to support the development of national preparedness training initiatives that further the homeland security

mission. The CTGP supports our overall goals for national preparedness as outlined in the National Preparedness Guidelines and Homeland Security Directives." (**DHS**, *FY07 CTPG*)

Complex Incidents: "Events where the victims have unusual medical needs or require medical care that is not readily available. These medical needs may be very difficult to adequately define or address without specialized expertise, even with only a few casualties." (HHS, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-3)

Comprehensive (Core Principle of Emergency Management): "Comprehensive: emergency managers consider and take into account all hazards, all phases, all stakeholders and all impacts relevant to disasters." (**EM Roundtable**, 2007, p. 4)

Comprehensive Cooperative Agreement (CCA): Successor (circa 1981-1983 timeframe) to the Personnel and Administrative Expenses program, Defense Civil Preparedness Agency (and previous Federal Civil Defense Programs) which provided funding to State civil defense/emergency management organizations on at a rate not to exceed 50 percent of personnel and administrative expenses on a matching fund basis. States were required to pass the majority of the funding to local civil defense/emergency management offices within each State. CCA's were negotiated annually between FEMA Regional Offices and State CD/EM Offices based upon national program priorities. The Emergency Management Performance Grants (EMPG) replaced the CCA during the Clinton Administration. (Blanchard)

Comprehensive Cooperative Agreement (CCA): "…the contractual management instrument for State and local emergency preparedness projects receiving Federal financial assistance from FEMA." (**FEMA**, *IEMS MYDP*, 1984, p. III-1)

Comprehensive Emergency Management (CEM): An integrated approach to the management of emergency programs and activities for all four emergency phases (mitigation, preparedness, response, and recovery), for all types of emergencies and disasters and for all levels of government and the private sector.

Comprehensive Emergency Management (CEM): "Comprehensive Emergency Management Programs provide a complete approach for dealing with disruptions in both the public and the private sector. While the term is not widely understood, it represents the umbrella which covers emergency management, business continuity, and disaster recovery." (**Davis Logic**, *CEM*, 2005)

Comprehensive Emergency Management (CEM): "Comprehensive Emergency Management means integrating all actors, in all phases of emergency activity, for all types of disasters." (**NGA,** 1978, 111)

Comprehensive Emergency Management (CEM): "CEM refers to a state's responsibility and unique capability to manage all types of disasters by coordinating wide-ranging actions of numerous agencies. The 'comprehensive' aspect of CEM includes all four phases of disaster activity: mitigation, preparedness, response and recovery for all risks -- attack, man-made, and natural -- in a federal-state-local operating partnership." (**NGA** 1978, 203)

Comprehensive Emergency Management (CEM): "CEM fosters a *federal-state-local operating partnership.*" (NGA, *Comprehensive Emergency Management*, 1979, p. 15)

"CEM should be distinguished from *comprehensive emergency preparedness,* a term now generally in use, which emphasizes, in practice if not legislative intent, the preparedness and response phases of emergency management almost exclusively." (NGA, *CEM*, 1979, p. 50)

"In keeping with the concept of a full federal-state-local partnership in the consolidation of all-risk emergency management, state and local governments should adopt consistent nomenclature, using the words *emergency management*." (NGA, *CEM*, 1979, p. 53)

Comprehensive Emergency Management (CEM) Public Commitment Component: "To ensure public support and commitment for emergency preparedness, the emergency management leader must lead a statewide effort to tap the skills, knowledge and abilities of the public to bolster the preparedness of households and businesses, as well as support public and private sector emergency response." (**Little Hoover Com**., *Safeguarding the Golden State*, 2006, 39)

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 1980: (Public Law 96-510.) "The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment….CERCLA:

- established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- provided for liability of persons responsible for releases of hazardous waste at these sites; and
- established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response.
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's National Priorities List (NPL).

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the NPL. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986." (**EPA**, *CERCLA* Overview, July 17, 2007 Update)

Comprehensive Maritime Awareness: "Improves maritime security by acquiring, integrating and exchanging relevant maritime activity information on regional threats and focuses limited interdiction and inspection assets on the most probable threats." (**DOD**, *FY 2006 Advanced Concept Technology*…, March 16, 2006)

Comprehensive Resource Management (See "Resource Management")

Computer-Assisted Natural Disaster Operations: "Under a contractual arrangement with the University of Tennessee, a prototype computer system to assist local planners in natural disaster operations was developed and tested during the fiscal year [1973]. The system, using existing computer programs and available data, produces outputs useful in local natural disaster planning. Outputs include numbers of people and resources in an area; estimates of requirements to deal with all types of natural disasters; allocations of populations affected to temporary shelter. Additional capabilities will be developed during fiscal year 1974, including a complete computer package for use in large metropolitan areas." (**DCPA**, *Foresight, Annual Report FY73*, 1974, 11)

COMSEC: Communications Security. (**Dept. of the Army**, *WMD-CST Ops*, 2007, 4-9)

CoMSUPCEN: Consequence Management Support Center. (**DA**, *WMD-CST Ops*, 2007, 4-2)

Concept and Objectives (C&O) Meeting: "The C&O Meeting is the formal beginning of the exercise planning process. It is held to agree upon already-identified type, *scope*, *capabilities*, *objectives*, and *purpose* of the exercise. For less complex exercises and for jurisdictions/organizations with limited resources, the C&O Meeting can be conducted in conjunction with the *Initial Planning Conference (IPC)*; however, when exercise scope dictates, the C&O Meeting is held first. Representatives from the sponsoring agency or organization, the *lead exercise planner*, and senior officials typically attend the C&O Meeting to identify an overall exercise goal, develop rough drafts of exercise capabilities and objectives, and identify *exercise planning team* members." (**FEMA**, *HSEEP Glossary*, 2008)

Concept of Operations: "A verbal or graphic statement that clearly and concisely expresses what the joint force commander intends to accomplish and how it will be done using available resources. The concept is designed to give an overall picture of the operation." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Concept of Operations: "A verbal or graphic statement, in broad outline, of a commander's assumptions or intent in regard to an operation or series of operations. The concept of operations frequently is embodied in campaign plans and operation plans; in the latter case, particularly when the plans cover a series of connected operations to be carried out simultaneously or in succession. The concept is designed to give an overall picture of the operation. It is included primarily for additional clarity of purpose. Also called commander's concept. (Joint Pub 1-02)" (**JCS**, *JOPES,* 1995, p. GL-3)

Concept of Operations (EOP): "The concept of operations will capture the sequence and scope of the planned response, explaining the overall approach to the emergency situation. The concept of operations should include division of responsibilities, sequence of action (before, during and after the incident), how requests for resources will be met, and who and under what

circumstances will request be made for additional aid from the State (this should included the process for declaring a state of emergency). The concept of operations should mention direction and control, alert and warning, or other activities. This information is usually outlined in the basic plan and fully detailed in the functional and hazard specific annexes and appendices." (**DHS**, *Local and Tribal NIMS Integration: Integrating the National Incident Management System into Local and Tribal Emergency Operations Plans and Standard Operating Procedures* (Version 1.0), November 15, 2005, p. 7 of 33)

Concept of Operations (EOP): "The audience for the Basic Plan needs to picture the sequence and scope of the planned emergency response. The concept of operations section explains the jurisdiction's overall approach to an emergency situation, i.e., what should happen, when, and at whose direction. Topics should include: division of local, State, Federal, and any intermediate interjurisdictional responsibilities; activation of the EOP; "action levels" and their implications…; general sequence of actions before, during, and after the emergency situation; who requests aid and under what conditions (the necessary forms being contained in tabs); and, for States, who appoints a State Coordinating Officer (SCO) and how the SCO and the State response organization will coordinate and work with Federal response personnel in accordance with the FRP… The concept of operations will touch on direction and control, alert and warning, or continuity of operations matters that may be dealt with more fully in annexes." (**FEMA**. *Guide For All-Hazard Emergency Operations Planning* (SLG 101), 1996, 4-3)

Concept Plan (CONPLAN): "The term 'concept plan' or 'CONPLAN' refers to a plan that briefly describes the concept of operations for integrating and synchronizing existing Federal capabilities to accomplish the mission essential tasks, and describes how Federal capabilities will be integrated into and support regional, State, local, and tribal plans." (**White House**, *Annex I "National Planning" to HSPD-8*, December 2007, p. 2)

Condition ALFA: "The USACE posture resulting from a surprise nuclear attack on the CONUS which may destroy the entire or portion of the seat of government and the key personnel of HQUSACE. Planning for this condition is based on employment of an alternate command element and/or predesignated AH to provide continuity of operations. (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-1)

Condition BRAVO: 'The USACE posture resulting from either actual or suspected nuclear attack on CONUS or allied countries which was preceded by sufficient warning to permit selected USACE personnel to relocate prior to the attack. Continuity planning for this condition is based on the concept of selected personnel moving to and operation from predesignated ERS's." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-1)

Conditions (UTL): "Conditions are variables of the environment that affect the performance of a task. Some conditions describe the environment in which a response occurs (e.g., weather or austere conditions). Others describe the scope of the response (e.g., the number of casualties or describe the type of agent). When linked to specific tasks, conditions help frame the differences or similarities between assigned missions." (**DHS**, *UTL 2.1*, 2005, p. 5)

CONELRAD (Control of Electro-Magnetic Radiation): Public Emergency Radio Broadcast System – "the specially organized system which will utilize broadcasting voluntarily in the public interest as soon as the approach of an enemy is detected." "The CONELRAD system became opertive on May 15, 1953. A nationwide test in October demonstrated that it was generally practical." (**FCDA,** *1953 Annual Report*, pp. 1 and 29)

"Every major radio manufacturer in the U.S. is now marking the dials of all new radio sets with the civil defense symbol at 640 and 1240 kilocylces to denote the two Conelrad freqauencies." (**FCDA**, *1954 Annual Report*, p. 94)

"FCDA produced two short subjects [in 1954] …`Bert The Turtle' one-minute spont on Conelrad." (**FCDA**, *1954 Annual Report*, p. 95)

Conflict Hazards: War, acts of terrorism, civil unrest, riots, and revolutions.

Congregate Care Coordination Unit (CCCU): "The Congregate Care Coordination Unit (CCCU) serves as the coordinating unit to support all congregate care activities at the Regional and JFO levels. It provides resources and subject matter experts and coordinates with other ESF-6 partners, other federal agencies (OFAs), and contractors at the NRCC. A CCCU may work in coordination with other Regional and State levels CCCUs. In addition, the CCU manages the National Shelter System (NSS)." (**FEMA**, *Statement of Paulison, Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath…"* 26Jun08, 12)

Congregate Care Management: "Manage conventional and nonconventional mass shelter facilities in support of State, tribal, 3 and local government and host States when traditional mass care systems are overwhelmed. Coordinate Federal resources and provide technical support to State, tribal, and local 7 governments for shelter-in-place activities. Nonconventional sheltering may include:

Hotels, motels, and other single-room facilities.
Temporary facilities such as tents, prefab module facilities, trains, and ships.
Specialized shelters and functional and medical support shelters.

Support for other specialized congregate care areas that may include respite centers, rescue areas, and decontamination processing centers. (**DHS**, *National Response Framework Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex* (Comment Draft). September 10, 2007, p. 6)

Congregate Household Pet Shelters: "Any private or public facility that provides refuge to rescued household pets and the household pets of shelterees in response to a declared major disaster or emergency." (**FEMA**, *Eligible Costs Related to Pet Evacuations, Sheltering*, 2007)

Congregate Shelters: "*Congregate Shelters* are facilities used for sheltering large groups of people, but that normally serve other purposes (e.g., schools, stadiums, churches, or church-sponsored facilities)." (**FEMA**, *FEMA Recovery Strategy*, August 3, 2006)

CONOPS/CONOPs: Concept of Operations.

CONPLAN (NRF): Concept Plan. (**DHS**, *NRF Comment Draft*, September 10, 2007, p. 61)

CONPLAN: Contingency Plan. (**Dept. of the Army**, *WMD-CST Ops*, Dec 2007, Glossary-2)

Consequence: "Aligned with accepted terrorism risk management best practices, risk is best described as the product of ***Threat, Vulnerability, and Consequence***. Threat represents the likelihood that an asset is attacked; vulnerability is the likelihood of succumbing to that attack; and consequence quantifies the adverse effects such as loss of life, economic damage, and the psychological impact a successful terrorist attacks will sustain.

Consequence: "The plausible negative outcomes of the current conditions that are creating uncertainty." (**DOA**, *Infrastructure Risk Management. (Army)*, 2004, p. 13)

Consequence: "The result of a terrorist attack or other hazard that reflects the level, duration, and nature of the loss resulting from the incident. For the purposes of the NIPP, consequences are divided into four main categories: public health and safety, economic, psychological, and governance." (**DHS**, NIPP, 2006, p. 103)

Consequence: "The Consequence of a terrorist attack is a product of the *criticality* of the target and the *impact* that an attack would have on that *criticality*.

- Consequence = (Criticality) X (Impact)." (**DHS**, *TCL*, 2007, p. 51)

Consequence: "**CONSEQUENCE** is the direct effect of an event, incident or accident. It is expressed as a health effect (e.g., death, injury, exposure), property loss, environmental effect, evacuation, or quantity spilled." (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

Consequence: "Outcome of an event." (**ISO 22399**, *Societal Security*…, 2007, p. 2)

Consequence: The outcome of an event or situation expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain. (**Standards Australia/Standards New Zealand**, 1995)

Consequence Analysis: The estimation of the effect of potential hazardous events. (**New South Wales** 1989).

Consequence Assessment Tool Set (CATS): "CATS is a consequence management tool package that integrates hazard prediction, consequence assessment and emergency management tools (including HPAC) with critical population and infrastructure data, all within a commercial Geographical Information System (GIS). CATS uses its constituent tools and data to predict the hazard areas caused by chemical, biological, radiological, nuclear and explosive incidents, as well as earthquakes and hurricanes. CATS helps to estimate collateral damage to military, civil and industrial installations, assesses associated casualties and damage to facilities, resources, and infrastructure and creates mitigation strategies for responders." (**DTRA/DOD**, *CATS*)

Consequence Management: "Comprises those essential services and activities required to manage and mitigate problems resulting from disasters and catastrophes. Such services and

activities may include transportation, communications, public works and engineering, fire fighting, information planning, mass care, resources support, health and medical services, urban search and rescue, hazardous materials, food, and energy." (**DoD**, *MACA*, 1997, p. 15

Consequence Management: "Per the National Strategy for Homeland Security, July 2002, the NRP will consolidate existing federal government emergency response plans into one genuinely all-discipline, all-hazard plan and thereby eliminate the "crisis management" and "consequence management" distinction. Traditionally, consequence management has been predominantly an emergency management function and included measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. The requirements of consequence management and crisis management are combined in the NRP. See also crisis management." (**DHS**, *National Response Plan* (Draft #1), 25Feb2004, p. 73 (Gloss.)

Consequences Management: "Those planning actions and preparations taken to identify, organize, equip, and train emergency response forces and to develop the executable plans implemented in response to an accident; and, the actions taken following an accident to mitigate and recover from the effects of an accident. (**DoD**, *DoD Response to Radiological Accidents* (DoD Directive 3150.8), 1996, p. 9)

Consequences Management: "Consequence management is predominantly an emergency management function and includes measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. In an actual or potential terrorist incident, a consequence management response will be managed by FEMA using structures and resources of the Federal Response Plan (FRP). These efforts will include support missions as described in other Federal operations plans, such as predictive modeling, protective action recommendations, and mass decontamination. The laws of the United States assign primary authority to the State and local governments to respond to the consequences of terrorism; the Federal government provides assistance, as required." (**FBI**, *United States Government Interagency Domestic Terrorism Concept of Operations Plan*, January 2001, p. 7)

Consequence Management ($C^{O}M$): Involves measures to alleviate the damage, loss, hardship, or suffering caused by emergencies. It includes measures to restore essential government services, protect public health and safety, and provide emergency relief to affected governments, businesses, and individuals. (**FEMA**, *Weapons of Mass Destruction-Nuclear Scenario,* 1999*)*

Consequence Management: "Relative to terrorism incident operations, measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses and individuals affected by the consequences of terrorism." (**FEMA** *Disaster Dictionary* 2001, 22; cites Federal Response Plan, "Terrorism Incident Annex.")

Consequence Management: "CM includes those actions required to manage and mitigate problems resulting from disasters and catastrophes**.** It may include COOP/COG measures to restore essential government services, protect public health and safety, and provide emergency

relief to affected governments, businesses, and individuals. Responses occur under the primary jurisdiction of the affected state and local government, and the Federal government provides assistance when required. When situations are beyond the capability of the state, the governor requests federal assistance through the President. The President may also direct the Federal government to provide supplemental assistance to state and local governments to alleviate the suffering and damage resulting from disasters or emergencies. DHS/FEMA has the primary responsibility for coordination of federal CM assistance to state and local governments." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, pp. IV 8 & 9)

Consequence Management: "Traditionally, consequence management has been predominantly an emergency management function and included measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. The requirements of consequence management and crisis management are combined in the NRP." (**US Army TRADOC**, 2007, p. 147)

Consequence Management: "Consequence management is predominantly an emergency management function and includes measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. In an actual or potential terrorist incident, a consequence management response will be managed by FEMA using structures and resources of the Federal Response Plan (FRP). These efforts will include support missions as described in other Federal operations plans, such as predictive modeling, protective action recommendations, and mass decontamination.

The laws of the United States assign primary authority to the State and local governments to respond to the consequences of terrorism; the Federal government provides assistance, as required." (**USG**, *Interagency Domestic Terrorism CONPLAN*, 2001, p. 10)

Consequence Management Support Center: "A Department of Defense hub for integrated logistics support that serves as a supply support activity for military and commercial equipment, kitting and shipping agent, and logistics operations center for both deployed and home-station units. It supports and sustains the weapons of mass destruction civil support teams through a central organization consisting of a supply support activity, an emergency resupply activity, and a support coordination center." (**DA**, *WMD-CST Operations*, 2007, Glossary-10)

Consequences: "Consequences mean the damages (full or partial), injuries, and losses of life, property, environment, and business that can be quantified by some unit of measure, often in economic or financial terms." (**FEMA**, *Multi Hazard Identification and Risk Assessment*, 1997, p. xxv)

Constitution and Homeland Security: "The Preamble states that two of the purposes of the Constitution are to insure domestic tranquility and provide for the common defense. Furthermore, Congress has the power to declare war, raise and support armies, provide and maintain a Navy, and provide for calling forth the militia to execute the laws of the Union, suppress insurrections and repel invasions. The President is the Commander in Chief of the

Armed Forces. The Constitution provides the fundamental justification for HS through the guarantee of domestic tranquility and provision for the common defense of the nation." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. A-1)

Constraints/Impediments (NIMS): "Limitations or restrictions in conducting NIMS activities. The following list defines the constraints/impediments:

- **Education:** The knowledge or skill obtained or developed by a learning process.
- **Equipment:** Instrumentality needed for an undertaking or to perform a service including its associated supplies. Equipment can range from small personal items such as search and rescue gear (flashlights, dusk masks, etc.) to large-scale multi-jurisdictional systems (radio repeater systems, computer networks, etc.).
- **Exercise:** Opportunity provided to demonstrate, evaluate, and improve the combined capability and interoperability of elements to perform assigned missions and tasks to standards necessary to achieve successful outcomes." (**FEMA**, *FY 2007 NIMS Compliance Metrics Terms of Reference*, October 23, 2006, p. 1)

Consumable Commodities: "Food, ice, water and other items not requiring installation, such as small plastic tarps and small generators." (**FEMA**, *100% Funding for Direct Federal Assistance and Grant Assistance*, June 9, 2006)

Container Security Initiative (CSI): "…under CSI, U.S. Customs and Border Protection inspectors are placed at the world's top seaports, where they work with their foreign counterparts to screen and label cargo as "higher-risk" or "low-risk" long before it reaches the U.S. This process is aided immeasurably by the new "24-hour rule," which requires electronic transmission of advance cargo manifests from U.S.-bound sea carriers a day in advance of loading. Early reports from industry show that the 24-hour rule is aiding not just security, but productivity. The information is run through our Automated Targeting System, which compares it against law enforcement data, the latest threat intelligence and the ships' history." (**DHS**, *Remarks* [DHS Sec] *Ridge…Port of Portland*, 4May04)

Contamination (Nuclear Weapon): "The deposit of radioactive material on the surfaces of structures, areas, objects, or personnel, following a nuclear (or atomic) explosion. This material generally consists of fallout in which fission products and other weapon debris have become incorporated with particles of dirt, etc. Contamination can also arise from the radioactivity induced in certain substances by the action of neutrons from a nuclear explosion." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, Glossary, p. 631)

Contingency: "A situation requiring military operations in response to natural disasters, terrorists, subversives, or as otherwise directed by appropriate authority to protect US interests." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Contingency: "A contingency is an incident which would involve DHS resources in response to natural or man made disasters, terrorists or other situations as directed by the President or Secretary of Homeland Security." (**DHS**, *National Planning and Execution System*, 2007, 5-1)

Contingency and Crisis Action Planning: "Ideally all potential national domestic incidents would have a plan ready for execution at a moments notice. This is unlikely so it is necessary to view planning in two contexts. Planning in the Pre-incident phase aims to prepare plans for the most dangerous potential incidents that could affect the nation; this is called contingency planning. Planning that takes place during the Incident Phase is called "crisis action planning" or CAP. Both use the same procedure to develop courses of action. The essential difference is that CAP takes place in a time-constrained and high-visibility environment. These aspects make CAP the most critical capability to develop. An effective CAP process relies on experienced planners, whose primary experience comes from developing contingency plans. Both contingency planning and CAP aim to produce plans that will achieve a specific national objective for a given incident; that is they are "execution" focused." (**DHS**, 2007)

Contingency Plan: "A plan used by an organization or business unit to respond to a specific systems failure or disruption of operations. A contingency plan may use any number of resources including workaround procedures, an alternate work area, a reciprocal agreement, or replacement resources." (**DigitalCare**, *State of OR BC Workshop*, 2006, pp. 50-51)

Contingency Plan: "A document to identify and catalog the elements required to respond to an emergency, to define responsibilities and specific tasks, and to serve as a response guide." (**EPA**, *Technical Guidance for Hazards* Analysis, 1987, p. A-4)

Contingency Plan: "The portion of an IAP [Incident Action Plan] or other plan that identifies possible but unlikely events and the contingency resources needed to mitigate those events." (**USCG**, *IM Handbook*, 2006, Glossary 25-5)

Contingency Planning: "Process of developing advance arrangements and procedures that enable an organization to respond to an event that could occur by chance or unforeseen circumstances." (**DigitalCare**, *State of OR BC Workshop*, 2006, pp. 50-51)

Contingency Planning: "Contingency planning creates plans in anticipation of future incidents based on the most current information utilizing Department resources. A contingency is an incident which would involve DHS resources in response to natural or man made disasters, terrorists or other situations as directed by the President or Secretary of Homeland Security. Contingency planning facilitates the transition to CAP; during CAP any contingency plan will become a Crisis Action Plan. Any plan for conducting national incident management operations will be called a *Department Contingency Plan.* (**DHS**, 2007)

Contingency Planning: "The Joint Operation Planning and Execution System planning activities that occur in noncrisis situations. The Joint Planning and Execution Community uses contingency planning to develop operation plans for a broad range of contingencies based on requirements identified in the Contingency Planning Guidance, Joint Strategic Capabilities Plan, or other planning directive. Contingency planning underpins and facilitates the transition to crisis action planning." (**DOD**, *DOD Dictionary of Military and Related Terms*, 2007)

Contingency Planning: "Contingency planning is the cornerstone of homeland security planning. It supports crisis action planning by anticipating potential crises and developing plans

that facilitate timely selection of courses of action and execution planning during a crisis. Crisis action planning provides the means to transition from normal circumstances to heightened threats, emergency response, and recovery." (**FEMA**, *Interim IPS* (V 2.3), July 2008 copy, 2-8)

Contingency Planning. "Contingency planning creates plans in anticipation of future incidents based on the most current information. A contingency is an incident which would involve national resources to prevent, protect from, respond to, or recover from terrorist attacks or natural disasters.

- Contingency planning facilitates the transition to CAP; during CAP any contingency plan may become a Crisis Action Plan. Contingency plans are prepared by senior Federal agency leaders in response to requirements established by the Secretary [DHS] and/or the President.

- Contingency planning is conducted before an incident. A contingency plan provides guidance for conducting operations for a given threat or scenario. It is conducted under non-emergency conditions, evaluated through training and exercises, and refined over time.

- Contingency plans are not immediately executed after they are approved. They are continually refined over time and provide planners a well-developed starting point that can be rapidly modified with little or no notice to support crisis action planning requirements." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, p. 2-9)

Contingency Planning: "Asking about all the 'what if's that might occur in the activities of an organization and the dangers faced in the external environment." (**Lerbinger** 1997, 267)

Contingent Business Interruption Coverage: "*Contingent Business Interruption* coverage protects against economic losses caused by your inability to get a supplier's goods, thereby preventing you from producing and then selling you product to the marketplace." (Insure.com. "Hurricane Gustav Losses at Least $4 Billion." September 2, 2008)

Continuity: "An uninterrupted ability to provide services and support, while maintaining organizational viability, before, during, and after an event." (**DHS**, *FCD 1*, Nov 2007, p. P-2)

Continuity Advisory Group (CAG): "The NCC [National Continuity Coordinator] will establish a Continuity Advisory Group (CAG) as a sub-PCC group focused on interagency implementation of continuity programs. It will be comprised of Continuity Coordinators, or their designees, from Category I, II, III, and IV (identified in NSPD-51/HSPD-20 Annex A and in Appendix B of this *Plan*) executive departments and agencies. Key State and local government representatives from the National Capital Region (NCR), and representatives from the legislative and judicial branches may be invited as appropriate. The CAG shall represent the interests of departments and agencies from Categories I-IV before the CPCC. The CAG will assist its member departments and agencies in implementing directives within its scope by performing the following functions: Providing the forum to address issues ultimately requiring commitment of department and agency resources; Facilitating the exchange of information, including lessons

learned, and a sensing of the member community's views; Facilitating the overall coordination and decision process and the initial coordination among departments and agencies of plans and procedures for shared responsibilities; Identifying, prioritizing, and undertaking initiatives to explore options and make recommendations; and Assisting in resolving conflicts as required." (**HSC,** *NCPIP*, August 2007, p. 22)

Continuity Capability: "The ability of an organization to continue performance of Essential Functions, utilizing Continuity of Operations and Continuity of Government programs and integrated, day-to-day operations with a primary goal of ensuring the preservation of our form of government under the Constitution and the continuing performance of National Essential Functions under all conditions. Built from the foundation of continuity planning and continuity program management, the key pillars of continuity capability are Leadership, Staff, Communications, and Facilities." (**HSC**, *National Continuity Policy Implementation Plan*, August, 2007, p. 60; **DHS**, *FCD 1*, Nov 2007, p. P-2))

Continuity Communications Architecture: "An integrated, comprehensive, interoperable information architecture, developed utilizing the OMB-sanctioned Federal Enterprise Architecture Framework, that describes the data, systems, applications, technical standards, and underlying infrastructure required to ensure that Federal executive branch departments and agencies can execute their Primary Mission Essential Functions and Mission Essential Functions in support of National Essential Functions and continuity requirements under all circumstances." (**HSC**, *National Continuity Policy Implementation Plan*, Aug, 2007, p. 60; **DHS**, *FCD* 1, 2007))

Continuity Coordinators: "Representatives of the executive branch departments and agencies at the Assistant Secretary (or equivalent) level." (**HSC**, *National Continuity Policy Implementation Plan*, August, 2007, p. 60; **DHS**, *FCD 1*, Nov 2007, p. P-2)

Continuity Facilities: "As part of their continuity planning, all agencies must identify alternate facilities; alternate uses for existing facilities; and as appropriate, virtual office options including telework. Risk assessments will be conducted on these facilities to provide reliable and comprehensive data to inform risk mitigation decisions that will allow agencies to protect assets, systems, networks, and functions while determining the likely causes and impacts of any disruption. All agency personnel shall be briefed on agency continuity plans that involve using, or relocating personnel to alternate facilities, existing facilities, or virtual offices. Continuity personnel must be provided supplemental training and guidance on relocation procedures." (**DHS**, *FCD 1*, Nov. 2007, p. 8)

Continuity of Government (COG): All measures that may be taken to ensure the continuity of essential functions of governments in the event of emergency conditions, including line-of-succession for key decision-makers.

Continuity of Government (COG): "Continuity of Government means a *coordinated* effort within each branch of Government (e.g., the Federal Government's executive branch) to ensure that NEFs [National Essential Functions] continue to be performed during a catastrophic emergency." (**DHS/FEMA**, *FCD 1*, November 2007, p. 2)

Continuity of Government (COG): "The principle of establishing defined procedures that allow a government to continue its essential operations in case of a nuclear war or other catastrophic event." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Continuity of Government (COG): "Activities that address the continuance of constitutional governance. COG planning aims to preserve and/or reconstitute the institution of government and ensure that a department or agency's constitutional, legislative, and/or administrative responsibilities are maintained. This is accomplished through succession of leadership, the predelegation of emergency authority, and active command and control during response and recovery operations." (**FEMA,** *NIMS* (FEMA 501/Draft), August 2007, p. 149; see as well, *National Response Framework* Resource Center Glossary/Acronyms, September 2007 draft)

Continuity of Government (COG): "The preservation, maintenance, or reconstitution of civil government's ability to carryout the executive, legislative and judicial processes under the threat or occurrence of any emergency condition that could disrupt such process and services." (**Homeland Defense Journal** 2004, 26)

Continuity of Government: The Continuity of Government Program is based upon the principle that the Naation's nomilitary defenses must be developed within the framework of Federal, State, and local governments. It is designed to insure the survival ande effective operation of civil government in case of attack and thereby improve emergency operational capability, prevent unlawful assumption of authority, and reduce the necessity for martial rule…." (**OCDM**, *Annual Report 1960*, p. 7)

Continuity of Government (COG) (Support to the Nation): "Actions taken to assure that essential functions of the government are continued during an enemy attack upon CONUS." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-1)

Continuity of Government (COG): "'Continuity of Government,' or 'COG', means a coordinated effort within the Federal Government's executive branch to ensure that National Essential Functions continue to be performed during a Catastrophic Emergency." (**White House**, *HSPD-20*, 9 May 2007)

Continuity of Government, State and Local (1957): "During the latter part of fiscal year 1957, a program for the continuity of State and local government was developed with the advice and assistance of State and local officials and such organizations as the United States Civil Defense Council, National Association of State and Territorial Civil Defense Directors…

The purpose of the program is: (a) to preserve leadership and authority, (b) to preserve State and local government, and (c) to strengthen State and local government for emergency action." (**FCDA**, *1957 Annual Report*, 30)

Continuity of Government Condition (COGCON): There are four levels with level 4 as the lowest threat level and level 1 as the highest. (**DOE**, *DOE Order 100.1D, Subject: Secretarial Succession, Threat Level Notification, and Successor Tracking*, April 20, 2007.

Continuity of Government Readiness Conditions (COGCON): "In order to provide a coordinated response to escalating threat levels or actual emergencies, the Continuity of Government Readiness Conditions (COGCON) system establishes executive branch continuity program readiness levels, focusing on possible threats to the National Capital Region. The President will determine and issue the COGCON Level. Executive departments and agencies shall comply with the requirements and assigned responsibilities under the COGCON program. During COOP activation, executive departments and agencies shall report their readiness status to the Secretary of Homeland Security or the Secretary's designee." (**White House,** *HSPD-20*)

Continuity of Government Readiness Conditions (COGCON) Matrix:

- **COGCON 4:** Continuity Plan fully operational within 12 hours.
- **COGCON 3:** Continuity Plan fully operational within 8 hours.
- **COGCON 2:** Continuity Plan fully operational within 4 hours.
- **COGCON 1:** Continuity Plan fully operational immediately. (**DHS**, *FCD 1*, 2007, N-2)

Continuity of Government Spectrum Strategy. (**DHS**, *Budget-in-Brief FY 2008*, 2007, p. 80)

Continuity of Operations (COOP): "Efforts to ensure a viable capability exists to continue essential functions across a wide range of potential emergencies through plans and procedures that delineate essential functions; specify succession to office and the emergency delegation of authority; provide for the safekeeping of vital records and databases; identify alternate operating facilities; provide for interoperable communications; and validate the capability through tests, training, and exercises." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Continuity of Operations (COOP): "The ability to recover and provide services sufficient to meet the minimal needs of users of the system/agency. This ability to continue essential agency functions across a wide spectrum of emergencies will not necessarily limit COG functions." (**Homeland Defense Journal** 2004, 26)

Continuity of Operations (COOP) (Support to DA, DOD and other Federal agencies): "Actions taken to assure that essential military missions are continued during an enemy attack upon CONUS or the national defense strategy." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-1)

Continuity of Operations (COOP): "`Continuity of Operations,' or 'COOP,' means an effort within individual executive departments and agencies to ensure that Primary Mission-Essential Functions continue to be performed during a wide range of emergencies, including localized acts of nature, accidents, and technological or attack-related emergencies." (**White House,** *HSPD-20*, May 9, 2007)

Continuity of Operations (COOP) and Continuity of Government (COG) (Public Sector): "An ongoing process supported by senior management and funded to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies, recovery plans, and continuity of services." (**NFPA 1600**, 2007, p.7 and 11)

Continuity of Operations Implementation Plan Phases:

- Readiness and Preparedness
- Activation and Relocation (0-12 Hours)
- Continuity Operations
- Reconstitution (**DHS**, *FCD* 1, Nov. 2007, p. N-1)

Continuity of Operations Minimum Issues to Address in COOP Plan:

- Identifying and prioritizing mission-essential functions
- Establishing how, when, and which authorities will be delegated
- Creating orders of succession
- Identifying and training appropriate staff to support essential functions
- Acquiring and equipping an alternate facility for relocation
- Defining availability and redundancy of interoperable communications and IT systems
- Identifying, protecting, and sustaining availability of vital records and databases
- Determining methods to transfer control to/from primary site during/after an emergency
- Creating a viable schedule to update training, exercises, and plans. (**ICF Int**., *Continuity Planning Emphasizes Comprehensive, All-Hazards Approach*, Winter 2005, p. 1)

Continuity of Operations Phases:

a. *Pre-attack*: That phase that includes all planning and testing of existing facilities, plans and Emergency Action Procedures.

b. *Trans-attack period.* From initial attack until civil defense personnel determine that radiation levels permit leaving shelters. Essential functions during this period would include at a minimum all FOA generated Essential War Functions…

c. *Post-attack period*.

(1) Immediate phase. Emphasis on recovery, would include:
(a) Continuing survival activities and military operations.
(b) Mobilizing military and civilian resources.
(c) Restoring essential communications and transportation.
(d) Increasing procurement and production of essential items.

Long-term phase. Activities related to rehabilitation, rejuvenation and restructuring from remaining resources." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-1)

Continuity of Operations Plan (COOP): "A COOP provides guidance on the system restoration for emergencies, disasters, mobilization, and for maintaining a state of readiness to provide the necessary level of information processing support commensurate with the mission requirements/priorities identified by the respective functional proponent. The Federal

Government and its supporting agencies traditionally use this term to describe activities otherwise known as Disaster Recovery, Business Continuity, Business Resumption, or Contingency Planning." (**DigitalCare**, *State of OR BC Workshop*, 2006, pp. 50-51)

Continuity of Operations Plan (COOP): "A plan that provides for the continuity of essential functions of an organization in the event an emergency prevents occupancy of its primary facility. The plan provides the organization with an operational framework for continuing its essential functions when normal operations are disrupted or otherwise cannot be conducted from the primary facility." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Continuity of Operations Plan-Essential (COP-E): "COP-E planning assumes a major disaster of national significance like a pandemic cascades into a national and international catastrophe. It assumes planning for degrees of "essential" operational requirements based upon a dramatically worsening situation and the need to sustain not only the business, but also the community and the nation. Thus, the scale and scope of the impacts and possible outcomes demands a dedicated level of effort, investment, and planning beyond typical business continuity planning. COP-E expands initial business continuity plans to create an agile, actionable plan for responding and recovering from a potential catastrophic failure on a national or international scale." (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p. 29)

Continuity of Operations Plan-Essential (COP-E), Pandemic: "Pandemic preparedness must involve all types and sizes of businesses. Moreover, it demands a shift in business continuity planning from one that anticipates a short-term, near-normal condition, to one that prepares for extreme long-term, catastrophic contingencies. In the event of a pandemic, the private sector must cope to sustain the nation's essential security, as well as its economic and social stability. To do this, the private sector must maintain production of essential goods and services while mitigating the pandemic impact on operations. COP-E planning assumes pandemic-specific impacts and encourages business contingency planners to identify truly essential functions, people, and materials within and across critical sectors. COP-E also proposes alternative methods tailored to each pandemic phase from preparation to recovery…. *Essential functions:* Functions that are absolutely necessary to keep a business operating during an influenza pandemic, and critical to survival and recovery." (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p. 20; see also pp. 29-)

Continuity of Operations Plans (COOP): "Planning should be instituted (including all levels of government) across the private sector and nongovernmental organizations (NGOs), as appropriate, to ensure the continued performance of core capabilities and/or critical government operations during any potential incident." (**FEMA**, *NIMS Draft*, August 2007, p. 149)

Continuity of Operations (COOP) Plans: "Procedures to ensure the continued performance of core capabilities and/or critical government operations during any potential incident. (**FEMA**, Strategic Plan, 2007, Appendix D: Glossary, p. 51, citing **National Response Framework** (NRF) Resource Center Glossary/Acronyms Draft September 10, 2007)

Continuity Planning: "Continuity planning is simply the good business practice of ensuring the execution of essential functions through all circumstances, and it is a fundamental responsibility of public and private entities responsible to their stakeholders." (**DHS**, *FCD* 1, Nov. 2007, p. 2)

Continuity Planning: "Continuity planning addresses any situation that might disrupt normal operations and possibly prevent access to the organization's primary place of business, ranging from a short-term inconvenience (e.g., a water main break or other maintenance issue) to a long-term interruption (e.g., a major terrorist incident or natural disaster). Disruptions in communications and/or information technology systems also can trigger activation of a continuity plan—physical damage to the primary facility is not required." (**ICF**, *CP Emphasizes Comprehensive, All-Hazards Approach*, Winter 2005)

Continuity Planning: "Specific areas to consider in continuity plans include the following:
(1) Succession: To ensure that the leadership will continue to function effectively under emergency conditions. When practical, there is a designation of at least three successors for each position. Provisions have been made to deal with vacancies and other contingencies such as absence or inability to act.
(2) Pre-delegation of emergency authorities: To ensure that sufficient enabling measures are in effect to continue operations under emergency conditions. Emergency authorities have been enacted that specify the essential duties to be performed by the leadership during the emergency period and that enable the leadership to act if other associated entities are disrupted, and to re-delegate with appropriate limitations.
(3) Emergency action steps: Actions that facilitate the ability of personnel to respond quickly and efficiently to disasters/emergencies. Checklists, action lists, and/or standard operating procedures (SOPs) have been written that identify emergency assignments, responsibilities, and emergency duty locations. Procedures should also exist for alerting, notifying, locating, and recalling key members of the entity. The SOPs and notification procedures should be integrated.
(4) Primary and alternate emergency operations centers: A facility or capability from which direction and control is exercised in an emergency. This type of center or capability is designated to ensure that the capacity exists for the leadership to direct and control operations from a centralized facility or capability in the event of an emergency.
(5) Alternate operating or backup facilities: Provisions also exist for alternate site(s) for departments or agencies having emergency functions or continuing operations.
(6) Vital records: The measures that are taken by the entity to protect the entity's vital records—for example, financial, data, personnel records, and engineering drawings — that the entity should have to continue functioning during emergency conditions and to protect the rights and interests of the entity. Procedures have been put in place to ensure the selection, preservation, and availability of records essential to the effective functioning of the entity under emergency conditions and to maintain the continuity of operations. Protection of records should comply with applicable laws [Health Insurance Portability and Accountability Act (HIPAA) or other privacy laws].
(7) Protection of resources, facilities, and personnel: The measures that are taken to deploy resources and personnel in a manner that will provide redundancy to ensure the entity can continue to function during emergency conditions. Plans and procedures are in place to ensure the protection of personnel, facilities, and resources so the entity can operate effectively. The entity should have the ability to allocate needed resources and restore functions during and after

disasters/emergencies. Plans should address deployment procedures to relocate/replicate resources or facilities, increase protection of facilities, and inform and train personnel in protective measures. Preparedness should be increased based on the threat level." (**NFPA 1600**, 2007, p. 17)

Continuity Policy Coordination Committee (CPCC): "A committee led by HSC established to comprehensively address national level continuity program coordination, integration, oversight, and management. This forum institutionalizes national security policy development, implementation, and oversight for continuity programs. The Committee serves in a continuity oversight and management role with membership at the Assistant Secretary level from the following organizations: the Office of the Vice President; the Homeland and National Security Councils; the White House Military Office; the Office of Management and Budget; the Office of Science and Technology Policy; the Departments of State, Treasury, Defense, Justice, and Homeland Security; the Director of National Intelligence; the Central Intelligence Agency; the Federal Bureau of Investigation; the United States Secret Service; the Federal Emergency Management Agency; and the Joint Chiefs of Staff. Other observers may be invited to attend." (**HSC**, *National Continuity Policy Implementation Plan*, August, 2007, p. 61)

Continuity Program Management Cycle: "An ongoing, cyclical model of planning, training, evaluating, and implementing corrective actions for continuity capabilities." (**HSC**, *NCPIP*, August 2007, p. 61)

Continuity Readiness Posture: A system which establishes readiness levels, such as the executive branch's Continuity of Government Readiness Conditions (COGCON) for the National Capital Region or the DHS Homeland Security Advisory System (HSAS). (**DHS**, *FCD 1*, Nov 2007, pp. 4-5)

Continuous Improvement and Accountability Strategy (Recommendation for CA);

- *The governor and Legislature should fortify internal efforts to improve progress and accountability. The governor and Legislature should:*
    - *Require the department to develop performance measures and benchmarks for preparedness.* Modeled after standards and benchmarks used by the federal Office of Management and Budget, measures should reflect all aspects of preparedness, be understandable to the public and present reliable and valid information on effectiveness. Performance measures and benchmarks should be subject to review and approval by the Emergency Council.
    - *Require the department to prepare & submit an annual emergency preparedness assessment***.** As part of the budget process, the Senate and Assembly budget committees should require the Governor's [OES] and [OHS] to submit annually an assessment of state and local progress toward preparedness goals. Assessments should be based on the benchmarks and standards developed by the department. The report should include strategies to be undertaken in the following budget year to achieve improvement. Annual reports should be reviewed by the Emergency Council.

  - *Require local report cards on preparedness.* Based on the State's performance measures and benchmarks, each local agency should develop and publicly release a report card on preparedness. For those measures requiring confidentially, the State should develop strategies to assess and monitor performance without releasing sensitive information.
- *The Legislature should direct the California Emergency Council to promote improvement and accountability. The council should be charged with the following responsibilities:*
  - *Advise policy-makers and administrators on preparedness goals and progress in meeting them.* The council should advise the department on the formulation of preparedness goals and benchmarks and a strategic plan… The council also should provide ongoing advice to the Legislature on legislative proposals, the governor's budget and other proposals to bolster preparedness. The council should be authorized to issue reports on preparedness as needed.
  - *Evaluate after action reports.* The council should assess after action reports issued by state and local agencies, report its findings to policy-makers and the public and recommend changes in policies and practice s based on lessons learned following emergency events. The council also should recommend strategies to improve the value of after action reports.
- *Authorize the Joint Legislative Budget Committee to review and approve contingent emergency rules…* the [OES] should promulgate contingent emergency management rules and regulations to support catastrophic response, emergency response and recovery. To provide a reasonable check of the governor's unilateral authority, any order established in advance of an emergency that would suspend existing rules or regulations or represent new rules or regulations, as authorized by Government Code Section 8567, should be submitted to the Joint Committee, rather than the Emergency Council, for review and approval." (**Little Hoover Com.**, *Safeguarding…State…,* 2007, 61-62)

Continuous Improvement Plan/Program/Process (CIP). A Continuous Improvement Plan is a set of activities designed to bring gradual, but continual improvement to a process through constant review.

Contributions in Kind: **"**Non-cash assistance in materials or services offered or provided in case of disaster." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 22)

Control and Authority: "Coordination is not possible without some system of overall control and distribution of authority. There must be people who have responsibilities, who are in charge, and whose authority is legitimated… spheres of organized activity are relatively independent during normal periods. This lack of overall control will simply not suffice in disasters. A general tendency in disaster situations is for new authority patterns, to emerge. An individual's authority may be legitimated by his technical competence, his preparation, or his degree of information about the on-going situation. Likewise, organizations which are loci of communication, have a disaster technology, or are especially prepared in some way often exert considerable control and coordination. The authority of these individuals and organizations is accepted for these same reasons…. the traditional or pre-disaster community contains coordination gaps which must be filled in disaster situations. In order to fill these coordination gaps, there must be an associated system of authority and control." (**Dynes**, et al, *A Perspective on Disaster Planning*, 1981, p. 12)

Control Center: "The control center would be the place from which operations are directed, and would be the source of information and of instructions to the operating personnel." (**OCDP**, *Hopley Report*, 1948, p. 224)

Control Staff Instructions (COSIN): "The COSIN, typically only used in larger, more complex exercises (e.g., *TOPOFF*) contains guidance that *controllers* may need concerning procedures and responsibilities for exercise control, simulation, and support. The COSIN is designed to help exercise controllers understand their roles and responsibilities in exercise execution in order to conduct an effective exercise. For most exercises, however, the COSIN can be combined with an *EvalPlan* to produce a *Controller and Evaluator Handbook*." (**FEMA**, *HSEEP Glossary*, 2008)

Control Zones: "Designated areas at dangerous goods incidents, based on safety and the degree of hazard. Many terms are used to describe control zones; however, in this guidebook, these zones are defined as the hot/exclusion/restricted zone, warm/contamination reduction/limited access zone, and cold/support/clean zone. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472)." (**DOT**, *Emergency Response Guidebook*, 2004, p. 360)

Controller: "Individuals who manage an exercise and influence player actions by injecting preplanned events to stimulate play and to keep the exercise from going off track." (**DHS**, *Cyber Storm Exercise Report*, 2006, p. 3, footnote 3)

Controller and Evaluator (C/E) Debrief: "The C/E debriefing provides each *controller* and *evaluator* with an opportunity to provide an overview of the functional area they observed, and to discuss both strengths and areas for improvement. The *lead evaluator* should assign one or more members of the *evaluation team* to take detailed notes of the C/E debriefing discussion." (**FEMA**, *HSEEP Glossary*, 2008)

Controller and Evaluator (C/E) Handbook: "The Controller and Evaluator (C/E) Handbook supplements the ExPlan for operations-based exercises, containing more detailed information about the exercise scenario and describing exercise controllers' and evaluators' roles and responsibilities. Because the C/E Handbook contains information on the scenario and exercise administration, it is distributed only to those individuals specifically designated as controllers or evaluators." (**FEMA**, *About HSEEP*, 2008)

Controllers: "In an *operations-based exercise*, *controllers* plan and manage exercise play, set up and operate the exercise incident site, and possibly take the roles of individuals and agencies not actually participating in the exercise (i.e., in the *Simulation Cell* [*SimCell*]). Controllers direct the pace of exercise play and routinely include members from the *exercise planning team*, provide key data to players, and may prompt or initiate certain player actions and injects to the players as described in the *Master Scenario Event List (MSEL)* to ensure exercise continuity. The individual *controllers* issue exercise materials to *players* as required, monitor the exercise timeline, and monitor the safety of all exercise *participants*. Controllers are the only participants who should provide information or direction to players. All controllers should be accountable to one senior controller. (Note: If conducting an exercise requires more controllers or evaluators

than are available, a controller may serve as an *evaluator*; however, this typically is discouraged.)" (**FEMA,** *HSEEP Glossary*, 2008)

CONUS: Continental United States. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-2)

CO-OP: Cooperative Training Outreach Program. (DHS, *U.S. Department of Homeland Security Launches Program to Decentralize First Responder Training*, October 19, 2005)

COOP: Continuity of Operations. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-2)

COOP Event: "Any event that causes an Agency or Department to relocate operations to an alternate site to assure continuance of its essential functions." (**FEMA**, *Federal Preparedness Circular (FPC 65) – Subject: Federal Executive Branch Continuity of Operations (COOP)*, June 15, 2004)

Cooperating Agency (ICS/NIMS): "An agency supplying assistance other than direct operational or support functions or resources to the incident management effort." (**DHS**, NIMS, 2004, p. 128)

Cooperating Federal Agency: "Each Support Annex of the NRP identifies a coordinating Federal agency and cooperating agencies. When the procedures within a Support Annex are needed to support elements of an incident, the coordinating Federal agency will notify cooperating agencies of the circumstances. Cooperating agencies are responsible for conducting using their own authorities, subject-matter experts, capabilities, or resources and participating in planning for short-term and long-term incident management and recovery operations and the development of supporting operational plans, standard operating procedures, checklists, or other job aids, in concert with existing first-responder standards." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 55)

Cooperating Technical Partners (CTP) Program, FEMA NFIP: "With over 20,000 communities in the National Flood Insurance Program (NFIP), there is a significant challenge keeping flood hazard maps current. The Cooperating Technical Partners (CTP) Program is an innovative approach to creating partnerships between FEMA and participating NFIP communities, regional agencies, and State agencies that have the interest and capability to become more active participants in the FEMA flood hazard mapping program." (**FEMA**, *CTP Program*, November 29, 2007)

Cooperative Training Outreach Program (CO-OP): "CO-OP is a program designed to decentralize the delivery of identified ODP courses and facilitate access to them in a cost effective manner, augmenting the capacity of States, territories, and tribal entities (participating entity/entities) to deliver SLGCP/ODP (SLGCP) courses. The program provides ready access to all the tools, including course curricula and supporting materials, that participating entities need to offer courses to their response communities without the attendant costs of course development and approval processes. (**DHS**, *Cooperative Training Outreach Program (CO-OP) Responses to Frequently Asked Questions*, October 24, 2005)

Cooperative Training Outreach Program (CO-OP): "The Cooperative Training Outreach Program (CO-OP) was launched in October 2005 to expand first responder preparedness training across the country by permitting the states to identify and approve institutions within their states, territories, or tribal entities that can adopt and deliver DHS standardized training courses." (**DHS**, *Cooperative Training Outreach Program*, April 3, 2007)

Coordinate: "To advance systematically an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident management responsibilities." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B. Definitions, p. 1; see also, **DHS**, *NIMS*, 2004, p. 128)

Coordinate (Incidence Management): "To advance systematically an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident management responsibilities." (**FEMA**, *NIMS Draft*, 2007, p. 149)

Coordinated (**Core Principle of Emergency Management): "**Coordinated: emergency managers synchronize the activities of all relevant stakeholders to achieve a common purpose." (**EM Roundtable**, 2007, p. 4)

Coordinating Agencies: "Coordinating agencies described in the NRP annexes support the DHS incident management mission by providing the leadership, expertise and authorities to implement critical and specific aspects of the response." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 48)

Coordinating Agency: "An agency that supports the incident management mission by providing the leadership, expertise, and authorities to implement critical and specific aspects of the response. Responsible for orchestrating a coordinated response, provides staff for operations functions, notifies and tasks cooperating agencies, manages tasks with cooperating agencies, works with private-sector organizations, communicates ongoing activities to organizational elements, plans for short- and long-term incident management and maintains trained personnel to execute their appropriate support responsibilities." (**JCS/DoD**, *Civil Support*, 2007, p. Gl-7)

Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER): "The mission of the Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) is to protect health and enhance the potential for full, satisfying and productive living across the lifespan of all people in all communities related to community preparedness and response. To carry out its mission, COTPER (1) fosters collaborations, partnerships, integration, and resource leveraging to increase the Centers for Disease Control and Prevention's (CDC) health impact and achieve population health goals; (2) provides strategic direction to support CDC's terrorism preparedness and emergency response efforts; (3) manages CDC-wide preparedness and emergency response programs; (4) maintains concerted emergency response operations—including the Strategic National Stockpile and the Director's Emergency Operations Center; (5) communicates terrorism preparedness and emergency response activities to internal and external stakeholders." (**CDC**, *COTPER*, 2005)

Coordination: "The process of systematically analyzing a situation, developing relevant information, and informing appropriate command authority of viable alternatives for selection of

the most effective combination of available resources to meet specific objectives. The coordination process (which can be either intra-or inter-agency) does not involve dispatch actions. However, personnel responsible for coordination may perform command or dispatch functions within the limits established by specific agency delegations, procedures, legal authority, etc." (**CA OES**, *SEMS Guidelines*, 2006, Glossary, p. 5)

Coordination: "The federal government, through FEMA, requires all states to have a comprehensive emergency operations plan to serve as a guide for all types of hazards that may occur in their area, including emergency evacuation events. This comprehensive plan would be built upon the emergency plans developed by the counties and cities within that state. Thus, the information should be fully coordinated among all agencies.

Typically, this has involved a hierarchical structure to the development of emergency management plans at all levels. The local level, usually individual cities or counties, will lead the development of plans for emergency planning, response, and recovery operations within their immediate jurisdictions. Emergency management agencies at the next higher level, county and/or state, typically serve to coordinate all local-level emergency management activities, as well as assist with additional law enforcement and transportation system management." (**FHWA/DOT**, *Evacuation Transportation Management Task Five: Operational Concept*, 2006, 18)

Coordination: "Coordination and networking, not command and control are the essence of emergency management." (**Harrald**, *Statement Before the Senate Homeland Security and Government Affairs Committee, Hearing on 'National Emergency Management: Where Does FEMA Belong?'* June 8, 2005, p. 2)

Coordinator of Civil Defense Planning: Position created in the National Security Resources Board by President Truman on March 3, 1949, thereby transferring civil defense responsibility for the Office of Civil Defense Planning in the National Military Establishment. William A. Gill named Coordinator. (**Gessert**, *Federal Civil Defense Organization*, 1965, p. 63)

COP: Common Operating Picture. (**DHS**, *Target Capabilities List*, 2007, p. 34)

COP: Common Operational Picture. (**DHS/IGO,** *Progress in Developing the National Asset Database*, June 2006, Abbreviations)

COP-E: Continuity of Operations Plan-Essential. (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p, 19)

Coping Capacity: "The means by which people or organizations use available resources and abilities to face adverse consequences that could lead to a disaster. In general, this involves managing resources, both in normal times as well as during crises or adverse conditions. The strengthening of coping capacities *usually builds resilience to withstand the effects of natural and human-induced hazards*. (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

CORE: Cadre of on-Call Response Employee (FEMA).

Corporate Crisis Response Officers Association (CCROA). "Every local business should appoint an employee to a new position in every facility called the **Crisis Response Officer** (CRO), to act as liaison from the facility to the local public responder/law/medical sectors – and function as a partner to help plan and train their employees for community crisis. The CRO will also identify corporate resources and employees that can be assets to the community during threat or crisis. Because there is a shared interest in community recovery, this can result not only in a more robust response, but a quicker recovery, with businesses and community organizations working together to prepare, respond and recover.

"The CRO serves three primary functions: 1) act as the key liaison between the corporation and the surrounding jurisdiction leadership for planning, response and continuity; 2) establish a direct link to responder sector leaders to facilitate training, preparedness and response planning; and 3) serve as the task officer to help employees and their families prepare, respond and recover from crisis. In addition to the individual role, an organization of CROs should be created to develop practical public policy initiatives that overcome barriers to participation with respect to liability and cost. The core of this policy effort would be model state and federal legislation to provide an affirmative defense to tort liability for conforming corporations which have incidents occur generally in or around their facilities. As long as corporations exercise enumerated care in following practical standards (employee education, training, communication, dispensaries, commissaries, etc.), commercial planning and continuity is reinforced by the protection through this affirmative defense. The rationale is two-fold: 1) encouraging collaboration between municipalities and their local employers and businesses to establish a new standard of participation protected in part by new laws at the local and state level; and 2) by removing barriers to private sector involvement in preparedness and crisis that could augment and magnify the local community capability (and make it more adaptive and responsive) by magnitudes far greater than possible through a public-sector tax-funded system." (CCROA, *About CCROA: A New Corporate Position in Local Preparedness and Response*, 2007)

Corporate Security Review (CSR) Program: "The CSR program has gathered excellent pipeline system data since its conception in 2003. The CSR program is an on-site security review process with pipeline companies that is used to help establish working relationships with key security representatives. CSRs give TSA an understanding of the pipeline operator's security plan and its implementation. The CSR process uses a standard protocol to capture data on pipeline systems, which can be evaluated both quantitatively and qualitatively to further prioritize critical pipeline systems. During the CSR process, potentially critical assets are examined and catalogued based on their importance to the pipeline systems. Assets are identified and a link between the asset and the critical pipeline system will be documented." (**DHS**, *Transportation Sector-Specific Plan, Pipeline Modal Annex, Section 4, Risk-Based Approach to Pipeline Security*, May 21 2007, p. 16)

Corporation for National and Community Service: "The mission of the Corporation for National and Community Service is to improve lives, strengthen communities, and foster civic engagement through service and volunteering. As we pursue our goals, we are guided by the following principles:

- Put the needs of local communities first.

- Strengthen the public-private partnerships that underpin all of our programs.
- Use our programs to build stronger, more efficient, and more sustainable community networks capable of mobilizing volunteers to address local needs, including disaster preparedness and response.
- Measure and continually improve our programs' benefits to service beneficiaries, participants, community organizations, and our national culture of service.
- Build collaborations wherever possible across our programs and with other Federal programs.
- Help rural and economically distressed communities obtain access to public and private resources.
- Support diverse organizations, including faith-based and other community organizations, minority colleges, and disability organizations.
- Use service-learning principles to put volunteer and service activities into an appropriate context that stimulates life-long civic engagement.
- Support continued civic engagement, leadership, and public service careers for our programs' participants and community volunteers.
- Exhibit excellence in management and customer service."

(**Corporation for National and Community Service**. *Our Mission and Guiding Principles*, 2007)

Corporation for National and Community Service: "Provides teams of trained National Service Participants (including AmeriCorps members, Learn and Serve America volunteers, and Retired and Senior Volunteer Program volunteers) to carry out a wide range of response and recovery support activities emphasizing disadvantaged communities and special needs residents, including:

- Canvassing, needs assessment, and information distribution.
- Shelter and feeding support; and distribution of water, food, ice, and other emergency goods.
- Debris clearance, temporary roof repair, and elimination of identified health/safety hazards.
- Unaffiliated volunteer support and warehousing assistance.
- Registration and call center support.
- Case management assistance." (**DHS**, *National Response Framework Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex* (Comment Draft), September 10, 2007, p. 15)

Corrective Action: "Corrective actions are the concrete, actionable steps outlined in Improvement Plan (IPs) that are intended to resolve preparedness gaps and shortcomings experienced in exercises or real-world events." (**FEMA,** *HSEEP Glossary*, 2008)

Corrective Action Program (CAP): "The CAP system is a web-based application that allows Federal, State, territorial, tribal and local emergency response and homeland security officials to track and analyze improvements in their COOP plans." (**DHS**, *Fed. Cont. Direct. 1*, 2007, P-3)

Corrective Action Program (CAP): "All local, tribal, State, and Federal entities should institute a corrective action program to evaluate exercise participation and response, capture lessons learned, and make improvements in their response capabilities. An active corrective action program will provide a method and define roles and responsibilities for identification,

prioritization, assignment, monitoring, and reporting of corrective actions arising from exercises and real-world events. The Homeland Security Exercise and Evaluation Program (HSEEP) Toolkit is a Web-based system that enables implementation of the corrective action program process. In this way, the continuous cycle of preparedness yields enhancements to national preparedness." (**DHS**, *National Response Framework*, Jan 2008, 32)

Corrective Action Program (CAP): "Corrective Action Program (CAP) System - a web-based application that enables users to prioritize, track, and analyze improvement plans developed from exercises and real-world events. Features of the CAP System include Improvement Plan creation and maintenance, corrective action assignment and tracking, and reporting and analysis. The CAP System functionality is based on the process described in HSEEP Volume III: Exercise Evaluation and Improvement Planning. The CAP System supports the process by which exercise and real-world events can inform and improve exercise programs and other preparedness components." (**FEMA**, *HSEEP Toolkit: Overview*, 2008)

Corrective Action Program (CAP): "There are eight components in the Corrective Action Program…
(1) Develop a problem statement that states the problem and identifies its impact
(2) Review the past history of corrective action issues from previous evaluations and identify possible solutions to the problem
(3) Select a corrective action strategy and prioritize the actions to be taken, as well as an associated schedule for completion
(4) Provide authority and resources to the individual assigned to implementation so that the designated change can be accomplished
(5) Identify the resources required to implement the strategy
(6) Check on the progress of completing the corrective action
(7) Forward problems that need to be resolved by higher authorities to the level of authority that can resolve the problem
(8) Test the solution through exercising once the problem is solved." (**NFPA 1600**, 2007, 18-19)

Corrective Action Program (CAP) System: "The Corrective Action Program (CAP) System is a web-based application that allows Federal, State, and local emergency response and homeland security officials to track and analyze Improvement Plans. The Department of Homeland Security is developing this system as part of a larger effort to systematically translate Homeland Security Exercise and Evaluation Program (HSEEP) outputs—including findings, areas for improvement, recommendations, lessons learned, and best practices—into meaningful inputs for homeland security plans, programs, and budgets." (**HSC**, *NCPIP*, August 2007, p. 61)

[Note: The CAP System was made available to the DHS stakeholder community in Nov. 2006,]

Corrective Actions: "Implementing procedures that are based on lessons learned from actual incidents or from training and exercises." (**FEMA**, *NIMS Draft*, August 2007, p. 149)

COSIN: Control Staff Instructions. (**FEMA**, *HSEEP Glossary*, 2008)

Cost-Benefit Analysis: "A process used to select countermeasures, by balancing the costs of implementing each option against the benefits derived from it. In general, the cost of managing risks needs to be equal to the benefits gained from putting the countermeasures in place. The benefit of this technique is the attempt to ensure public investment is directed toward those activities producing the greatest benefits for the best value for money. The limitations of the technique include the lack of data collection and methods that are required to capture indirect and intangible costs and benefits, legal and social responsibility requirements may override simple financial cost benefit analysis, and the possibility that its application may disadvantage certain measures or people." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Cost-Efficiency: "FEMA continually strives to improve performance while reducing operating costs. Initiatives include re-engineering our processes, streamlining Agency operations, reducing regulations, leveraging state-of-the-art technology, and enhancing our ability to measure success and redirect efforts to maximize effectiveness." (**FEMA**, *Strategic Plan FY 1998…*, 1997, 33)

Cost-Share Adjustments: "For work performed by State and local jurisdictions under the PA program, an upward adjustment to the 75/25 percent Federal/non-Federal ratio of sharing total eligible costs for repair, restoration, reconstruction, or replacement of facilities. Cost-share adjustments cannot exceed 90/10 percent for the Federal/non-Federal cost-share ratio. The cost-share for the Individual and Family Grant program or the Hazard Mitigation program may not be adjusted." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 48)

Cost Unit: "The unit within the Finance/Administration Section responsible for tracking costs, analyzing cost-related data, making cost estimates and recommending cost-saving measures." (**Capital Health Region**, Canada, *ICS100: Incident Command Sys. Training SM*, Mar 2007, 51)

COTPER: Coordinating Office for Terrorism Preparedness and Emergency Response, CDC.

COTS: Commercial, Off-The Shelf. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-2)

Counter Measures: "All measures taken to counter and reduce disaster risk. They most commonly refer to engineering (structural) measures but can also include non-structural measures and tools designed and employed to avoid or limit the adverse impact of natural hazards and related environmental and technological disasters." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Counterintelligence: "`Counterintelligence' is defined by Executive Order 12333, United States Intelligence Activities, Dec 81, (As Amended), as 'information gathered and activities conducted to protect against espionage, and activities conducted to protect against espionage, other intelligence activities, sabotage or assassinations conducted for or on behalf of foreign powers, organizations, or persons, or international terrorist activities, but not including personnel, physical, document or communications security programs.'." (**Chertoff**, Foreign Intelligence Threat to DHS Memorandum, August 4, 2008)

Counterterrorism (CT): "Counterterrorism - is responsive or reactive to terrorist threats or attacks. It entails using "active measures... which incorporate the direct intervention of terrorists

groups or the targeting… of terrorist personnel."[10] (**DHS**, *The ODP Guidelines*…, 2003, Glossary, p. 1)

Counterterrorism (CT): "Operations that include the offensive measures taken to prevent, deter, preempt, and respond to terrorism." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Counterterrorism (CT): "…usually describes proactive measures, including targeting terrorist personnel and supporters" (as opposed to Antiterrorism). (**Sauter & Carafano** 2005, 261)

Counterterrorism (CT): "The full range of activities directed against terrorism, including preventive, deterrent, response and crisis management efforts." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B: Definitions)

Counterterrorism Security Group (CSG): "The CSG is an interagency body convened on a regular basis to develop terrorism prevention policy and to coordinate threat response and law enforcement investigations associated with terrorism. This staff-level group evaluates various policy issues of interagency import regarding counterterrorism and makes recommendations to Cabinet and agency deputies and principals for decision. As appropriate, the chair of the National Security Council and Cabinet principals will present such policy issues to the President for decision. The CSG has *no role regarding operational management* during an actual incident." (**DHS**, *NRF Comment Draft*, September 2007, pp. 51-52)

Counterterrorism (CT) Support: "Acting through the FBI, the Attorney General, in cooperation with the heads of other Federal departments, agencies, and military criminal investigative organizations, coordinates domestic intelligence collection and the activities of the law enforcement community to detect, prevent, preempt, and disrupt terrorist attacks, and to identify the perpetrators and bring them to justice in the event of a terrorist incident. DOD may be requested to support the FBI or other LEAs during the CrM portion of a response. If there is a credible threat, DOD may also be requested to support LEAs in a pre-positioning of forces. Under this type of support, specific RUF must be established and approved. In the absence of preexisting RUF, such as are contained in DODD 5210.56, *Use of Deadly Force and the Carrying of Firearms by DOD Personnel Engaged in Law Enforcement and Security Duties*, requests for RUF [rules for the use of force] for CS missions will be sent through the supported combatant commander to DOD for development and approval. Supplemental RUF may be required depending on the situation. *For more information on CT see JP 3-07.2,* Joint Tactics, Techniques, and Procedures for Antiterrorism." (**JCS/DoD**, *Homeland Security*, 2005, p. IV-6)

County Civil Defense Directors, Number (1961): "On June 30, 1961, the number of counties having a civil defense director (full- or part-time), a plan published and State approved, an active training program, a staff appointed and on record with the State, and significant civil defense planning and organizational activity totaled 738 or 24 percent. Counties having a full-or part-time civil defense director and a plan published and State approved totaled 950 or 30 percent.

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[10] Citation: For example, see Plaster, Sherry and Stan Carter. (1993). *Planning for Prevention: Sarasota, Florida's Approach to Crime Prevention Through Environmental Design.* Tallahassee: Florida Criminal Justice Executive Institute.

Therefore, 1,688 counties or 54 prcent have a full- or part-time director and a published State plan as a minum. About 1,414 or 46 percent of the counties had little or no civil defense activity." (**OCDM**, *Annual Report 1961*, p. 6)

Course of Action (COA) Analysis (DHS): "COA Analysis, also known as 'WARGAMING,' identifies which COA accomplishes the mission with minimum risk and best positions capabilities/resources to prevent, respond, to, and/or recover from national domestic incidents. The war game is a disciplined process, with rules and steps designed to attempt to visualize the flow of an operation. It relies heavily on doctrinal foundation, judgment, and experience." (**DHS**, 2007)

Course of Action (COA) Comparison (DHS): "COA Comparison displays the information obtained during COA Analysis into a matrix format. Each COA is rated based on weighted criteria in order to present a quantified basis for leadership decision making. This phase ends at the completion of the COA Decision Brief provided to senior leadership." (**DHS**, 2007)

Course of Action (COA) Statement (DHS): "The COA statement clearly articulates how the organization will accomplish the mission and explain the sequence of response to include:

- Mission
- End State
- Who, how, where, and why (purpose)
- Address risk and where it may occur for the organization." (**DHS**, *Interagency Planning Workshop*, November 29, 2007, slide 36)

CP: Command Post. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, p. 5-6)

CPCC: Continuity Policy Coordination Committee. (**HSC**, *NCPIP*, August 2007, p. 22)

CPE: Command Post Exercise. (**DHS**, *US DHS Announces Completion of TOPOFF 4*, 6/22/06)

CPHP: Centers for Public Health Preparedness. (**ASPH**, *CPHP,* 2008)

CPG: Civil Preparedness Guide.

CPG: Comprehensive Preparedness Guide. (DHS, NRF, 2008, 81)

CPTED: Crime Prevention through Environmental Design. (**DHS**, *The ODP Guidelines*…, 2003, p. 15)

CPX: Command Post Exercise. (**DHS**, *HSEEP*, Vol. V, 2005, p. 41; *DOD Dictionary*, 2007)

CRA: Community Risk Assessment. (**ProVention Consortium**, 2006)

Crate & Ship: "A strategy for providing alternate processing capability in a disaster, via contractual arrangements with an equipment supplier, to ship replacement hardware within a

specified time period. SIMILAR TERMS: Guaranteed Replacement, Drop Ship, Quick Ship.**"** (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 51)

CRCL: Office of Civil Rights and Liberties, DHS.

CREATE: Center for Risk and Economic Analysis of Terrorism Events, USC.

CRED: Centre for Research on the Epidemiology of Disasters.

Credentialing: "The credentialing process is an objective evaluation and documentation of a person's current license or degree; training or experience; competence or certification; and the ability to meet nationally accepted minimum standards, to provide particular services and/or functions or perform particular procedures during an incident." **FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 39)

Credentialing: "Providing documentation that can authenticate and verify the certification and identity of designated incident managers and emergency responders. This system helps ensure that personnel representing various jurisdictional levels and functional disciplines possess a minimum common level of training, currency, experience, physical and medical fitness, and capability for the incident management or emergency responder position they are tasked to fill." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p.149)

Credentialing First Responders: "…credentialing first responders is the right of the local community and that FEMA and the Department in no way wishes this effort to encroach upon that right, but instead assist them in their efforts both now and into the future to develop nationwide credentialing standards. FEMA will not be issuing credentials to state and local personnel; that will remain a state and local responsibility as it always has been." (**FEMA**, *Statement of Marko Bourne* Director…, 15Nov07, p, 1)

"Lessons learned from past disasters have indicated that it is often difficult for local officials to know who is qualified to do what, and who may be an immediate asset to the situation among the multitude of volunteers or entities that arrive. Additionally, examples of people posing as firefighters, police officers, doctors or rescue specialists are well documented in every major disaster, and further underscore the need for further measures to provide the Incident Commander with greater assurance that those who respond, whether asked or not, can be verified, validated and utilized." (pp. 1-2)

Credentialing System, National: "A national credentialing system must:
• Function within existing federal, state, tribal and local identification and qualification protocols, where feasible;
• Not place undue burden on federal, state, tribal or local governments;
• Support (primarily) interstate augmentation of state and local resources;
• Conform to ICS protocols; and
• Use current credentialing emergency responder systems, where possible." (**FEMA**, *National Emergency Responder Credentialing System,* October 26, 2005, p. 2)

CREST: Community Response Emergency Simulation Training, DOD.

CREW: Cascadia Region Earthquake Workgroup.

CRI: Cities Readiness Initiative (CDC).

Crime Scene: "An area or areas that contain physical evidence that may have forensic, investigative, demonstrative or other probative value. Crime Scenes include "Remains Collection Areas"/"Body Collection Points" where the decedents are gathered for processing and safeguarding." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 34)

Crisis: "…a decisive or critical moment or turning point when things can take a dramatic turn, normally for the worse…" (**Allinson** 1993, 93; based upon *Webster's New International Dictionary, Unabridged*, 2nd ed.)

Crisis: "…negative incidents that can cause the demise of an organization." (**Chong**, John K. S., "Six Steps to Better Crisis Management," *Journal of Business Strategy* 25, no. 2 (2004): 43; quoted in Light, *Predicting Organizational Crisis Readiness*, 2008, 8)

Crisis: "A critical event, which, if not handled in an appropriate manner, may dramatically impact an organization's profitability, reputation, or ability to operate. Or, an occurrence and/or perception that threatens the operations, staff, shareholder value, stakeholders, brand, reputation, trust and/or strategic/business goals of an organization." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 51)

Crisis: "An incident or situation involving a threat to a nation, its territories, citizens, military forces, possessions, or vital interests that develops rapidly and creates a condition of such diplomatic, economic, political, or military importance that commitment of military forces and resources is contemplated to achieve national objectives." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Crisis: "Definition of a Crisis:

- Normal operational procedures are severely impacted
- Traumatic events or situations occur
- The lives and the well-being of employees are directly impacted." (**DOJ**, *CMP*, 2002, p. 3)

Crisis: Short period of extreme danger, acute emergency. (**D&E** Reference Center 1998)

Crisis: "Crises involve events and processes that carry severe threat, uncertainty, an unknown outcome, and urgency…Most crises have trigger points so critical as to leave historical marks on nations, groups, and individual lives. Crises are historical points of reference, distinguishing between the past and the present….Crises come in a variety of forms, such as terrorism (New York World Trade Center and Oklahoma bombings), natural disasters (Hurricanes Hugo and Andrew in Florida, the Holland and Bangladesh flood disasters), nuclear plant accidents (Three-Mile Island and Chernobyl), riots (Los Angeles riot and the Paris riot of 1968, or periodic prison

riots), business crises, and organizational crises facing life-or-death situations in a time of rapid environmental change….Crises consist of a 'short chain of events that destroy or drastically weaken' a condition of equilibrium and the effectiveness of a system or regime within a period of days, weeks, or hours rather than years….Surprises characterize the dynamics of crisis situations…Some crises are processes of events leading to a level of criticality or degree of intensity generally out of control. Crises often have past origins, and diagnosing their original sources can help to understand and manage a particular crisis or lead it to alternative state of condition" (**Farazmand** 2001, 3-4)

Crisis: "A crisis is an incident or situation involving a threat to the United States, its territories, citizens, military forces, possessions or vital interests. It typically develops rapidly and creates a condition of such diplomatic, economic, political, or military importance that the President or Secretary of Homeland Security considers commitment of Federal resources to achieve national objectives. A crisis may occur with little or no warning or cause additional emergencies or cascading effects that create new problems or amplify the existing disaster(s)." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, p. 2-9)

Crisis: "…a situation that threatens high-priority goals of the decision-making unit, restricts the amount of time available for response before the decision is transformed and surprises the members of the decision-making unit by its occurrence." (**Hermann**, C. F., *International Crises: Insights from Behavioral Research* (New York: Free Press, 1972), as quoted in Uriel Rosenthal and Alexander Kouzmin, "Crises and Crisis Management: Toward Comprehensive Government Decision Marking," Journal of Public Administration Research and Theory 7, no. 2 (1997): 279; cited in Light, *Predicting Organizational Crisis Readiness*, 2008, p. 9)

Crisis: "Any incident(s), human-caused or natural, that require(s) urgent attention and action to protect life, property, or environment." (**ISO 22399**, *Societal Security*…, 2007, p. 2)

Crisis: "Any emotionally charged situation that, once it becomes public, invites negative stakeholder reaction and thereby has the potential to threaten the financial wellbeing, reputation or survival of the firm or some portion thereof." (**James**, Erica Hayes and Lynn Perry Wooten, "Leadership as (Un)usual: How to Display Competence in Times of Crisis," *Organizational Dynamics* 34, no. 2 (2005): 142; quoted in Light, *Predicting Organizational Crisis Readiness*, 2008, p. 9)

Crisis: "An incident or event that cannot be adequately handled within the normal scope of business operations. (**Jones**, *Critical Incident Protocol*, 2000, p. 37)

Crisis: "…an event and/or a situation which endangers the established system, the health, life, and property of its members….the term 'crisis' is treated as being separated from…other concepts based on the intensity and scope of influence. The terms *disaster, hazard, accident*, etc., refer to only one event and/or situation, while *crisis* includes the concepts of natural disasters, man-made/technological disasters, and social disasters." (**Kim and Lee** 2001, 502)

Crisis: "A crisis is an incident, event, circumstance, or series of incidents, events, or circumstances that has, or has the potential to, significantly and negatively impact financial

results, image, reputation, or relationships with customers, investors, regulators, employees, or the general public." (**NFPA**, *Implementing NFPA 1600*, 2007, p. 6)

Crisis: "…events that threaten the survival and goals of an organization." (**Nathan**, Maria L. "How Past Becomes Prologue: A Sensemaking Interpretation of the Hindsight-Foresight Relationship Given the Circumstances of Crisis," *Futures* 36 (2004): 184; quoted in Light, *Predicting Organizational Crisis Readiness*, 2008, pp. 8-9)

Crisis: "Crises act as *focusing events*, demanding public attention to a policy failure or problem…A great war, a major depression, or an epidemic may set into motion a number of important changes in public policies." (**Nice and Grosse** 2001, 55)

Crisis: "A crisis, according to the *Oxford English Dictionary,* is figuratively a "vitally important or decisive stage in the progress of anything; a turning-point." The definition continues by specifying that a crisis is "a state of affairs in which a decisive change for better or worse is imminent; now applied esp. to times of difficulty, insecurity, and suspense in politics or commerce." (***Oxford English Dictionary,*** 2nd ed., s.v. "crisis."; quoted in Light, *Predicting Organizational Crisis Readiness*, 2008, p. 8)

Crisis: "A low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly." (**Pearson**, Christine M. and Judith A. Clair, "Reframing Crisis Management," Academy of Management Review 23 (1998): 60; quoted in Light, *Predicting Organizational Crisis Readiness*, 2008, p. 9)

Crisis: "…a hard and complicated situation…or a turning point—a decisive crucial time/event, or a time of great danger or trouble with the possibilities of both good and bad outcomes" (**Porfiriev** 1995, 291-292).

Crisis: "A collective crisis can be conceptualized as having three interrelated features: (1) a threat of some kind, involving something that the group values; (2) when the occasion occurs it is relatively unexpected, being abrupt, at least in social time; and (3) the need to collectively react for otherwise the effects are seen as likely to be even more negative if nothing is done sooner or later..." (**Quarantelli** 1998, 257).

Crisis: "…a serious threat to the basic structure or the fundamental values and norms of a social system, which—under time pressure and highly uncertain circumstances—necessitates making critical decisions." (**Rosenthal**, Uriel, Paul 't Hart, and Michael T. Charles, "The World of Crises and Crisis Management," in *Coping with Crises: The Management of Disasters, Riots and Terrorism*, ed. Uriel Rosenthal, Michael T. Charles, and Paul 't Hart (Springfield, Ill.: Charles C. Thomas, 1 10; quoted in Light, *Predicting Organizational Crisis Readiness*, 2008, p. 9)

Crisis: "…crises are 'events that threaten [the corporation's] most important goals of survival and profitability'." (**Shrivastava**, Paul and Ian I. Mitroff, "Strategic Management of Corporate Crises," *Columbia World Journal of Business* 22, no. 1 (1987); quoted in Light, *Predicting Organizational Crisis Readiness*, 2008, p. 8)

Crisis: "…a situation that, left unaddressed, will jeopardize the organization's ability to do business." (**Ziaukas** 2001, 246; citing other sources)

Crisis (Smoldering): "A smoldering crisis is a problem that starts out small and someone within the organization should recognize the potential for trouble and fix it before it becomes a public issue." (**Institute for Crisis Management**, *Annual ICM Crisis Report*, March 2008, p. 5)

Crisis Action Planning (CAP): "Crisis Action Planning will create one of two products…OPORD [or] Campaign Plan, and they are really related to one another." (**Army Transportation School**, *Crisis Action Planning* (Strategic Deployment Planning Course). Slide 4) CAP ensures:

- A logical approach to a crisis
- Rapid, effective exchange of information
- Timely preparation of COAs [Courses of Action]
- Timely relay of decisions. (Slide 5)

Crisis Action Planning (CAP): "One of the two types of joint operation planning. The Joint Operation Planning and Execution System process involving the time-sensitive development of joint operation plans and operation orders for the deployment, employment, and sustainment of assigned and allocated forces and resources in response to an imminent crisis. Crisis action planning is based on the actual circumstances that exist at the time planning occurs. Also called CAP." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Crisis Action Planning: "Deliberative planning during nonincident periods should quickly transition to crisis action planning when an incident occurs. Crisis action planning is the process for rapidly adapting existing deliberative plans and procedures during an incident based on the actual circumstances of an event. Crisis action planning should also include the provision of decision tools for senior leaders to guide their decisionmaking." (**DHS**, *NRF*, 2008, 49)

Crisis Action Planning (CAP): "CAP occurs in response to a credible threat or in response to an incident. CAP occurs in a time-compressed environment with the objective of developing an imminently executable plan. Planners operating in a CAP environment normally attempt to modify an existing contingency plan related to the incident threat or scenario. If a plan is unavailable, planners will develop a plan using CAP. Because crisis planning is a continuation and derivative of deliberate planning, the processes used for both should be as similar as possible. Emergency situations—where human tragedy, disrupted communications, contradictory information, demands for immediate action, and other factors place tremendous strain on staffs and leaders—is not the time to be shaking out and learning new methods and systems. To the maximum extent possible, deliberate planning should be the template for crisis action planning." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, p. 2-9)

Crisis Action Planning (CAP): "When time is not a critical factor planners use a process called peacetime or deliberate planning. When the time available for planning is short and the near-term result is expected to be an actual deployment and/or employment of military forces, the planner uses crisis action planning (CAP) procedures…. Regardless of which process is used, the basic procedures are the same for both adaptive, deliberate and crisis action planning:

- receive and analyze the task to be accomplished
- review the enemy situation and begin to collect necessary intelligence
- develop and compare courses of action
- select a course of action (COA)
- develop and get approval for the selected COA
- prepare a plan
- then document the plan." (**JFSC**, *Joint Transition Course: Planning Primer*, 2005, 1-7)

Crisis Action Planning: "Crisis action planning is a third key principle in our approach to incident management. This planning process takes existing contingency plans and procedures and rapidly adapts them to address the requirements of the current crisis or event of concern in a compressed timeframe." (**White House**, *National Strategy for Homeland Security*, Oct 2007, 47)

Crisis Action Process (CAP): "Purpose: The Crisis Action Process (CAP) was developed to facilitate SECDHS' ability to execute his responsibilities as the principal federal official for domestic incident management." (**DHS**, *DHS Ops Coordination: IM&P: CAP*, Jan 2008, 21)

Crisis Action Process (CAP): "The Crisis Action Process (CAP) is a standard process by which DHS leadership manages a domestic incident response by following a general sequence of events while simultaneously engaging in a continuous cycle of actions. Over the past 6 months, in an effort to bolster preparations for real-world events, a number of refinements have been made to our processes. Two refinements of note are the formalization of the Senior Leadership Group (SLG), which the Director of OPS chairs, and the establishment of the Crisis Action Team (CAT) to manage incidents.

"The SLG is comprised of the various DHS Assistant Secretaries that report to the Secretary and other select leaders within DHS. The SLG can be convened by the Secretary at any time and its primary purpose is to facilitate the Secretary's ability to receive input and recommendations from his most experienced leaders during times of crisis. When convened during times of crisis, the Secretary can also issue initial guidance to the SLG members regarding actions he deems appropriate.

"The CAT is the main focus of the Crisis Action Process. The CAT is a multi-agency coordination entity comprised of over 60 personnel, many from the interagency IMPT, and is designed to facilitate the Secretary's ability to coordinate interagency operations for threats and incidents in accordance with the responsibilities identified in HSPD-5. The CAT provides the Secretary and the Federal government with an immediate incident management capability and ensures seamless integration of threat monitoring and strategic cross-directorate operational response activities. By incorporating guidance from the Secretary and SLG into its incident management activities, the CAT is able to translate executive level guidance into operational action.

"The CAT's incident management activities include, but are not limited to, developing course of action recommendations, conducting national level planning, facilitating access to critical resources, prioritizing incidents and resources, serving as a central point for information

collection and evaluation, and coordinating the flow of information and resources for complex and/or multiple incidents." (**DHS**, *Statement of Frank DiFalco, Director of NOC*, 20Jun07, 6)

Crisis Action Process (CAP): "During deliberate planning and the Crisis Action Process, the JOPES [Joint Operations Planning and Execution System] model integrates all elements of deliberate or crisis action civil-military planning. In addition, the planning process for military operations other than war…places considerable emphasis on mission analysis and the commander's estimate. Commanders must plan for the right mix of available forces to quickly make the transition to combat operations, evacuations, peacekeeping or peace enforcement." (**Joint Forces Staff College**, *Pre-Planning and Post-Conflict CMOC/CIMIC Challenges*, 2003)

Crisis Action Team (CAT): "Conducts national/strategic-level Crisis Action Management." (**DHS**, *Operations Coordination: Incident Management and Planning: CAP*, Jan 2008, slide 20)

Crisis Action Teams (CAT): "These multi-agency teams, whose membership overlaps in part with the new planning teams, are to provide interagency incident management capabilities and to, among other things, recommend courses of action, help prioritize incidents and resources, and serve as a central point for information collection, evaluation, and coordination, especially for complex or multiple incidents." (**GAO**, *Homeland Security: Guidance from Ops*…, 2007, 17)

Crisis and Emergency Risk Communication (CERC): "Crisis and emergency risk communication is the attempt by science- or public health professionals to provide information that allows an individual, stakeholders, or an entire community to make the best possible decisions during a crisis emergency about their well being, and communicate those decisions, within nearly impossible time constraints, and ultimately, to accept the imperfect nature of choices as the situation evolves." (**CDC**, *CERC Course*, 2002, Course Purpose Statement.)

"Crisis and emergency risk communication encompasses the urgency of disaster communication with the need to communicate risks and benefits to stakeholders and the public. Crisis and emergency risk communication differs from crisis communication in that the communicator is not perceived as a participant in the crisis or disaster, except as an agent to resolve the crisis or emergency. Crisis and emergency risk communication is the effort by experts to provide information to allow an individual, stakeholder, or an entire community to make the best possible decisions about their well-being within nearly impossible time constraints and help people ultimately to accept the imperfect nature of choices during the crisis. This is the communication that goes on in emergency rooms, not doctors' offices. Crisis and emergency risk communication also differs from risk communication in that a decision must be made within a narrow time constraint, the decision may be irreversible, the outcome of the decision may be uncertain, and the decision may need to be made with imperfect or incomplete information. Crisis and emergency risk communication represents an expert opinion provided in the hope that it benefits its receivers and advances a behavior or an action that allows for rapid and efficient recovery from the event." (**CDC**, *CERC Course*, 2002, p. 10)

"Crises, emergencies, and disasters happen. One of the reasons disaster response is difficult to coordinate is that *disasters are different from routine daily emergencies.* The difference is more than just one of magnitude. Disasters generally cannot be adequately managed merely by

mobilizing more personnel and material. During crisis situations, decision-makers are often unable to collect and process information in a timely manner and, thus, rely on established routines for situations that are, by definition, novel. Communication during a crisis cannot be managed solely by mobilizing more people and material—the communication itself must change because crises are inherently low-probability but high-impact events in which established frames of reference for understanding may breakdown. In major disasters, the incident is so shattering that both the sense of what is occurring and the means to rebuild that sense collapse simultaneously. Crisis and emergency risk communication is a vital component to help people cope and begin to rebuild a sense of order and understanding in their lives. Crisis and emergency risk communication can work to counter some of the harmful human behaviors that are known to arise during a crisis. These potentially harmful individual, group, or community behaviors include:

- Demands for unneeded treatment
- Disorganized group behavior (stealing/looting)
- Bribery and fraud
- Reliance on special relationships
- Increased alcohol and tobacco use
- Increased multiple unexplained physical symptoms (MUPS)
- Unreasonable trade and travel restrictions.

"Add bad communication practices to a crisis situation and the odds of a negative public response increase." (**CDC**, *CERC*, 2002, p. 11)

Crisis Communication: "Crisis communication can be defined in two ways and, therefore, can cause some confusion for a practitioner looking for expert training and counsel. Today, the term is most often used to describe an organization facing a crisis and the need to communicate about that crisis to stakeholders and the public. Typically, a crisis is an event that occurs unexpectedly, may not be in the organization's control, and may cause harm to the organization's good reputation or viability. An example of an organization facing a crisis is the occurrence of a mass shooting of employees by a disgruntled employee. In most instances, the organization is facing some legal or moral culpability for the crisis (unlike a disaster in which a tornado wipes out the production plant), and stakeholders and the public are judging the organization's response to the crisis.

"A simple definition of crisis communication separates the judgment or reputation factors in the communication and deals primarily with factual communication by an involved organization to its stakeholders and the public. Crisis communication could simply be the effort by community leaders to inform the public that, by law, they must evacuate in advance of a hurricane. In this definition, the organization is not being overtly judged as a possible participant in the creation of the disaster, and the information is empirically sound, so the individual can judge its veracity without the help of an expert.

'The underlying thread in crisis communication is that the communicating organization is experiencing an unexpected crisis and must respond. Crisis also implies lack of control by the involved organization in the timing of the crisis event." (**CDC**, *CERC*, 2002, p. 5)

Crisis Communication: "Effective communication is a "resource multiplier" during a crisis, disaster, or emergency. Many of the expected harmful individual and community behaviors can be mitigated with effective crisis and emergency risk communication. Each crisis will carry its own psychological baggage. The practitioner must anticipate what mental stresses the population will be experiencing and apply appropriate risk communication strategies to attempt to manage these stresses in the population. Risk communication is a fully legitimate tool of response and recovery just like any other resource applied to the disaster. It is not an attempt at mass mental therapy. It is a reasoned and mature communication approach to the selection of message, messenger, and method of delivery." (**CDC**, *CERC*, 2002, p. 13)

Crisis Communication Audiences: "Although it is impossible to anticipate every aspect of crisis communications to be deployed during an event, some audiences that should be addressed in plans and preparedness efforts include:

- Members of the organization's response team.
- Managers responsible for continuing operations and interfacing with employees.
- Line employees whose understanding of the broader issues may be less complete than the management team.
- Family members of employees, especially family members of employees directly impacted by the event or the organization's response.
- National media, including financial media, whose interest in the organization is principally focused on management of the current event.
- Local media, both print and broadcast, that cover the organization regularly on a broad variety of topics.
- Investors, especially institutional investors, who desire transparency in the short- and long-term ramifications of an incident.
- Local and state/provincial governments that are interested in the long-term viability of the tax base and other benefits the organization brings to their constituents.
- Regulatory agencies responsible for ensuring continued compliance even when operating in recovery mode.
- Neighbors who may be adversely affected by the event, the organization's response, or the authorities' efforts to minimize overall community impact." (**IIA**, *BCM*, 2008, 18)

Crisis Communication Lifecycle: "Understanding the pattern of a crisis can help communicators anticipate problems and respond effectively. For communicators, it's vital to know that every emergency, disaster, or crisis evolves in phases and that the communication must evolve in tandem. By dividing the crisis into the following phases, the communicator can anticipate the information needs of the media, stakeholders, and the general public. Each phase has its unique informational requirements." (**CDC**, *CERC*, 2002, p. 7)

[Figure 1 includes "Precrisis, Initial, Maintenance, Resolution, Evaluation."]

Crisis/Emergency Communication Practices, Unadvisable: "Some of the bad communication practices that contribute to a poor public response that can be overcome with planning, coordination, research, and training include:

■ Mixed messages from multiple experts
■ Information released so late that events make the issue moot
■ Messages that are over-reassuring
■ Recommendations to the public without a reality check
■ Leaving myths, rumors, and doomsayers unchallenged or corrected
■ Spokespersons who engage in improper behavior, exhibit a lack of affect, or use inappropriate humor
■ Public power struggles and confusion." (**CDC**, *CERC*, 2002, pp. 11-12)

Crisis Communication STARCC Principle:

Simple—Frightened people do not want to hear big words.
Timely—Frightened people want information now.
Accurate—Frightened people will not get nuances, so give it straight.
Relevant—Answer their questions and give action steps.
Credible—Empathy and openness are your keys to credibility.
Consistent—The slightest change in the message is upsetting. (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p. 78)

Crisis Management: In the literature that exists so far, the term "crisis management" has been widely employed. But this terminology is ambiguous. "Crisis management" can be taken to refer either to managing a crisis after it has arisen—that is, intervening in a crisis situation—or managing in such a way that a crisis does not arise in the first place. The blanket term "crisis management" is thus a conceptual blanket that covers a multitude of sins. It is best to avoid the usage of such a label, since the inclusion of the word "management" in such a label implies that the process so labeled is envisioned as a *solution* to the problem of crises in general. This, however, is not really the case. At best, so-called crisis management addresses only crises that have already arisen and usually only when such crises have become either imminent or already actualized disasters. (**Allinson**, 1993, 92)

Since "crisis management" is used in the literature to refer for the most part to either how one responds to an existent crisis or how one might anticipate crises and therefore be able to respond to them, crisis management most often connotes crisis intervention management whether after the onset of the disaster or in anticipation of a disaster. In either of these two modes, it is nevertheless a "band-aid" approach since it either comes into effect after the wound or primarily addresses itself to having a band-aid ready to cover the wound immediately so that the wound does not bleed overly much. (**Allinson** 1993, 93)

Crisis Management: Coordination of actions during acute emergency. (**D&E Ref Center** 1998)

Crisis Management: "Crisis management is predominately a law enforcement function that manages the resources necessary to prevent or resolve a terrorist incident, including one involving WMD." (**CRS**, *Terrorism and the Military's Role in Domestic Crisis Management: Background and Issues for Congress*, April 19, 2001, p. i)

Crisis Management: "The overall coordination of an organization's response to a crisis, in an effective, timely manner, with the goal of avoiding or minimizing damage to the organization's profitability, reputation, or ability to operate." (**DigitalCare**, *State of OR BC Wkshop*, 2006, 51)

Crisis Management: "Per the National Strategy for Homeland Security, July 2002, the NRP will consolidate existing federal government emergency response plans into one genuinely all-discipline, all-hazard plan and thereby eliminate the "crisis management" and "consequence management" distinction. Traditionally, crisis management was predominantly a law enforcement function and included measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism. The requirements of consequence management and crisis management are combined in the NRP. See also consequence management." (**DHS**, *National Response Plan* (Draft #1). Washington, DC: DHS, February 25, 2004, pp. 73-74 (Glossary)

Crisis Management: "Measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or an act of terrorism. It is predominantly a law enforcement response, normally executed under federal law. Also called CrM." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Crisis Management: "Key to crisis management is an accurate and timely diagnosis of the criticality of the problems and the dynamics of events that ensue. This requires knowledge, skills, courageous leadership full of risk-taking ability; and vigilance. Successful crisis management also requires motivation, a sense of urgency, commitment, and creative thinking with a long-term strategic vision. In managing crises, established organizational norms, culture, rules and procedures become major obstacles: administrators and bureaucrats tend to protect themselves by playing a bureaucratic game and hiding behind organizational and legal shelters. A sense of urgency gives way to inertia and organizational sheltering and self-protection by managers and staff alike….Successful crisis management requires: (1) sensing the urgency of the matter; (2) thinking creatively and strategically to solving the crisis; (3) taking bold actions and acting courageously and sincerely; (4) breaking away from the self-protective organizational culture by taking risks and actions that may produce optimum solutions in which there would be no significant losers; and (5) maintaining a continuous presence in the rapidly changing situation with unfolding dramatic events. (**Farazmand** 2001, 4)

Crisis Management: "Crisis management is predominantly a law enforcement function and includes measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism. In a terrorist incident, a crisis management response may include traditional law enforcement missions, such as intelligence, surveillance, tactical operations, negotiations, forensics, and investigations, as well as technical support missions, such as agent identification, search, render safe procedures, transfer and disposal, and limited decontamination. In addition to the traditional law enforcement missions, crisis management also includes assurance of public health and safety.

"The laws of the United States assign primary authority to the Federal government to prevent and respond to acts of terrorism or potential acts of terrorism. Based on the situation, a Federal crisis management response may be supported by technical operations, and by consequence

management activities, which should operate concurrently. (**FBI**, *United States Government Interagency Domestic Terrorism Concept of Operations Plan*, January 2001, p. 7)

Crisis Management (C^RM): Involves measures to resolve the hostile situation, investigate, and prepare a criminal case for prosecution under federal law. (**FEMA**, *WMD IG*, 1998)

Crisis Management: "Measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism." (**FEMA** *Disaster Dictionary*, 2001, 26; citing FEMA FRP, "Terrorism Incident Annex")

Crisis Management: "The fundamental strategic objective of any organization is to ensure its long term survivability and economic success. Crisis management is a strategic function that links functions such as risk management, safety management, environmental management, security, contingency planning, business recovery, and emergency response…. Organizations that have technocratic, reactive, compliance, or preventive (safety and security management) crisis management programs are focused almost exclusively on their internal processes and activities and will see no need to cooperate and coordinate with external organizations. Businesses with communications oriented crisis management programs are focused on their customers and stakeholders, not on threats and vulnerabilities. The strategic integration of these functions is, therefore, a necessary condition for proactive public sector participation in natural disaster reduction. Similarly, an understanding by public sector managers of the private sector requirements for both short term profitability and long term survival will lead to an appreciation of the complexity of private sector crisis management and the effective use of the skills, knowledge, and experience gained by their private sector crisis managers." (Harrald, *Linking Corporate Crisis Management To Natural Disaster Reduction*, pp. 1, 5)

Crisis Management (CM): "Crisis management (CM) focuses on managing external — and in some companies, internal — communications and senior management activities during a disaster. (**IIA**, *Business Continuity Management*, July, 2008, p. 2)

"*Crisis Management* is easily one of the most misunderstood words in the entire BCM field. In some organizations, it is the extremely tactical planning we…[describe] as *emergency response*. Some organizations use it to cover events related to physical security problems. Some organizations define it as being the executive-level plan to address major events at the entity level, but in reality, their plans only address crisis communications issues. For the purposes of this GTAG, we will use the term to describe entity-level planning designed to address the immediate and high-level impacts to an organization." (**IIA**, *BCM*, July, 2008, p. 20)

Crisis Management (CrM): "Crisis management is predominantly a law enforcement response and involves measures to identify, acquire, plan, and employ the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism." (**JCS/DoD**, *CBRNE CM*, 2006, v)

Crisis Management: "The HSPD-5 and the NRP adopt the concept of incident management as including both consequence management (CM) and crisis management (CrM), while DOD continues to categorize CS [Civil Support] operations using these two terms. The application of CrM and CM is unique and separate in the context of planning and conducting military

operations…. CrM is predominantly a law enforcement response, normally executed under federal law. DHS is responsible for preventing terrorist attacks, reducing the vulnerability of the United States to terrorism, minimizing the damage, and assisting in the recovery, from terrorist attacks…. Historically, much of DOD's CS mission set has involved CM operations. This is due to legal restrictions which generally preclude DOD from participating in CrM law enforcement investigations and operations." (**JCS/DoD**, *Civil Support*, 2007, p. I-9)

Crisis Management: "CrM refers to measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or an act of terrorism. PDD-39, *US Policy on Counterterrorism,* designates DOJ, specifically the FBI, as the LFA for CrM. The Federal government exercises primary authority to prevent, preempt, and terminate threats or acts of terrorism and to apprehend and prosecute the perpetrators, and state and local governments provide assistance as required. CrM is predominantly a law enforcement response and in such cases involves measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism under federal law." (**JCD/DoD**, *Homeland Security* (JP 3-26), 2005, p. IV-8)

Crisis Management: "When interviewed by *CIO Insight,* Mitroff provided "best practice" advice on crisis management: he stressed that organizations (1) should not ignore low-probability, high-consequence events when developing their crisis management plans; (2) should understand the limitations of risk analysis—namely the fact that it doesn't usually include failures in multiple systems simultaneously; and (3) should dedicate one individual to crisis management. This individual does not need to be a "chief crisis officer," but does need to make crisis management (and avoidance) a full-time responsibility." (Cited: Pearson, Christine M. and Ian I. **Mitroff**, "From Crisis Prone to Crisis Prepared: A Framework for Crisis Management," *Academy of Management Executive* 7 (1993), by Light in *Predicting Organizational Crisis Readiness*, 2008, pp.19-20)

Crisis Management: "Crisis management is a program similar in structure to emergency management and business continuity. It includes a process to identify potential causes of crises and includes activities to prepare the organization for response to, and recovery from, a crisis. Crisis management is a strategic and overarching program designed to protect the organization itself." (**NFPA**, *Implementing NFPA 1600*, 2007, p. 6)

Crisis Management: "While there are numerous views of what crisis management is, one of the most accepted models was developed by Pearson and Mitroff, who are leading scholars in the area of organizational crises. These authors maintain that crisis management should proceed through five logical steps: (1) signal detection, (2) preparation/prevention, (3) containment-damage limitation, (4) recovery, and (5) learning." (Cited: **Pearson**, Christine M. and Ian I. **Mitroff**, "From Crisis Prone to Crisis Prepared: A Framework for Crisis Management," *Academy of Management Executive* 7 (1993), by Light in *Predicting Organizational Crisis Readiness*, 2008, p. 19)

Crisis Management: "Traditionally, crisis management was predominantly a law enforcement function and included measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism. The requirements of consequence

management and crisis management are combined in the NRP." (**US Army TRADOC**, 2007, p. 147)

Crisis Management: "Crisis management is predominantly a law enforcement function and includes measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism. In a terrorist incident, a crisis management response may include traditional law enforcement missions, such as intelligence, surveillance, tactical operations, negotiations, forensics, and investigations, as well as technical support missions, such as agent identification, search, render safe procedures, transfer and disposal, and limited decontamination. In addition to the traditional law enforcement missions, crisis management also includes assurance of public health and safety.

The laws of the United States assign primary authority to the Federal government to prevent and respond to acts of terrorism or potential acts of terrorism. Based on the situation, a Federal crisis management response may be supported by technical operations, and by consequence management activities, which should operate concurrently." (**USG,** *Interagency Domestic Terrorism CONPLAN*, 2001. pp. 9-10)

Crisis Management -- versus Disaster Risk Reduction Management Approaches:
Crisis Management:

1. Primary focus on hazards and disaster events
2. Single, event-based scenarios
3. Basic responsibility to respond to an event.
4. Often fixed, location-specific conditions
5. Responsibility in single authority or agency
6. Command and control, directed operations
7. Established hierarchical relationships
8. Often focused on hardware and equipment
9. Dependent on specialized expertise
10. Urgent, immediate and short time frames in outlook, planning, attention, returns
11. Rapidly changing, dynamic information usage, often conflicting or sensitive
12. Primary, authorized or singular information sources, need for definitive facts
13. Directed, 'need to know' basis of information dissemination, availability
14. Operational, or public information based on use of communications
15. In-out or vertical flows of information
16. Relates to matters of public security, safety

Disaster Risk Reduction Strategies:

1. Primary focus on vulnerability and risk issues
2. Dynamic, multiple risk issues and development scenarios
3. Fundamental need to assess, monitor and update exposure to changing conditions
4. Extended, changing, shared or regional, local variations
5. Involves multiple authorities, interests, actors
6. Situation-specific functions, free association
7. Shifting, fluid and tangential relationships
8. Dependent on related practices, abilities, and knowledge base
9. Specialized expertise, squared with public views, priorities

10. Comparative, moderate and long time frames in outlook, planning, values, returns
11. Accumulated, historical, layered, updated, or comparative use of information
12. Open or public information, multiple, diverse or changing sources, differing perspectives, points of view.
13. Multiple use, shared exchange, inter-sectoral use of information
14. Matrix, nodal communication
15. Dispersed, lateral flows of information
16. Matters of public interest, investment and safety."
(**UN ISDR**, *Living With Risk*, Chapter 1, 2002, p. 13)[11]

Crisis Management, State of Literature (2007): "Since the start of the 1980s, the field of crisis management has been characterized by two main trends: planning in crisis management and the analysis of organizational contingencies during a crisis. The literature on crisis management planning consists of a number of normative pronouncements aimed at increasing the efficiency of crisis interventions. Their authors highlight the need for emergency planning (Lagadec, 1991, 1996; Counts & Prowant, 1994; Perry & Nigg, 1985; Denis, 1993, 2002; Bugge, 1993; Sylves & Pavalak; Quarantelli, 1996), defining actions in relation to the various phases of the evolution of a crisis starting with the detection of warning signs up to post-crisis activities (Drabek & Hoetmer, 1991), stressing the development of a culture of security, both within organizations and in the population at large (Lagadec, 1991; Tazieff, 1988; Denis, 1993, 2002; Toft & Reynolds, 1994; Pauchant, 1997), and the training and sensitization of leaders to their roles in times of crisis (Perry & Nigg, 1985; Lagadec, 1991, 1996, 1997; Kuban, 1995; Petak, 1985; Pauchant & Mitroff, 1995). (**Lalonde**, *Crisis Management and Organizational Development*, 2007, p. 508)

Crisis Management Center (CMC): "Location where the Crisis Management Team meets. Primary and alternate location must be preplanned. May be at the facility where the incident is occurring or a distant location, as the main office, headquarters of the business function, or alternate site. (**Jones**, *Critical Incident Protocol*, 2000, p. 37)

Crisis Management Plan (CMP): "This Crisis Management Plan (CMP) is a detailed guide outlining the policies and procedures to be followed…in case there is an emergency situation that impacts normal workplace operations. The CMP provides guidance to Personnel Staff, the Crisis Management Team (CMT) and the Evacuation Team. This plan incorporates emergency procedures found in the Department of Justice Occupant Emergency Plan developed for National Place Building. Both the Crisis Management Team and the Evacuation Team for JMD Personnel Staff will work with the Command Center Team (CCT) for the National Place Building when necessary, as outlined in this plan. The Crisis Management Plan Goals are to:

- Provide guidance to managers regarding appropriate procedures and resources
- Protect the safety and well-being of all employees
- Provide for the care of employees and their families through personnel services and EAP

[11] Cites: Terry Jeggle, "The Evolution of Disaster Reduction as an International Strategy: Policy Implications For the Future." Chapter 20, pages 316-341 in *Managing Crises: Threats, Dilemmas, Opportunities*, (Edited by U. Rosenthal, R. Boin, L. Comfort, 2001)

- Minimize post-traumatic stress reaction among employees
- Ensure that accurate and appropriate information about the incident is conveyed to appropriate audiences both inside and outside the PS.
- Plan the orderly return of the workplace to a normal mode of operation
- Outline preventative measures which should be taken in advance." (**USDOJ**, *CMP*, 2002, p. 1)

Crisis Management Planning: "Crisis management planning addresses how the corporate entity will inform the general public, its employees, and various stakeholders of the crisis and the steps being taken to get the business up and running again. CM consists of methods used to respond to both the reality and perception of crises, which are documented in a CM plan. CM also involves establishing metrics to define what scenarios constitute a crisis and should consequently trigger the necessary response mechanisms. It consists of the communication that occurs within the response phase of emergency management scenarios." (**IIA**, *Business Continuity Management*, July, 2008, p. 3)

Crisis Readiness: "…the term *crisis readiness*…suggests a desirable, proactive orientation toward crises. In addition, because it is broader than many of the other related terms in use, such as *emergency* or *disaster preparedness, emergency response,* and *disaster recovery*, the term *crisis readiness* encapsulates these other terms. It is thus defined here as *an organization's ability to effectively respond to and recover from external events (such as terrorist attacks and natural disasters), as well as internal events (such as major accidents and financial/funding crises).* In this regard, crisis readiness is the desired end state of organizational preparedness, crisis management, business continuity planning, and other organizational activities and processes." (Light, *Predicting Organizational Crisis Readiness*, 2008, p. 17)

Crisis Readiness: "In the late 1980s, Anne Reilly proposed a "crisis readiness" construct, defining it as "the readiness to cope with the uncertainty and change engendered by a crisis." She further suggested that crisis readiness has six core components, which are related to (1) the organization's ability to respond quickly to a crisis, (2) managers' awareness of the organization's crisis management repertoire, (3) managers' access to the organization's crisis management repertoire, (4) the adequacy of the firm's strategic crisis planning, (5) the organization's media management ability in a crisis, and (6) the perceived likelihood of crisis striking the organization."[12] (**Light**, *Predicting Organizational Crisis Readiness*, 2008, 17-18)

Crisis Readiness Management Characteristics: "Frequently mentioned management characteristics

- Developing and implementing crisis management/disaster management plans
- Incorporating crisis readiness into the strategic management process, the strategic plan, and the overall business planning process
- Engaging in a crisis management planning process and regularly updating the plan
- Engaging in risk and vulnerability assessment
- Increasing staff crisis readiness through regular crisis drills

[12] Anne H. Reilly, "Are Organizations Ready for Crisis? A Managerial Scorecard," *Columbia Journal of World Business* 22 (1987): 81.

- Ensuring that the organization has sufficient general workforce training programs in place
- Rewarding error detection and reporting
- Implementing robust project management systems
- Providing redundant, off-site locations to ensure continuity of operations" (**Light**, *Predicting Organizational Crisis Readiness*, 2008, p. 33)

Crisis Relocation: "It is DCPA's judgment, based on extensive research and developmental work, that crisis relocation could be highly effective – given the requisite planning and development of supporting systems and capabilities, and given about a week for moving and protecting the bulk of our population at risk. For example, while no one can issue a guarantee that the response of the population would be predominately cooperative and constructive, experience in peacetime disasters and wartime situations requiring evacuation is that most people will comply with official instructions, provided these are understandable and appear to make sense in terms of improving chances for survival. Also, planning includes provision for temporary lodging and feeding for evacuees, and for developing fallout protection in host areas. It is important to note that relocation has great lifesaving potential even if it works not perfectly but quite well.

It is significant that on September 1-3, 1939 the British moved some 1.5 million women and children from London and a few other large cities in what was a crisis evacuation, for Britain did not declare war until September 3. (Also of interest are the facts that some 2 million additional persons spontaneously evacuated at their own initiative, and that this was unsuspected at the time by the British government.) It is also worthy of note that in Hurricane Carla, in 1961, between half and three-quarters of a million people were evacuated from Gulf Coast cities without a single fatality or a major reported accident.[13]" (**Chipman**, *CD for the 1980's*, July 13, 1979, 17)

Crisis Relocation Planning: Introduced by the DCPA circa 1973 in consonance with its movement away from "hardware oriented" civil defense programs of the 1950's and 1960's, toward a dual-use (peacetime and wartime) "civil preparedness" program for the 1970's which was to be more "people-oriented". Crisis relocation planning is noted in the FY 1973 DCPA Annual Report under the "major task" of "development of guidance for local governments based on risk analysis, to include crisis relocation planning guidance for areas at high-risk to the direct effects of nuclear weapons and low-risk reception areas." (**DCPA**, *Foresight*, 1974, pp. 2 & 6)

"Crisis Relocation Planning: During fiscal year 1973 worked on the development of handbooks for use in guiding State and local governments in preparing contingency plans for population relocation, should a period of international crisis make this advisable. Such contingency plans may also be needed when certain types of natural disasters threaten, such as hurricanes or floods, which might require people to evacuate low-lying areas….DCPA expects to make use of the guide during fiscal year 1974." (**DCPA**, *Foresight*, 1974, p. 10)

[13] Cited is: Senate Committee on Banking, Housing, and Urban Affairs, Hearings, Civil Defense, 95th Congress, 2d Session (January 1979) at 51-52.

"During fiscal year 1973, an in-house task force developed procedures for conducting contingency planning for population relocation during periods of increased threat for communities considered at high-risk to direct weapons effects if the event of a nuclear attack. Results of this work and DCPA research efforts are expected to be applied by DCPA and the CSPOS [Community Shelter Planning Officers] on a pilot-project basis during fiscal year 1974." (**DCPA**, *Foresight*, 1974, p. 18)

Crisis Response Organizations. "During the crisis assessment phase, special teams are assembled at all levels where the problem and its resolution are being developed. These teams vary in size and composition, as well as in name. They may be called crisis action teams, crisis response cells, battle staffs, emergency response teams, operations action groups, or operation planning groups. Specially constituted crisis action organizations generally include representatives from all command staff divisions and may include representatives from a wide range of involved organizations." (**JFSC**, *JFSC Pub 1 (JSO Guide 2000*), p. 5-13)

Crisis Response Planning: "Effective crisis response plans include the following ten elements:

1. **A representative set of planning scenarios.** It's essential to create a set of crisis scenarios that serve to guide planning. This need not be an exhaustive list of everything that could happen, but it should represent a broad range of potential emergency situations that the organization could plausibly face…
2. **A flexible set of response modules.** Leaders should be able to pull combinations of pre-set response "modules" off the shelf. Modularizing the elements of a crisis response plan provides the organization with flexibility to deal with unexpected scenarios or combinations of scenarios…
3. **A plan that matches response modules to scenarios.** This is the core plan that links each of the planning scenarios to the response modules that will be immediately activated. For example, a "shooter on site" event triggers an immediate facility lockdown plus a police response plus preset communication protocols to convene the crisis-response team and warn staff.
4. **A designated chain of command.** One finding of research on crisis response is that decentralized organizations, which are so good at helping promote innovation in normal times, prove to be woefully inadequate in times of crisis. Crisis demands a rapid centralized response and this, in turn, requires a very clear line of command and the ability to shift into what the military term "war fighting mode" rapidly. Otherwise the organization responds incoherently. This means creating a centralized parallel organization, in which the leader has a designated deputy and they, too, have a backup who would take command if the others were unavailable or disabled. It also means having a core crisis response team of perhaps five or six people who function as the leader's staff in the parallel crisis-management organization.
5. **Preset activation protocols.** Preset signals for activating and coordinating the various response modules in the event of a crisis situation. There have to be clear triggers to move the organization from "normal" to "war-fighting" mode as well as to activate specific response modules….
6. **A command post and backup.** This should be a location that can be rapidly converted to be used by the crisis response team. Requirements include the ability to rapidly connect

many lines of communication, to have access to external media (TV coverage), to provide access to crisis management plans, etc. In addition, there should be a backup command post located off-site in the event that evacuation is necessary….

7. **Clear communication channels.** Easily activated channels for reaching people on site and outside. For example, use of internal speakers and TV monitors to make announcements. A shooter on site, for example, triggers facility lockdown and police response but also rapid announcement that everyone should stay where they are, lock doors, hide, etc. To the extent possible there should be redundancy in these channels including backups that are not linked to the telephone system or the Web. Messages should be composed in advance. There also should be mechanisms for rapidly locating key staff (e.g. "check in" Web pages, phone-in lines).
8. **Backup resources.** Critical resource stocks to be tapped if necessary. Examples include backup power generation/gas supplies, modest reserves of food and water, and medical supplies. Agreements should also be negotiated with external agencies to provide specific resources in time of crisis, for example augmented private security.
9. **Regular simulation exercises.** The best plans are worthless if they exist only on paper. There needs to be regular, at least biannual, exercises conducted by the crisis response team, and regular testing of channels, inventorying of resources, and the like. These tests should be done regularly, but not scheduled in order to test speed of response.
10. **Disciplined post-crisis review.** Each crisis provides an opportunity for organizational learning to occur and plans to be revised. But this learning only occurs if the mechanisms are in place to make it happen. A post-crisis review should be conducted by the crisis response team after each significant event. The guiding questions should be: What went well and what went poorly? What are the key lessons learned? What changes do we need to make to our organization, procedures, and support resources?" (Watkins, "Your Crisis Response Plan: The Ten Effective Elements," 30 Sep 2002)

Critical Activity: "Any function or process that is essential for the organization to deliver its products and/or services." (**ISO 22399**, *Societal Security.…*, 2007, p. 2)

Critical Asset: "Any facility, equipment, service or resource considered essential to DoD operations in peace, crisis and war and warranting measures and precautions to ensure its continued efficient operation, protection from disruption, degradation or destruction, and timely restoration. Critical Assets may be DoD assets or other government or private assets, (e.g., Industrial or Infrastructure Critical Assets), domestic or foreign, whose disruption or loss would render DoD Critical Assets ineffective or otherwise seriously disrupt DoD operations. Critical Assets include both traditional "physical" facilities or equipment, non-physical assets (such as software systems) or "assets" that are distributed in nature (such as command and control networks, wide area networks or similar computer-based networks)." (**DoD**, *CAAP*, 1998)

Critical Asset and Portfolio Risk Analysis (CAPRA): A quantitative model which "Resembles the traditional security risk model where risk is the product of consequence, vulnerability, and threat, though with clear meanings assigned to each parameter.

Critical Asset Assurance Program (CAAP) Policy (Directive No. 5160.54, January 20, 1998)**:**
4. POLICY. It is DoD policy to:

4.1. Identify and ensure the availability, integrity, survivability and adequacy of those assets, (domestic and foreign) whose capabilities are deemed critical to DoD Force Readiness and operations in peace, crisis, and war by providing for their protection from all hazards; mitigating the effect of their loss or disruption; and/or planning for timely restoral or recovery. The level of assurance appropriate for each asset is a risk management decision of the owning or controlling DoD Component, made in coordination with those dependent on the asset, and based on its criticality, the threat, and resources available.
4.2. Recognize that critical DoD equipment, facilities, and services are dependent upon non-DoD assets – the international and national infrastructures, other facilities and services of the private sector, and those of other Government Departments and Agencies; and that non-DoD assets essential to the functioning of DoD Critical Assets are also Critical Assets of concern to the Department of Defense. Critical Assets include information systems and computer-based systems and networks that can be distributive in nature.
4.3. Recognize that in peacetime responsibility for protecting non-DoD Critical Assets and designing their security rests primarily with the civil sector owners and with local, State, and Federal law enforcement authorities and that responsibility for protecting non-U.S. Critical Assets rests with the appropriate national authority. However, the Department of Defense must participate with the civil sector, emergency preparedness and law enforcement authorities in planning for Critical Asset assurance during an emergency, and must be prepared, in concert with the appropriate authorities and within defense priorities, to assist in their protection during emergencies, including natural disaster, physical or technical attack, and technological or other emergency that seriously degrades or threatens DoD operations. (See DoD Directives 3025.1, 3025.12, and 3025.15, references (f) through (h).)
4.4. Provide an integrated asset and infrastructure vulnerability assessment and assurance program for the protection and assurance of DoD and non-DoD Critical Assets worldwide through the CAAP. The CAAP must provide a comprehensive and integrated decision support environment to represent the relationship between Critical Assets and force readiness and operations in peace, crisis or war that can be used to assess the dependencies, vulnerabilities and effects of the disruption or loss of Critical Assets or supporting infrastructures on their plans and operations. The CAAP must also provide the capability for Critical Asset assurance analysis, planning, prioritization, resource programming and response necessary to mitigate the disruption or loss of Critical Assets. It must also ensure that the collection, retention, and dissemination of CAAP information are in compliance with applicable U.S. law, statutes, directives, and policies as delineated by the established intelligence oversight program. See DoD Directive 5240.1 and DoD 5240.l-R (references (i) and (j)).” (**DoD**, *CAAP*, January 20, 1998)

Critical Business Functions (CBF): “Business functions or information that could not be interrupted or unavailable for one month or less without significantly jeopardizing the mission of the agency, and…health, welfare or safety…” (**DigitalCare**, *State of OR BC Wkshop*, 2006, 51)

Critical Business Functions (CBF): “Critical business functions are functions a business must perform in order to stay in business…. Non-profits and governments need business continuity to assure that they can perform their mandated functions.” (**Glenn**, *What Is BC Planning?*, 2002)

Critical Facilities Self Protection (1952): “We call our part of the job ‘Facilities Self-Protection’….Our program includes thi protective system…to minimize the effects of enemy

action; and, second, necessry countermeasures that will restore the facilities to normal operations in a minimum of time. We have available to us a key facilities list, which will be given to state and local civil defense directors, so that they will know the facilities which must be given top priority in rehabilitation or even in emergency hook up to power, water, or otherwise in the event of attack." (**Wadsworth**, *The National Civil Defense Plan*, 1952, p. 9)

Critical Functions: "Business activities or information that could not be interrupted or unavailable for several business days without significantly jeopardizing operation of the organization." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 51)

Critical Functions: "Processes and activities which, if interrupted, will cause a business or organization to sustain a severe economic loss, or jeopardize the continued existence of the organization. Public service organizations may define *critical functions* to include those whose loss would cause adverse effects to their clients. For example, a welfare office's existence may not be threatened by the temporary loss of its facilities, but the well-being of the public it serves may be severely impacted." (**Risky Thinking**, *A Glossary of Risk Related Terms*, 2007)

Critical Incident: "A critical incident is any event or situation that threatens people and/or their homes, businesses, or community. While we often think of floods, tornadoes, hurricanes, or armed assailants as posing critical incidents, the true definition of a critical incident includes any situation requiring swift, decisive action involving multiple components in response to and occurring outside of the normal course of routine business activities. (**Jones**, *Critical Incident Protocol: A Public and Private Partnership*, 2000, p. 4)

Critical Incident Plan: "Action plan developed to mitigate, respond to, and recover from a critical incident. Includes steps to guide the response and recovery efforts. Identifies persons, equipment, and resources for activation in a disaster and outlines how they will be coordinated. (**Jones**, *Critical Incident Protocol: A Public and Private Partnership*, 2000, p. 37)

Critical Incident Stress Management: "Critical Incident Stress Management (CISM) provides an organized approach to the management of stress responses for personnel having been exposed to a traumatic event in the line of duty. The use of CISM may decrease post-traumatic stress disorder, acute stress disorder, workman's compensation claims, fatalities, injuries, and suicide. The use of CISM does not prevent an employee from seeking individual consultation through the Employee Assistance Program or a trained Peer Supporter." (**NIFC**, *Interagency Standards for Fire and Aviation Operations 2007* (Appendix Q, CISM), p. Q-1)

Critical Incident Stress Management Team: "Team is responsible for the prevention and mitigation of disabling stress among emergency responders in accordance with the standards of the International Critical Incident Stress Foundation (ICISF). Team composition, management, membership and governance varies, but can include psychologists, psychiatrists, social workers, and licensed professional counselors." (**FEMA**, *Typed Resource Definitions: Incident Management Resources* (FEMA 508-2), 2005, p. 9)

Critical Information Requirement (CIR): "CIRs comprise information requirements that need to be collected and processed in order to meet operational requirements and are critical in

facilitating timely information management and the decision-making process that affects successful operations." (DHS, *JFO Activation and Operations: Interagency Integrated SOP Version 8.3*, April 2006, p. 46)

Critical Infrastructure: "Essential underlying systems and facilities upon which our standard of life relies. (**Capital Health Region**, Canada, *Incident Cmd. Sys. Training SM*, Mar 2007, 51)

Critical Infrastructure: "Assets, systems, and networks, whether physical or virtual, so vital to the United States that the incapacity or destruction of such assets, systems, or networks would have a debilitating impact on security, national economic security, public health or safety, or any combination of those matters." (**DHS**, *National Infrastructure Protection Plan*, 2006, p. 103)

Critical Infrastructure: "Critical infrastructures include those assets, systems, networks and functions – physical or virtual – so vital to the United States that their incapacitation or destruction would have a debilitating impact on security, national economic security, public health or safety or any combination of those matters. Key resources are publicly or privately controlled resources essential to minimal operation of the economy and the government." (**DHS,** *National Response Framework* (Comment Draft), September 10, 2007, p. 15)

Critical Infrastructure: "Systems whose incapacity or destruction would have a debilitating impact on the economic security of an organization, community, nation, etc." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 51)

Critical Infrastructure: "Systems and assets, whether physical of virtual, so vital to the United States that the incapacity or destruction of such systems and assets would be a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters." (**Patriot Act**, Sec. 1016(e))

Critical Infrastructure: "Critical infrastructure includes systems, facilities, and assets so vital that if destroyed or incapacitated would disrupt the security, economy, health, safety, or welfare of the public. Critical infrastructure may cross political boundaries and may be built (such as structures, energy, water, transportation, and communications systems); natural (such as surface or groundwater resources); or virtual (such as cyber, electronic data, and information systems)."

"Criticality is often in the eyes of the beholder and is dependent upon a given situation. The large and diverse number of critical assets within a region, constrained state and local resources, and our need to gain better understanding of infrastructure interdependencies require the development of criteria for and a risk-based approach to identifying critical assets." (**The Infrastructure Security Partnership**, *Regional Disaster Resilience*, 2006, pp. 3-4)

Critical Infrastructure:

Information Technology
Telecommunications
Chemicals
Transportation Systems
Emergency Services

Postal and Shipping
Agriculture and Food
Public Health
Water and Waste Water
Energy
Banking and Finance
National Monuments and Icons
Defense Industrial Base (**White House**, *HSPD 7*, 2003)

Critical Infrastructure and Key Resources (CI/KR): "An interdependent network of vital physical and information facilities, networks, and assets, including in the telecommunications, energy, financial services, water, and transportation sectors, that private business and the Government rely upon (including for the defense and national security of the United States). Critical infrastructures are those systems and assets so vital to the Nation that their incapacity or destruction would have a debilitating impact on national security (including national economic security) and/or national public health or safety." (**DHS**, Fed. Cont. Direct. 1, Nov 2007, P-1)

Critical Infrastructure and Key Resources (CI/KR): "Critical infrastructure includes those assets, systems, networks and functions—physical or virtual—so vital to the United States that their incapacitation or destruction would have a debilitating impact on security, national economic security, public health or safety or any combination of those matters. Key resources are publicly or privately controlled resources essential to minimal operation of the economy and the government." (**DHS**, *Private Sector and Nongovernmental Organizations Response Partner Guide* (Draft), Sep.10, 2007, p. 2)

Critical Infrastructure and Key Resources (CI/KR) Sectors:
Agriculture and Food
Banking and Finance
Chemical
Commercial Facilities
Commercial Nuclear Reactors, Materials and Waste
Communications
Dams
Defense Industrial Base
Drinking Water and Water Treatment Systems
Emergency Services
Energy
Government Facilities
Information Technology
National Monuments and Icons
Postal and Shipping
Public Health and Healthcare
Transportation Systems (**DHS,** *National Infrastructure Protection Plan Sector Overview*, 2007)

Critical Infrastructure and Key Resources (CI/KR) Tiers: "DHS has established a set of consequence thresholds to identify sites that are considered CIKR *Tier 1* assets, and thus eligible

for higher funding levels. To be considered CIKR *Tier 1*, the asset or system must be documented to have the potential, if successfully destroyed or disrupted through terrorist attack, to cause major national or regional impacts. These include combinations of the following characteristics:
• Nationally significant loss of life
• Severe cascading economic impacts
• Mass evacuations with relocation for an extended period of time
• Impact to a city, region, or sector of the economy due to contamination, destruction, or disruption of vital services to the public
• Severe national security impacts
DHS worked with the SSAs to establish sector-by-sector criteria for CIKR *Tier 2* assets that would identify those CIKR sites having inherently greater consequence potential than other assets within their sectors. DHS worked with States to identify assets that met these criteria. Sites nominated by the States through this process were subsequently validated by the Federal SSAs. CIKR sites that may otherwise meet the criteria identified above, but are not being addressed through the FY 2008 BZPP, include:
• Sites that have been sufficiently addressed through prior grants
• Sites eligible for funding through other HSGP and/or grant program funding that more directly address risks associated with the specific site
• Sites, particularly those associated with systems, whose risks DHS has determined may be more appropriately addressed in future program years." (**DHS**, *Fiscal Year 2008 Buffer Zone Protection Program Guidance and Application Kit*, February 2008, p. 6)

Critical Infrastructure Government Coordinating Councils: "The Critical Infrastructure Government Coordinating Councils will serve as government coordination mechanisms and will be comprised of representatives from DHS, sector-specific agencies, appropriate supporting Federal departments and agencies, and state and local government representatives, as appropriate. These councils will work with and support their counterpart Critical Infrastructure Sector Coordinating Council to plan, implement, and execute sector-wide security, planning, and information sharing." (**DHS**, *ODP Information Bulletin*, No. 172, June 01, 2005)

Critical Infrastructure Information: "The term 'critical infrastructure information' means information not customarily in the public domain and related to the security of critical infrastructure or protected systems—

(A) actual, potential, or threatened interference with, attack on, compromise of, or incapacitation of critical infrastructure or protected systems by either physical or computer-based attack or other similar conduct (including the misuse of or unauthorized access to all types of communications and data transmission systems) that violates Federal, State, or local law, harms interstate commerce of the United States, or threatens public health or safety;
(B) the ability of any critical infrastructure or protected system to resist such interference, compromise, or incapacitation, including any planned or past assessment, projection, or estimate of the vulnerability of critical infrastructure or a protected system, including security testing, risk evaluation thereto, risk management planning, or risk audit; or
(C) any planned or past operational problem or solution regarding critical infrastructure or protected systems, including repair, recovery, reconstruction, insurance, or continuity, to the

extent it is related to such interference, compromise, or incapacitation." (**Critical Infrastructure Information Act of 2002**)

Critical Infrastructure Partnership Advisory Council (CIPAC): See Department of Homeland Security, CIPAC.

Critical Infrastructure Program – Mission Assurance Assessments (CIP-MAA): "National Guard CIP-MAA teams execute the pre-planning needed to educate the civilian agencies on basic force protection and emergency response. Additionally, these teams are building relationships with first responders, owners of critical infrastructure and National Guard planners in the States and Territories. CIP-MAA teams deploy traditional National Guard forces in a timely fashion to assist in protection of the Nation's critical infrastructure, including vital elements of the Defense Industrial Base." (**Blum**, July 19, 2007, pp. 5-6)

Critical Infrastructure Protection (CIP): "Actions taken to prevent, remediate, or mitigate the risks resulting from vulnerabilities of critical infrastructure assets. Depending on the risk, these actions could include changes in tactics, techniques, or procedures; adding redundancy; selection of another asset; isolation or hardening; guarding, etc." (**DoD**, *DCIP*, 2005, p. 11)

Critical Infrastructure Protection (CIP): "Critical Infrastructure Protection (CIP) focuses on using available resources to protect truly indispensable infrastructures from degradation or destruction prior to any catastrophe. Simply stated, CIP is all about preventing the loss of crucial services by protecting the critical assets that provide those services." (**FEMA**, *Infogram 3-08: Protection, Resilience or Both?* January 24, 2008)

Critical Infrastructure Protection (CIP): "CIP activities consist of the identification, prioritization, assessment, and security enhancement of infrastructure network assets essential to mobilize, deploy, and sustain DOD military operations. **DCI generally consists of physical (installations, power projection platforms, etc.), and nonphysical (electronic information) assets.** The increasing interconnectivity and interdependence among commercial and defense infrastructures demand that DOD also take steps to understand the vulnerabilities of, and threats to, the critical infrastructures on which it depends for mission assurance. The DCIP is a fully integrated program that provides a comprehensive process for understanding and protecting selected infrastructure assets that are critical to national security during peace, crisis, and war. It involves identifying, prioritizing, assessing, protecting, monitoring, and assuring the reliability and availability of mission-critical infrastructures essential to the execution of the NMS. The program also addresses the operational decision support necessary for combatant commanders to achieve their mission objectives despite the degradation or absence of these infrastructures." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. III-6)

Critical Infrastructure Protection – Decision Support System (CIP-DSS): See Department of Homeland Security, CIP, DSS.

Critical Infrastructure Protection Program: "The term 'critical infrastructure protection program' means any component or bureau of a covered Federal agency that has been designated

by the President or any agency head to receive critical infrastructure information." (**Critical Infrastructure Information Act of 2002**)

Critical Infrastructure Resilience (CIR): "Extend National Goal [required by HSPD-8] from CIP: Protection against intentional acts, to CIR: Resilience to all-hazards." (**DHS**, *Critical Infrastructure Task Force Presentation to HSAC,* January 10, 2006, slide 12)

Critical Infrastructure Resilience (CIR): "Critical Infrastructure Resilience (CIR) addresses and resolves the protection gaps" in critical infrastructures. Recognizing that scarce resources limit protective (CIP) measures, CIR actions provide redundancy for that which cannot be protected. CIR strategies ensure that unprotected infrastructures can restore essential operations and services shortly after an all-hazards attack. CIR is a cost-effective alternative to CIP, particularly when critical infrastructures cannot be adequately protected because of insufficient resources. At its core, CIR refers to the ability of an organization to expeditiously recover and reconstitute fundamental services with minimum disruption to personnel, processes, procedures, information, and facilities. In other words, CIR facilitates a quicker recovery from man-made and natural disasters, and an earlier return to normal operations" (**FEMA**, *Infogram 3-08: Protection, Resilience or Both?* January 24, 2008)

Critical Infrastructure Sector Coordinating Councils: "The Critical Infrastructure Sector Coordinating Councils will act as private sector coordination mechanisms and will be comprised of private sector infrastructure owners and operators, and supporting associations, as appropriate. These councils will bring together sector-specific infrastructure protection activities and issues and will provide a primary point of entry for government to partner with the sector." (**DHS**, *ODP Info. Bulletin*, No.172, 1 June 2005)

Critical Infrastructure Task Force (CITR) Charter: "Review current and provide recommendations on *advancing national critical infrastructure policy&* planning to ensure the reliable delivery of critical infrastructure services while *simultaneously reducing the consequences* of the exploitation, destruction, or disruption of critical infrastructure products, services, and/or operations." (**DHS**, *Critical Infrastructure Task Force Presentation,* 10Jan06)

Critical Infrastructure Tiers: "DHS divides high-risk facilities into 4 risk-based tiers. As risk increases from Tier 4 to Tier 1, stricter security measures are required." (DHS, *Success Stories: DHS Sets Regulations for Chemical Facility Security*. DC: DHS, September 14, 2007 mod.)

Critical infrastructure Warning Information Network (CWIN): "Arrowhead Global Solutions, Inc. has announced the successful roll out of the US Critical infrastructure Warning Information Network (CWIN) to all 50 states and the District of Columbia. The implementation of CWIN's network connectivity to the states by the Department of Homeland Security provides a survivable line of communications for use particularly when the public networks are unavailable. Operational since 2003, CWIN is the survivable link in the Homeland Security Information Network (HSIN), connecting DHS with the vital sectors that restore the Nation's infrastructure during emergencies; the states' homeland security advisors; and appropriate federal agencies. CWIN has no logical dependency on the Internet or the public switched network, and remains viable under emergency conditions to provide key decision-makers with the ability to

direct and manage incident response activities." (Continuity Central, *US Critical infrastructure Warning Information Network Complete*, April 15, 2005)

Critical Infrastructures: "Systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters." (**USCG**, *IM Handbook*, 2006, Glossary 25-6)

Critical Records: "Records or documents that, if damaged or destroyed, would cause considerable inconvenience and/or require replacement or recreation at considerable expense." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 52)

Critical Resource Logistics and Distribution Capability Definition: "Critical Resource Logistics and Distribution is the capability to identify, inventory, dispatch, mobilize, transport, recover, and demobilize and to accurately track and record available human and material critical resources throughout all incident management phases. Critical resources are those necessary to preserve life, property, safety, and security." (**DHS**, *TCL*, 2007, p. 223)

Critical Success Factors (CSF): "Recognizing the variability of capability requirements, the USCG has developed Critical Success Factors (CSF) for spill response that drive a "Best Possible Response"—that is, a set of general goals to achieve when conducting a comprehensive and effective response. Six particular CSF are to be considered when developing ACPs [Area Contingency Plan], including (1) no public or responder injuries, illness or deaths; (2) sensitive areas protected; (3) resource damage minimized; (4) infrastructure damage minimized; (5) economic impact minimized; and (6) highly coordinated law enforcement and emergency management operations." (**GAO**, *Maritime Security*, December 2007, p. 67)

Critical Target Areas, 1953: "It is assumed that large concentrations of industry and people will be major enemy targets for attack with nuclear weapons. The atomic bomb and chemical warfare are weapons of mass destruction most efficiently used on large targets, such as our standard metropolitan areas, with their high concentrations of population and industry. Biological warfare can be efficiently used against both urban and rural areas and populations.

Based on Census Bureau and Department of Labor statistics, there has been drawn up a list of 193 potential atomic target areas in the continental United States, the Territories and possessions, including State and Territorial capitals which do not qualify as standard metropolitan areas.

Of the 193 areas, the 70 which contain the highest concentrations of both industry and population are designated 'critical target areas,' since they are assumed to be the most likely targets…. Nearly half the population of the United States lives within these 70 areas, although they comprise less than 3 percent of the total area of the Nation." (**FCDA**, *1953 Annual Report*, 10)

Critical Task: "A task that must be performed during a major event to prevent occurrence, reduce loss of life or serious injuries, or mitigate significant property damage. Critical tasks are essential to the success of a homeland security mission and require coordination among a combination of federal, state, local, and tribal entities." (**DA**, *WMD-CST Ops*, 2007, Gloss-10)

Critical Task: "A task performed by an individual which is essential for mission accomplishment. It is identified through the application of a task selection model. It is addressed in the training curriculum for the position/occupation. (DHS, *Training Glossary, Version 1.2.* December 2007, p. 22)

Critical Task: "Critical tasks are defined as those prevention, protection, response, and recovery tasks that require coordination among an appropriate combination of Federal, State, local, tribal, private sector, and non-governmental entities during a major event in order to minimize the impact on lives, property, and the economy." (**DHS**, *UTL 2.1*, 2005, p. B-1)

Critical Tasks: "Critical tasks are tasks that are essential to achieving the desired outcome and to the success of a homeland security mission. The critical tasks are derived from the tasks found in the Universal Task List." (**DHS**, *TCL*, 2007, p. 6)

Criticality: "Criticality (i.e., how quickly a specific capability is needed to prevent an incident, save lives, prevent suffering, or reduce major damage) is an important consideration in determining where a capability is needed." (**DHS**, *TCL*, 2007, p. 12)

Criticality: "*Criticality* is broadly defined as the particular aspects or features of an asset that would make someone want to protect the asset against an attack. Generally, *criticality* is defined using a set of 'Critical Asset Factors'. These factors define the specific features of an asset that could make it important to protect that asset from attack. Examples of typical critical asset factors include:

- Loss of Life
- Economic losses
- Disruption of Government Services
- Degradation of Critical Infrastructures and Key assets." (**DHS**, *TCL*, 2007, p. 51)

CrM: Crisis Management. (**JCS/DoD**, *Civil Support*, 2007, p. I-9)

Crop Failure: "Abnormal reduction in crop yield such that it is insufficient to meet the nutritional or economic needs of the community." (**UNDHA**, *DM Glossary*, 1992, p. 22)

Crop Moisture Ratio: "The ratio of precipitation to the potential evapotranspiration. An index for assessment of agricultural drought." (**UNDHA**, *Disaster Management Glossary*, 1992, 23)

CRP: Crisis Relocation Plan.

CRR: Continuity Readiness Reports. (**DHS,** *FCD 2*, November 2007, p. B-1)

CRS: Community Rating System, National Flood Insurance Program. (**FEMA**, *CRS*, 2007)

CRS: Congressional Research Service.

CRT: Critical Response Team (FEMA, *Compendium of Federal Terrorism Training for State and Local Audiences*, November 10, 2003, p. 2)

Cry Wolf "Syndrome": A "common assumption is that warnings not followed by the anticipated hazard will cause people to ignore future warnings. If false warnings are a regular occurrence, the public may begin to pay less attention to future warnings. However, there is no solid research that shows relatively rare false warnings have such an effect. The objective is to educate the public about uncertainty so that they can comprehend that false warnings arise from inherent uncertainty rather than from poor professional practice. One implication of this lesson is that warning systems should be designed to only alert and warn those at risk. A warning system that continually warns many people not at risk may lose credibility and the public will pay less attention." (**PPW**, *Protecting America's Communities,* 2004, 8)

CS: Tear Gas (2-chlorobenzalmalononitrile). (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-2)

CSAT: Chemical Security Assessment Tool. (**DHS**, *Fact Sheet: CFATS*, November 2, 2007)

CSCD: Chemical Security Compliance Division, DHS. (**DHS**, *Procedural Manual…CVI*, 2007)

CSEPP: Chemical Stockpile Emergency Preparedness Program.

CSF: Critical Skill Factor. (**GAO**, *Maritime Security*, December 2007, p. iv)

CSG: Counterterrorism Security Group.

CSI: Container Security Initiative. (**DHS**, *Remarks* [DHS Sec] *Ridge…Port of Portland*, 4May04)

CSIA IWG: Cyber Security and Information Assurance Interagency Working Group. (**DHS**, *NIPP* 2006, p. 101)

CSID: Centralized Scheduling and Information Desk. (**FEMA**, *TEI/TO Course Catalog*, 2008, 7)

CSIRT: Computer Security Incident Response Teams. (**DHS**, *NIPP* 2006, p. 101)

CSP: Community Shelter Plan/Planning. (**DCPA**, *On-Site Assistance Appendices*, 1974, B-20)

CSPOS: Community Shelter Planning Officers. (**DCPA**, *Foresight*, 1974, p. 18)

CSR: Corporate Security Review.

CSR: Critical Success Factors: (**GAO**, *Maritime Security*, December 2007, p. 67)

CST: Civil Support Team. (**DA**, *WMD CST Operations*, December 2007, p. 1-3)

CT: Counterterrorism. (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. IV-6)

CTF: Combined Task Force.

CTF: Cooperating Technical Partners, FEMA.

CTGP: Competitive Training Grants Program, DHS.

CTOS: Counter Terrorism Operations Support, DOE Nevada Test Site. (**FEMA**, *TEI/TO* Course Catalog, 2008, 5)

C-TPAT: Customs-Trade Partnership Against Terrorism.

Cultural Competence: "A set of values, behaviors, attitudes, and practices that enables an organization or individual to work effectively across cultures; the ability to honor and respect the beliefs, language, interpersonal styles, and behaviors of individuals and families receiving services as well as of staff who are providing such services."] (**HHS**, 2003, p. 60)

Culture: "*Culture* refers to the characteristic attitudes and practices within an organization or society: "it defines the tacit rules that influence actions in a wide variety of situations." Because it is "rooted in a set of values, beliefs, rituals, symbols, and assumptions," it drives many unexamined actions. And because it strongly influences behavior, culture "can affect performance and capability," and it is thus a strategic concern of those who manage human resources….To transform the military he [DOD Sec. Donald Rumsfeld] "encourag[ed] a culture of creativity and intelligent risk taking" and asked for "a more entrepreneurial approach to developing military capabilities." " (**Commission on the National Guard and Reserves**, *Transforming,* 2008, p. 323)

Culture of Continuity: "Pursuant to NSPD-51/HSPD-20 [May 4, 2007], and in accordance with the National Continuity Policy Implementation Plan, the President directs the executive branch to reorient itself and to utilize an integrated, overlapping national continuity concept to ensure the preservation of our Government and the continuing performance of essential functions. Continuity responsibility and planning should not be a separate and compartmentalized function performed by independent cells of a few planners in each agency. It must be fully integrated into all aspects of an organization's daily operations thus creating a 'culture of continuity'." (**DHS/FEMA**, *Federal Continuity Directive 1*, November 2007, p. 3)

Culture of Preparedness: "The National Response Framework…reflects our pledge to provide clear, concise information and a sound structure within which we can develop tailored planning for every one of the myriad types of challenges that we are likely to face as we enter into this new, very transformative century… beyond the doctrine and the principles and the plans is the issue of culture. We need a culture of preparedness -- and that means engaging communities, businesses, schools and individuals, because despite our best efforts to put plans in place, and despite all the training that professionals undertake, unless we engage civic leaders to help us prepare the public, our emergency response efforts will always be strained and lives will be put at risk. And that's why we made community preparedness a priority in the National Preparedness Guidelines that we released in September.

“We recognize it's a national effort to get community preparedness underway that will not be achieved overnight. But it will require instead continuous education and community involvement at all levels. And so we're taking a comprehensive approach by engaging community leaders, NGOs, and our partners in the private and public sectors so we can focus on preparedness and, as important, resiliency.

“One of the ways we're building a culture of preparedness is our Citizen Corps program. In the nearly six years since its creation, Citizen Corps has seen tremendous growth and support from local communities. In fact, there are nearly 2,300 Citizen Corps Councils in all of our states and territories, and a new council is registered every two days. What these councils do is bring community and government leaders together to participate in emergency planning, training, exercise, and response surge development. The councils foster education and participation with the general public.

“Our Ready campaign, which is undertaken with the private sector and the Ad Council, complements this grassroot effort through national preparedness messaging. The Ready -- by the way, it was a great set of ads -- which I saw previewed and then I saw a couple of them on TV -- in which they went out and they actually talked to families. And they said, do you have a plan for an emergency? And what they did is they talked to like every member of the family separately -- you know, there was the father, the mother, the kids -- and everybody said, oh yes, we have a plan. And then everybody's recitation of the plan was different. And it was great, actually. It was a great self-test, and we tried it at home, and we didn't do that well either. So we have actually now got our kids focused on these issues. And it requires constantly reminding people about it because, you know, you do get distracted with your day-to-day.

“But I'll tell you, as someone who lived through 9/11 with my family, and lived through the anthrax attack, and lived through the sniper attack, having a plan and knowing that your kids know what they're supposed to do, for parents is the number one most important concern.

Now, we have a website, www.ready.gov, which has useful information, and it gets quite a lot of hits. And this past September we sponsored our fourth annual National Preparedness Month. More than 14 -- more than 1,700 organizations partnered with us through our Ready campaign in that National Preparedness Month, and hosted various events educating people on preparedness and response.

“In addition to reaching out through the Ad Council and these other media campaigns, private sector partners, such as the Council on Competitiveness and the Infrastructure Security Partnership, have worked with us, recognizing that we have to focus on resiliency as well as preparedness -- that means the community's ability to rebound and restore critical government and business functions after a disaster occurs. To that end we've provided funding to organizations like the Southeast Region Research Initiative to study and increase resiliency in our cities and other communities.

Our goal here is to make sure that if, despite the best preventive and preparedness efforts, a disaster strikes, we can get back up and running and recover, as quickly as possible. And some of these efforts are now underway in Mississippi, Tennessee and South Carolina, working to increase community resiliency through SERRI-directed research.

Finally, as we talk about various institutions, I'd be remiss if I didn't mention schools. Schools, in many way, are the network that binds communities most closely together. It gets parents most engaged, and, of course, as we all know, when children become part of the process of educating their parents, that's really a phenomenal engine for information and, frankly, driving good behavior. You know, when we've got kids involved in things like the fire safety campaign or recycling, they're like little relentless engines of propaganda. They never drop it -- they just nag again and again and again about the recycling and stuff. Don't take this as a comment on my family.

"But, actually, it's a great lesson. It brings parents around to understanding what they need to do. We need to harness some of that great energy by educating a generation of children to readiness and preparedness -- not to frighten them, but to make sure that part of civic preparation is understanding how you play your role when there is a flood, or an emergency, or some kind of a medical situation, that requires community-based response.

"And so we've worked closely with the Department of Education to ensure that schools across the country are engaged with our local Citizen Corps Councils and have the information and guidance, first to make sure they've got good plans, and second to make sure they've got their children engaged and their parents engaged in what they would need to do if, God forbid, we faced some kind of a catastrophe that affected a community and a school structure.

"Finally, I want to highlight what is the key foundation element in everything that we're talking about in terms of preparedness -- and that is individual responsibility. We need your leadership at the local level to echo the message that we are sending at the national and state level, which is getting people prepared by getting together a kit of the necessary things that they need, making a plan, and staying informed. You all know that these three principles are the key to responding to any disaster of whatever kind.

"Sometimes people think it's complicated. Sometimes people think it's just not going to happen. What we have to do is demystify this. We have to make it clear that this is no different than the kind of preparations a responsible person does before they take, for example, their family on a long vacation trip in the automobile. You know, you check the car, you check the tires, you make sure the automobile is running properly, maybe you take it in for an oil change. This is basic stuff that all of us do and learn to do in order to protect our families with respect to everyday challenges. And now, as you look at the possibility of hurricanes and ice storms and earthquakes, you'll recognize how important it is to build this same mindset, and to make it accessible to people if we're going to survive ice storms and fires and other kinds of catastrophes, and even, God forbid, some kind of medical emergency or a terrorist attack.

"Not only do we have to demystify it, but we have to make this part of the morality of public life, part of civic responsibility, because my view is that when able-bodied people take the steps they need to take care of themselves for 48 or 72 hours, what they are doing is they are freeing the first responders to help those who cannot help themselves. On the other hand, if you simply throw your hands up and you don't bother, and you figure someone is going to come and take care of you, then what you're likely doing is distracting a responder who could otherwise be helping someone who can't help themselves. And I think -- so it is really a matter of public morality and civic engagement." (**DHS**, *Remarks by Secretary Michael Chertoff to the National Congress for Secure Communities*, December 17, 2007)

Culture of Preparedness: "Though created as the federal agency that leads and manages emergency management on behalf of the Nation, there are many organizations engaged in all phases of [EM]…at the federal, state, and local levels. FEMA, in its leadership role, must set the standard for emergency management across the Nation and help build strong relationships among its partners. As a first step, we will foster a culture of preparedness by building combined and comprehensive national capabilities that better protect us all from the extraordinary natural and man-made threats that face our Nation." (**FEMA**, *Strategic Plan*, 2007, 5)

Culture of Preparedness, Strategic Plan Objective 1.1: Build a culture of preparedness across the Nation for all hazards:

"FEMA will strengthen national preparedness by engaging and supporting other federal agencies, states, territories, tribal nations, local governments, and private sector and nongovernmental organizations in building national capabilities to address all-hazard events. Through grants that provide financial assistance, the provision of technical expertise, or through enhanced partnerships and cooperative agreements with the public and private sector, FEMA will work closely with its partners to build a nationwide culture of preparedness that builds and sustains national capabilities. This effort will include public education and outreach that strives to instill broad awareness of the importance of personal and community responsibility for the Nation's overall preparedness." (**FEMA**, *Strategic Plan*, 2007, p. 12)

Culture of Preparedness: "Those who have had the most exposure to disasters tend to be the most prepared, but they are in the minority. We can create a broader culture of preparedness with relatively simple, low-cost measures like involving the public in the planning process, empowering them with information, and providing tools. In higher risk areas, we can involve the public more directly by assigning specific roles for disaster response and offering opportunities to interact with first responders and care providers during drills and emergencies." (**PricewaterhouseCoopers**, 2007, p. 4)

Culture of Preparedness: "Foresman [George W. Foresman, DHS Under Secretary, Preparedness Directorate] told the symposium audience that, previously, the nation has viewed preparedness in the context of the last crisis event. In the new culture of preparedness, 'we need to look forward, not back.'…. The culture of preparedness, he said, includes continuing a national dialog to make sure the public knows its responsibility: to begin individually." (**USNORTHCOM**, "DHS Official Promotes New 'Culture of Preparedness'." October 4, 2006)

Culture of Preparedness: "CREATING A CULTURE OF PREPAREDNESS: The second element of our continuing transformation for homeland security perhaps will be the most profound and enduring—the creation of a Culture of Preparedness. A new preparedness culture must emphasize that the entire Nation—Federal, State, and local governments; the private sector; communities; and individual citizens—shares common goals and responsibilities for homeland security. In other words, our homeland security is built upon a foundation of partnerships. And these partnerships must include shared understanding of at least four concepts:

- The certainty of future catastrophes;

- The importance of initiative;
- The roles of citizens and other homeland security stakeholders in preparedness; and
- The roles of each level of government and the private sector in creating a prepared Nation." (**White House**. *The Federal Response to Hurricane Katrina – Lessons Learned*, Chapter 6 "Transforming National Preparedness," February **2006**.)

Culture of Preparedness: "This Culture rests on four principles.

- The first principle of our Culture of Preparedness is a shared acknowledgement that creating a prepared Nation will be an enduring challenge….

- The second principle is the importance of individual and collective initiative to counter fundamental biases toward reactive responses and approaches….

- The third principle is that individual citizens, communities, the private sector, and non-profit organizations each perform a central role in homeland security….

- The fourth principle of our Culture of Preparedness is the responsibility of each level of government in fostering a prepared Nation." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October **2007**, pp. 41-42)

Culture of Preparedness: "In order for citizens to play an optimum role in responding to a mass casualty event, it is important to develop a "culture of preparedness". Spreading basic knowledge such as who to inform when an incident occurs can speed up responses and result in lives being saved. Similarly, increasing basic search and rescue and first aid skills can avoid the onset of complications for those injured in a mass casualty incident. In addition to knowledge, attitudes need to be changed. The passive expectation that responding to emergencies is someone else's responsibility (typically someone in authority) can be changed to an active willingness to get involved in the activities necessary to a planned response. While efforts to inculcate such a culture can be sponsored (i.e. funded and conceived) at national level, programming is likely to be most effective if delivered by local government authorities and based in a planning process. Such activities may include:

• preparedness training to teach communities how to survive without outside help for a given period (48 or 72 hours)
• Basic search and rescue and first aid training for community members and for emergency services staff (publications such as *Capacity Building for Search & Rescue in Local Communities (Jeannet 1999)* and *International harmonization of First Aid: First recommendations on life-saving techniques* (IFRC 2004) provide useful advice on this)
• presentations at public gatherings such as clubs, religious centres (e.g. those connected with churches, mosques and temples), and community service organizations
• Advertising or public information through the press and electronic media, or using posters, leaflets and public displays in markets and shopping areas. The education system has an important role to play in preparedness. Schools can incorporate some elements of the community's emergency preparedness plans in curricula for children and teen-agers, in order to increase the awareness of what to do during a mass casualty

incident." (**World Health Organization**, *Mass Casualty Management Systems*, April 2007, p. 23)

Current Meter (water): "Instrument for measuring the velocity of water." (**UNDHA**, *DM Glossary*, 1992, 23)

CUSEC: Central United States Earthquake Consortium.

Customer Service: "The stated ideologies of service companies that have consistently performed extremely well have a strong focus on flowing value to the customer. The customer service theme from these companies resonates with lean thinking philosophy:

- Service to the customer above all else. We exist to provide value to our customers--to make their lives better via lower prices and greater selection; all else is secondary
- People are number one–they are your only appreciating asset, treat them well, expect a lot, and the rest will follow
- Partner with employees, include them in the process
- Encourage individual initiative
- Expect hard work and productivity, yet keep it fun
- Work with passion, commitment, and enthusiasm
- Continuous self-improvement; there's always something more to be improved
- Excellence in reputation
- Run lean by continuously identifying and eliminating waste
- Never settle for less than what is possible." (**Buckentine**, "Lean for Service Businesses," *MA Insider* [Manufacturers Alliance E-Newsletter], May 2007)

Customer Service: "Customer service is a key element of FEMA's strategic plan. FEMA's customer service initiatives include benchmarking performance, setting standards, and surveying internal (FEMA employees) and external (the public and emergency management partners) customers. It also focuses on building skills and instituting programs that provide high-quality service that exceeds the expectations of FEMA's customers. The customer service program supplies valuable information that assists to identify barriers to performance and measure progress towards achieving the Agency's strategic goals. The customer service strategy seeks to:

1. Refine data collection, databases and performance measures for the Agency's strategic plan and establish baselines against which future performance can be measured.
2. Create a highly productive, customer-driven workforce that provides services that meet or exceed customer expectations
3. Institutionalize better and more cost-effective service-delivery systems." (**FEMA**, *Strategic Plan FY 1988 – FY 1992*, 1997, p. 30)

Customer Service: "In Oklahoma, I'm lucky to have a boss, Governor Brad Henry, who realizes emergency management is a customer service business. More importantly, he understands that the customers we serve are at the local level, not in Washington. Following disaster events, he expects me to brief him on what assistance is being provided to the victims immediately and what assistance we're working to provide in the future. The Governor does not expect me to provide anything which is not available under the law, but he does expect me to

extract the full potential of the law to the victim's advantage. And, he expects the same level of customer service to be provided by the federal government, in the support of our state. Unfortunately, our recent dealings with FEMA, in response to disasters our state has experienced over the last 18 months, has done little to ensure customer service is a concern, or that we are even considered a customer. Since December 2005, Oklahoma has experienced wildfires, ice storms, tornadoes and floods which have resulted in six major disaster declarations, one emergency declaration, and 26 fire management assistance grants.

One might say that this level of activity is proof that the "new" FEMA is working diligently to make sure assistance is being provided as quickly as possibly, but I would offer that each request has been viewed from a federal perspective of, "what is the minimum we have to provide, as opposed to, what is the need." Never before have I entered into so many discussions regarding the interpretation of the law or the standard of assessment. I've even had a FEMA attorney question the authority my Lieutenant Governor has to make a request for the state, in the Governor's absence. Through this all, the Governor has asked me some very simple questions, like: "Is FEMA this unresponsive because they're under DHS?; Why does it take two weeks to make a decision on my request?; Why does the FEMA Region support our request and FEMA Headquarters doesn't?; or even, Why won't they return my phone calls?". Regretfully, I have but one answer to each of his questions, "I don't know, sir. But, I do know this is not the way it's supposed to be." (**Ashwood**, *Testimony... on* "*FEMA Preparedness in 2007…*," 2007, 3)

"In conclusion, I'd like to summarize the current philosophical differences between my state and FEMA with a brief illustration. In my operations center a sign, defining what is expected of each employee, has hung on the wall for many years. It simply says, "If it's legal, moral and ethical . . . Just do it!" And while I realize much of this creed is subjective, by nature, it does stress the reason we are all employed . . . to provide a service to our citizens during their time of need. With this in mind, I wonder what a similar sign would say, if it were currently hanging on the wall in FEMA headquarters. Perhaps it would say something like, "If it's legally concise and limits our agency's exposure and potential liability, we should consider doing it, contingent of course on General Counsel's final opinion, in coordination with the Office of Management and Budget, and subject to the final vote of the tribunal convened to effectively disperse responsibility throughout the federal government." Whether this philosophy is a product of FEMA, DHS, the White House, Congress, or a combination of any or all of the above, I simply don't know. I only know it is does not meet my expectations, as either a state customer or private citizen." (**Ashwood**, *Testimony... on* "*FEMA Preparedness in 2007…*," 2007, 4)

CVI: Chemical-terrorism Vulnerability Information. (**DHS**, *CVI Glossary*, Nov. 2007, p. 1)

CWG: Continuity Working Group(s). (**DHS**, *FCD 1*, Nov. 2007, p. 11)

CWG: COOP Working Group. (**FEMA**, *Region III Annual Report FY 2007*, 2008, 30)

CWIN: Critical Infrastructure Warning & Information Network. (**Continuity Central**, *US CWIN Complete*, April 15, 2005.

CX: Phosgene Oxime. (**Dept. of the Army**, *WMD-CST Operations*, Dec 2007, Glossary-2)

Cyber Cop Portal: "Coordination with law enforcement helps capture and convict those responsible for cyber attacks. The Cyber Cop Portal is an information sharing and collaboration tool accessed by over 5,300 investigators worldwide who are involved in electronic crimes cases." (**DHS,** *National Cyber Security Division*, September 23, 2006 modification)

Cyber-Risk Management Programs, DHS: "Through Cyber Risk Management, the National Cyber Security Division seeks to assess risk, prioritize resources, and execute protective measures critical to securing our cyber infrastructure." (**DHS,** *NCSD*, 23Sep2006 modification)

Cyber Security: "The prevention of damage to, unauthorized use of, or exploitation of, and, if needed, the restoration of electronic information and communications systems and the information contained therein to ensure confidentiality, integrity, and availability. Includes protection and restoration, when needed, of information networks and wireline, wireless, satellite, public safety answering points, and 911 communications systems and control systems." (**DHS,** *NIPP*, 2006, 103)

Cyber Security Preparedness and the National Cyber Alert System, DHS: "Cyber threats are constantly changing. Both technical and non-technical computer users can stay prepared for these threats by receiving current information by signing up for the National Cyber Alert System." (DHS, National Cyber Security Division, September 23, 2006 modification)

Cyber Storm: A National Cyber Exercise (NCE): "**…**the first government-led, full-scale cyber security exercise of its kind [February 6-10, 2006]…. Cyber Storm was designed to test communications, policies and procedures in response to various cyber attacks and to identify where further planning and process improvements are needed. Activities included:

- Exercising interagency coordination through the activation of the National Cyber Response Coordination Group (NCRCG) and the Interagency Incident Management Group (IIMG)
- Exercising inter-governmental and intra-governmental coordination and incident response
- Identifying policies and issues that either hinder or support cyber security requirements
- Identifying public and private information sharing mechanisms to address communications challenges
- Identifying the interdependence of cyber and physical infrastructures
- Raising awareness of the economic and national security impacts associated with a significant cyber incident
- Highlighting available tools and technologies for cyber incident response and recovery." (**DHS**, *Cyber Storm Exercise Fact Sheet*, September 13, 2006)

Cyber Storm II: Held March 10-14, 2008, largest cyber security exercise ever organized. Cyber Storm II included "18 federal departments and agencies, nine states (Calif., Colo., Del.,

Ill., Mich., N.C., Pa., Texas and Va.), five countries (United States, Australia, Canada, New Zealand and the United Kingdom), and more than 40 private sector companies. They include ABB, Inc., Air Products, Cisco, Dow Chemical Company Inc., Harris Corporation, Juniper Networks, McAfee, Microsoft, NeuStar, PPG Industries, and Wachovia.
Cyber Storm II objectives include:

- Examining the capabilities of participating organizations to prepare for, protect against, and respond to the potential effects of cyber attacks
- Exercising strategic decision making and interagency coordination of incident response in accordance with national level policy and procedures
- Validating information sharing relationships and communications paths for the collection and dissemination of cyber incident situational awareness, response and recovery information
- Examining means and processes through which to share sensitive information across boundaries and sectors without compromising proprietary or national security interests."

(**DHS**, *DHS Holds Cyber Storm II Exercise to Further Cyber Security Preparedness and Response Capabilities*, March 10, 2008)

Cyber Storm II:

- Affects 4 infrastructure sectors including chemical, information technology (IT), communications and transportation (rail/pipe) and used 10 information sharing and analysis centers;
- Exercises the processes, procedures, tools and organizational response to a multi-sector coordinated attack through, and on, the global cyber infrastructure;
- Allows players to exercise and evaluate their cyber response capabilities to a multi-day coordinated attack and to gauge the cascading effects of cyber disasters on other critical infrastructures, shaping response priorities; and
- Exercises government and private sector concepts and processes developed since Cyber Storm I, requiring great interaction and coordination at the strategic, operational, and tactical levels. (DHS, *Cyber Storm: Securing Cyber Space*, March 7, 2008)

Cyber-Terrorism: "(FBI): A criminal act perpetrated by the use of computers and telecommunications capabilities, resulting in violence, destruction and/or disruption of services to create fear by causing confusion and uncertainty within a given population, with the goal of influencing a government or population to conform to a particular political, social, or ideological agenda." (**US Army TRADOC**, 2007, p. 148)

Cybergeddon: Cyber mushroom cloud.

Cyclone: "An atmospheric closed circulation rotating counter-clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere." (**NHC**, *Glossary of NHC Terms*, 2007)

Cyclone: "A large-scale closed circulation system in the atmosphere with low barometric pressure and strong winds that rotate counter clockwise in the northern hemisphere and clockwise in the southern hemisphere. The system is referred to as a cyclone in the Indian Ocean and South Pacific, hurricane in the western Atlantic and eastern Pacific and typhoon in the western Pacific." (**UNDHA**, *Disaster Management Glossary*, 1992, 23)

CZMA: Coastal Zone Management Act.

D/A: Department and/or Agency

DA: Department of the Army. (**Department of the Army** Website, References (Glossary).)

DA: Diphenylchloroarsine. (**Dept. of Army**, *WMD-CST-Operations*, Dec 2007, Glossary-2)

DAC: Disaster Application Center.

DAD: Disaster Assistance Directorate, FEMA (**DHS**, *FEMA OMA*, 2008, 5)

DAE: Disaster Assistance Employee, FEMA.

Daily NOC Elements Conference Call: "…in order to enhance integration and coordination, we established the Daily NOC Elements Conference Call. This conference call provides the NOC Element Directors, Operation Centers (Senior Duty Officers), and staff members a daily forum to highlight operational matters, address process issues, and conduct coordination as appropriate." (**DHS**, *Statement of Frank DiFalco, Director of the NOC, OOC*, June 20, 2007, 7)

DAIP: Disaster Assistance Improvement Plan. (**FEMA**, S*tatement of Harvey E. Johnson, Jr., Acting Deputy Administrator and Chief Operating Officer, "Moving Beyond the First Five Years: Ensuring FEMA's Ability to Respond and Recover in the Wake of a National Catastrophe,"* April 9, 2008, p. 4)

Dam (also barrage; barrier; weir): "Barrier constructed across a valley for impounding water or creating a reservoir." (**UNDHA**, *Disaster Management Glossary*, 1992, 23)

Dam Failure: "Downstream flooding due to the partial or complete collapse of any impoundment. Dam failure is associated with intense rainfall and prolonged flood conditions. However, dam breaks may also occur during dry periods as a result of progressive erosion of an embankment caused by seepage leaks. Dam failure may also be caused by earthquake." (**FEMA**, *Hazard Identification…* (CPG 1-34), 1985, p. A-3)

Damage Assessment: The process utilized to determine the magnitude of damage and the unmet needs of individuals, businesses, the public sector, and the community caused by a disaster or emergency event.

Damage Assessment: "The process of assessing damage, following a disaster, to computer hardware, vital records, office facilities, etc. and determining what can be salvaged or restored and what must be replaced." (**DigitalCare**, *State of OR Business Cont. Workshop*, 2006, p. 52)

Damage Assessment: "The process used to appraise or determine the number of injuries and deaths, damage to public and private property, and the status of key facilities and services such as hospitals and other health care facilities, fire and police stations, communications networks,

water and sanitation systems, utilities, and transportation networks resulting from a man-made or natural disaster." (**FEMA**, *Guide For All-Hazard Emer. Ops Planning* (SLG 101), 1996, GLO-1)

Damage Assessment: "An appraisal or determination of the effects of the disaster on human, physical, economic, and natural resources." (**NFPA 1600**, 2007, p. 7)

Damage Classification: "Evaluation and recording of damage to structures, facilities, or objects according to three (or more) categories:

1. "Severe Damage" - which precludes further use of the structure, facility, or abject for its intended purpose.
2. "Moderate Damage" - or the degree of damage to principal members, which precludes effective use of the structure, facility, or object for its intended purpose, unless major repairs are made short of complete reconstruction.
3. "Light Damage" - such as broken windows, slight damage to roofing and siding, interior partitions blown down, and cracked walls; the damage is not severe enough to preclude use of the installation for the purpose for which it was intended." (**UNDHA**, *DM Glossary*, 1992, 24)

Damping: "Limitation of movement or dissipation of energy." (**UNDHA**, *DM Gloss.*, 1992, 24)

DAST: Disaster Area Survey Team. (**Japan National Committee for IDNDR**, *Multi-language Glossary on Natural Disasters,* March 1993)

Data Backups: "The back up of system, application, program and/or production files to media that can be stored both on and/or offsite. Data backups can be used to restore corrupted or lost data or to recover entire systems and databases in the event of a disaster. Data backups should be considered confidential and should be kept secure from physical damage and theft." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 52)

Data Center Recovery: "The component of Disaster Recovery which deals with the restoration, at an alternate location, of data center services and computer processing capabilities. SIMILAR TERMS: Mainframe Recovery, Technology Recovery." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 52)

Data Collection Platform (DCP): "Automatic measuring facility with a radio transmitter to provide contact and transmission of data via satellite." (**UNDHA**, *DM Glossary*, 1992, 24)

Data Mining: "Data mining is the process of knowledge discovery and predictive modeling and analytics, traditionally involving the identification of patterns and relationships from databases…. In government, data mining is increasingly used to help detect terrorist threats through the collection and analysis of both public and private sector data." (**DHS/OIG**, *ADVISE Report*, June 2007, p. 6)

DCIP: Defense Critical Infrastructure Program. (**DOD**, *DCIP Geospatial Data Strategy*, 2006)

DCIP: Defense Critical Infrastructure Protection. (**DSB**, *Report of DSB TF on CHIP*, 2007, 2)

DCE: Defense Coordinating Element (DCO Staff). (**JCS/DOD**, *CBRNE CM*, 2006, II-19)

DCO: Defense Coordinating Officer. (**Dept of the Army**, *WMD-CST Ops*, 2007, Glossary-2)

DCP: Data Collection Platform. "Automatic measuring facility with a radio transmitter to provide contact and transmission of data via satellite." (**UNDHA**, *DM Glossary*, 1992, 24)

DCPA: Defense Civil Preparedness Agency.

DCT: Data Collection Toolkit. (**OIG/DHS**, *IT Information Management Letter, FY 2005*, p. 58)

DDS: Design and Development System. (**FEMA**, *HSEEP*, 2008 slide presentation)

Deaf and Hard-of-Hearing Notification System (DHNS): "Provides emergency information to the hearing impaired community; Uses American Sign Language videos; Information is sent over Internet and other communication devices." (**FEMA**, *IPAWS*, September 11, 2007)

DEARE: Delayed Effects of Acute Radiation Exposure. (**HHS**, *PHEMCE IP*, 2007, p. 17)

DEAS: Digital Emergency Alert System. (**DHS**, *NCRC, First Annual Report*, 2005, p. F-11)

Debrief: "A debriefing is a forum for planners, *facilitators*, *controllers*, and *evaluators* to review and provide feedback after the exercise is held. It should be a facilitated discussion that allows each person an opportunity to provide an overview of the functional area they observed and document both strengths and areas for improvement. Debriefs should be facilitated by the *exercise planning team* leader or the *exercise program manager*; results should be captured for inclusion in the *AAR/IP*. (Note: Other sessions, such as a separate debrief for hospitals during an *operations-based* exercise, may be held as necessary.) A debriefing is different from a *hot wash*, in that a hot wash is intended for players to provide feedback." (**FEMA**, *HSEEP Glossary*, 2008)

Debris Clearance and Removal: "Clearance, pick up, hauling, processing and disposal of all manner of debris generated by the declared event on public property. This includes woody debris, sand and gravel, and components of buildings or other structures. This may also include debris on private property, when FEMA has approved such removal." (**FEMA**, *100% Funding for Direct Federal Assistance and Grant Assistance*, June 9, 2006)

Debris Flow: "A high-density mud flow with abundant coarse-grained materials such as rocks, tree trunks, etc." (**UNDHA**, *Disaster Management Glossary*, 1992, 25)

DEC: Disaster Emergency Communications. (**FEMA**, *JTF Commanders' Briefing*, Jan 2008)

Decedents: "A deceased person, including portions of remains from that person." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 34)

Decision Information Distribution System (DIDS): "DIDS is a low-frequency radio network which has been designed to improve and expand nationwide warning. A…prototype facility is located at Edgewood Arsenal, MD…. DIDs could form the basis for automatic indoor home warning. Special low-frequency home warning receivers are under development, along with devices which could be incorporated in regular television or entertainment radios. The low-frequency transmission of DIDS could turn on these units to alert the public and provide warning information." (**DCPA**, *Civil Preparedness – A New Dual Mission*, 1972, p. 8)

Declaration: The formal action by the President to make a State eligible for major disaster or emergency assistance under the Robert T. Stafford Relief and Emergency Assistance Act, Public Law 93-288, as amended. (**FEMA**, *Disaster Basics* (IS-292), 2007 update, p. A-2 (Glossary)

Declaration of Disaster: "Official issuance of a state of emergency upon the occurrence of a large-scale calamity, in order to activate measures aimed at the reduction of the disaster's impact." (**UNDHA**, *Disaster Management Glossary*, 1992, 25)

Declaration Process: "The request for a declaration [disaster or emergency] must come from the Governor or Acting Governor. Before sending a formal request letter to the President, the Governor will request that FEMA conduct a joint Preliminary Damage Assessment (PDA) with the State to verify damage and estimate the amount of supplemental assistance that will be needed. If the Governor believes that Federal assistance is necessary after this assessment is complete, the Governor sends a request letter to the President, directed through the Regional Administrator (RA) of the appropriate FEMA region. The RA reviews the request and forwards it with a recommendation to the Director of FEMA who, in turn, makes a recommendation to the President. In the aftermath of a significant event causing extensive damage and loss of life, the declaration process may be expedited. The President makes the decision whether to declare a major disaster or emergency. After the initial declaration, the person designated by the Governor as the Governor's Authorized Representative (GAR) may request additional areas to be eligible for assistance or for additional types of assistance as deemed necessary." (**FEMA**, *Public Assistance Guide* (FEMA 322), June 2007)

Deconfliction: "…the avoidance of duplication or interference." (**FEMA**, *IIFOG, Ver 3*, 08, 12)

Decontamination: "The removal of dangerous goods from personnel and equipment to the extent necessary to prevent potential adverse health effects. Always avoid direct or indirect contact with dangerous goods; however, if contact occurs, personnel should be decontaminated as soon as possible. Since the methods used to decontaminate personnel and equipment differ from one chemical to another, contact the chemical manufacturer, through the agencies listed on the inside back cover, to determine the appropriate procedure. Contaminated clothing and equipment should be removed after use and stored in a controlled area (warm/contamination reduction/limited access zone) until cleanup procedures can be initiated. In some cases, protective clothing and equipment cannot be decontaminated and must be disposed of in a proper manner." (**DOT**, *Emergency Response Guidebook…Hazardous Materials Incident*, 2004, 360)

DEFCON: Defense Readiness Condition. (**OCD**, *Abbreviations and Definitions*, 1971, p. 1)

Defense Against Weapons of Mass Destruction Act of 1996: Public Law 104-201, Title XIV**,** also known as the Nunn- Lugar-Domenici Domestic Preparedness Act.

Defense Against Weapons of Mass Destruction Act of 1996: "The Defense Against Weapons of Mass Destruction Act of 1996, or Nunn-Lugar-Domenici amendment to the National Defense Authorization Act for FY97, stipulated the training of first responders to deal with WMD terrorist incidents. (James Martin Center for Nonproliferation Studies." *Nunn-Lugar-Domenici Domestic Preparedness and WMD Civil Support Teams.* October 2001)

Defense Against Weapons of Mass Destruction Act: "The Defense Against Weapons of Mass Destruction (WMD) Act, 50 U.S.C. 2301*et seq*, is intended to enhance the capability of the Federal government to prevent and respond to terrorist incidents involving WMD. Congress has directed that DOD provide certain expert advice to Federal, State, and local agencies with regard to WMD, to include domestic terrorism rapid response teams, training in emergency response to the use or threat of use of WMD and a program of testing and improving the response of civil agencies to biological and chemical emergencies." (**DHS**, *National Response Plan* (Draft #1), Feb. 25, 2004, p. 70.)

Defense Civil Preparedness Agency (DCPA): "In further recognition of the broader responsibility of the Federal Government in disaster preparedness assistance at the State and local government level, Secretary of Defense Melvin Laird, on May 5, 1972, abolished the Office of Civil Defense, which operated under the Secretary of the Army, and established a new, separated Defense Agency within the Department of Defense – the Defense Civil Preparedness Agency." (**DCPA**, *Civil Preparedness – A New Dual Mission*, 1972, p. 1)

Defense Coordination Element (DCE): "On-scene staff element composed of administrative staff and liaison personnel (including Emergency Preparedness Liaison Officers). Normally, the DCE will co-locate with the ERT Operations Section in the JFO." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 48)

Defense Coordinating Element (DCE): "The Defense Coordinating Element is that structure within the DFO which supports and executes missions under the authority of the Defense Coordinating Officer." (**USACE**, *Response Planning Guide*, 1995, p. B-2)

Defense Coordinating Officer (DCO): "DOD has appointed 10 DCOs and assigned one to each FEMA region. If requested and approved, the DCO serves as DOD's single point of contact at the JFO. With few exceptions, requests for Defense Support of Civil Authorities originating at the JFO are coordinated with and processed through the DCO. The DCO may have a Defense Coordinating Element consisting of a staff and military liaison officers to facilitate coordination and support to activated ESFs. Specific responsibilities of the DCO (subject to modification based on the situation) include processing requirements for military support, forwarding mission assignments to the appropriate military organizations through DOD-designated channels and assigning military liaisons, as appropriate, to activated ESFs." (**DHS**, *National Response Framework* (Comment Draft), September 10, 2007, p. 66; see, also, **DHS**, *NRF*, 2008, 68))

Defense Coordination Officer (DCO): "A military official specifically designated to orchestrate DoD support activity. As the designated DoD on-scene member of the ERT, the DCO is the single POC in the field for coordinating and tasking the use of all DoD resources in support of Federal relief efforts, excluding National Guard forces operating under State control." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 48)

Defense Coordinating Officer (DCO): "The **DCO** is appointed by DOD and serves as DOD's single point of contact at the JFO, with the exception of US Special Operations Command and USACE assets. Generally, requests for CS originating at the JFO will be coordinated with and processed through the DCO. The DCO may have a DCE consisting of a staff and military LNOs [Liaison Officers] in order to facilitate coordination and support to activated ESFs. Specific responsibilities of the DCO (subject to modification based on the situation) include processing requirements for military support, forwarding RFAs to the appropriate military organizations through DOD designated channels, and assigning military liaisons, as appropriate, to activated ESFs. Requests for CS originating at the JFO will be coordinated and processed through the DCO with the exception of requests for USACE support, NG forces operating under state active duty or Title 32 USC (i.e., not in federal service), or, in some circumstances, DOD forces in support of the FBI." (**JCS/DoD**, *Civil Support*, 2007, pp. D-21-22)

Defense Coordinating Officer (DCO) Relationship to Joint Task Force (JTF) as part of the Unified Coordination Group (UCG): "The DCO and JTF Commander, although both DOD representatives, have very distinct roles and responsibilities. If requested and approved, the DCO serves as DOD's single point of contact at the JFO for requesting assistance from DOD . With few exceptions, requests for Defense Support to Civil Authorities (DSCA) originating at the JFO are coordinated with and processed through the DCO. Based on the complexity and type of incident, and the anticipated level of DOD resource involvement, DOD may also elect to designate a JTF Commander to command Federal (Title 10) military activities in support of the incident objectives. If a JTF is established, consistent with operational requirements, its command and control element will be co-located with the senior on-scene leadership at the JFO to ensure coordination and unity of effort. The co-location of the JTF command and control element does not replace the requirement for a DCO/Defense Coordinating Element as part of the JFO Unified Coordination Staff. The DCO remains the DOD single point of contact in the JFO for requesting assistance from DOD." (**DHS**, *NRF FAQs*, Jan 2008, 7)

Defense Critical Asset: "An asset of such extraordinary importance to DoD operations in peace, crisis, and war that its incapacitation or destruction would have a very serious, debilitating effect on the ability of the Department of Defense to fulfill its missions." (**DoD**, *DCIP*, 2005, 11)

Defense Critical Infrastructure: "DoD and non-DoD networked assets essential to project, support, and sustain military forces and operations worldwide." (**DoD**, *DCIP*, 2005, 2)

Defense Critical Infrastructure Program (DCIP): "…the mission of the DCIP is to identify, prioritize, and coordinate protection of critical assets that affect the warfighting capability of the U.S. armed forces and, ultimately, our national defense and economic security; to establish adaptive plans and procedures to mitigate risk and restore capability in the event of an asset's

loss or degradation; to support Defense critical infrastructure crisis and consequence management; and to protect critical infrastructure information." (**DoD**, *DCIP*, 2004)

Defense Critical Infrastructure Program (DCIP): "A DoD risk management program that seeks to ensure the availability of networked assets critical to DoD missions. Activities include the identification, assessment, and security enhancement of assets essential for executing the National Military Strategy." (**DoD**, *DCIP* (DODD 3020.40), August 19, 2005, p. 2)

Defense Emergency Response Fund: Established by Public Law 101-165 (1989). That law provides that, "The Fund shall be available for providing reimbursement to currently applicable appropriations of the Department of Defense for supplies and services provided in anticipation of requests from other Federal departments and agencies and from State and local governments for assistance on a reimbursable basis to respond to natural or manmade disasters. The Fund may be used upon a determination by the Secretary of Defense that immediate action is necessary before a formal request for assistance on a reimbursable basis is received." The Fund is applicable to military support to civil authorities (MSCA) under DoD Directive 3025.1 and to foreign disaster assistance under DoD Directive 5100.46. (**32 CFR 185**)

Defense Production Act of 1950 (DPA): "The Defense Production Act of 1950 (DPA) as amended by P.L. 102-558, 106 Stat. 4201, 50 U.S.C. App. 2062, is the primary authority to ensure the timely availability of resources for national defense and civil emergency preparedness and response. Among other things, the DPA authorizes the President to demand that companies accept and give priority to government contracts "which he deems necessary or appropriate to promote the national defense." The DPA defines "national defense" to include activities authorized by the emergency preparedness sections of the Stafford Act. Consequently, DPA authorities are available for activities and measures undertaken in preparation for, during, or following a natural disaster or accidental or man-caused event. The Department of Commerce has redelegated DPA authority under Executive Order 12919, National Defense Industrial Resource Preparedness, June 7, 1994, as amended, to the Secretary of Homeland Security to place, and upon application, to authorize State and local governments to place, priority rated contracts in support of Federal, State, and local emergency preparedness activities." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, pp. 68-69)

Defense Support of Civil Authorities (DSCA): "Defense support of civil authorities, often referred to as civil support, is DoD support, including Federal military forces, the Department's career civilian and contractor personnel, and DoD agency and component assets, for domestic emergencies and for designated law enforcement and other activities. The Department of Defense provides defense support of civil authorities when directed to do so by the President or Secretary of Defense." (**DOD**, *Strategy for Homeland Defense/Civil Support*, June 2005, pp. 5-6)

Defense Support of Civil Authorities (DSCA) -- Immediate Response: "Imminently serious conditions resulting from any civil emergency may require immediate action to save lives, prevent human suffering or mitigate property damage. When such conditions exist, and time does not permit approval from higher headquarters, local military commanders and responsible officials from DOD components and agencies are authorized to take necessary action to respond to requests from civil authorities. This response must be consistent with the Posse Comitatus Act

18 U.S.C. § 1385), which generally prohibits Federal military personnel (and units of the National Guard under Federal authority) from acting in a law enforcement capacity (e.g., search, seizures, arrests) within the United States, except where expressly authorized by the Constitution or Congress." (**DHS**, *Overview: ESF…Support Annexes…In Support of the NF*, Sep 2007, p. 6)

Deforestation: "The clearing or destruction of a previously forested area." (**UNDHA**, *Disaster Management Glossary*, 1992, 25)

Delegation of Authority: "A delegation of authority identifies who is authorized to act on behalf of the agency head or other officials for specified purposes and ensures that designated individuals have the legal authorities to carry out their duties. To the extent possible, these authorities should be identified by title or position, and not by the individual office holder's name." (**DHS**, *FCD 1*, Nov. 2007, p. E-3)

Delegation of Authority: "Identification, by position, of the authorities for making policy determinations and decisions at headquarters, field levels, and all other organizational locations. Generally, pre-determined delegations of authority will take effect when normal channels of direction are disrupted and terminate when these channels have resumed." (**HSC,** *NCPIP*, 2007, p. 61)

Deliberate Planning: Contingency Planning "(the creation of plans in anticipation of future incidents based on the most current information utilizing Department resources, also known as deliberate planning." (**DHS**, *National Planning and Execution System*, 2007 Draft, p. 4-4)

DEMHS: Department of Emergency Management and Homeland Security, Connecticut.

Demobilization Unit: "The unit within the Planning Section responsible for ensuring the orderly, safe and efficient demobilization of incident resources." (**Capital Health Region**, Canada, *Incident Cmd. Sys. Training SM*, Mar 2007, 52)

Department of Defense "Active, Layered Defense" for the Homeland, Civil Support: "The Department of Defense's approach to homeland defense and civil support is guided by the concept of an "active, layered defense." The strategy focuses on four strata: the forward regions, the approaches, the global commons, and the homeland. DOD's objective in the *forward regions*—foreign lands, airspace, and waters—consists of deterring and preventing attacks. Its objective for the *approaches*—the means of access from the forward regions to the homeland, including Canadian and Mexican territory and those waters and airspace contiguous to the homeland—consists of detecting, deterring, and defeating threats en route to the United States. For the *global commons*—international waters and airspace, space beyond Earth's atmosphere, and cyberspace—DOD's objective is to continue to be able to operate effectively within it. Finally, in the *homeland* DOD focuses on deterring and defeating direct attacks on the United States, supporting civilian law enforcement and counterterrorism activities, and supporting civil authorities by providing critical chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) consequence management capabilities."[14] (**Commission on the National Guard and Reserves**, *Transitioning*, 2008, p. B-5 (390 of 448))

[14] Cites: *Strategy for Homeland Defense and Civil Support,* pp. 10–13.

Department of Defense (DOD) Process for Requests for Assistance, Domestic Emergencies: "JDOMS [Joint Director pf Military Support], located within the Joint Staff Operations Directorate (J-3), produces military orders as they pertain to domestic emergencies, forwards them to the SecDef for approval, and then to the appropriate military commander for execution. A six-step process is initiated when a request for assistance (RFA) is received from a lead or other primary agency:

(a) Lead or other primary agency initiates the RFA.
(b) RFA is sent to the DOD Executive Secretary for assessment/processing.
(c) RFA is processed and sent to ASD(HD) and JDOMS.
(d) JDOMS processes the order.
(e) SecDef approves the order.
(f) JDOMS issues the order to appropriate combatant commanders, Services, and agencies." (**JCS/DOD**, *CBRNE Consequence Management* (JP 3-41), 2006, p. II-9)

Department of Defense Strategy for Homeland Defense: "According to DOD's *Strategy for Homeland Defense and Civil Support,* the Department has five objectives in the homeland and its approaches. In order of priority, they are

- Achieve Maximum Awareness of Threats.
- Deter, Intercept, and Defeat Threats at a Safe Distance.
- Achieve Mission Assurance.
- Support Consequence Management for CBRNE Mass Casualty Attacks.
- Improve National and International Capabilities for Homeland Defense and Homeland Security.

"The first three objectives represent more traditional military missions that fall under the homeland defense umbrella, in which DOD acts as the lead agency.38 In fulfilling the final objective, DOD plans to improve interagency planning and interoperability, as well as its ability to function alongside federal, state, and local partners to improve its capacity to provide defense support to civil authorities. This objective also involves strengthening security cooperation with other countries. While the objective emphasizes the importance of cooperation with civil authorities, much of what constitutes civil support appears to fall outside of it." (**Commission on the National Guard and Reserves**, *Transitioning*, 2008, p. B-5 (390 of 448)

Department of Energy (DOE). "DOE serves as a support agency to the FBI for technical operations and a support agency to DHS/FEMA for CM [Consequence Management]. DOE provides scientific and technical personnel and equipment in support of the LFA during all aspects of WMD incidents. DOE assistance can support both CrM [Crisis Management] and CM activities with capabilities such as threat assessments, domestic emergency support team (DEST) deployment, LFA advisory requirements, technical advice, forecasted modeling predictions, and assistance in the direct support of operations. Deployable DOE scientific technical assistance and support includes capabilities such as search operations; access operations; diagnostic and device assessment; radiological assessment and monitoring; identification of material; development of federal protective action recommendations; provision of information on the radiological response; render safe operations; hazards assessment; containment, relocation and storage of special nuclear material evidence; post-incident cleanup; and on-site management and

radiological assessment to the public, the White House, and members of Congress and foreign governments. All DOE support to a federal response will be coordinated through a senior DOE official." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. II-20)

Department of Health and Human Services (DHHS): "DHHS assistance supports threat assessment, DEST deployment, epidemiological investigation, LFA advisory requirements, and technical advice. Technical assistance to the FBI may include identification of agents, sample collection and analysis, on-site safety and protection activities, and medical management planning. DHHS serves as a support agency to the FBI for technical operations, and a support agency to DHS/FEMA for CM. DHHS provides technical personnel and supporting equipment to the LFA during all aspects of an incident. DHHS can also provide regulatory follow-up when an incident involves a product regulated by the Food and Drug Administration. Operational support to DHS/FEMA may include mass immunization, mass prophylaxis, mass fatality management, pharmaceutical support operations (Strategic National Stockpile), contingency medical records, patient tracking, and patient evacuation and definitive medical care provided through the National Disaster Medical System." (**JCS/DoD**, *Homeland Security*, 2005, p. II-21)

Department of Homeland Security Goals, Missions, Principles, Priorities, Vision, etc.

[Note: Scroll down below for descriptions of DHS organization parts and components]

Department of Homeland Security: "Legislation to create the largest reorganization of the federal government in 50 years was signed into law on November 25, 2002. Three months later, on March 1, 2003, the majority of the 22 agencies and 180,000 employees were officially merged to form the U.S. Department of Homeland Security." (**DHS**, Fact Sheet: Leadership and Management Strategies for Homeland Security Merger, February 11, 2004)

Department of Homeland Security (June 2002): "The Homeland Security Act of 2002, Pub. L. No. 107-296, 116 Stat. 2135 (2002) (codified predominantly at 6 U.S.C. §§ 101-557), as amended with respect to the organization and mission of the Federal Emergency Management Agency in the Department of Homeland Security Appropriations Act of 2007, Pub. L. No. 109-295, 120 Stat. 1355 (2006), established a Department of Homeland Security as an executive department of the United States. The Homeland Security Act consolidated component agencies…into the Department. The Secretary of Homeland Security is the head of the Department and has direction, authority, and control over it. All functions of all officers, employees, and organizational units of the Department are vested in the Secretary." (**DHS**, *National Response Framework List of Authorities and References*. (Draft), Sep.10, 2007, p. 1)

Department of Homeland Security, First Principles of Homeland Security -- See Principles.

Department of Homeland Security, Foundational Operating Concept – Unified Effort: "Unified Effort is the combination and integration of Federal, State, local, and tribal governments and organizations; the private sector; and international partners' operations and investments to plan, prepare, coordinate, execute, and assess those actions necessary to prevent,

protect, respond, and recover from threats to the citizens, infrastructure and homeland of the United States.

"The concept of *Unified Effort* defines the way DHS operates both internally and within the broader homeland security environment; it binds the operations of its components as well as the approach DHS takes in working with its partners from across the community. *Unified Effort* allows DHS to expand its strengths, compensate for its weaknesses, and provide depth in delivering capabilities to meet homeland security challenges.

"*Unified Effort* is an operational concept applied to all DHS missions. The unique roles and missions of the DHS components, as well as the State, local and tribal governments, and the private sector, require coordination and cooperation in planning and executing for the range of homeland operations. *Unified Effort* ensures a precision of roles and a clear understanding of who does what in each situation." (**DHS**, Chapter 2, *Capstone Doctrine Pub 1 Draft*, 2008, 2)

Department of Homeland Security, Goals:

1. Continue to Protect our Nation from Dangerous People
2. Continue to Protect our Nation from Dangerous Goods
3. Protect Critical Infrastructure
4. Build a Nimble, Effective Emergency Response System and a Culture of Preparedness
5. Strengthen and Unify DHS Operations and Management. (**DHS**, *Performance Budget Overview, Fiscal Year 2008 Congressional Budget Justification*, March 2007, p. i) [Under Goal 5: "…we will integrate hiring, retention, training and development and performance programs by the end of 2008." (Cited in **DHS**, *Establishing a DHS University System*, Sep 28, 2007, p. 6)

Department of Homeland Security, Guiding Principles: See DHS Principles, below:

Department of Homeland Security, Imperatives (2005):

"In the weeks and months to come, the Department will launch specific policy initiatives in a number of key areas. Here, then, are six of the key imperatives that will drive the near-term agenda for DHS.

1. We must increase preparedness with particular focus on catastrophic events;
2. Strengthen border security and interior enforcement and reform immigration processes;
3. Harden transportation security without sacrificing mobility;
4. Enhance information sharing with our partners, particularly with state, local and tribal governments and with the private sector;
5. Improve DHS stewardship, particularly with stronger financial, human resource, procurement, and information technology management; and
6. Realign the DHS organization to maximize mission performance."

(**DHS**, *Secretary Michael Chertoff U.S. Department of Homeland Security Second Stage Review Remarks*, 13 July 2005)

Department of Homeland Security, Incident Planning:

- Contingency Planning
- Crisis Action Planning (**DHS**, *National Planning and Execution System*, 2007, p. 5-1)

Department of Homeland Security, Interoperability Continuum: The "… Interoperability Continuum is designed to help the emergency response community and local, tribal, state, and Federal policy makers address critical elements for success as they plan and implement interoperability solutions. These elements include governance, standard operating procedures, technology, training and exercises, and usage of interoperable communications. The Interoperability Continuum was developed in accordance with the SAFECOM program's locally driven philosophy and its practical experience in working with local governments across the Nation. SAFECOM is a communications program of the Department of Homeland Security's Office for Interoperability and Compatibility. The Continuum was established to depict the core facets of interoperability according to the stated needs and challenges of the emergency response community and will aid emergency responders and policy makers in their short- and long-term interoperability efforts. (**DHS/Safecom**, *Interoperability Continuum.…*, Aug 2006, p. 2)

Department of Homeland Security, Mission (Primary) (2002): "The primary mission of the Department is to:

> (A) prevent terrorist attacks within the United States;
> (B) reduce the vulnerability of the United States to terrorism; and
> (C) minimize the damage, and assist in the recovery, from terrorist attacks that do occur within the United States." (*Homeland Security Act of 2002*, November 25, 2002).

Department of Homeland Security, Mission (Critical Six Missions) (2003): "I…wish to state my promise that I will do everything in my power to use the office of the secretary to keep the Department focused on all six of its critical missions outlined in the *National Strategy for Homeland Security*. They include:

- Intelligence and Warning,
- Border and Transportation Security,
- Domestic Counterterrorism,
- Protecting Critical Infrastructure and Key Assets,
- Defending Against Catastrophic Threats, and
- Emergency Preparedness and Response.

"While each of these missions is unique, each is essential to our primary mission of protecting the security of the United States. Some, such as Emergency Preparedness and Response, have long played key roles in helping society overcome hardship and emergencies; while others are byproducts of the harsh reality that terrorism can strike on our soil….the future employees of the Department of Homeland Security will be doing the same job in the new Department that they are doing today. The difference is that the new structure of the Department will refocus, consolidate and reorganize the functions of each of the 22 agencies involved in protecting the homeland. (DHS, *The Nomination of The Honorable Tom Ridge to be Secretary of the Department of Homeland Security*, January 19, 2003)

Department of Homeland Security, Mission (2004): "We will lead the unified national effort to secure America. We will prevent and deter terrorist attacks and protect against and respond to

threats and hazards to the nation. We will ensure safe and secure borders, welcome lawful immigrants and visitors, and promote the free-flow of commerce." (**DHS**, *Strategic Plan*, 2004)I

Department of Homeland Security, Mission (Preparedness) (2005): "Bringing greater planning discipline to each of these risk scenarios is another dimension of our preparedness mission, and simple common sense counsels that we begin by concentrating on events with the greatest potential consequences." (DHS, *Secretary Michael Chertoff U.S. Department of Homeland Security Second Stage Review Remarks*, July 13, 2005)

Department of Homeland Security, Missions (Primary) (2007): "The primary missions of the Department are to:

- Prevent terrorist attacks within the United States;
- Reduce the vulnerability of the United States to terrorism;
- Minimize the damage, and assist in the recovery, from terrorist attacks that do occur within the United States;
- Carry out all functions of entities transferred to the Department, including by acting as a focal point regarding natural and manmade crises and emergency planning;
- Ensure that the functions of the agencies and subdivisions within the Department that are not related directly to securing the homeland are not diminished or neglected except by specific explicit Act of Congress;
- Ensure that the overall economic security of the United States is not diminished by efforts, activities, and programs aimed at securing the homeland;
- Ensure that the civil rights and civil liberties of persons are not diminished by efforts, activities, and programs aimed at securing the homeland; and
- Monitor connections between illegal drug trafficking and terrorism, coordinate efforts to sever such connections, and otherwise contribute to the efforts to interdict illegal drug trafficking." (**DHS**, *National Response Framework List of Authorities and References* (Draft), Sep. 2007, p.1)

Department of Homeland Security, Operational Security Domains (Four): *"Operating in Multiple Domains*

"The Department's prevention, protection, response and recovery missions are carried out across a range of security domains, to include the air, land, maritime, and cyber domains. Security domains are those areas of flow of goods, people, and technologies, where a breach in security with malicious intent threatens the overall homeland security of the country. Achieving homeland security means exercising dominion over each of the homeland security domains so as to have information about the threats and vulnerabilities within the domains and be able to prevent, protect, respond and recover from security incidents in that domain. For example, achieving security in the cyber domain is not merely related to building fire-walls to prevent cyber attacks, but also includes increasing domain awareness, building a cyber response and recovery system, and developing partnerships among a range of legitimate participants in activities (including commerce) in cyber space, particularly the private sector, to reduce the consequences of an attack to the cyber network. DHS strives to lead the unified effort to prevent, protect, respond, and recover from threats to the citizens, infrastructure and homeland of the United States across four major domains.

- ***The land domain***. The homeland security land domain entails the entire geographic area of the United States and its territories. Protecting the land domain entails both border protection, to prevent illicit entry of people and goods into the U.S., as well as protection of the country's infrastructure. This involves both a "borders out" and a "borders in" approach to security operations.
- ***The maritime domain***. The maritime domain is all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime related activities, infrastructure, people, cargo, and vessels and other conveyances.[15]
- ***The air domain***. The air domain consists of both the skies above the United States, and the skies that allow entry into U.S. airspace. As the National Strategy for Aviation Security notes, "the differences between ground-based and airborne aviation security measures implemented in different jurisdictions throughout the world, the volume of domestic and international air traffic, the speed with which events unfold, and the complexity of aviation assets make the Air Domain uniquely susceptible to attack or exploitation by terrorist groups, hostile nation-states, and criminals."
- ***The cyber domain***. The cyber domain is composed of hundreds of thousands of interconnected computers, servers, routers, switches, and fiber optic cables that allow the Nation's critical infrastructures to work. Thus, the healthy functioning of cyberspace is essential to the economy and the Nation's well-being.[16] (DHS, Capstone Doctrine Pub 1 Draft, Chapter 2, 2008, p. 2-6)

Department of Homeland Security, Planning Communities of Interest (COI): "DHS has four major planning communities of interest (COI):

- Key Department Components,
- Intra-Departmental,
- Interagency, and
- Other." (**DHS**, *National Planning and Execution System*, 2007 Draft, p. 2-1)

[Note: At p. 2-4 "Other" is elaborated upon as: "State, local, and tribal governments; Non-Governmental and Volunteer Organizations; Private Sector; Other."]

Department of Homeland Security, Primary Responsibilities: As "described in this Act, the Department's primary responsibilities shall include:

(A) information analysis and infrastructure protection;
(B) chemical, biological, radiological, nuclear, and related countermeasures;
(C) border and transportation security;
(D) emergency preparedness and response; and

[15] Definition from "The National Strategy for Maritime Security."
[16] Definition of cyber space from "The National Strategy to Secure Cyberspace"

(E) coordination (including the provision of training and equipment) with other executive agencies, with State and local government personnel, agencies, and authorities, with the private sector, and with other entities." (**Homeland Security Act**, 2002, Title 1,Sec. 101, p. 5)

Department of Homeland Security, Principles: "Our review [2SR] was conducted with several core principles in mind.

First, as I've said before, DHS must base its work on **priorities that are driven by risk**. Our goal is to maximize our security, but not security "at any price." Our security strategy must promote Americans' freedom, privacy, prosperity, mobility.

Second, our Department must **drive improvement** with a **sense of urgency**. Our enemy constantly changes and adapts, so we as a Department must be nimble and decisive.

Third, DHS must **be an effective steward of public resources**. Our stewardship will demand many attributes -- the willingness to set priorities; disciplined execution of those priorities; sound financial management; and a commitment to measure performance and share results.

Perhaps most of all, **DHS must foster innovation.**

Finally, our work must be guided by the understanding that effective security is built upon a **network of systems** that span all levels of government and the private sector. DHS does not own or control all these systems. But we must set a clear national strategy, and design an architecture in which separate roles and responsibilities for security are fully integrated among public and private stakeholders. We must draw on the strength of our considerable network of assets, functioning as seamlessly as possible with state and local leadership, law enforcement, emergency management personnel, firefighters, the private sector, our international partners, and most certainly, the general public. **Building effective partnerships** must be core to every mission of DHS.

So, with these principles in mind, we went to work. From across the Department and elsewhere in the federal government, we pulled subject matter experts and talented individuals away from their day jobs to focus on how well we tackle **our tough fundamental challenges: prevention, protection, and all-hazards response and recovery.**" (DHS, *Secretary Michael Chertoff U.S. Department of Homeland Security Second Stage Review Remarks*, July 13, 2005) {Thus}

- **Priorities that are driven by risk**
- **Drive improvement with a sense of urgency**
- **Be an effective steward of public resources**
- **DHS must foster innovation**
- **Building effective partnerships must be core to every mission of DHS.**

Department of Homeland Security, Principles – All Hazards, Integrated Organization: "I would like to thank the Committee for its thoughtful look at how we as a nation, and especially the federal government, responded to Katrina…. I…agree with the fundamental principles underlying the Committee's conclusions and recommendations. The first and most

important such principle is that DHS must operate as an all hazards, integrated organization. I said this when I announced our Second Stage Review one month prior to Katrina, and my experiences since then have made me even more steadfast in the belief that this is the best approach." (**DHS**, *Statement of Michael Chertoff… Building An Integrated Preparedness And Emergency Management System: The Case For Keeping FEMA Within The Department Of Homeland Security*, June 8, 2006, p. 2)

Department of Homeland Security, Principles: First Principles of Homeland Security:
"First Principles are axioms that underpin how DHS and its employees should think about, approach, and reconcile the multitude of activities and actions that constitute their effort to secure the Homeland; they transcend any specific task or operations. These principles enable *Unified Effort* to provide a construct for organizing, planning, and conducting operations. They have been developed through a study of past homeland security operations, as well as analysis of critical components of success for DHS and its components in accomplishing their mission. The First Principles of DHS Capstone Doctrine are:

- Risk Management
- Preparedness
- Engaged Partnerships
- Bias Toward Action
- Leadership
- Operational Security
- Unity of Effort
- Economy of Effort
- Information
- Support in Depth

(**DHS,** "First Principles of Homeland Security," Ch. 4, *Capstone Doctrine Pub 1 Draft*, 2008, 1)

Department of Homeland Security, Principles: Guiding Principles of Homeland Security:
"The philosophy that informs and shapes decision making and provides normative criteria that governs the actions of policy makers and employees in performing their work.

- *Protect Civil Rights and Civil Liberties*. We will defend America while protecting the freedoms that define America. Our strategies and actions will be consistent with the individual rights and liberties enshrined by our Constitution and the Rule of Law. While we seek to improve the way we collect and share information about terrorists, we will nevertheless be vigilant in respecting the confidentiality and protecting the privacy of our citizens. We are committed to securing our nation while protecting civil rights and civil liberties.
- *Integrate Our Actions*. We will blend 22 previously disparate agencies, each with its employees, mission and culture, into a single, unified Department whose mission is to secure the homeland. The Department of Homeland Security will be a cohesive, capable and service-oriented organization whose cross-cutting functions will be optimized so that we may protect our nation against threats and effectively respond to disasters.
- *Build Coalitions and Partnerships*. Building new bridges to one another are as important as building new barriers against terrorism. We will collaborate and coordinate across traditional boundaries, both horizontally (between agencies) and vertically (among different levels of

government). We will engage partners and stakeholders from federal, state, local, tribal and international governments, as well as the private sector and academia. We will work together to identify needs, provide service, share information and promote best practices. We will foster inter-connected systems, rooted in the precepts of federalism that reinforce rather than duplicate individual efforts. Homeland security is a national effort, not solely a federal one.

- *Develop Human Capital*. Our most valuable asset is not new equipment or technology, but rather our dedicated and patriotic employees. Their contributions will be recognized and valued by this Department. We will hire, train and place the very best people in jobs to which they are best suited. We are committed to personal and professional growth and will create new opportunities to train and to learn. We will create a model human resources management system that supports equally the mission of the Department and the people charged with achieving it.
- *Innovate*. We will introduce and apply new concepts and creative approaches that will help us meet the challenges of the present and anticipate the needs of the future. We will support innovation and agility within the public and private sector, both by providing resources and removing red tape so that new solutions reach the Department and the marketplace as soon as possible. We will harness our nation's best minds in science, medicine and technology to develop applications for homeland security. Above all, we will look for ways to constantly improve—we will recognize complacency as an enemy.

Be Accountable. We will seek measurable progress as we identify vulnerabilities, detect evolving threats to the American homeland and prioritize our homeland security resources. We will assess our work, evaluate the results and incorporate lessons learned to enhance our performance. We will reward excellence and fix what we find to be broken. We will communicate our progress to the American people, operating as transparently as possible and routinely measuring the success of our progress. (**DHS**, *Securing Our Homeland: U.S. Department of Homeland Security Strategic Plan 2004*. February 24, 2004, p. 5)

Department of Homeland Security, Principles: Learning and Development Guiding Principles:

"Principle 1: Align with Homeland Security and National Strategies
Programs must be aligned with the Department of Homeland Security Strategic Plan and National Strategy. All curricula must continuously adapt to the changing nature of the security environment and the strategies that arise to address emerging threats and hazards.
Principle 2: Encompass Interdisciplinary and Global Perspectives
Learning programs must be interdisciplinary in nature and acknowledge the global scope of the endeavor. Programs must be grounded in a systemic understanding of the strategy, operations and tactics needed to achieve objectives associated with prevention, protection, detection, disruption, response, economic stabilization and recovery.
Principle 3: Employ Best Practices
Courses and programs should be based on best practices in education and training, grounded in learning theory, research-based, built on experiential learning principles and proven before deployment.
Principle 4: Emphasize Integration
Courses and programs should be integrated vertically and horizontally using the DHS lexicon to bridge communication across different sectors, disciplines and cultures. Similarly, educational

institutions and other program delivery entities must coordinate, communicate and collaborate if there is to be a comprehensive system of programs that meets national needs.

Principle 5: Responsive to Multiple Stakeholder Needs

Programs must prepare leadership across public and private sectors to formulate and execute strategies in harmony with Federal homeland security strategic objectives. Programs must be developed and delivered in a spirit of inclusiveness among the Federal, state, local, public and private sectors. Programs must be designed to promote essential information sharing, and unity of effort. Courses must be integrated into ongoing career development and professional training programs.

Principle 6: Make Programs Modular

Programs must be based on a building-block approach that can be adapted to different audiences. All programs must be designed to acknowledge target audiences' needs to balance breadth of knowledge objectives against the depth of knowledge needed for operational expertise.

Principle 7: Promote Innovation

Studies must be designed to expand horizons, perceptions and combat biases that inhibit creative, critical thinking. Programs must incorporate innovative approaches to problem solving, be designed to achieve resilient and adaptive patterns of thinking, and be dynamic and evolutionary in nature, in terms of both content and delivery. (**DHS**, *Establishing a Department of Homeland Security University: Learning and Development Strategy*, September 28, 2007, p. 3)

Department of Homeland Security, Priorities (Secretary's Five Highest):

"The Department continues to be disciplined in its use of resources, and has structured its budget request to target the Secretary's five highest priorities.

- Protect Our Nation From Dangerous People
- Protect Our Nation From Dangerous Goods
- Protect Critical Infrastructure
- Build a Nimble Effective Emergency Response System and Culture of Preparedness
- Strengthen and Unify DHS Operations and Management." (**DHS**, *Budget-in-Brief, Fiscal Year 2008*, pp. 9-13)

Department of Homeland Security, Purpose: "We were established shortly after the September 11th attacks to mobilize our nation to prevent, protect against, and respond to acts of terrorism and other threats to our security." (**DHS/Chertoff**, Rice University, June 5, 2008, p. 1)

Department of Homeland Security, Risk-Based Planning: "…the Department's recently released *National Preparedness Goals* -- and additional, risk-based planning -- will form our standard in allocating future DHS grants to our state and local partners so that we build the right capabilities in the right places at the right level. Federal money should be distributed using the risk-based approach that we will apply to all preparedness activities." (DHS, *Secretary Michael Chertoff U.S. Department of Homeland Security Second Stage Review Remarks*, July 13, 2005)

Department of Homeland Security, Secretary's Five Highest Priorities: --See DHS Priorities

Department of Homeland Security, Strategic Goals:

- "**Awareness** -- Identify and understand threats, assess vulnerabilities, determine potential impacts and disseminate timely information to our homeland security partners and the American public.
- **Prevention** — Detect, deter and mitigate threats to our homeland.
- **Protection** — Safeguard our people and their freedoms, critical infrastructure, property and the economy of our Nation from acts of terrorism, natural disasters, or other emergencies.
- **Response** — Lead, manage and coordinate the national response to acts of terrorism, natural disasters, or other emergencies.
- **Recovery** — Lead national, state, local and private sector efforts to restore services and rebuild communities after acts of terrorism, natural disasters, or other emergencies.
- **Service** — Serve the public effectively by facilitating lawful trade, travel and immigration.
- **Organizational Excellence** — Value our most important resource, our people. Create a culture that promotes a common identity, innovation, mutual respect, accountability and teamwork to achieve efficiencies, effectiveness, and operational synergies." (**DHS**, *Strategic Plan*, 2004)

Department of Homeland Security, Strategic Plan: "In January 2003, the Department of Homeland Security became the Nation's 15th and newest Cabinet department, consolidating 22 previously disparate agencies under one unified organization. One year ago, no single federal department had homeland security as its primary objective. Now it is our mission. We are integrating our resources to meet a common goal. Our most important job is to protect the American people and our way of life from terrorism. We have a single, clear line of authority to get the job done. While we can never eliminate the potential for attack, particularly in a society that's as open, as diverse, and as large as ours, we will significantly reduce the Nation's vulnerability to terrorism and terrorist attack over time. Through partnerships with state, local and tribal governments and the private sector, we are working to ensure the highest level of protection and preparedness for the country and the citizens we serve.

This plan outlines our approach to implement the National Strategy to secure the United States from terrorist threats and attacks, and prepare our country by building up capacity to respond if either occurs. It provides the frame of reference in which we will set priorities and focus our operations. We, in the Department of Homeland Security, are working to protect our fellow citizens and our very way of life by securing our borders, our airports, our waterways and our critical infrastructure. We are increasing our nation's ability to respond to emergencies. We are protecting the rights of American citizens and enhancing public services. We understand our mission. The task before us is difficult, but not impossible. We undertake the challenges before us with the understanding that Americans do not live in fear. We live in freedom, and we will never let that freedom go." (**DHS**, *Securing Our Homeland: Strategic Plan 2004*, 24Feb2004, 2)

Department of Homeland Security, Vision: "Preserving our freedoms, protecting America ... we secure our homeland." (**DHS**, *Strategic Plan*, March 8, 2007 update)

Department of Homeland Security Component Parts, Programs and Organizations

Scroll Up For Entries on Goals, Missions, Principles, Priorities, Vision, etc.

Department of Homeland Security, Air and Marine Operations Center: 24/7 operations center for the Office of Air and Marine Operations within DHS' Customs and Border Protection, "the largest law enforcement air force in the world." (**DHS**, *Fact Sheet: Securing America's Borders CBP 2006 FY Review*)

Department of Homeland Security, Analysis, Dissemination, Visualization, Insight, and Semantic Enhancement (ADVISE) System: The "(ADVISE) system enables intelligence analysts to search rapidly and integrate information to identify and understand potential threats to homeland security." (**DHS/OIG**, *ADVISE Report*, June 2007. Preface)

Department of Homeland Security, BioWatch: "DHS, through the Science and Technology (S&T) Directorate, provides management oversight to the BioWatch program (BioWatch), an early warning system designed to detect the release of biological agents in the air through a comprehensive protocol of monitoring and laboratory analysis." (**DHS/OIG**, *DHS' Management of BioWatch*, 2007, p. 1)

"BioWatch was rolled out in just under 80 days from late January 2003 to mid-April 2003." (**DHS/OIG**, *DHS' Management of BioWatch*, 2007, p. 4)

Department of Homeland Security, BioWatch Exercise and Evaluation Program (BWEEP): "Under…BWEEP, all jurisdictions undergo a yearly assessment of operational proficiency." (**DHS/OIG**, *DHS' Management of BioWatch*, 2007, p. 12)

Department of Homeland Security, BioWatch Goals: "The goals of BioWatch are to:

- Provide early warning of a biological attack by expeditiously identifying the bio-agent, thereby minimizing casualties in an affected area;
- Assist in establishing forensic evidence on the source, nature, and extent of biological attack to aid law enforcement agents in identifying the perpetrators; and
- Determining a preliminary spatial distribution of biological contamination, including what populations may have been exposed." (**DHS/OIG**, *DHS' Management of BioWatch*, 2007, p. 2)

Department of Homeland Security, Buffer Zone Plans (BZPs) and Vulnerability Reduction Purchasing Plans (VRPPS): *Development of the BZP and VRPP***.** "The IP Protective Security Coordination Division (PSCD) provides a range of support to BZPP grantees and sub-grantees. PSCD can provide a federally guided vulnerability assessment team to assist in the development of the BZP. BZP workshops, which train law enforcement and other homeland security

prevention personnel on the BZP process, are also available to support grantee and sub-grantee jurisdictions. While conducting a BZP assessment with DHS assistance, a Site Assistance Visit (SAV) will also be conducted, when possible. The purpose of conducting a SAV in coordination with the BZP assessment is to provide the CIKR owner and operator with a facility report. This coordinated process reduces the need to revisit a site for a more detailed assessment, thus reducing the impact on owner/operators and on State and local homeland security personnel. Additionally, conducting these assessments simultaneously will provide a more thorough BZP and SAV report for State, local, and private sector partners to support prevention and protection efforts of CIKR.

• Jurisdictions are required to notify and include their PSAs in the BZP assessment. The PSA will coordinate federal resources to ensure the appropriate level of support and/or resources are available during the BZP workshop and/or assessment.

• Site vulnerability and jurisdiction capability assessments are critical elements of the BZPP process. Jurisdictions are expected to evaluate their relevant prevention and protection capabilities in accordance with the Target Capabilities List (TCL), and conduct, or leverage, existing vulnerability assessments of the specific CIKR site, including the zone outside the perimeter of the potential target. The assessment process must include coordination with security management, where possible, and consideration of security and safety measures already in place at the facility.

• The responsible jurisdictions are required to share these assessments with DHS, upon request, so that DHS may better prioritize preventive and protective programs, as they may be relevant to emerging and specific threats.

• Upon completion of these assessments, the responsible jurisdictions must complete the BZP template in coordination with the State for each identified CIKR site. Additionally, the development of the BZP must be coordinated with the following entities, as applicable and when possible:

o Urban Area Working Groups (UAWGs)
o Area Maritime Security Committees (AMSCs)
o Regional Transit Security Working Groups (RTSWGs)
o Protective Security Advisors (PSAs)
o Sector Specific Agencies (SSAs) (information on the SSAs located at http://www.dhs.gov/xlibrary/assets/NIPP_SectorOverview.pdf

"The BZP template serves as a useful tool that can be integrated to support CIKR protection program planning efforts across all sectors. The BZP will assist in identifying preventive and protective measures necessary to protect the CIKR site, mitigate vulnerabilities, or close capability gaps. This includes a description of required planning, equipment, training, and exercises necessary to address identified vulnerabilities and/or capability gaps.

• Upon completion of the BZP, the jurisdictions must complete a VRPP. The VRPP identifies a spending plan, including the planning activities and equipment necessary to implement the BZP. If multiple sites are identified in a single VRPP, the responsible jurisdictions should ensure that any requested equipment is available to support the implementation of preventive and protective measures for all identified sites in the VRPP, as appropriate and applicable. For more information on assessments or the assessment process, please contact ipassessment@dhs.gov.

Department of Homeland Security, Buffer Zone Protection Program (BZPP): A Department of Homeland Security program which provides "funding to protect and secure areas surrounding critical infrastructure and key resource sites such as chemical facilities, dams, and nuclear plants across the country. The Buffer Zone Protection Program (BZPP) provides targeted funding through states to local jurisdictions to purchase equipment that will extend the zone of protection beyond the gates of these critical facilities." (**DHS**, *Department of Homeland Security Announces $91.3 Million in Buffer Zone Protection Program Grants*, March 2, 2005.)

Department of Homeland Security, Buffer Zone Protection Program (BZPP): The BZPP assists responsible jurisdictions in building effective prevention and protection capabilities that will make it more difficult for terrorists to conduct site surveillance or launch attacks within the immediate vicinity of selected CI/KR assets. These capabilities are enumerated in Buffer Zone Plans (BZPs) that:
• Identify significant assets at the site(s) that may be targeted by terrorists for attack.
• Identify specific threats and vulnerabilities associated with the site(s) and its significant assets.
• Develop an appropriate buffer zone extending outward from the facility in which preventive and protective measures can be employed to make it more difficult for terrorists to conduct site surveillance or launch attacks.
• Identify all applicable law enforcement jurisdictions and other Federal, State, and local agencies having a role in the prevention of, protection against, and response to terrorist threats or attacks specific to the CI/KR site(s) and appropriate points of contact within these organizations.
• Evaluate the capabilities of the responsible jurisdictions with respect to terrorism prevention and response.
• Identify specific planning, equipment, training, and/or exercise requirements to better enable responsible jurisdictions to mitigate threats and vulnerabilities of the site(s) and its buffer zone.
(**DHS**, *Fiscal Year 2007 Infrastructure Protection Program: Buffer Zone Protection Program – Program Guidance and Application Kit*, January 2007, pp. 2-3)

Department of Homeland Security, Buffer Zone Protection Program (BZPP): "The Buffer Zone Protection Program (BZPP) is one of five grant programs that constitute the Department of Homeland Security (DHS) Fiscal Year 2008 focus on infrastructure protection activities. The BZPP is one tool among a comprehensive set of measures authorized by Congress and implemented by the Administration to help strengthen the nation's critical infrastructure against risks associated with potential terrorist attacks. The vast bulk of America's critical infrastructure is owned and/or operated by State, local and private sector partners. The funds provided by the BZPP are provided to increase the preparedness capabilities of jurisdictions responsible for the safety and security of communities surrounding high-priority critical infrastructure and key resource (CIKR) assets through allowable planning and equipment acquisition. The purpose of this package is to provide: (1) an overview of the BZPP; and (2) the formal grant guidance and application materials needed to apply for funding under the program. Also included is an explanation of DHS management requirements for implementation of a successful application." (DHS, *Fiscal Year 2008 Buffer Zone Protection Program Guidance and Application Kit*, February 2008, page 1).

Department of Homeland Security, Buffer Zone Protection Program (BZPP): "Described as a surgical approach to protecting CI/KR, the goal of the BZPP is to provide funding for the purchase of equipment that will:

• Devalue a target by making it less attractive or too costly to attack;
• Deter an event from happening;
• Detect an aggressor planning or committing an attack, or the presence of a hazardous device or weapon; and
• Defend against attack by delaying or preventing an aggressor's movement toward the asset, or the use of weapons and explosives." (**DHS/OIG**, *Review of the BZPP*, July 2007, p. 3)

Department of Homeland Security, Center for Academic and Interagency Programs:
"The Center for Academic and Interagency Programs will employ partnerships and current best practices to provide DHS employees with the highest quality training, education and professional development opportunities available in the homeland security community. The Center will establish and maintain partnerships and linkages with interagency counterparts, institutions of higher learning and professional associations.

"As the academic discipline of homeland security emerges and grows, it will eventually develop enough depth to positively impact DHS operations and initiatives. The Center for Academic and Interagency Programs provides a foundation for the DHS University System, supporting the pillars by sustaining a cycle of continuous academic improvement. Effective implementation will require:

• **Communication:** The Department will first focus on increasing awareness of the many programs already available to employees within DHS components and throughout academia and the interagency community. This requires continuous and timely communication and information sharing between organizations. The Department will share relevant information on training, education and professional development opportunities through the DHS OCHCO learning and development website and interagency consortiums and councils.
• **Coordination:** Coordination via partnerships and linkages will include managing learning opportunity quotas between agencies and determining appropriate mixes of employee populations to maximize the learning benefit and methods to leverage opportunities at academic institutions. All parties involved must carefully consider the benefits of the partnership in order to optimize the value to DHS and to our partners.
• **Collaboration:** Melding the talents and expertise of workforce managers, course developers and content managers from different agencies will facilitate interagency communication and cooperation. The collective work of cross-cultural learning and development professionals will help build and sustain cooperative interagency and intergovernmental working relationships. By working together, the multi-faceted academic discipline of homeland security will emerge and grow.
• **Programs:** The Katrina Lessons Learned Interagency Working Group on Professional Development, the DHS Training Leaders Council and the National Security Education Consortium have all identified the value of reaching outside the Department to build capacity and capabilities to support mission operations. DHS is involved in several such program initiatives and is developing new programs that when expanded will more effectively meet

current and future DHS and interagency professional development needs. Some examples include:
• The Science and Technology Directorate's Centers of Excellence and Homeland Security Scholars and Fellows Programs
• National Security Education Consortium pilot for a National Security Professionals Program
• The DHS Office of Grant Programs (FEMA/GP) funded Center for Homeland Defense and Security Executive Development Program
• The Center for Academic and Interagency Programs Center will augment existing programs by establishing new fellowship, scholarship and internship opportunities at the baccalaureate and graduate levels to align with mission-critical occupational requirements and functional areas (e.g., maritime security, intelligence, human resources management)

"Partnerships, communication, coordination and collaboration with our academic and governmental counterparts will support the pillars of the DHS University System and develop unlimited potential for employee learning and development, while effectively enhancing the Department's and Nation's capacity to manage homeland and national security missions. (**DHS**, *Establishing a DHS University System*, Sep 2007, pp. 16-17)

Department of Homeland Security, Critical Infrastructure Partnership Advisory Council: "CIPAC is a partnership between government and private sector CI/KF [critical infrastructure and key resources] owners and operators that facilitates effective coordination of Federal CI/KR protection programs…DHS published a Federal Register Notice on March 24, 2006, announcing the establishment of CIPAC as a Federal Advisory Committee Act (FACA) exempt body pursuant to section 871 of the Homeland Security Act…" **(DHS**, *NIPP***,** 2006, p. 27)

Department of Homeland Security, Critical Infrastructure Protection – Decision Support System (CIP-DSS): "The CIP-DSS provides a unique, scientifically-informed approach for prioritizing critical infrastructure protection strategies and resource allocations. Using modeling, simulation, and analyses to assess vulnerabilities, consequences, and risks, the system develops and evaluates protection, mitigation, response, and recovery strategies and technologies; and provides real-time support during crises and emergencies to leadership within the Department and the rest of the government. This measure demonstrates the availability of actionable information to help protect U.S. critical infrastructure from acts of terrorism, natural disasters, and other emergencies." (**DHS**, *Performance Budget Overview, FY 2008,* March 2007, 29)

Department of Homeland Security, Customs and Border Protection (CBP): "…the Nation's frontline border agency… responsible for protecting the Nation's borders in order to prevent terrorists and terrorist weapons from entering the United States, while facilitating the flow of legitimate trade and travel. CBP provides shipping security at the Nation's ports and border security to prevent illegal entry of goods or individuals into this country." (**DHS**, The Homeland Security Challenge, *Capstone Doctrine Pub 1 Draft*, 2008, 8)

Department of Homeland Security, Director of Operations Coordination: "The DHS Director of Operations Coordination is the Secretary's principal advisor for the overall departmental level of integration of incident management operations and oversees the National Operations Center. Run by the Director, the National Operations Center is intended to provide a

one-stop information source for incident information sharing with the White House and other Federal departments and agencies at the headquarters level." (**DHS**, *NRF*, 2008, 55)

Department of Homeland Security, Directorate for Management: "The Directorate for Management is responsible for budget, appropriations, expenditure of funds, accounting and finance; procurement; human resources and personnel; information technology systems; facilities, property, equipment, and other material resources; and identification and tracking of performance measurements relating to the responsibilities of the Department." Within this Directorate are:

- Chief Administrative Services Officer
- Chief Financial Officer
- Chief Human Capital Officer
- Chief Information Officer
- Chief Procurement Officer
- Chief Security Officer (**DHS**, *Directorate for Management*, March 2, 2007)

Department of Homeland Security, Directorate for National Protection and Programs. See DHS NPP Directorate, below.

Department of Homeland Security, Directorate for Science and Technology. See DHS S&T Directorate below.

Department of Homeland Security, DHScovery: "DHScovery is owned by the Office of the Chief Information Officer (OCIO) in partnership with the Office of the Chief Human Capital Officer (OCHCO). DHScovery will create an e-training environment that supports development of the Department of Homeland Security (DHS) workforce through simplified one-stop access to high quality e-training products and services…. Many of the current DHS components maintain and operate their own training systems. DHScovery's goal is to consolidate all training programs at DHS into a single operation. DHScovery is intended to accomplish several objectives including:

- Providing easy access to mandatory and professional development training,
- Facilitating sharing of courses through a common DHS course catalog…" (**DHS**, *Privacy Impact Assessment for the DHS Headquarters DHScovery*, January 19, 2006, p. 2)

Department of Homeland Security, Enterprise Data Management Office (EDMO): "…responsible for the data architecture of DHS, and is engaged in helping DHS lay the foundation and building blocks for an information sharing environment." (**Metatopia**, "Geospatial Data and the National Information Exchange Model, November 5-7, 2007)

Department of Homeland Security, Federal Emergency Management Agency: "The primary mission of the Federal Emergency Management Agency is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation." (**FEMA**, *About FEMA, What We Do, FEMA Mission*, October 16, 2007)

Department of Homeland Security, Federal Law Enforcement Training Center (FLETC): The FLETC "provides career-long training to law enforcement professionals to help them fulfill their responsibilities safely and proficiently." (**DHS**, *Department Subcomponents and Agencies*)

Department of Homeland Security, Functional Areas: "The DHS Enterprise Architecture, developed and baselined originally by the DHS Chief Information Officer with the input of DHS Components, organizes the Department's mission space around "Functional Areas." The Functional Areas designate groupings of activities, assets, programs, projects and other resources around groups of similar functions. Each of the Functional Area groupings are designed to encompass the mission spaces of multiple Components, thereby helping to illuminate areas where cross-component coordination and integration could be beneficial to the Department's missions. They also help provide a DHS-wide view of what the Department does and what resources it will need to accomplish its missions." (**DHS**, *IPG FY 2011-2015 Draft*, 2008, 10)

1. Screening
2. Securing
3. Law Enforcement
4. Domain Awareness
5. Incident Management
6. Benefits Administration

Department of Homeland Security, Homeland Infrastructure Threat and Risk Analysis Center (HITRAC). "DHS has established the …HITRAC to develop products to help inform infrastructure owners and operators of any threats they may potentially face, as well as to better inform their security planning and investment decisions. HITRAC is currently working in partnership with industry to develop an updated threat assessment for the chemical sector detailing plausible terrorist threats on a sector basis. This effort includes available intelligence as well as operational tactics, techniques, and procedures derived from study of overseas terrorist operations." **(DHS/Stephan**, June 15, 2005, p. 3)

"The Department's Homeland Infrastructure Threat and Risk Analysis Center (HITRAC) conducts all-source intelligence research and analysis to assess the potential threat to critical infrastructure and key resources across the Nation, as well as develop lessons learned products derived from attacks on commercial venues abroad. HITRAC's goal is to provide owners and operators of CIKR with strategically relevant and actionable information on threats they face, primarily from terrorists. HITRAC conducts outreach to both private sector and public sector partners through classified and unclassified threat briefings to members of private sector coordinating councils; government coordinating councils; State and local officials; and individual companies." (**DHS**, *Statement for…Record, Robert B. **Stephan**, Assistant Secretary, Infrastructure Protection…[NPPD, DHS] before... Committee on…[HLS],* July 9, 2008, p.5)

Department of Homeland Security, Homeland Security Academy:
"*Objective*: The Homeland Security Academy cultivates creative homeland security strategic analysis and decision-making skills through a high quality, fully accredited graduate degree program in homeland security studies.

"*Overview*: The DHS Homeland Security Academy graduate program initially will support an existing DHS program funded by the Office of Grant Programs (FEMA/GP) and offered at the Center for Homeland Defense and Security located at the Naval Postgraduate School in Monterey, California.

"The Homeland Security Academy will employ DHS and other government training facilities to disseminate graduate-level homeland security curricula for select DHS, interagency, state and local students. A new group of students will start every six months with a desired FY09 goal of three classes in session at any given time. Each class will attend the program for 18 months and will participate in a blended learning environment comprised of two-weeks of in-residence instruction per quarter and online learning. The Academy will matriculate 200 students annually when combined with the three-class program for state and local participants administered by the Office of Grant Programs (FEMA/GP) at the Monterey, California facility.

"To establish deeper interagency and military understanding and cooperation and to maximize master's level education opportunities in National Security Studies, the Department will expand its relationships with National Defense University, the Foreign Service Institute and other senior service schools. These collaborative relationships provide the essential link between National Security and Homeland Security missions so critical to protecting national interests. These programs include:
• Industrial College of the Armed Forces
• National War College
• Joint Forces Staff College
• US Army War College
• Naval War College." (**DHS**, *Establishing a DHS University System*, Sep 2007, p. 15)

Department of Homeland Security, Homeland Security Advisory Council (HSAC): "The HSAC provides advice and recommendations to the Secretary of Homeland Security on relevant issues. The Council members, appointed by the DHS Secretary, include experts from State and local governments, public safety, security and first-responder communities, academia, and the private sector." **(DHS**, *NIPP,* 2006, p. 27)

Department of Homeland Security, Homeland Security Education Program: "H.R. 4331, DHS Appropriations Act 2007, Section 623 amending the Homeland Security Act to establish a graduate level Homeland Security Education Program." "The Secretary, acting through the Administrator, shall establish a graduate-level Homeland Security Education Program in the National Capital Region to provide educational opportunities to senior Federal officials and selected state and local officials with homeland security and emergency management responsibilities." (DHS, *Establishing a Department of Homeland Security University: Learning and Development Strategy*, September 28, 2007, p. 5)

Department of Homeland Security, Homeland Security Institute (HSI: First announced on April 23, 2004 and operational in June 2004, the HSI was DHS's first federally funded research and development center or "think tank."

Department of Homeland Security, Homeland Security Preparedness: "Homeland security preparedness is a comprehensive national program encompassing all homeland security systems involved in the planning of organizational, operational, and technical measures designed to achieve full and sustainable performance to prevent, disrupt, or deter threats or acts of terrorism; reduce vulnerabilities; mitigate the effects of acts of terrorism; respond to threats and acts of terrorism; and perform effective remediation and recovery efforts from terrorist attacks throughout the entire threat spectrum, including terrorist use of chemical, biological, radiological, nuclear, and explosive weapons of mass destruction (CBRNE WMD)." (**DHS/ ODP**, *HSEEP*, Vol. II, 2003, p. ix)

Department of Homeland Security, Homeland Security Preparedness Technical Assistance Program (HSPTAP): "The Homeland Security Preparedness Technical Assistance Program (HSPTAP) is a capabilities-based program that is structured to build and sustain State and local capacity in preparedness activities. Under this vision, the technical assistance (TA) services developed and delivered to State and local homeland security personnel address the full spectrum of mission areas, national priorities, and target capabilities outlined in the National Preparedness Goal (the Goal). As capability gaps are identified, the HSPTAP develops services to address those needs and build priority capabilities in the most critical areas. The HSPTAP is designed to be an agile program that addresses present day areas of greatest State and local need; is committed to transferring and institutionalizing knowledge at the State and local level; provides a dynamic menu of services that is responsive to national priorities; is performance based; and effectively leverages limited resources. HSPTAP provides direct assistance to State, regional, local, and Tribal jurisdictions to improve their ability to prevent, protect against, respond to, and recover from major events, including threats or acts of terrorism" Program Guidance and Application Kit (**DHS**, *Programs*, March 4, 2008)

Department of Homeland Security, Homeland Security Science and Technology Advisory Committee (HSSTAC): "The Department of Homeland Security through the Science and Technology division is harnessing the nation's scientific knowledge to protect America and our way of life from terrorists and their weapons of mass destruction. The Homeland Security Science and Technology Advisory Committee (HSSTAC) is assisting the division in its efforts.
Overview and Mission:

> The Homeland Security Act of 2002 directed the Secretary of Homeland Security to establish a Homeland Security Science and Technology Advisory Committee (HSSTAC). The Committee's mission is to serve as a source of independent, scientific and technical planning advice for the Under Secretary for Science and Technology.

Duties:

> Focus the responsibilities of the Science and Technology division to organize the nation's scientific and technological resources to prevent or mitigate the effects of catastrophic terrorism against the United States, including sponsorship and coordination of research and development for this purpose…." (**DHS**, *Fact Sheet: HSSTAC*, February 26, 2004)

Department of Homeland Security, Immigration and Customs Enforcement (ICE):
"Created in March 2003, ICE… is the largest investigative branch of …DHS. The agency was created after 9/11, by combining the law enforcement arms of the former Immigration and Naturalization Service (INS) and the former U.S. Customs Service, to more effectively enforce

our immigration and customs laws and to protect the United States against terrorist attacks. ICE does this by targeting illegal immigrants: the people, money and materials that support terrorism and other criminal activities. ICE is a key component of the DHS 'layered defense' approach to protecting the nation." (**ICE**, *About Us*, 31 Oct 2007)

Department of Homeland Security, Infrastructure Protection Program (IPP): "The DHS Infrastructure Protection Program (IPP) is designed to strengthen the Nation's ability to protect critical infrastructure facilities and systems. IPP is comprised of five separate grant programs: the Transit Security Grant Program (TSGP), the Port Security Grant Program (PSGP), the Intercity Bus Security Grant Program (IBSGP), the Trucking Security Program (TSP), and the Buffer Zone Protection Program (BZPP). Funding under these grant programs will total roughly $445 million for State, local and private industry infrastructure protection initiatives. Together, these grants fund a range of preparedness activities, including strengthening infrastructure against explosive attacks, preparedness, planning, equipment purchase, training, exercises, and security management and administration costs. IPP programs support objectives outlined in the interim National Preparedness Goal and related national preparedness doctrine, such as the National Incident Management System, the National Response Plan, and the National Infrastructure Protection Plan." (**DHS**, *Infrastructure Protection Program*, May 10, 2007)

"The risk methodology for the IPP programs is consistent across the modes and is linked to the risk methodology used to determine eligibility for the core DHS State and local grant programs. The risk formula for the IPP program is based on a 100 point scale comprised of *threat* (20 points) and *vulnerability/consequence* (80 points). The threat component of the formula is drawn from comprehensive analysis by the Intelligence Community of known threats from all data sources at its disposal." (**DHS,** *Overview: FY 2007 IPP Final Awards*, 2007, p 3)

Department of Homeland Security, Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities: Created by Presidential Executive Order: *Individuals with Disabilities in Emergency Preparedness*, July 22, 2004. "Section 1. Policy. To ensure that the Federal Government appropriately supports safety and security for individuals with disabilities in situations involving disasters, including earthquakes, tornadoes, fires, floods, hurricanes, and acts of terrorism, it shall be the policy of the United States that executive departments and agencies of the Federal Government (agencies):
(a) consider, in their emergency preparedness planning, the unique needs of agency employees with disabilities and individuals with disabilities whom the agency serves;
(b) encourage, including through the provision of technical assistance, as appropriate, consideration of the unique needs of employees and individuals with disabilities served by State, local, and tribal governments and private organizations and individuals in emergency preparedness planning; and
(c) facilitate cooperation among Federal, State, local, and tribal governments and private organizations and individuals in the implementation of emergency preparedness plans as they relate to individuals with disabilities." (**White House**. *Executive Order: Individuals with Disabilities in Emergency Preparedness*, July 22, 2004)

Department of Homeland Security, Interoperable Communications Technical Assistance Program (ICTAP): Through the ICTAP "ODP will provide to any site or state, on a first-come,

first-served basis, no-cost technical assistance in developing and exercising a Tactical Interoperable Communications Plan. ICTAP has assigned a site manager and a site technical lead to each UASI grantee and to states without a designated urban area. These individuals (and support staff) are available on a first-come, first-served basis to meet with a site's governance, operations, and technical working groups to facilitate TICP development and documentation and to support table top exercises." (**DHS/ODP**, *ODP TICP FAQs*, May 16, 2005, p. 1)

Department of Homeland Security, Law Enforcement Terrorism Prevention Program (LETPP) "…focuses upon the prevention of terrorist attacks and provides law enforcement and public safety communities with funds to support the following activities: intelligence gathering and information sharing through enhancing/establishing fusion centers; hardening high-value targets; planning strategically; continuing to build interoperable communications; and collaborating with non-law enforcement partners, other government agencies and the private sector." (**DHS**, *State Contacts & Grant Award Information,* July 18, 2007 Update)

Department of Homeland Security, Metropolitan Medical Response System (MMRS): "The MMRS program began by awarding contracts to municipalities, requiring the submission of disaster response plans as the contract deliverable. The program's scope now includes planning as well as exercising, training, and equipment purchasing. Currently, MMRS awards are provided annually to 124 of the nation's most populous cities to develop plans and conduct related activities for mass casualty incidents by coordinating efforts among first responders, healthcare providers, public health officials, emergency managers, volunteer organizations, and other local entities.[83] In FY2007, each MMRS jurisdiction received $258,145 to establish or sustain local mass casualty preparedness capabilities. Each fiscal year, MMRS guidance explicitly requires grantees to update or revise their plans as needed to address new benchmarks." (**CRS**, *Pandemic Influenza: An Analysis of State Preparedness and Response Plans*, September 24, 2007, p. 27)

Department of Homeland Security, Metropolitan Medical Response System (MMRS): The MMRS "grant program funds support MMRS jurisdictions to further enhance and sustain an integrated, systematic mass casualty incident preparedness program that enables a first response during the first crucial hours of an incident." (**DHS**, *State Contacts & Grant Award Information*, July 18, 2007 Update)

Department of Homeland Security, National Applications Office (NAO): "The U.S. Department of Homeland Security's (DHS) National Applications Office (NAO) is the executive agent to facilitate the use of intelligence community technological assets for civil, homeland security and law enforcement purposes within the United States. The office will begin initial operation by fall 2007 and will build on the long-standing work of the Civil Applications Committee, which was created in 1974 to facilitate the use of the capabilities of the intelligence community for civil, non-defense uses in the United States.

"While civil users are well supported for purposes such as monitoring volcanic activity, environmental and geological changes, hurricanes, and floods through the current Civil Applications Committee, homeland security and law enforcement will also benefit from access to Intelligence Community capabilities. As a principal interface between the Intelligence

Community and the Civil Applications, Homeland Security and Law Enforcement Domains, the National Applications Office will provide more robust access to needed remote sensing information to appropriate customers by:

- Enabling a wide spectrum of civil applications, homeland security, and law enforcement users greater access to the collection, analysis, and production skills and capabilities of the intelligence community;
- Enhancing intelligence and information sharing and dissemination to federal, state, and local government and law enforcement users;
- Educating customers about the capabilities and products of the intelligence community;
- Advocating future collection technology needs of the civil applications, homeland security and law enforcement customers in the intelligence community and Department of Defense forums; and
- Providing a forum for discussion of proper use oversight and management of new uses of classified information on behalf of domains, in addition to already established uses." (**DHS**, *Fact Sheet: National Applications Office*, August 15, 2007)

Department of Homeland Security, National Biosurveillance Integration Center (NBIC):
"…the Office of Health Affairs, within DHS, is leading the National Biosurveillance Integration Center, or NBIC, partnership…. NBIC brings together biological information from various Federal partners and open sources to develop an integrated picture of biological risks. The President has called for a "timely response to mitigate the consequences of a biological weapons attack." Our mission was initially established through Homeland Security Presidential Directives (HSPDs) 9 and 10. It was also recently codified in title XI of P.L. 110-53, *Implementing Recommendations of the 9/11 Commission Act of 2007.*

"NBIC seeks to provide information to allow early recognition of biological events of national concern, both natural and man-made, to make a timely response possible. No other place in government serves to integrate this information from across the spectrum of public and private, domestic and international, open or protected sources. The three…component parts of NBIC are:

- A robust information management system capable of handling large quantities of structured and unstructured information;
- A corps of highly-trained subject matter experts and analysts; and
- A clear establishment of a culture of cooperation, trust and mutual support across the Federal government and other partners….

"To provide additional value to our partners, DHS has the advantage of its access to threat information, which, when integrated with surveillance of health data and disease outbreak trends may provide early warning of a biological attack. To accomplish this, fused information products and other patterns and trends developed from biosurveillance sources are provided to our agency partner, the DHS Office of Intelligence and Analysis, for incorporation with intelligence analysis products. When appropriate, the product can be forwarded to the wider Intelligence Community and pertinent threat analysis information added for return to the Center for further interagency dissemination. This final process of actionable information preparation fuses biosurveillance patterns and trends with threat information. The completed products can then be provided to the National Operations Center (NOC) for inclusion in the Common Operating Picture (COP). This distribution closes the loop by providing biosurveillance situational awareness back to NBIC partner agencies and other organizations.

"By integrating and fusing this large amount of available information we can then begin to develop a base-line against which we can recognize anomalies and changes of significance. NBIC seeks to identify patterns and trends, which in combination with threat analysis provide the situational awareness our partners need to execute their mission." (**DHS**, *Testimony of Dr. Kimothy Smith…National Biosurveillance Integration Center*, October 4, 2007)

Department of Homeland Security, National Biosurveillance Integration System Operational Display System (NODS): "…an IT system that provides our Center [NBIC] the visibility into over 300-plus unclassified sources of biosurveillance information from across multiple sources. This information is aggregated with various reports that we receive from the departments of Defense, State, Health and Human Services, Agriculture, and Transportation and other sources. Our relationship and integration of such valuable sources, such as ARGUS is firmly established within NODS." (**DHS**, *Testimony of Dr. Kimothy Smith…NBIC...,* 4Oct2007)

Department of Homeland Security, National Biosurveillance Watch Desk: Operates 24/7 within the National Operations Center (NOC), which first stood up in December 2005. (**DHS**, *Testimony of Dr. Kimothy Smith…NBIC*…, October 4, 2007)

Department of Homeland Security, National Cyber Security Center:

Department of Homeland Security, National Cyber Security Division (NCSD):
"*Mission* The National Cyber Security Division (NCSD) works collaboratively with public, private, and international entities to secure cyberspace and America's cyber assets.
Strategic Objectives To protect the cyber infrastructure, NCSD has identified two overarching objectives:

- To build and maintain an effective national cyberspace response system
- To implement a cyber-risk management program for protection of critical infrastructure.

Organization and Functions NCSD works to achieve its strategic objectives through the following programs:
National Cyberspace Response System The National Cyber Security Division seeks to protect the critical cyber infrastructure 24 hours a day, 7 days a week. The National Cyberspace Response System coordinates the cyber leadership, processes, and protocols that will determine when and what action(s) need to be taken as cyber incidents arise. Examples of current cyber preparedness and response programs include:

- *Cyber Security Preparedness and the National Cyber Alert System* - Cyber threats are constantly changing. Both technical and non-technical computer users can stay prepared for these threats by receiving current information by signing up for the National Cyber Alert System.
- *US-CERT Operations* - US-CERT is responsible for analyzing and reducing cyber threats and vulnerabilities, disseminating cyber threat warning information, and coordinating incident response activities.
- *National Cyber Response Coordination Group* - Made up of 13 Federal agencies, this is the principal Federal agency mechanism for cyber incident response. In the event of a nationally significant cyber-related incident, the NCRCG will help to coordinate the

Federal response, including US-CERT, law enforcement, and the intelligence community.

- *Cyber Cop Portal* – Coordination with law enforcement helps capture and convict those responsible for cyber attacks. The Cyber Cop Portal is an information sharing and collaboration tool accessed by over 5,300 investigators worldwide who are involved in electronic crimes cases.

Cyber-Risk Management Programs - Through Cyber Risk Management, the National Cyber Security Division seeks to assess risk, prioritize resources, and execute protective measures critical to securing our cyber infrastructure. Examples of current cyber risk management programs include:

- *Cyber Exercises: Cyber Storm* - Cyber Storm is a nationwide cyber security exercise that took place in early February 2006, to assess preparedness capabilities in response to a cyber incident of national significance. Cyber Storm was the Department of Homeland Security's first cyber exercise testing response across the private sector as well as international, Federal, and state governments.
- *National Outreach Awareness Month* - Every October the National Cyber Security Division coordinates with multiple states, universities and the private sector to produce National Cyber Security Awareness month.
- *Software Assurance Program* - This program seeks to reduce software vulnerabilities, minimize exploitation, and address ways to improve the routine development and deployment of trustworthy software products. Together, these activities will enable more secure and reliable software that supports mission requirements across enterprises and the critical infrastructure." (**DHS**, *National Cyber Security Division*, 23Sep06 modification)

Department of Homeland Security, National Domestic Incident Response Planning Components: "The Department has four Components with <u>*major*</u> National domestic incident response planning requirements. These Components include:

- Directorate of Policy
- Federal Emergency Management Agency
  - National Preparedness Division (Executive Agent for the NIMS)
  - Disaster Operations Division (Executive Agent for the NRP and ESFLG)
  - National Security Coordination (Executive Agent for COOP)
- National Protection and Programs Directorate
  - Infrastructure Protection Division (Executive Agent for the NIPP)
- Office of Operations Coordination
  - National Operations Center (NOC) Planning Element (called the Incident Management Planning Team [IMPT]). (**DHS**, 2007)

Department of Homeland Security, National Infrastructure Advisory Council (NIAC): "The NIAC provides the President, through the Secretary of Homeland Security, with advice on the security of physical and cyber systems across all CI/KR sectors. The Council is comprised of up to 30 members appointed by the President. Members are selected from the private sector, academia, and State and local governments. The Council was established (and amended) under Executive Orders 13231, 13286, and 13385." (**DHS,** *NIPP*, 2006, 28.)

Department of Homeland Security, National Infrastructure Coordinating Center (NICC*).* "Part of the NOC [DHS Operations Center], the NICC monitors the nation's critical infrastructure and key resources on an ongoing basis. During an incident, the NICC provides a coordinating forum to share information across infrastructure and key resources sectors through appropriate information-sharing entities such as the Information Sharing and Analysis Centers and the Sector Coordinating Councils." (**DHS**, *NRF Comment Draft,* 2007, 54; see, also, **DHS,** *NRF*, 2008, 56))

Department of Homeland Security, National Operations Center (NOC): "The NOC links key headquarters components together. It is comprised of five sub-elements:

- **The NOC – Interagency Watch (NOC-Watch, DHS HQ).** The NOC Interagency Watch is a standing 24/7 interagency organization fusing law enforcement, national intelligence, emergency response, and private sector reporting. The NOC-Watch facilitates homeland security information-sharing and operational coordination with other Federal, State, local, tribal, and nongovernmental emergency operations centers.

- **National Response Coordination Center (NOC-NRCC), FEMA.** The NOC-NRCC monitors potential or developing incidents and supports the efforts of regional and field components, including coordinating the preparedness of national-level emergency response teams and resources; in coordination with Regional Response Coordination Centers (RRCCs), initiating mission assignments or reimbursable agreements to activate other Federal departments and agencies; and activating and deploying national-level specialized teams. In addition, the NOC-NRCC resolves Federal resource support conflicts and other implementation issues forwarded by the JFO. Those issues that cannot be resolved by the NOC-NRCC are referred to the IAC. During an incident, the NOC-NRCC operates on a 24/7 basis or as required in coordination with other elements of the NOC.

- **Intelligence and Analysis (NOC-I&A).** I&A is responsible for interagency intelligence collection requirements, analysis, production, and product dissemination for DHS. I&A coordinates or disseminates homeland security threat warnings, advisory bulletins, and other information pertinent to national incident.

- **National Infrastructure Coordination Center (NOC-NICC).** The NOC-NICC monitors the Nation's critical infrastructure and key resources (CI/KR) on an ongoing basis. During an incident, the NOC-NICC provides a coordinating forum to share information across infrastructure and key resources sectors through appropriate information-sharing entities such as the Information Sharing & Analysis Centers and the Sector Coordinating Councils.

- **NOC-Planning Element:** The NOC-Planning Element conducts national domestic incident management planning and coordination. This includes coordinating response, recovery, and mitigation operational planning and interagency coordination with the NOC-NRCC; coordinating and sustaining Federal preparedness, prevention, and protection activities related to an Incident of National Significance or at the Secretary's

> direction; and coordinating preparedness, prevention, and protection operations and resource allocation planning with the appropriate Federal departments and agencies, the NOC-NRCC, the RRCCs, and the JFO. Also called the Incident Management Planning Team (IMPT)." (**DHS**, *National Planning and Execution System*, 2007 Draft, pp. 3-5/6)

"The DHS National Operations Center (NOC) is responsible for facilitating homeland security coordination across the Federal mission areas of prevention, protection, response and recovery. The NOC serves as the national fusion center, collecting and synthesizing all-source information to determine if there is a terrorist nexus. The NOC also shares all-threats and all-hazards information across the spectrum of homeland security partners. Federal departments and agencies should report information regarding actual or potential incidents requiring a coordinated Federal response to the NOC." (**DHS**, *NRF Comment Draft*, 2007, p, 32)

"The NOC is the primary national hub for domestic incident management operational coordination, and situational awareness. The NOC is a standing 24/7 interagency organization fusing law enforcement, national intelligence, emergency response, and private sector reporting." (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 56)

"National Operations Center is the principal operations center for the Department [DHS] and shall (1) provide situational awareness and a common operating picture for the entire Federal Government, and for State, local, and tribal governments as appropriate, in the event of a natural disaster, act of terrorism, or other man-made disaster; and (2) ensure that critical terrorism and disaster-related information reaches government decision-makers." (**Post-Katrina EM Reform Act of 2006**, p. 1409)

Department of Homeland Security, National Protection and Programs Directorate (NPPD):
"The goal of the National Protection and Programs Directorate is to advance the Department's risk-reduction mission. Reducing risk requires an integrated approach that encompasses both physical and virtual threats and their associated human elements…. The components of the National Protection and Programs Directorate include:
Office of Cybersecurity and Communications (CS&C: CS&C has the mission of assuring the security, resiliency, and reliability of the nation's cyber and communications infrastructure.
Office of Infrastructure Protection (OIP): OIP leads the coordinated national effort to reduce risk to our critical infrastructures and key resources (CI/KR) posed by acts of terrorism. In doing so, the Department increases the nation's level of preparedness and the ability to respond and quickly recover in the event of an attack, natural disaster, or other emergency.
Office of Intergovernmental Programs (IGP): IGP has the mission of promoting an integrated national approach to homeland security by ensuring, coordinating, and advancing federal interaction with state, local, tribal, and territorial governments.
Office of Risk Management and Analysis (RMA): RMA serves as the Department's Executive Agent for national risk management and analysis.
US-VISIT uses innovative biometrics-based technological solutions--digital fingerprints and photographs--to provide decision-makers with accurate information when and where they need.. (**DHS**, *National Protection and Programs Directorate*, January 25, 2008)

Department of Homeland Security, Nonprofit Security Grant Program (NSGP):

"Grants are being awarded to nonprofit organizations according to criteria that include:

- Prior identified and substantiated threats or attacks by a terrorist organization, corroborated by intelligence or law enforcement reporting, toward the nonprofit or closely-related organization, either within or outside the United States;
- Symbolic value of a site as a highly recognized national or historical institution that renders it a possible terrorist target;
- Organization's role in responding to or recovering from terrorist attacks; and
- Organization's credible threat or vulnerability, as well as the potential consequences of an attack, as determined by a previously conducted risk assessment.

NSGP grants seek to integrate nonprofit preparedness activities with broader state and local preparedness efforts. The program is also designed to promote coordination and collaboration in emergency preparedness activities among public and private community representatives, state and local government agencies, and Citizen Corps Councils." (**DHS**, *DHS Announces $24 Million in Homeland Security Nonprofit Grants*, 28Sep07)

Department of Homeland Security, Office of Business Continuity and Emergency Preparedness (BCEP): "ICF International…today announced it has won a new task order valued at $5.6 million with…DHS, Office of Business Continuity and Emergency Preparedness (BCEP). The task order was issued under a Blanket Purchase Agreement awarded to ICF in June 2006 to supply professional and program management support services to DHS headquarters. It has been funded for the first year at $1.4 million, with two option years.
Under the task order, ICF will support BCEP activities to ensure the DHS headquarters is able to continue operations during any emergency situation. This is ICF's first task order for new work with BCEP, the office responsible for setting continuity of operations policy for all DHS offices and divisions. ICF is partnering on this work with Lockstep Consulting, LLC, a national security/emergency preparedness consultant."

Centredaily.com. "ICF International Awarded Task Order by Department of Homeland Security Valued at $5.6 Million: Firm to Support Business Continuity and Emergency Preparedness Office." 19 Feb 2008

Department of Homeland Security, Office of Chief of Staff: "The Chief of Staff is responsible for the coordination of all Department agencies, directorates, and offices. This office is tasked to streamline, coordinate, and deliver initiatives and policies that will ensure our safety, response capacity, and our freedoms." (**DHS**, *DHS FY 2009 Cong. Budget Justification*, 2008, 3144)

Department of Homeland Security, Office of Civil Rights and Civil Liberties: (**DHS**, *Office of CR&CL*, December 7, 2007)

Department of Homeland Security, Office of Emergency Communications (OEC, DHS): "OEC Mission Statement: The OEC supports and promotes the ability of emergency responders and government officials to continue to communicate in the event of natural disasters, acts of terrorism, or other man-made disasters, and works to ensure, accelerate, and attain interoperable and operable emergency communications nationwide." (**OEC** October 18, 2007 slide pres.)

Department of Homeland Security, Office of Counternarcotics Enforcement:
"…responsible for developing policies that will unify the Department's counternarcotics activities, and coordinates efforts to monitor and combat connections between illegal drug trafficking and terrorism." (**DHS**, *Director…OCE*, 07)

Department of Homeland Security, Office of Cybersecurity and Communications (CS&C):
"…has the mission of assuring the security, resiliency, and reliability of the nation's cyber and communications infrastructure in collaboration with the public and private sectors, including international partners. Specifically, CS&C is focused on preparing for and responding to catastrophic incidents that could degrade or overwhelm the networks, systems, and assets that operate our nation's information technology (IT) and communications infrastructure. Programs include the following:

- National Communications System
- National Cyber Security Division
- Office of Emergency Communications." (**DHS**, *Office of CS&C*, October 2, 2007)

Department of Homeland Security, Office of Emergency Communications (OEC):
"The Office of Emergency Communications (OEC) supports the Secretary of Homeland Security in developing, implementing, and coordinating interoperable and operable communications for the emergency response community at all levels of government. The mission of the Office of Emergency Communications is to support and promote the ability of emergency responders and government officials to continue to communicate in the event of natural disasters, acts of terrorism, or other man-made disasters, and work to ensure, accelerate, and attain interoperable and operable emergency communications nationwide. On October 4, 2006, President George W. Bush signed the Department of Homeland Security Fiscal Year 2007 Appropriations Act, which established the OEC. The legislation assigned the OEC to the Department of Homeland Security's Office of Cybersecurity and Communications within the National Protection and Programs Directorate…. OEC became operational on April 1, 2007." (**DHS**, *OEC*, 2007)

Department of Homeland Security, Office of General Counsel (OGC): "The Office of the General Counsel (OGC) integrates approximately 1700 lawyers from throughout the Department into an effective, client-oriented, full-service legal team. The Office of the General Counsel comprises a headquarters office with subsidiary divisions and the legal programs for eight Department components." (**DHS**, *OGC*, 07)

Department of Homeland Security, Office of Health Affairs (OHA): Formally established April 1, 2007. "The Office of Health Affairs serves as the principal medical advisor for the Secretary and FEMA Administrator by providing timely incident-specific management guidance for the medical consequences of disasters. Additionally, the OHA leads the Department's biodefense activities in coordination with other Departments and agencies across the Federal government; leads and sustains a comprehensive, integrated and collaborative framework that protects the health security of the Nation…" (**DHS**, *OHA FY09 Cong. Justification*, 08, OHA-3)

"OHA plays a crucial role in the Department's mission to secure the homeland. In leading the Department's biodefense activities, OHA is responsible for operating the biological monitoring and early detection systems that are deployed in the nation's major cities, and for managing the

National Biosurveillance Integration System. Together, these programs play a vital role in ensuring that relevant human, plant, animal and environmental health information is consolidated, analyzed and shared with interagency partners and better coordinate the nation's biodefense activities." (**DHS**, *Budget-in-Brief FY 2008*, p. 84)

Department of Homeland Security, Office of Health Affairs Biodefense Countermeasures Program: "The Biodefense Countermeasures program procures medical countermeasures to strengthen the Nation's preparedness against chemical, biological, radiological, and nuclear (CBRN) attacks, including promoting the removal of barriers to development and production processes that the Government undergoes to pre-purchase critically needed vaccines or medications for biodefense." (**DHS**, *OHA Biodefense Countermeasures Fiscal Year 2009 Congressional Justification*, 2008, BIO-2)

Department of Homeland Security, Office of Infrastructure Protection (OIP): "The Office of Infrastructure Protection (OIP) leads the coordinated national effort to reduce risk to our critical infrastructures and key resources (CI/KR) posed by acts of terrorism. In doing so, the Department increases the nation's level of preparedness and the ability to respond and quickly recover in the event of an attack, natural disaster, or other emergency. The Office of Infrastructure Protection facilitates the identification, prioritization, coordination, and protection of CI/KR in support of federal, state, local, territorial, and tribal governments, as well as the private sector and international entities. By ensuring the sharing of information with our security partners, the Office of Infrastructure Protection communicates threats, vulnerabilities, incidents, potential protective measures, and best practices that enhance protection, response, mitigation, and restoration activities across the nation and the international community. The Office of Infrastructure Protection uses the National Infrastructure Protection Plan, and mechanisms for enhancing CI/KR-related protective and response capabilities under the National Response Plan, to provide operational support to government and private entities in response to significant threats and incidents. Through the Office of Infrastructure Protection's vulnerability assessment process, the organization communicates standards to the infrastructure owners/operators and key stakeholders and ensures the maintenance of a CI/KR sector governance and information-sharing framework." (**DHS**, *Office of Infrastructure Protection*, December 6, 2007 Update.

Department of Homeland Security, Office of Inspector General: "The DHS Office of Inspector General (OIG) was established by the *Homeland Security Act 2002* (P.L. 107-296), by amendment to the *Inspector General Act of 1978*. The Inspector General (IG) has a dual reporting responsibility, to the Secretary of Homeland Security and to the Congress. The OIG serves as an independent and objective inspection, audit, and investigative body to promote economy, efficiency, and effectiveness in DHS programs and operations, and to prevent and detect fraud, waste, and abuse in such programs and operations." (**DHS**, *DHS FY09 Cong. Budget Justification*, 2008, 3437)

Department of Homeland Security, Office of Intelligence and Analysis (I&A): "The mission of my Office is clear – it is to identify and assess transnational and domestic threats to Homeland security. We provide anticipatory, proactive, and actionable intelligence to support the Department; State, local, tribal, and private sector customers; and the Intelligence Community. The most critical and overarching threat to the Homeland remains terrorism – transnational and

domestic – and much of the IC's resources are devoted to this issue. I believe, however, that my Office adds unique value by viewing terrorism through the prism of threats to the Homeland. This holistic perspective allows us to make connections – if and where they exist – between terrorism and other illicit transnational criminal activities. Moreover, these other illicit activities often constitute serious threats to the Homeland, and we must address these as well to support our Departmental mission and to help secure the Nation." (**DHS**, *Statement, Charles Allen*, 08)

Department of Homeland Security, Office of Intergovernmental Programs (IGP): The IGP "mission is to promote an integrated national approach to homeland security by ensuring, coordinating, and advancing federal interaction with state, local, tribal, and territorial governments…The purpose of the office's operations is multi-faceted: to facilitate communication between the Department's expert resources and the expert resources of the nation's autonomous governments; to act as an advocate for state, local, tribal, and territorial governments within the Department; and to coordinate and maintain constant awareness of the various bilateral communications occurring regularly throughout the Department….The Office of Intergovernmental Programs' overarching goal is to facilitate timely and meaningful consultation by the Department and its agencies with our state, local, tribal, and territorial partners." (**DHS**, *Office of Intergovernmental Programs*, September 26, 2007)

Department of Homeland Security, Office of Legislative Affairs: "The Office of Legislative Affairs serves as the Secretary's principal liaison with Capital Hill and other governmental entities by fostering relationships with Members of Congress and staff to precipitate legislative support for the Departmental programs, policies and initiatives that promote a more secure nation." (**DHS**, *DHS FY09 CBJ*, 2008, 3145)

Department of Homeland Security, Office of Operations Coordination (OPS): "The mission of the Office of Operations Coordination is to integrate DHS and interagency operations and planning to prevent, protect, respond to and recover from terrorist threats attacks or threats from other man-made/natural disasters. OPS disseminates threat information, maintains and disseminates domestic situational awareness, performs incident management and operational coordination among all DHS components, Federal, state, local, tribal, private sector and international partners' to facilitate a coordinated and efficient effort to secure the Homeland against all threats and hazards." (**DHS**, *DHS FY2009 Cong. Budget Justification*, 2008, 3406)

"The Office of Operations Coordination is responsible for monitoring the security of the United States on a daily basis and coordinating activities within the Department and with governors, Homeland Security Advisors, law enforcement partners, and critical infrastructure operators in all 50 States and more than 50 major urban areas nationwide. Leadership: The Office of Operations Coordination is headed by Director for Operations Coordination, Roger T. Rufe, Jr. (USCG Ret).

"*Mission:* The Office of Operations Coordination works to deter, detect, and prevent terrorist acts by coordinating the work of Federal, state, territorial, tribal, local, and private sector partners and by collecting and fusing information from a variety of sources.

"*Goals*: The Office is responsible for:

- conducting joint operations across all organizational elements.
- coordinating activities related to incident management.
- employing all Department resources to translate intelligence and policy into action.
- overseeing the National Operations Center (NOC) which collects and fuses information from more than 35 Federal, State, territorial, tribal, local, and private sector agencies.

"*Organization*: Information is shared and fused on a daily basis by the two halves of the Office that are referred to as the "Intelligence Side" and the "Law Enforcement Side." Each half is identical and functions in tandem with the other but requires a different level of clearance to access information. The Intelligence Side focuses on pieces of highly classified intelligence and how the information contributes to the current threat picture for any given area. The Law Enforcement Side is dedicated to tracking the different enforcement activities across the country that may have a terrorist nexus. The two pieces fused together create a real-time snap shot of the nation's threat environment at any moment." (**DHS**, *Office of Operations Coordination*, 2007)

Department of Homeland Security, Office of Operations Coordination (OPS) DHS Mission: "The mission of OPS…is to integrate DHS and interagency planning and operations coordination in order to prevent, deter, protect, and respond to terrorists threats/attacks or threats from other man-made or natural disasters." (**DHS**, *Statement of Frank DiFalco, Director of NOC*, June 20, 2007, p. 1)

Department of Homeland Security, Office of Operations Coordination, DHS Mission Blueprint Analysis: "OPS conducted a Mission Blueprint Analysis in September 2006. In this Blueprint Analysis, we took a hard look at our policies, processes, procedures, organization and technologies in order to help define the way forward for OPS in order to meet and exceed the Department's capabilities required to fulfill HSPD-5, the Homeland Security Act, and highlighted in the White House Katrina lessons learned review. The Blueprint analysis was conducted by an outside team that performed a top-down strategic review of the organization, its mission capabilities and perceived future requirements. In addition, the team also employed a bottom-up assessment of existing capabilities and supporting activities. Over 100 individuals within OPS, DHS, and throughout the government were interviewed during the course of the study. This effort provided analysis and recommendations for ensuring OPS more effectively meets its current and emerging integrated mission requirements within DHS and across the larger homeland security community." (**DHS**, *Statement of Frank DiFalco, Director of the NOC*, June 20, 2007, 7)

Department of Homeland Security, Office of Operations Coordination (OPS) DHS Mission Blueprint Analysis: "DHS has completed a study of its operational capabilities and gaps to guide its future mission and initiatives. Called the Operations Mission Blueprint, DHS operations staff said the results are still under review; therefore, that they could not provide us with a copy. Part of this study includes a plan to consolidate DHS operations centers in headquarters and its components in a facility located at the St. Elizabeth's West Campus in Washington, D.C.[13] The plan cites a number of organizational benefits to collocating facilities, including enhancing collaboration by bringing together a large number of DHS executives and line employees currently dispersed across the region." (**GAO**, *Homeland Security: Guidance from Ops. Directorate*, 20Jun07, 17)

Department of Homeland Security, Office of Policy: "The Office of Policy's responsibilities include the coordination of Department wide policies, programs, and planning to ensure consistency and integration of missions throughout the Department. This Office strengthens the Department's ability to maintain policy and operational readiness needed to protect the Homeland by providing a centralized coordination point for developing and communicating policies across the multiple internal and external components of the Homeland Security network." (**DHS**, *DHS FY2009 Congressional Budget Justification*, 2008, 3145)

Component parts:

- Office of Policy Development
- Office of Strategic Plans
- Office of International Relations
- Office of Immigration Statistics
- Private Sector Office
- Homeland Security Advisory Council (**DHS**, *Office of Policy: Organization*, 2008)

Department of Homeland Security, Office of Policy Development (Office of Policy):
"The Office of Policy Development ensures the coordinated development of all policy matters before for the Department. The Office of Policy Development:

- Supports the Secretary in the identification, development, and implementation of the Department's policy objectives.
- Regularly interacts with Department entities such as Legislative Affairs, Public Affairs, the Chief Privacy and Civil Liberties Officers, the General Counsel, and the Department's agencies to ensure effective and coordinated development of Department policy.
- Serves as principal representative for the Department in promoting the policies before the White House and other cabinet agencies.
- Works with foreign governments and institutions, stakeholders in the affected private sector industries, think tanks, and media to identify potential concerns and solutions."

There are 13 units within Policy Development.

- Biothreats
- Border Security
- Cargo Maritime & Trade
- Committee on Foreign Investment in the United States
- Counterterrorism Strategy and Policy
- Cyber Security
- Emergency Preparedness and Response
    - Emergency Preparedness & Response is responsible for developing and coordinating Department-wide policies and plans for preparedness, response and recovery missions, as well as the federal emergency management mission within the Department's overall incident management function. Issue areas include the Terrorism Risk Insurance Act, school preparedness and interoperable emergency communications.
- Immigration, Refugee & Asylum
- Law Enforcement Intelligence

- Rad/Nuke/Chem and S&T Policy
- REAL ID Program Office
- Regulatory Policy
- Transportation Infrastructure
- Visa Waiver Program. (**DHS**, *Office of Policy Development*, February 8, 2008)

Department of Homeland Security, Office of Public Affairs: "The Office of Public Affairs is responsible for managing external and internal communications. The Office of Public Affairs respond to national media inquiries, maintain and update the Department's web site, write speeches for principals and coordinate speaking events for Department officials. The Office of Public Affairs also develops and manages various public education programs including the Ready Campaign to increase citizen preparedness. The Office fosters strategic communication throughout the Department and with external stakeholders. It manages the Department's organizational identity program, which includes usage of the DHS seal and related guidelines. It oversees the Department's employee communication activities, which include an all employee newsletter, town hall meetings between management and employees, and an intranet site. Finally, its incident communications program guides overall Federal incident communication activity and coordinates with state, local, and international partners to ensure accurate and timely information to the public during a crisis." (**DHS**, *DHS FY 2009 Cong. BJ*, 2008, 3145)

Department of Homeland Security, Office of Strategic Plans (Office of Policy):
"*Mission* -- The Office of Strategic Plans articulates the long-term view to the Department and translates the Secretary's strategic priorities into capstone planning products that drive integration, component priorities, and the tough resource allocation decisions.
The Office of Strategic Plans

- Develops a Department-wide planning structure and implementation strategies for use by Homeland Security leadership.
- Ensures the Secretary's strategic priorities are reflected in the Department's budget documents and throughout Strategic Plans of the Department and its component agencies.

Responsibilities
Strategic Planning Division

- Is the primary coordinator of Department-wide planning, including the formation of priorities, goals, objectives and performance measures to reflect legislatively mandated missions and Secretarial priorities.
- Works closely with the Office of Budget for Department to ensure coordination of budget and planning and provides the foundation and direction for Department-wide strategic planning and budget priorities. It provides the Department with a central office to develop and communicate planning efforts across multiple components of the homeland security network.
- Bridges multiple headquarters' components and operating agencies will improve communication and coordination among Department of Homeland Security entities, eliminate duplication of effort, and translate Department policies into achievable goals and objectives. It will also create a single point of contact for internal and external stakeholders that will allow for streamlined performance management across the Department.

- Strategic Planning also reviews Department component strategic plans, ensuring coordination amongst components and alignment with the Department's Strategic Plan.

Counterterrorism (CT) Plans Division

- Protects and defends the homeland by developing and coordinating counterterrorism policies and planning for the Department's missions that support the war on terrorism (WOT).
- Is primary departmental coordinator for interagency plans and policies that support the U.S. Government war on terrorism.
- Provides other U.S. departments and agencies with a single, central element within the Department to ensure consistent coordination of interagency counterterrorism and WOT plans affecting multiple Homeland Security components enabling those plans to be translated into timely action.
- Serves as primary liaison element within the Department's Office of Policy to the National Counterterrorism Center (NCTC) Directorate of Strategic Operational Planning (SOP) and will manage the deployment of Homeland Security personnel to the NCTC SOP and serve as primary office for deployed department personnel to reach back for policy and planning guidance from the Department.
- Serves as lead policy element on planning issues related to the National Strategy for Combating Terrorism, National Presidential Decision Directives, and Homeland Security Decision Directives related to the WOT.
- Coordinates interagency security plans for the prevention of terrorism and protection of the homeland.

Implementation Plans Division

- Serves as the cross-cutting medium to long-term operational planning office for Homeland Security agencies to ensure effective integration and execution of Department strategic goals, priorities, and policies. This Division will strengthen Homeland Security by developing and coordinating the implementation planning efforts of Department of Homeland Security agencies to improve operational effectiveness.
- Serves as primary coordinator and guide for Department-wide development of medium-to long-term operational planning in alignment with the strategic goals and policy priorities set forth by the Department. It will coordinate policy development and implementation planning to ensure thoughtful, optimal, execution of Homeland Security's mission. It will advocate and support Department of Homeland Security agencies with guidance and direction for policy implementation planning. A central departmental planning office will improve communication, resource allocation, and build requirements based planning into the Department as a tool to bridge multiple agency headquarters' centric focus and develop integration of operations.
- Serves as liaison with policy developers both at the Department and agency levels to coordinate planning to achieve medium to long-term goals. It will have the expertise and direct participation of agency liaisons to effectively communicate and engage agency leadership to improve implementation planning of agency operations. It will serve to validate implementation plans to ensure sufficient integrated planning, allocation of Department resources, mission critical, and operational security issues have been addressed.

- Provides critical feedback to the Undersecretary for Policy regarding the tempo and operational efficiencies of planning to achieve Departmental goals." (**DHS**, *Office of Strategic Plans*, February 8, 2008 modification)

Department of Homeland Security, Office of the Executive Secretary: "The Office of the Executive Secretary's mission is to support the Office of the Secretary in the Homeland Security mission of leading a unified national effort to secure America. By providing the Secretary with accurate and timely dissemination of information and written communications throughout DHS and with our homeland security partners, the Executive Secretary supports DHS's strategic goals of awareness, prevention, protection, response, recovery, service and organizational excellence. The Executive Secretary supports the Office of the Secretary by developing, implementing, and managing business processes for written communications, briefing book materials for the Secretary and Deputy Secretary, Authorization Questions for the Record, White House/ interagency actions, and others as identified by the Chief of Staff. Most importantly, the Executive Secretary facilitates communications among all the DHS components, thereby encouraging a unified national effort to secure America." (**DHS**, *DHS FY 2009 CBJ*, 2008, 3145)

Department of Homeland Security, Office of the Federal Coordinator for Gulf Coast Rebuilding. "The Office of the Federal Coordinator for Gulf Coast Rebuilding was created by President George W. Bush to help devise a long-term plan for rebuilding the region devastated by Hurricanes Katrina and Rita." (**DHS**, *Office of the Federal Coordinator*, January 23, 2008)

Department of Homeland Security, Office of the Secretary and Executive Management (OSEM) Mission Statement: "The Department of Homeland Security (DHS) Office of the Secretary and Executive Management (OSEM) supports the Department and all of its components by providing leadership, direction, and management to the Department. OSEM establishes and implements policy and provides various support functions and oversight to all entities within the Department. The Department continues to work toward integration and consolidation of its resources and operations to create a seamless organization that shares services, information, and best practices across previously stove-piped organizations." (**DHS**, *DHS FY09 Congressional Budget Justification*, 2008. 3144)

Department of Homeland Security, Office of US-VISIT: "US-VISIT (United States Visitor and Immigrant Status Indicator Technology) was established in order to accurately record the entry and exit of travelers to the United States by collecting biographic information and biometrics—digital fingerprints and photographs." (**DHS**, *Office of US-VISIT*, September 28, 2007)

Department of Homeland Security, Organization/Structure (2003): "The Department will be structured into four Directorates, each responsible for implementing the applicable components of the six critical missions. They are:

- Border and Transportation Security,
- Information Analysis and Critical Infrastructure Protection,
- Emergency Response and Preparedness, and
- Science and Technology.

"The United States Coast Guard and Secret Service will retain their independence and will play key roles in supporting all of the critical missions. (**DHS**, *The Nomination of The Honorable Tom Ridge to be Secretary of the Department of Homeland Security*, January 19, 2003)

Department of Homeland Security, Protective Security Advisor (PSA) Coordination. "DHS has deployed PSAs in major metropolitan areas throughout the country to assist State and local efforts to identify and protect CIKR and to ensure national risk assessments are better informed through State and local input. PSAs implement DHS's mission to protect CIKR by fostering improved coordination at the State and local level through their support for national CIKR protection-related programs. Responsible jurisdictions must coordinate with and include their PSAs in the assessment of CIKR identified for BZPP funding to ensure all necessary resources are made available for the development of the BZP" (DHS, *Fiscal Year 2008 Buffer Zone Protection Program Guidance and Application Kit*, February 2008, p. 10)

Department of Homeland Security, Public Safety Interoperable Communications Grant Program (PSIC): "…assists public safety agencies in the acquisition of, deployment of, or training for the use of interoperable communications systems that can utilize reallocated public safety spectrum in the 700 MHz band for radio communication." (**DHS**, *State Contacts & Grant Award*, July 18, 2007 Update)

Department of Homeland Security, Science & Technology(S&T) Directorate: "The Directorate for Science and Technology is the primary research and development arm of DHS. *Mission and Objectives* -- The S&T Directorate, in partnership with the private sector, national laboratories, universities, and other government agencies (domestic and foreign), helps push the innovation envelope and drive development and the use of high technology in support of homeland security. The Directorate is focusing on enabling its customers—the DHS components—and their customers, including Border Patrol agents, Coast Guardsmen, airport baggage screeners, Federal Air Marshals, and state, local, and Federal emergency responders, as well as the many others teamed and committed to the vital mission of securing the Nation.
To reach its goals, the S&T Directorate is:

- Creating a customer-focused, output-oriented, full-service science and technology management organization that is consistent with its enabling legislation
- Incorporating lessons learned since the start-up of DHS to sharpen its focus on executing mission-oriented programs
- Providing leadership and resources to develop the intellectual basis that is essential to future mission success." (**DHS**, *Directorate for Science and Technology*, May 22, 2007)

Department of Homeland Security, Science & Technology(S&T) Directorate, Office of University Programs: S&T "is harnessing the nation's scientific knowledge to protect America and our way of life from terrorists and their weapons of mass destruction. The Office of University Programs is furthering this mission by engaging the academic community to create learning and research environments in areas critical to Homeland Security. Through a national network of Homeland Security Centers of Excellence, the Department encourages colleges and universities to lead or participate in centers of multi-disciplinary research where important areas of inquiry can be analyzed and debated and academic and policy results can be shared. To create an enduring capability for homeland security and fulfill its stewardship mission, S&T also

develops and supports the next generation of scientists through the DHS Scholars and Fellows Program, which provides financial assistance and career development for deserving students whose intellectual pursuits align with the DHS mission." (**DHS**, *Fact Sheet: HS Centers of Excellence: Partnering with the Nation's Universities*, January 10, 2005)

Department of Homeland Security, Secret Service: "The Secret Service represents…[a] unique critical mission that aligns with the core competencies of the new Department and will remain independent. Through its two distinct missions, protection and criminal investigation, the Secret Service is responsible for the protection of the President, the Vice President and their families; heads of state; the security for designated National Special Security Events; and the investigation and enforcement of laws relating to counterfeiting, fraud and financial crimes. The Secret Service is, and has been for decades, in the business of assessing vulnerabilities and designing ways to reduce them in advance of an attack. This expertise will greatly benefit the Department as we strive to create an overall culture of anticipation, vulnerability assessment, and threat reduction. Building on these institutional ideals will be of the utmost importance as it pertains to nearly all of the missions in the Department, but none more so than protecting our critical infrastructure." (**DHS**, *The Nomination of The Honorable Tom Ridge to be Secretary of the Department of Homeland Security*, January 19, 2003)

Department of Homeland Security, Situational Awareness Teams (DSATs): "DSATs are made up of DHS personnel who provide key situational awareness reporting to incident managers by providing data directly from the scene of the incident. This data can include information from streaming video which can be posted on HSIN, satellite communications, and other tools that provide incident managers vital information in near real-time. This capability supports Federal, State, and Local domestic incident managers and allows our collective emergency response to be coordinated with key homeland security partners such as the Principal Federal Official (PFO)." (**DHS**, *Statement of Frank DiFalco, Director of the NOC*, 20Jun07, 4)

Department of Homeland Security, Software Assurance Program: "Grounded in the National Strategy to Secure Cyberspace, The Department of Homeland Security's Software Assurance Program spearheads the development of practical guidance and tools and promotes research and development investment in cyber security. Significant new research on secure software engineering is underway, examining a range of development issues from new methods that avoid basic programming errors, to enterprise systems that remain secure when portions of the system software are compromised. Through these efforts, Homeland Security seeks to reduce software vulnerabilities, minimize exploitation, and address ways to improve the routine development and deployment of trustworthy software products. Together, these activities will enable more secure and reliable software that supports mission requirements across enterprises and the critical infrastructure." (**DHS**, *Software Assurance*, US-CERT, February 18, 2008)

Department of Homeland Security, Transportation Security Administration (TSA):

"TSA includes the Federal Air Marshal Service (FAMS) and airport aviation screeners at airports across the country. The skills and competencies developed by FAMS and the screeners became the nucleus of operations called upon by the Aviation and Transportation Security Act passed on November 19th 2001. The operations include all modes of transportation – not just aviation – and

provide a layered security system involving examination of people, cargo, and worker credentials; investigations of suspect activity on maritime, land, and airports; sharing intelligence and conducting analysis of transportation security gaps; as well as enforcing industry regulation. Through this work, TSA inspectors are the most visible enforcement presence to aviation travelers in the Nation's airports." (**DHS**, "United States Homeland Security…." Ch. 3, *Capstone Doctrine Pub 1 Draft*, Feb 2008, 8)

Department of Homeland Security, United States Citizen and Immigration Services (USCIS): "On March 1, 2003, service and benefit functions of the U.S. Immigration and Naturalization Service (INS) transitioned into the Department of Homeland Security (DHS) as the U.S. Citizenship and Immigration Services (USCIS). USCIS is responsible for the administration of immigration and naturalization adjudication functions and establishing immigration services policies and priorities. These functions include:

- adjudication of immigrant visa petitions;
- adjudication of naturalization petitions;
- adjudication of asylum and refugee applications;
- adjudications performed at the service centers, and
- all other adjudications performed by the INS.
- Fifteen thousand…federal employees and contractors working in approximately 250 [HQ] and field offices around the world comprise the USCIS." (**DHS**, *About USCIS*)

Department of Homeland Security, United States Coast Guard: "The Coast Guard's fundamental responsibilities -- preparedness, protection, response and recovery -- cut across all facets of the Department's mission. Every day since the September 11th terrorist attacks, the Coast Guard pushes our maritime borders farther from shore. All ships bound for the U.S., regardless of registry, face a multi-layered, interagency security screening process in addition to traditional safety, environmental and operational standards enforcement, plus random boardings…. The Coast Guard has also created highly trained and specially equipped Maritime Safety and Security Teams to add an extra layer of security and additional quick-response capabilities in key U.S. ports. But let me make one thing clear. The new Department will not lose focus of the Coast Guard's other critical missions. From search and rescue, anti-drug and illegal migrant patrols to fisheries enforcement and aids to navigation, I will work personally to ensure that the Department continues to support the entirety of the Coast Guard mission. (**DHS**, *The Nomination of The Honorable Tom Ridge to be Secretary of the Department of Homeland Security*, January 19, 2003)

"The US Coast Guard (USCG) is a Military Service within the DHS dedicated to protecting the safety and security of the United States. As such, it operates globally; on the high seas and in US territorial waters, and has certain federal law enforcement authorities ashore. It is a federal LEA and an Armed Force of the United States whose Service secretary is the Secretary of DHS. It is the lead agency for maritime drug interdiction and the co-lead agency for air drug interdiction operations, along with US Customs and Border Protection. The USCG defends the United States' seaward frontier against illegal drugs and illegal immigrants. The USCG is also the lead agency for maritime search and rescue. The USCG is the lead agency for coordinating all maritime security planning and operations in the ports and inland waterways, including all efforts to prevent attacks and to mitigate the consequences of an attack should one occur. The USCG's

counterterrorism teams are ready to intercept terrorists before they ever reach the homeland. In time of war, the USCG could be transferred to the Department of the Navy for operations. In its maritime law enforcement role, USCG has jurisdiction in both US waters and on the high seas. In this capacity, the USCG may make inquiries, examinations, inspections, searches, seizures, and arrests upon the high seas and waters over which the US has jurisdiction, for prevention, detection, and suppression of violations of laws of the US. It is unique among the Services in that it has statutory law enforcement authority." (**JCS/DoD**, *Civil Support*, 2007, pp. II-16-17)

Department of Homeland Security, University System Governance and Implementation: "The Executive Steering Committee will provide guidance and recommendations, through the Office of the Chief Human Capital Officer (OCHCO), to develop and facilitate a cohesive DHS community of learning. Specifically, the Executive Steering Committee will:
• Determine policies that govern employee training and outline the guiding principles for agency training and education
• Assign responsibility for and delegate training approval authority to the lowest possible level
• Establish priorities for training and educating employees and providing funds and staff according to these priorities
• Provide guidance and resource support to the DHS Training Leaders Council (TLC)
• Annually review and approve the Learning and Development Strategy
Champion: Secretary of the Department of Homeland Security
Meetings: The Executive Steering Committee will meet at least two times annually or as otherwise required to address training, education and/or development needs of DHS employees. Meeting objectives will include:
• Review progress of the DHS Training Leaders Council's Strategic Plan for Learning and Development and the DHS Learning and Development Strategy
• Discuss learning and development priorities and resource allocation." (**DHS**, *Establishing a DHS University System*, 2007, p. 7)

Department of Homeland Security, Urban Areas Security Initiative Nonprofit Security Grant Program (UASI-NSGP): "The…Urban Areas Security Initiative (UASI) Nonprofit Security Grant Program provides funding support for target hardening activities to nonprofit organizations that are at high risk of international terrorist attack. While this funding is provided specifically to high-risk nonprofit organizations, the program seeks to integrate nonprofit preparedness activities with broader state and local preparedness efforts. It is also designed to promote coordination and collaboration in emergency preparedness activities among public and private community representatives, State and local government agencies, and Citizen Corps Councils." (**DHS**, *Fiscal Year 2007 Homeland Security Grant Program Urban Areas Security Initiative: Nonprofit Security Grant Program--Program Guidance and Application Kit*, April 2007, p. 1)

Department of Homeland Security, USCG Deployable Operations Group (DOG): "Over the past year, we have strengthened the Coast Guard's capabilities by creating a Deployable Operations Group (DOG) consisting of six Coast Guard elements: the National Strike Force, Port Security Units, Maritime Safety and Security Teams, Tactical Law Enforcement Teams, Naval Coastal Warfare Personnel, and Maritime Security Response Teams.

Each of these elements has unique capabilities, including search and rescue, hazmat, biological and chemical response, counterterrorism, law enforcement, and port security expertise. By bringing them under a single command and training them for rapid deployment in any environment, we are strengthening our ability to respond effectively to any disaster. Moreover, by coordinating this group with other DHS assets, such as FEMA Search and Rescue teams, ICE officers, and CBP agents, we can create an efficient, tailored, DHS-wide response to any incident." (DHS, *Testimony of Secretary Michael Chertoff before the House Committee on Homeland Security*. (Remarks as Prepared), September 5, 2007)

Department of Homeland Security, U.S. Customs and Border Protection (CBP): "U.S. Customs and Border Protection (CBP) is the unified border agency within the Department of Homeland Security (DHS). CBP combined the inspectional workforces and broad border authorities of U.S. Customs, U.S. Immigration, Animal and Plant Health Inspection Service and the entire U.S. Border Patrol…. For the first time in our nation's history, one agency has the lone responsibility of protecting our borders. As the single, unified border agency, CBP's mission is vitally important to the protection of America and the American people. CBP's priority mission is preventing terrorists and terrorist weapons from entering the United States, while also facilitating the flow of legitimate trade and travel…" (**DHS**, *About CBP Spotlight, Protecting Our Borders Against Terrorism*)

Department of Homeland Security, United States Computer Emergency Readiness Team (US-CERT): "The United States Computer Emergency Readiness Team (US-CERT) is a partnership between the Department of Homeland Security and the public and private sectors. Established in 2003 to protect the nation's Internet infrastructure, US-CERT coordinates defense against and responses to cyber attacks across the nation." (**DHS**, *Welcome to US-CERT*, November 2007)

Department of Homeland Security, University System: "The DHS University System is comprised of four centers or pillars that, together, support a comprehensive and networked approach to developing Department employees at all levels. The pillars include:
• Leadership Institute — prepares and grows leaders throughout the Department at every level by establishing programs and methods that deliver essential leadership training at career milestones.
• Preparedness Center — establishes a culture of preparedness throughout the Department by offering programs that build awareness of the Department's protection and response capabilities in a multi-threat/all-hazards environment by establishing a network of DHS recognized interagency and national preparedness training programs.
• Homeland Security Academy — cultivates homeland security strategic analysis and decisionmaking skills through a high-quality, fully-accredited graduate degree program in Homeland Security Studies.
• Center for Academic and Interagency Programs — establishes and maintains partnerships and linkages with interagency and academic community counterparts to optimize current best practices and provide DHS employees with the highest quality training, education and professional development opportunities available in the integrated homeland security learning community." (**DHS**, *Establishing a Department of Homeland Security University: Learning and Development Strategy*, September 28, 2007, p. 4)

Department of Justice (DOJ)/FBI: "As the lead for crisis management and counterterrorism, the Attorney General is responsible for ensuring the development and implementation of policies directed at preventing terrorist attacks domestically, and will undertake the criminal prosecution of acts of terrorism. DOJ has charged the FBI with execution of its LFA responsibilities for the management of a federal response to threats or acts of terrorism that take place within US territory or those occurring in international waters that do not involve flag vessels of foreign countries. As LFA, the FBI will implement a federal CrM response, and will designate a federal on-scene commander to ensure appropriate coordination with federal, state and local authorities until such time as the Attorney General finds it necessary to transfer the overall LFA role to DHS/FEMA." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. II-20)

Department Operations Center (DOC): "A school site or single-discipline operations center. May be found at any level above the field response level." (Orange County (CA) Emergency Management Organization Schools Committee. *SEMA Emergency Operations Center (EOC) Course for Schools*)

Department Operations Centers (DOCs): "Department Operations Centers (DOCs) normally focus on internal agency incident management and response and are linked to and, in most cases, are physically represented in a higher level EOC. ICPs [Incident Command Posts] should also be linked to DOCs and EOCs to ensure efficient incident management." (**DHS**, *NIMS,* 2004, 27)

Depression (low, low pressure area): "Region where the barometric pressure is lower relative to that in the surrounding regions at the same level." (**UNDHA**, *Disaster Mgmt Glossary*, 1992, 25)

Deputy (NIMS): "A fully qualified individual who, in the absence of a superior, can be delegated the authority to manage a functional operation or perform a specific task. In some cases, a deputy can act as relief for a superior and, therefore, must be fully qualified in the position. Deputies can be assigned to the Incident Commander, General Staff, and Branch Directors." (**DHS**, *NIMS*, 2004, p. 128)

Depth (total) of Run-Off: "Run-off volume from a drainage basin, divided by its area." (**UNDHA**, *DM Glossary*, 1992, 25)

Deputy (ICS): "A fully qualified individual, who in the absence of an immediate supervisor, could be delegated the authority to manage a functional operation or perform a specific task. Deputies can be assigned to the Incident Commander, General Staff and Branch Directors. (**Capital Health Region**, Canada, *Incident Cmd. Sys. Training SM*, Mar 2007, 52)

DERG: Devolution Emergency Response Group. (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Desertification: "The processes by which an already arid area becomes even more barren, less capable of retaining vegetation, and progressing towards becoming a desert." (**UNDHA**, *DM Glossary*, 1992, 26)

Design and Development (HSEEP Exercises): "Building on the exercise *foundation*, the design and development process should consist of identifying *capabilities*, *tasks*, and *objectives*, designing the *scenario*, creating documentation, coordinating logistics, planning exercise conduct, and selecting an evaluation and improvement methodology." (**FEMA**, *HSEEP Glossary*, 2008)

Design and Development System (DDS): "The Design and Development System (DDS) is a project management tool and comprehensive tutorial for the design, development, conduct, and evaluation of exercises. The DDS provides users with templates and guidance for developing master task lists, timelines, planning teams, and exercise documentation (e.g. Master Exercise Scenario Lists [MSELs] and Exercise Evaluation Guides [EEGs]). Note: the DDS was formerly called the HSEEP Toolkit." (**FEMA**, *HSEEP FAQs*, 2008)

Design and Development System (DDS) Objectives:

- ■ Encourage the development of self-sustaining exercise programs
- ■ Reduce dependency on direct support
- ■ Provide consistent exercise guidance, templates and exercise documentation

(**DHS**, *Homeland Security Exercise and Evaluation Program, Toolkit Overview*. May 15, 2007)

Design Earthquake: "Earthquake parameters selected for designing an earthquake resistant structure according to code requirements." (**UNDHA**, *Disaster Mgmt. Glossary*, 1992, 26)

Design Flood: "Flood hydrograph or peak discharge adopted for the design of a hydraulic structure according to code requirements." (**UNDHA**, *Disaster Mgmt. Glossary*, 1992, 26)

Design Flood Elevation (DFE): "…the specified level to which a structure will be protected from floods when it is built or retrofitted." (**FEMA**, *Reducing Damage…Flooding*, 2005, viii)

Design Storm: "Rainfall amount and time distribution adopted over a given drainage area, used in determining the design flood." (**UNDHA**, *Disaster Mgmt. Glossary*, 1992, 26)

Designated Area: "Any emergency or major disaster-affected portion of a State which has been determined in the President's declaration letter to be eligible for Federal assistance. Also referred to as the affected area." (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 49)

Designated Floodway: "…refers to the channel of the stream and that portion of the adjoining floodplain reasonably required to provide for the passage of a design flood; in California, it is also the floodway between existing levees as adopted by The Reclamation Board or the state Legislature." (**Galloway**, *A California Challenge*, 2007, 10)

Designated Period (Direct Federal Assistance):

- ***For Direct Federal Assistance:*** The period from 12:01 a.m. of the date of the Presidential declaration to 11:59 p.m. of the third full day after the date of the declaration.
- ***For Grant Assistance:*** The period selected by an applicant for eligibility for 100% Federal share assistance. The period will be 72 hours within a window from 12:01 a.m. of

the date of a Governor's or City or County official's declaration of emergency through 11:59 p.m. of the seventh full day after the date of the Presidential declaration of a major disaster. The period may be different for Category A and Category B work. (**FEMA**, *100% Funding for Direct Federal Assistance and Grant Assistance*, June 9, 2006)

DEST: Domestic Emergency Support Team.

Detection: "The Office [Homeland Security] shall identify priorities and coordinate efforts for collection and analysis of information within the United States regarding threats of terrorism against the United States and activities of terrorists or terrorist groups within the United States." (**White House**, *EO 13228*, October 8, 2001)

Detention Reservoir (also flood control reservoir): "Flood storage reservoir with uncontrolled outlets." (**UNDHA**, *Disaster Management Glossary*, 1992, 27)

Determined Accord: "…a table top exercise…[to increase] federal executive branch, state, tribal and local continuity of operations (COOP) readiness for a pandemic event. The interactive sessions…[were] conducted throughout August and September [2007] in the National Capital Region, and include[d] participants from a wide cross-section of federal departments and agencies and state organizations…. Exercise "Determined Accord" is designed to help identify gaps or weaknesses in pandemic planning in organization COOP plans, policies and procedures and is based on pandemic COOP guidance developed by FEMA and an interagency pandemic steering committee that includes representatives from across the executive branch. While all COOP elements are explored, the exercise encourages participates to give special consideration to ensuring the health and safety of employees and providing essential government functions and services with high absence rates." (**FEMA**, *"Determined Accord" Increases Pandemic Influenza Preparedness* 22 Sep 2007)

Determined Promise Exercise, 2004: "U.S. Joint Forces Command will support two major exercises, Determined Promise 04 (DP04) and Amalgam Virgo 04 (AV04)…this week for the North American Aerospace Defense Command (NORAD) and the U.S. Northern Command (USNORTHCOM) to test the commands' responses to terrorist attacks on national, state and local levels. USJFCOM developed DP04's scenario that will test USNORTHCOM's ability to assist civil and federal authorities in a coordinated response to simulate chemical, radiological, and explosive hazards, conducted in California and Virginia….

"The exercises will involve more than 4,000 Canadian and U.S. military personnel in three U.S. states [CA and VA] and two Canadian provinces…. The Southern California portion of DP-04 involves a simulated massive explosion of a radiological dispersion device in the Port of Los Angeles, resulting in casualties and thousands of resident exposures to the unknown substance "cloud," among several other events. State and federal partners, including the FBI, Transportation Security Administration, DoD, Department of Energy, the California National Guard Civil Support Teams, and the Federal Emergency Management Agency will participate in the full-scale exercise. In Virginia, the exercise will involve federal, state and local teams as well as those in the private sector. The exercise will test the abilities of Virginia's emergency managers and first responders to handle more than 12,000 deaths and 62,000 serious injuries

arising from simultaneous simulated "terrorist" attacks including a cruise ship, a major auto race, a bridge and two tunnels in Hampton Roads, a large suburban Richmond, Va. shopping complex and a Richmond area elementary school." (**USJFCOM**, *USJFCOM Supports Two Exercises*, 04)

Devolution: "The capability to transfer statutory authority and responsibility for essential functions from an agency's primary operating staff and facilities to other agency employees and facilities, and to sustain that operational capability for an extended period." (**DHS**, *FCD 1*, 2007, P-3)

Devolution Emergency Response Group (DERG) (COOP/COG): "Regional, interagency, and available… Headquarters staff that assume the responsibility and execution of… headquarters essential functions during a Devolution of Operations activation." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Devolution Emergency Response Group (DERG) Director (COOP/COG): "The Successor who succeeds the Director…and serves as the Devolution Response Group Director. According to the delegation of authority for the Director…the Successor must be confirmed and not acting." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Devolution of Authority: "The passing of an unexercised right, devolution of authority is an essential planning requirement for departments and agencies manifested as a formal list of personnel who are pre-delegated the authority and responsibility to assume leadership of organizational elements within a department or agency with the approval of the department or agency head." (**HSC**, *National Continuity Policy Implementation Plan*, August 2007, p. 61)

Devolution of Operations (COOP/COG): "Addresses the full spectrum of threats and all-hazard emergencies that may render an agency's leadership and staff unavailable to, or incapable of, supporting the execution of its essential functions from either its primary or alternate locations." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Devolution of Operations Activation Conditions (COOP/COG):

- **Active Measures:** "Active measures or "triggers" are those that initiate Devolution of Operations plan activation because of a deliberate decision by senior…HQ authorities. In this situation, the Director…or designated successor activates the Devolution of Operations Plan based on an identified threat to the NCR [National Capital Region]….
- **Passive Measures:** Passive measures or "triggers" for activating the Devolution of Operations Plan occur when…HQ leadership is not available to initiate activation. For example, when the DERG Director cannot establish contact with the HQ senior leaders… and the Homeland Security Operations Center (HSOC) using all possible communications devices or media coverage portrays catastrophic events in and around the NCR, the DERG Director activates the…HQ Devolution of Operations Plan and Program and assumes the…HQ mission and essential functions." (**FEMA**, *Devolution of Operations Plan Template*)

Devolution of Operations Plan (COOP/COG): "A plan that provides for the transfer and continuity of essential functions of an organization in the event a catastrophic emergency prevents performance of these functions by the primary personnel at the primary or alternate locations." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Devolution of Operations Phases (COOP/COG): "The three levels of operations implemented in response to a crisis, attack, or catastrophe that render headquarters personnel unavailable to, or incapable of, maintaining essential functions at the primary or alternate locations. The phases are implemented sequentially and include: Activation and Transfer of Authority, On-Site Operations, and Reconstitution." (**FEMA**, *Devolution of Operations Plan Template*)

Devolution of Operations Sites (COOP/COG): "The…facilities where the Devolution Response Group conducts the mission and essential functions of…headquarters." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Devolution Planning: "Devolution planning supports overall continuity of operations planning and addresses catastrophes and other all-hazards emergencies that render an agency's leadership and key staff unavailable to or incapable of performing its essential functions from either the agency's primary or alternate facilities. Devolution planning also addresses notice and no notice events. A continuity of operations plan's devolution option should be developed so that it addresses how an agency will identify and transfer its essential functions and/or leadership authorities away from the primary facility or facilities, and to a location that offers a safe and secure environment in which essential functions can continue to be performed. The devolution option may be used when the agency's alternate facility is not available or the option can be activated as a continuity measure.

At a minimum a devolution plan will

1. Include the following elements of a viable continuity of operations capability: program plans and procedures, budgeting and acquisitions, essential functions, orders of succession, delegations of authority, interoperable communications, vital-records management, staff, test, training, and exercise (TT&E), and reconstitution
2. Identify prioritized essential functions for devolution, define tasks that support those essential functions, and determine the necessary resources to facilitate those functions' immediate and seamless transfer to the devolution site
3. Include a roster that identifies fully equipped and trained personnel who will be stationed at the designated devolution site and who will have the authority to perform essential functions and activities when the devolution option of the continuity of operations plan is activated
4. Identify what would likely activate or "trigger" the devolution option
5. Specify how and when direction and control of agency operations will be transferred to and from the devolution site
6. List the necessary resources (i.e., equipment and materials) to facilitate the performance of essential functions at the devolution site
7. Establish and maintain reliable processes and procedures for acquiring the resources necessary to continue essential functions and to sustain those operations for extended periods

8. Establish and maintain a capability to restore or reconstitute agency authorities to their pre-event status upon termination of devolution." (**DHS**, *FCD 1*, Nov. 2007, p. L-1)

Devolution Working Group (DWG) (COOP): "The DWG is a standing committee that will meet on an annual basis to address coordination issues and support needs for the Devolution of Operations counterpart organizations. The DWG is comprised of…HQ Offices and Divisions and Regional and interagency planners who ensure that the resources and authorities necessary to carry out the HQ essential functions are in place at the Devolution of Operations sites. The DWG responsibilities include the identification of corresponding organizations and individuals for the…HQ Offices and Divisions, the furnishing of critical equipment and materials necessary for the Devolution of Operations, and the evaluation and reporting of the Devolution of Operations counterparts to conduct the…HQ mission and essential functions." (**FEMA**, *Devolution of Operations Plan Template*)

DFA: Direct Federal Assistance. (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 2)

DFC: Disaster Finance Center, FEMA. (**FEMA**, *Mission Assignment SOPs Draft*, July 2007, p. 4)

DFE: Design Flood Elevation. (**FEMA**, *Reducing Damage…Flooding*, 2005, viii)

DFIRM: Digital Flood Insurance Map. (**FEMA**, *FAQs: Digital Flood Data and Mapping*, 2007)

DFO: Disaster Field Office. (**FEMA/NFIP**, *Call for Issues Status Report*, 2000, xxiii)

DHA: Department of Humanitarian Affairs, United Nations. (**UN DHA**, *DM Glossary*, 1992)

DHAP: Disaster Housing Assistance Program, FEMA. (FEMA, *Written Statement of Carlos J. Castillo, Ast. Admin. for DAD, FEMA, House of Representatives*, June 4, 2008)

DHHS: Department of Health and Human Services.

DHNS: Deaf and Hard-of-Hearing Notification System. (**FEMA**, *IPAWS*, September 11, 2007)

DHS: U.S. Department of Homeland Security.

DHS CIS: Department of Homeland Security, Citizen and Immigration Services.

DHS CPO: Department of Homeland Security, Chief Privacy Officer.

DHS CBP: Department of Homeland Security, Customs and Border Protection.

DHS DNDO: Department of Homeland Security, Domestic Nuclear Detection Office.

DHS FEMA: Department of Homeland Security, Federal Emergency Management Agency.

DHS FLETC: Department of Homeland Security, Federal Law Enforcement Training Center.

DHS ICE: Immigration and Customs Enforcement.

DHS IP: Department of Homeland Security, Office of Infrastructure Protection. (**DHS**, 2006)

DHS LMS: Department of Homeland Security, Learning Management System.

DHS MD: Department of Homeland Security, Management Directorate.

DHS NOC: Department of Homeland Security, National Operations Center.

DHS NPPD: Department of Homeland Security, National Protection and Programs Directorate.

DHS OCE: Department of Homeland Security, Office of Counternarcotics Enforcement.

DHS OEC: Department of Homeland Security, Office of Emergency Communications (OEC):

DHS OGC: Department of Homeland Security, Office of General Counsel.

DHS OHA: Department of Homeland Security, Office of Health Affairs

DHS OIG: Department of Homeland Security, Office of Inspector General.

DHS OI&A: Department of Homeland Security, Office of Intelligence and Analysis (I&A).

DHS OPS: Department of Homeland Security, Office of Operations Coordination.

DHS OSEM: Department of Homeland Security, Office of the Secretary and Exec. Mgmt.

DHS S&T: Department of Homeland, Science and Technology Directorate.

DHS DSAT: Department of Homeland Security, Situational Awareness Team.

DHS TSA: Department of Homeland Security, Transportation Security Administration.

DHS USCG: Department of Homeland Security, U.S. Coast Guard.

DHS USSS: Department of Homeland Security, U.S. Secret Service.

Diablo Canyon Exercise, 2002: "On October 23, 2002, NRC [Nuclear Regulatory Commission] Headquarters and Region IV staff participated in an emergency preparedness exercise with Diablo Canyon Nuclear Power Plant in California. Multiple Federal agencies, including the Federal Bureau of Investigation, Office of Homeland Security, DOE, and Federal Emergency Management Agency participated. NRC activated its Headquarters Operations Center, Region IV's Incident Response Center, and sent a team to the site as part of the exercise. The exercise was unique in that it was the first FEMA-evaluated licensee exercise that featured

an integrated response, including aspects of the Concept of Operations Plan and the Federal Radiological Emergency Response Plan." (**NRC**, *Information Report*, October 20, 2002)

DIB: Defense Industrial Base. (**DSB**, *Report of DSB TF* on CHIP, 2007, p. 2)

Digital Emergency Alert System (DEAS): "The Digital Emergency Alert System-National Capital Region (DEAS-NCR) pilot has been designed to demonstrate how the capabilities of America's public broadcasters can be utilized to dramatically enhance the capabilities of the President to address the American people in the event of a national emergency. FEMA's Office of National Security Coordination serves as the federal government's Executive Agent for the national level of the Emergency Alert System (EAS)." (**DHS**, *National Capital Region Coordination, First Annual Report*, 2005, p. F-11 (51))

Digital Flood Insurance Map (DFIRM): "A Digital Flood Insurance Rate Map (DFIRM) includes all digital data required to create the hardcopy Flood Insurance Rate Map to FEMA FIA-21 standards and specifications (see the "Standards for Digital Flood Insurance Rate Maps"). It includes base map information, graphics, text, shading, and other geographic and graphic data. DFIRM specifications are consistent with those required for mapping at a scale of 1:24,000, or larger. DFIRMs generally are produced in a countywide format. They include information from the unincorporated areas of a county and all the incorporated communities within that county. Hardcopy maps printed from the DFIRMs are reviewed and approved by each community. They are the official basis for implementing the regulations and requirements of the NFIP. (**FEMA**, *FAQs: Digital Flood Data and Mapping*, 2007)

Diligent Endeavor Exercise, 2004: Defense Threat Reduction Agency (DTRA) sponsored interagency nuclear weapons accident Field Training Exercise (FTX) in preparation for Diligent Warrior Exercise 2004 (February 17-18, 2004, Washington, DC.

DIM: Domestic Incident Management.

Dingo King: National level domestic US nuclear weapons and special operations exercise August 22-26, 2005.

Direct Federal Assistance (DFA) (Object Class 2501): "FEMA's regulations at 44 CFR §206.208, Direct Federal Assistance, state, "When the State and local government lack the capability to perform or contract for eligible emergency work and/or debris removal under sections 402(4), 403 or 407 of the Act, the Grantee may request that the work be accomplished by a Federal agency." This assistance is subject to the cost share provisions contained in the FEMA/State agreement and the Stafford Act. In addition, 44 CFR §206.47(d) states, "If warranted by the needs of the disaster, we recommend up to one hundred percent (100%) Federal funding for emergency work under section 403 and section 407, including direct Federal assistance, for a limited period in the initial days of the disaster irrespective of the per capita impact." Generally, a "limited period in the initial days of the disaster" means the period of 100% funding will be limited the first 72 hours following the disaster declaration, or an applicant's selected 72-hour period. This period may be extended based on the gravity and scope of the disaster, as determined by the President….

"FEMA will provide direct Federal assistance through a mission assignment to another Federal agency - upon request of the State - when the State and local government certify they lack the capability to perform or contract for the requested work. The duration of mission assignments for debris removal will be limited to 60 days from the disaster declaration date. The Federal Coordinating Officer may approve extensions for up to an additional 60 days, if a State or local government demonstrates a continued lack of capability to assume oversight of the debris removal mission. Additional extensions will require approval by the Recovery Division Director at FEMA Headquarters. If the President has also authorized 100% Federal funding for emergency work and/or debris removal under sections 403 or 407 of the Stafford Act for the disaster, the Federal share of work mission-assigned by FEMA will be as follows:

- **Debris Clearance and/or Removal:** When FEMA directs another Federal agency to accomplish debris clearance and/or removal, FEMA will provide at 100% Federal share the cost of actual debris clearance and/or removal work accomplished, *not mission assignment task orders initiated*, during the designated period. This work includes whatever clearance, pick up, hauling, processing and disposal activities FEMA authorizes but only during the designated period. After the designated period, if further direct Federal assistance for debris clearance or removal is necessary, it will be provided at the prevailing Federal cost share rate for the particular disaster. The State shall agree in advance to reimburse FEMA for the appropriate non-Federal share of the work including the overhead of the Federal agency assigned the task of debris removal.

- **Food, Water, Ice and Other Consumable Commodities:** For a mission assignment task order approved during the designated period, such commodities and the work necessary to distribute them, but not including installation or set-up, shall be provided at 100% Federal share regardless of the work or project completion date. For task orders approved after the designated period, the commodities shall be provided at the prevailing Federal cost share rate for the particular disaster. The State shall agree in advance to reimburse FEMA for the appropriate non-Federal share of the work including the overhead of the Federal agency assigned the task.

- **Other Emergency Protective Measures:** For a mission assignment task order approved during the designated period, FEMA will provide at 100% Federal share the cost of the work actually completed during the designated period. Examples of these measures include: installation of generators, installation of large plastic sheet roofing, and shoring or demolition of unsafe structures. After the designated period, the work or supplies shall be provided at the prevailing Federal cost share rate for the particular disaster. The State shall agree in advance to reimburse FEMA for the appropriate non-Federal share of the work including the overhead of the Federal agency assigned the task." (**FEMA**, *100% Funding for Direct Federal Assistance and Grant Assistance, Recovery Policy 9523.9*, June 9, 2006; see also, **FEMA**, *Mission Assignment SOPs… Draft*, July 2007, p. 10)

Direct Mail Shelter Development System (DMSDS): "This program, administered by DCPA, involves use of a systematic procedure for contacting owners and architects of selected new buildings, to offer technical assistance for incorporating protection from natural and manmade

hazards in the design of new projects. The DMSDS uses direct-mail techniques, combined with personal contact by State or local government authorities and Advisory Service Centers to assist the project designers. Contacts are made early in the design phase while there is still time to incorporate protection into the building at little or no extra construction cost." (**DCPA**, *Foresight, Annual Report FY73*, 1974, pp. 16-17)

Director: "The ICS title for individuals responsible for supervision of a Branch." (**Capital Health Region**, Canada, *Incident Cmd. Sys. Training SM*, Mar 2007, 52)

Director of National Intelligence (DNI): "Position created pursuant to the Intelligence Reform Act of 2004. The DNI has "executive authority" to oversee the U.S. Intelligence Community. (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 34)

Directorate of Military Support (DOMS), DOD/DOA: "The Army operates DOMS as the executive agent for the Department of Defense. The agency's mission is to plan for and commit DoD resources in response to requests from civil authorities -- often in the form of emergency requests for assistance in responding to natural or manmade disasters or civil disturbances. Other DOMS functions include special event support and assisting in domestic preparedness implementation in response to weapons of mass destruction. Its area of responsibility covers the United States and its territories." (**DOD**, "National Guard to Staff Half of DOMS," 1997) [Now JDOMS]

Directorate of Military Support (DOMS): "The organization which represents the DoD executive agent (Secretary of the Army) for provision of military assistance to civil authorities. DOMS exercises national-level oversight of the DCO function. The DCO will coordinate action and refer problems, through appropriate military channels to DOMS, which will facilitate resolution of problematic or contentious military support issues at the national level." (**FEMA**, *Mission Assignment SOPs*, 2007) [Note: Changed to JDOMS]

Direction and Control: "This part of the plan [D&C Annex, Emergency Operations Plan] covers operation of the EOC, to permit direction and control of coordinated operations by key officials. It shall include duties of each member of the EOC staff including the Radiological Defense Officer (RDO), displays, internal EOC procedures, etc., and use of locally available communications for operations directed from the EOC. If the community has public shelters, the organization of shelters (e.g., into shelter complexes, with headquarters reporting to the EOC) shall be identified." (**DCPA**, *Standards for Local Civil Preparedness* (CPG 1-5), 1978, p. 18)

Direction and Control: "Direction and control is a critical emergency management function. During the applicable phases (pre-, trans-, and post-) of the emergency response effort, it allows the jurisdiction to: Analyze the emergency situation and decide how to respond quickly, appropriately, and effectively; Direct and coordinate the efforts of the jurisdiction's various response forces; Coordinate with the response efforts of other jurisdictions; Use available resources efficiently and effectively." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), 1996, p. 5-A-1)

Director of Operations Coordination (DHS): "The DHS Director of Operations Coordination is the Secretary's principal advisor for the overall departmental level of integration of incident management operations. Run by the Director, the DHS National Operations Center is intended to provide a one-stop information source for incident information sharing with the White House and other Federal departments and agencies at the headquarters level." (**DHS,** *National Response Framework* (Comment Draft), September 10, 2007, p. 52)

Dirty Bomb: "A Radiological Dispersion Devise, or "dirty bomb", is a mix of explosives with radioactive powder or pellets. When it explodes the blast scatters radioactive material.

- A dirty bomb is not the same as an atomic bomb, which produces an atomic mushroom cloud.
- A dirty bomb cannot create an atomic blast. It uses dynamite or other explosives to scatter radioactive materials which cause radioactive contamination….

The terrorists' purpose is to spread fear. The main danger from a dirty bomb is the explosion, which can cause serious injuries and damage. The radioactive materials in a dirty bomb would probably not lead to enough radiation exposure to cause serious illness immediately, except to those people who are very close to the blast site. However, the radioactive dust and smoke that spreads could be dangerous to health if they are inhaled." (**FEMA**, "Fact Sheet – Dirty Bombs" (FEMA 573), NIMS Integration Center, June 2007, p. 1)

Dirty Bomb: "A type of radiological dispersal device (RDD) that combines a conventional explosive with radioactive material." (**HSC**, *NCPIP*, August 2007, p. 61) [See "Radiological Dispersion Device"]

Dirty Bomb: "Basically, the principal type of dirty bomb, or Radiological Dispersal Device (RDD), combines a conventional explosive, such as dynamite, with radioactive material. In most instances, the conventional explosive itself would have more immediate lethality than the radioactive material. At the levels created by most probable sources, not enough radiation would be present in a dirty bomb to kill people or cause severe illness. For example, most radioactive material employed in hospitals for diagnosis or treatment of cancer is sufficiently benign that about 100,000 patients a day are released with this material in their bodies.

However, certain other radioactive materials, dispersed in the air, could contaminate up to several city blocks, creating fear and possibly panic and requiring potentially costly cleanup. Prompt, accurate, non-emotional public information might prevent the panic sought by terrorists.

A second type of RDD might involve a powerful radioactive source hidden in a public place, such as a trash receptacle in a busy train or subway station, where people passing close to the source might get a significant dose of radiation.

A dirty bomb is in no way similar to a nuclear weapon. The presumed purpose of its use would be therefore not as a Weapon of Mass Destruction but rather as a Weapon of Mass Disruption." (**NRC**, *Dirty Bombs* (Fact Sheet), March 2003, p. 1)

Disability (individual with). "A person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment." (**FEMA**, *Accommodating Individuals With Disabilities In The Provision Of Disaster Mass Care, Housing, And Human Services: Reference Guide*, 2007, Glossary)

Disaster: An event that requires resources beyond the capability of a community and requires a multiple agency response.

Disaster: The result of a hazard impacting a community.

Disaster: Unless otherwise stated, a "disaster" includes any domestic disaster or act or terrorism that:

- Suddenly requires a much larger amount of blood than usual, OR
- Temporarily restricts or eliminates a blood collectors ability to collect, test, process and distribute blood, OR
- Temporarily restricts or prevents the local population from donating blood or restricts or prevents the use of the available inventory of blood products requiring immediate replacement or re-supply of the region's blood inventory from another region, OR
- Creates a sudden influx of donors requiring accelerated drawing of blood to meet an emergent need elsewhere." (**American Association of Blood Banks** (AABB) Task Force on Domestic Disasters and Acts of Terrorism, *Disaster Response*, July 25, 2007)

Disaster: "For insurance purposes a disaster is defined internationally as an event that causes at least US $5 million in reimbursable losses." (**Alexander**, no date, 4)

Disaster: "The distinction between natural hazards or disasters and their manmade (or technological) counterparts is often difficult to sustain…we are dealing with a physical event which makes an impact on human beings and their environment…a **natural disaster** can be defined as some rapid, instantaneous or profound impact of the natural environment upon the socio-economic system" (**Alexander** 1993, 4).

Disaster: "The label 'disaster' rather than 'accident' carries with it not only the implication that…an event…was of extraordinary misfortune…but also the implication that it could (unlike most accidents) have been prevented…disasters are events which fall within our scope of concern to prevent and in principle are events which may be prevented, and that we have a consequent obligation to attempt to prevent them" (**Allinson** 1993, 168-169).

Disaster: "…**Allen Barton** characterized disaster as a type of collective stress situation in which 'many members of a social system fail to receive expected conditions of life from the system' (1969: 38). For Barton, what distinguishes disasters from other types of collective stress, such as war, is that the sources of disasters are external rather than internal." (Tierney, Lindell and Perry 2001, 9)

Disaster: "Disasters are fundamentally social phenomena; they involve the intersection of the physical processes of a hazard agent with the local characteristics of everyday life in a place and larger social and economic forces that structure that realm" (**Bolin with Stanford** 1998, 27).

> "Disasters are easily characterized as unfortunate things that happen from time to time to people and their cities. What is missing in this view is any understanding of the ways that political and economic forces create conditions that result in an earthquake having disastrous impacts for *some* people and communities…
>
> "The disruptions of a disaster can unmask social inequalities and the injustices that accompany them…Too often…disasters become the basis for rebuilding social inequalities and perhaps deepening them, thus setting the stage for the next disaster" (**Bolin with Stanford** 1998, 2).
>
> "Disasters, from a vulnerability perspective, are understood as bound up in the specific histories and socio-cultural practices of the affected people taken in the context of their political and economic systems" (**Bolin with Stanford** 1998, 8).
>
> "The value of a vulnerability approach [to the study of hazards and disasters] lies in its openness to cultural specificity, social variability, diversity, contingency, and local agency" (**Bolin with Stanford** 1998, 20).
>
> "A vulnerability approach [to hazards and disasters] directs attention back to people and the common everyday aspects of their lives that make them more or less likely to be caught up in a disaster" (**Bolin with Stanford** 1998, 20).
>
> "It is the local struggles and strategies that can provide lessons for dealing with disaster across a range of societal contexts….Too often disaster research proceeds with the 'view from above'" (**Bolin with Stanford** 1998, 20).
>
> "Disasters and other environmental problems are too often treated, not as symptoms of more basic political and economic processes, but rather as accidents whose effects can be remedied by sufficient application of technical skill and knowledge" (**Bolin with Stanford** 1998, 231).

Disaster: "A sudden calamitous emergency event bringing great damage loss or destruction." (**CA OES**, *SEMS Guidelines*, 2006, Glossary, p. 7)

Disaster: "A disaster is…an event associated with the impact of a natural hazard, which leads to increased mortality, illness and/or injury, and destroys or disrupts livelihoods, affecting the people or an area such that they (and/or outsiders) perceive it as being exceptional and requiring external assistance for recovery" (**Cannon** 1994, 29, fn.2).

> "Many people now accept that human activity itself has created the conditions for disaster events. This is partly because of growing awareness that through negligence or inappropriate response, the workings of social systems have made a disaster out of a

> situation which otherwise might not have been so serious. There has also been a growth in understanding that it is *hazards* that are natural, but that for a hazard to become a disaster it has to affect vulnerable people" (**Cannon** 1994, 16).

Disaster: "Not every windstorm, earth-tremor, or rush of water is a catastrophe. A catastrophe is known by its works; that is to say, by the occurrence of disaster. So long as the ship rides out the storm, so long as the city resists the earth-shocks, so long as the levees hold, there is no disaster. It is the collapse of the cultural protections that constitutes the disaster proper" (**Carr** 1932, 211).

> "Carr's conclusion signifies that disasters are the result of human activities, not of natural or supranatural forces. Disasters are simply the collapse of cultural protections; thus, they are principally man-made. Deductively, mankind is responsible for the consequences of his actions as well as of his omissions" (**Dombrowsky** 1998, 24-25).

Disaster: "A disaster is an emergency considered severe enough by local government to warrant the response and dedication of resources beyond the normal scope of a single jurisdiction or branch of local government." (**Carroll** 2001, 467)

Disaster: "An event, natural or man-made, sudden or progressive, which impacts with such severity that the affected community has to respond by taking exceptional measures." (**Carter** 1991)

Disaster: "…a *disaster* is a singular event that results in widespread losses to people, infrastructure, or the environment. Disasters originate from many sources, just as hazards do (natural systems, social systems, technology failures). (**Cutter** 2001, 3)

Disaster: Calamity beyond the coping capacity of the effected population, triggered by natural or technological hazards or by human action. (**D&E Reference Center** 1998)

Disaster: "Disasters do not cause effects. The effects are what we call a disaster" (**Dombrowsky** 1998, 21).

Disaster: "An event in which a community undergoes severe danger and incurs, or is threatened to incur, such losses to persons and/or property that the resources available within the community are exceeded. In disasters, resources from beyond the local jurisdiction, that is State or Federal level, are required to meet the disaster demands." (**Drabek** 1996, 2-4)

Disaster: "I argue that disaster is a social, rather than a 'natural,' happening. Thus, any effort at disaster reduction involves planning and action by various social units." (**Dynes** 1993, 175) And, "…disasters are qualitatively as well as quantitatively different from accidents and everyday emergencies." (pp. 178-179)

Disaster: "A disaster is a normatively defined occasion in a community when extraordinary efforts are taken to protect and benefit some social resource whose existence is perceived as threatened" (**Dynes** 1998, 113).

Disaster: "Differentiating a disaster from an accident "is the extensiveness of the involvement of organizations and other segments within the community…In a community disaster, the pattern of damage may extend to several different places in the community rather than being focalized as it is within a community accident. Also, a number of community structures, perhaps including those that might house the traditional emergency organizations, might be damaged or destroyed….The increased involvement of other nonemergency organizations then creates the need for coordination of activity and for new patterns of communication among parts of the community that previously had no reason to communicate" (**Dynes** 1998, 119).

Disaster: "What is a disaster anyway? In social science usage as well as in everyday speech…it is a sharp and furious eruption of some kind that splinters the silence for one terrible moment and then goes away. A Disaster is an 'event' with a distinct beginning and a distinct end, and it is by definition extraordinary – a freak of nature, a perversion of the natural processes of life…the two distinguishing properties of a disaster are, first, that it does a good deal of harm, and, second, that it is sudden, unexpected, acute." (**Erikson** 1976, 253)

> "…instead of classifying a condition as a *trauma* because it was induced by a disaster, we would classify an event as *disaster* if it had the property of bringing about traumatic reactions. According to the terms of this rule, any event or condition that could be shown to produce trauma on a large scale would have earned a place on the current roster of 'disasters'." (**Erikson** 1976, 254)

Disaster/Emergency: "An event that causes, or threatens to cause, loss of life, human suffering, public and private property damage, and economic and social disruption. Disasters and emergencies require resources that are beyond the scope of local agencies in routine responses to day-to-day emergencies and accidents, and may be of such magnitude or unusual circumstances as to require response by several or all levels of government – Federal, State and local." (**FEMA**, *Hazards Analysis for Emergency Management (Interim Guidance)*, September 1983, p. 5)

Disaster: "An occurrence that has resulted in property damage, deaths, and /or injuries to a community." (**FEMA**, *Definitions and* Terms, Instruction 5000.2, **1990**)

Disaster: "An occurrence of a natural catastrophe, technological accident, or human-caused event that has resulted in severe property damage, deaths, and/or multiple injuries. As used in this Guide, a "large-scale disaster" is one that exceeds the response capability of the local jurisdiction and requires State, and potentially Federal, involvement. As used in the Stafford Act, a "major disaster" is "any natural catastrophe [...] or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under [the] Act to supplement the efforts and available resources or States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), **1996**, p. GLO-1)

Disaster: "Based on the knowledge gained from various sources and documentation, a common definition for a disaster has been defined for this study, which entails the following:

- *Suddenness* – Unforeseen, unpredictable
- *Scale* – Has large impact and involves a large part of the public
- *Institutional Response* – Beyond the normal capacity for coping and involving many institutions
- *Prolonged Duration of Effect* – Impact does not quickly dissipate
- *Uncertainty in Behavioral Response* – Outside of normal range of experience." (**FHWA** DOT, *Evacuation Transportation Management Task Five: Operational Concept*, 2006, 1)

Disaster: Any event "concentrated in time and space, in which a society of a relatively self-sufficient subdivision of society, undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfillment of all or some of the essential functions of the society is prevented" (**Fritz** 1961, 655)

Disaster: "…a situation involving damage and/or loss of lives beyond one million German marks and/or 1,000 person killed." (**German insurance industry**. Dombrosky's words (1998, 20))

Disaster: "…such severe interference of the public order and safety that in intervention of the centralized, coordinated disaster protection units is necessary." (**German law**. Dombrowsky 1998, 20 citing Seeck 1980, 1)[17]

Disaster: An "extraordinary situation in which the everyday lives of people are suddenly interrupted and thus protection, nutrition, clothing, housing, medical and social aid or other vital necessities are requested." (**German Red Cross**. Dombrowsky 1998, 20, citing Katastrophen-Vorschrift 1988, 2)[18]

Disaster: The result of (1) the impact of external forces, (2) social vulnerability, or (3) uncertainty. (**Gilbert**, 1991)[19]

Disaster: "the loss of key standpoints in common sense, and difficulty of understanding reality through ordinary mental frameworks" (**Gilbert** 1995, 238).

Disaster: "The result of a vast ecological breakdown in the relations between man and his environment, a serious and sudden event (or slow, as in drought) on such a scale that the stricken community needs extraordinary efforts to cope with it, often with outside help or international aid." (**Gunn** 1990, 374)

Disaster: "Disasters are subjective phenomena. They arise from the behavior of complex systems, are perceived and take place in a specific socio-economic, historical, cultural and chronological context." (**Horlick-Jones and Peters** 1991a, 147)

Disaster: "…disasters arise from the exposure of vulnerable populations to hostile environments generated by the failure of complex systems…such systems are made vulnerable to failure by the

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[17] *Gesetz uber den katastrophenschutz in Schlesig-Holsteni (LkatSG) vom 9 Dezember 1974*. Wiesbaden, Germany: Kommunal und Schul-Verlag A. Heinig (in German).
[18] Kasastrophen-Vorschrift (1988), Bonn: Deuches Rotesse Kreuz (in German).
[19] *Politique et compexite: Les crises sans ennemi*. Grenoble, France: CRISE. (Cited in Porfiriev 1995, 287).

complex interplay of factors including elements of the political economy environment in which the system is embedded." (**Horlick-Jones and Peters** 1991b, 41)

Disaster: Events that "…release repressed anxiety [and constitute a] loss of control of social order" (**Horlick-Jones** 1995, 305).[20]

Disaster: "Event that causes great damage or loss." (**ISO 22399**, *Societal Security*…, 2007, 2)

Disaster: A disaster is an *event* concentrated in time and space, in which a society or one of its subdivisions undergoes physical harm and social disruption, such that all or some essential functions of the society or subdivision are impaired (**Kreps** 1995, 256).

Disaster: "Disasters are non-routine events in societies or their larger subdivisions (e.g. regions, communities) that involve social disruption **and** physical harm. Among the key defining properties of such events are (1) length of forewarning, (2) magnitude of impact, (3) scope of impact, and (4) duration of impact" (**Kreps** 1998, 34).

Disaster: "…disasters are conjunctions of historical happenings and social definitions of physical harm and social disruption" (**Kreps** 1998, 34).

Disaster: "…consensus-type social crisis occasions wherein demands are exceeding resources and emergent responses may generate social change….the idea of social change is introduced to correct what is identified as a predisposition to focus on disasters as necessarily dysfunctional" [when there are "winners" as well]. (Summary of "the generic perspective" by **Kroll-Smith and Couch** 1991, 357.)

Disaster: "When viewed from an ecological-symbolic perspective, the real issue is not the quality of the disaster agent per se, but whether or not it significantly alters the relationship between a community, its built, modified or biophysical environments, and how people interpret and experience the changes in those environments" (**Kroll-Smith and Couch** 1991, 361).

Disaster: "…disaster must not be seen like the meteorite that falls out of the sky on an innocent world; the disaster, most often, is anticipated, and on multiple occasions." (**Lagadec** 1982, 495)

Disaster: "An occurrence or threat of widespread or severe damage, injury, or loss of property resulting from a natural or human-made cause, including, but not limited to, fire, flood, snowstorm, ice storm, tornado, windstorm, wave action, oil spill, water contamination, utility failure, hazardous peacetime radiological incident, major transportation accident, hazardous materials incident, epidemic, air contamination, blight, drought, infestation, explosion, or hostile military action, or paramilitary action, or similar occurrences resulting from terrorist activities, riots, or civil disorders." (**Michigan EMD** 1998, 5)

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[20] Tierney, Lindell and Perry (2001, 14) state that "…Horlick-Jones (1995) argued in favor of defining disasters as originating in the fundamental social conditions of late-modern society and as involving disruptions of cultural expectations and the release of existential dread. Such dread or anxiety originates in turn in a loss of faith in the institutions that are supposed to keep risks under control."

Disaster: "Disasters, in contrast to risks and hazards, are singular or interactive hazard events…that have a profound impact on local people or places either in terms of injuries, property damages, loss of life, or environmental impacts" (**Mitchell and Cutte**r 1997, 10).

Disaster: "Disasters are commonly7 thought of as tragic situations over which persons, groups, or communities have no control – situations that are imposed by an outside force too great to resist. Disasters render ineffectual the customary behaviorf patterns, often nullify previous efforts, and block or drastiacally change the course of events. The loss of life is an essential element. Survivors are suddenly given a feeling if impotence. Institutions find themselves facing new tasks of undeniable immediacy which must be accomplished if survival is to be assured. On the community level, the situation can be described as one of acute disorganization; at the personal level, there is a high degree of frustration…. Nonpredictability may be an essential characteristic of disaster" (**Moore**, "Toward a Theory of Disaster," 1958, p. 310)

Disaster: "Examples of disaster definitions used by entities include the following:
(1) An occurrence or imminent threat to the entity of widespread or severe damage, injury, or loss of life or property resulting from natural or human causes
(2) An emergency that is beyond the normal response resources of the entity and would require the response of outside resources and assistance for recovery
(3) A suddenly occurring or unstoppable developing event that does the following: (a) Claims loss of life, suffering, loss of valuables, or damage to the environment (b) Overwhelms local resources or efforts (c) Has a long-term impact on social or natural life that is always negative in the beginning." (**NFPA 1600**, 2007, p. 11)

Disaster: "Disasters are the interface between an extreme physical event and a vulnerable population." (**Okeefe** et al 1976, 566)

Disaster: "In graphic ways, disasters signal the failure of a society to adapt successfully to certain features of its natural and socially constructed environments in a sustainable fashion" (**Oliver-Smith** 1996, 303).

Disaster: "…a process involving the combination of a potentially destructive agent(s) from the natural, modified and/or constructed environment and a population in a socially and economically produced condition of vulnerability, resulting in a perceived disruption of the customary relative satisfactions of individual and social needs for physical survival, social order and meaning" (**Oliver-Smith** 1998, 186)

> "A disaster is made inevitable by the historically produced pattern of vulnerability, evidenced in the location, infrastructure, sociopolitical structure, production patterns, and ideology, that characterize a society. The society's pattern of vulnerability is an essential element of a disaster. (**Oliver-Smith** 1998, 187).
>
> "…a disaster is at some basic level a social construction, its essence to be found in the organization of communities, rather than in an environmental phenomenon with destructive or disruptive effects for a society" (**Oliver-Smith** 1998, 181).

Disaster: "A major natural disaster, in the sociological sense, can be thought of as a failure of the social systems constituting a community to adapt to an environmental event…It should also be viewed as the failure to develop and distribute, among other things, technology in the form of housing and community infrastructure capable of withstanding such an event" (**Peacock/Ragsdale** 1997, 24).

Disaster: The result of negative social and environmental impacts, state (condition) of collective stress in a community, or a contradiction between the capacity to cope with destructive agents and their negative impacts. (C**. Pelanda**, 1982[21] according to Porfiriev 1995, 287-288.)

Disaster: "A disaster is a non-routine event that exceeds the capacity of the affected area to respond to it in such a way as to save lives; to preserve property; and to maintain the social, ecological, economic, and political stability of the affected region." (**Pearce** 2000, Chapter 2, 5)

Disaster: "…a state/condition destabilizing the social system that manifests itself in a malfunctioning or disruption of connections and communications between its elements or social units (communities, social groups and individuals); partial or total destruction/demolition; physical and psychological overloads suffered by some of these elements; thus making it necessary to take extraordinary or emergency countermeasures to reestablish stability" (**Porfiriev** 1995, 291)

Disaster: "Disasters occur when the demands for action exceed the capabilities for response in a crisis situation" (**Quarantelli** 1985, 50).

Disaster: An event in which emergency organizations need to expand and extend themselves (such as going to extra shifts) in order to cope. (**Quarantelli** 1987, 25)

Disaster: "Apparently the word etymologically entered the English language from a work in French (desastre), which in turn was a derivation from two Latin words (dis, astro), which combined meant, roughly, formed on a star. So, in its early usage, the word disaster had reference to unfavorable or negative effects, usually of a personal nature, resulting from a star or a planet….In time, the word disaster was applied more to major physical disturbances such as earthquakes and floods, or what came to be traditionally known as Acts of God. With the spread of more secular and non-religious ideologies, nature was increasingly substituted for the supernatural and the tern natural disaster came to the fore" (**Quarantelli** 1987, 8).

Disaster: "…earthquakes are quite harmless until you decide to put millions of people and two trillion dollars in real estate atop scissile fault zones" (**Riesner** 1993, 501).

Disaster: "A situation created by natural and or man-made events, other than war or internal strife which demands total integration and co-ordination, by those responsible for administration of the affected region including: 1. all rescue, relief and life support systems required to meet the needs of the victims, essential transportation and communication systems. 2. repairs to the infrastructure. 3. post-disaster rehabilitation and recovery." (**Ritchie**, et al. 2001, 2)

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[21] C. Pelanda. 1982. *Disaster and Order: Theoretical Problems in Disaster Research*. Unpublished paper.

Disaster: "In the traditional view of disasters, two categories of *conditions* appear to be dominant. Self-evidently, the scourge of God together with social or political negligence have traditionally served as the principle conditions of natural disasters. Gradually, negligence has given way to more specific conditions such as deficiencies in mitigatory policies and preparatory measures" (**Rosenthal** 1998, 148).

"…a great many official investigations as well as public opinion still cling to technical failure or human error as the number one cause of man-made disaster. In determining the conditions of disaster, technical failures often take its place as an appropriate substitute for the act of God, whereas human error reflects the inherent weaknesses of mankind…" (**Rosenthal** 1998, 149).

"…mediazation…[creates] a new category of disasters and crises which is characterized by extreme collective stress rather than fatal casualties or significant physical damage" (**Rosenthal** 1998, 157).

Disaster: A Condition or situation of significant destruction, disruption and/or distress to a community. (**Salter** 1997–98, 27)

Disaster: All events which cause at least 100 human deaths, 100 human injuries, or US $1 million economic damages. (**Sheehan and Hewitt** 1969, p. 20)

Disaster: The occurrence of a sudden or major misfortune which disrupts the basic fabric and normal functioning of a society (or community). An event or series of events which gives rise to casualties and/or damage or loss of property, infrastructure, essential services or means of livelihood on a scale which is beyond the normal capacity of the affected communities to cope with unaided. Disaster is sometimes also used to describe a catastrophic situation in which the normal patterns of life (or eco-systems) have been disrupted and extraordinary, emergency interventions are required to save and preserve human lives and/or the environment. Disasters are frequently categorized according to their perceived causes and speed of impact. A disaster occurs when a disruption reaches such proportions that there are injuries, deaths, or property damage, and when a disruption affects many or all of the community's essential functions, such as water supply, electrical power, roads, and hospitals. Also, people affected by a disaster may need assistance to alleviate their suffering. (**Simeon Institute**)

Disaster: "…a disaster may be seen as 'the realization of hazard', although there is no universally agreed definition of the scale on which loss has to occur in order to qualify as a disaster" (**Smith** 1996, 5).

"Natural disasters…result from the conflict of geophysical processes with people. This interpretation gives humans a central role. First, through location, because it is only when people, their possessions and what they value get in the way of natural processes that a risk of disaster exists. Second, through perception, because humans place subjective judgments on natural processes as part of a general environmental appraisal whenever they settle and use land" (**Smith** 1996, 10).

"…a disaster generally results from the interaction, in time and space, between the physical exposure to a hazardous process and a vulnerable human population" (**Smith** 1996, 22).

Disaster: "…disasters are significant events…The disruption associated with disaster is, by customary standards, non-trivial. Disasters are neither confined to isolated subsystems (a single household) nor are they of fleeting duration….Disasters involve the disruption of important societal routines….If damage could be prevented or reduced through human protective action, then disaster—the physical consequence of the intersection of society and natural forces—would not exist. Disaster is a function of knowledge…When knowledge is adequate, no external force can produce disaster; ships ride out storms, buildings shake but do not collapse in earthquakes, flood levees hold, etc…When knowledge is inadequate, disaster results" (**Stallings** 1998, 128-129).

> "Disasters affect entire societies; they are neither trivial nor confined to localized social units. Disasters involve the disruption of everyday routines to the extent that stability is threatened without remedial action. Increasingly significant is the loss of certainty and the undermining of faith in orderliness. The state is a major institution for supplying counter-measures when routines are disrupted" (Stallings 1998, 131).
>
> "…in practice the definition [of disaster] will always have a physical component. The physical properties of events are triggers for disaster researchers…" (**Stallings** 1998, 132).

Disaster: "Disasters are the interface between an extreme physical event and a vulnerable human population." (**Susman** et al, 1983)

Disaster: "catastrophic events that (a) interfere severely with everyday life, disrupt communities, and often cause extensive loss of life and property, (b) overtax local resources, and (c) create problems that continue far longer than those that arise from the normal vicissitudes of life" (**Taylor** 1989, 10).

Disaster: "Disasters originate in the fact that all societies regularly face geophysical, climatological, and technological events that reveal their physical and social vulnerabilities." (**Tierney, Lindell and Perry** 2001, 4)

Disaster: "A *disaster* is usually defined as an event that has a large impact on society" (**Tobin and Montz** 1997, 6).

Disaster: An event, concentrated in time and space which threatens a society or a relatively self-sufficient subdivision of a society with major unwanted consequences as a result of the collapse of precautions which had hitherto been accepted as adequate. (**Turner**)

Disaster: "A serious disruption of the functioning of society, causing widespread human, material, or environmental losses which exceed the ability of affected society to cope using only its own resources." (**UNDHA**, *Disaster Management Glossary* 1992, 27; **National Science and Technology Council** 2005, 17; **EEA**, *EEA Environmental Glossary*, 2007)

Disaster: "A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources. *A disaster is a function of the*

risk process. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of risk." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Disaster: A "sudden and extraordinary misfortune" to signify the actual onset of a calamity (Allinson 1993, 93; referring to **Webster's *New International Dictionary,* *Unabridged***, 2nd ed.).

Disaster: "…any happening that causes great harm or damage; serious or sudden misfortune; calamity. Disaster implies great or sudden misfortune that results in loss of life, property, etc. or that is ruinous to an undertaking; calamity suggests a grave misfortune that brings deep distress or sorrow to an individual or to the people at large" (**Webster's *New World Dictionary of the American Language***).

Disaster, Ecological: Events "that are caused principally by human beings and that initially affect, in a major way, the earth, its atmosphere, and its flora and fauna." (**Drabek/Hoetmer** 1991, xxi)

Disaster, Geological: "Disasters caused by movements and deformation of the earth's crust." (**European Environmental Agency**, *EEA Environmental Glossary*, 2007)

Disaster, Natural: "A natural disaster is a serious disruption to a community or region caused by the impact of a naturally occurring rapid onset event that threatens or causes death, injury or damage to property or the environment and which requires significant and coordinated multi-agency and community response. Such serious disruption can be caused by any one, or a combination, of the following natural hazards: bushfire; earthquake; flood; storm; cyclone; storm surge; landslide; tsunami; meteorite strike; or tornado." (**Australian Government** 2002, 1)

Disaster, Natural: "'Natural' disasters have more to do with the social, political, and economic aspects of society than they do with the environmental hazards that trigger them. Disasters occur at the interface of vulnerable people and hazardous environments" (**Bolin/Stanford** 1998, Preface).

Disaster, Natural: "Violent, sudden and destructive change in the environment without cause from human activity, due to phenomena such as floods, earthquakes, fire and hurricanes." (**European Environment Agency**, *EEA Environmental Glossary*, 2007)

Disaster, Natural: "While human actions generally cannot cause an earthquake in the sense of doing something to provoke fault movement, they are often critically involved in the disaster that can follow a seismic event. In that sense then, 'natural' is an inappropriate adjective to describe such disasters (**Hewitt** 1997)[22]" (Bolin with Stanford 1998, 4).

Disaster, Natural: Any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, or other catastrophe in any part of the United States which causes, or which may cause, substantial damage or injury to civilian property or persons. (**Robert T. Stafford Act**, 602)

[22] K. Hewitt. 1997. *Regions at Risk: A Geographical Introduction to Disasters.* London: Longman.

Disaster, Natural: "In a seeming inversion of what was 'obvious' about natural disasters, a view has been developed by such geographers as Hewitt that seeks explanations of disaster primarily in the sociocultural and economic features of the societies that are variously affected by natural forces. Their focus has been to develop an understanding of the social structures and material practices that made people more or less vulnerable to environmental hazards. In this approach, the underlying causes of disaster are to be found not in nature, but in the organization of human societies (**Varley** 1994[23])" (Bolin with Stanford 1998, 5).

Disaster, Technological: "…technological disasters – meaning everything that can go wrong when systems fail, humans err, designs prove faulty, engines misfire, and so on." (**Erikson**, 1989, 141)

Disaster, Technological: "Man-made disaster due to a sudden or slow breakdown, technical fault, error, or involuntary or voluntary human act that causes destruction, death, pollution, and environmental damage." (**Gunn** 1990, 375)

Disaster, Technological: "**Miller and Fowlkes** (1984)[24] have argued that the term 'technological disaster' renders such events too impersonal in origin. They believe that such 'accidents' are due mainly to the excessive priority given to industrial profits and advocate the term 'man-made disaster' to indicate corporate responsibility" (**Smith** 1997, 14).

Disaster Agent: "A class or category of phenomena that cause disasters, such as hurricanes, tornadoes, or explosions. Hurricane Andrew is a specific disaster event which reflected one of the classes of disaster agents, that is, hurricanes. Andrew is the disaster, hurricane is the disaster agent." **(Drabek** 1996, Session 2, p.6)

Disaster Agent Variability: "Disaster agents may and do vary along different dimensions. These dimensions and their variants can be combined in multiple and almost endless ways. Thus, it is all but impossible to develop a meaningful but simple typology of disaster agents. Nevertheless, knowledge of how disaster agents may differ along one dimension is still useful for emergency planning. Such knowledge should sensitize the planner to possible variants that have to be taken into account. Furthermore…some dimensions are more likely to be operative and varying in certain localities than others."

- Predictability
- Frequency
- Controllability
- Speed of onset
- Length of forewarning
- Duration of impact
- Scope of impact
- Intensity of impact. (**Dynes,** et al., *A Perspective on Disaster Planning*, 1981, pp. 6-7)

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[23] A. Varley. 1994. "The Exceptional and the Everyday: Vulnerability Analysis in the International Decade for Natural Disaster Reduction." In A. Varley (ed.), *Disasters, Development and Environment*. London: Wiley.
[24] P.Y. Miller and M.R. Fowlkes. 1984 "In Defense of 'Man-Made' Disaster." *Natural Hazards Observer*, Vol. 8, p. 11.

Disaster Area Survey Team (DAST): "A group that is deployed in an area after a disaster to ascertain the extent of damage to population and property and to recommend appropriate responses." (**UNDHA**, *Disaster Management Glossary*, 1992, 27)

Disaster Assistance Employee (DAE, FEMA): "Disaster Assistance Employee (DAE), also known as a Stafford Act employee or Reservist, is a nonpermanent, excepted service employee appointed under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended. DAEs perform disaster response and recovery activities, usually at temporary work sites located in disaster damaged areas. Initial appointments are for periods of up to one year and may be renewed in increments of one year.

DAEs are a critical staff resource to FEMA. They perform key program, technical, and administrative functions during disasters. Without this work, FEMA's ability to assist State and local governments in recovering from the effects of disasters would be significantly less effective. DAEs must be free to travel at a minimum of two to six weeks at a time, and sometimes longer, usually with as little as a day or two of notice. They need to be able to produce high quality work with minimal supervision, under pressure and in a hectic work environment. Their travel to and from a disaster scene is paid for, along with day-to-day expenses for lodgings and an allotment for meals and expenses. DAEs receive a salary which is based on the kinds of work they perform." (**FEMA**, *Disaster Assistance Employees (Reservists)*. October 11, 2007 update)

Disaster Assistance Improvement Plan (DAIP): "The Disaster Assistance Improvement Program (DAIP) is a government-wide initiative to improve the delivery of assistance to disaster victims. Through modification of an existing E-Gov initiative, GovBenefits.gov, DAIP provides a one-stop portal for those affected by disasters by providing information on programs offering disaster assistance and screening of benefits for which they may be eligible. After determining their eligibility, users may apply for disaster assistance benefits using a single application through FEMA, leading to a more simplified, streamlined process. All benefit applications are adjudicated by the appropriate agency. DAIP will also allow returning users to check the status of the request for benefits available through the single application. DAIP includes member agencies that have programs that: provide benefits for persons in response to disasters; help facilitate the application and delivery process through validation; have other resources that may assist disaster victims: or are otherwise relevant to those who are impacted by disasters." (**USTreas**, *E-Government Initiatives*, 2008)

Disaster Behavior: "…one is amazed how well populations stand up to major disasters and then how petty and irritated they can become on the minor furstrations which accompany these disasters. Accordingly, one should not be surprised to find that no heroes are found deserving the gratitude of the people; and no widespread appreciation is felt for the devoted services of administrators. Finally, no feeling of gratitude is evident in regard to the dispensing of relief and help." (**Vance**, *The Social and Psychological Consequenses of a Natural Disaster*, 1963, p. vi)

Disaster Control: "Measures taken before, during, or after hostile action or natural or manmade disasters to reduce the probability of damage, minimize its effects, and initiate recovery." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Disaster Declaration: Under the Stafford Act a "disaster declaration" is made upon a state Governor's request, FEMA processing, and Presidential Declaration when an event is seen to overwhelm State and local governmental response capabilities.

"The forms of public assistance typically flow either from a disaster declaration or an emergency declaration. A **major disaster** could result from a hurricane, earthquake, flood, tornado or major fire which the President determines warrants supplemental Federal aid. The event must be clearly more than State or local governments can handle alone. If declared, funding comes from the President's Disaster Relief Fund, which is managed by FEMA, and disaster aid programs of other participating Federal departments and agencies." (**DHS,** *NRF* (Comment Draft), Sep, 2007, 39)

Disaster/Emergency Management: "An ongoing process to prevent, mitigate, prepare for, respond to, and recover from an incident that threatens life, property, operations, or the environment." (**NFPA 1600**, 2007, p. 7)

Disaster Emergency Planning Initiative (DEPI): "…2007…marked the beginning of a new thrust area for DRC [Disaster Research Center] as we launched our Disaster Emergency Planning Initiative. This initiative is aimed at using best practices from emergency management and insights from disaster research to help small communities plan for disaster response. Our initial project in this area was with the small Delaware community of Delaware City. After acquiring Department of Homeland Security funding to update and improve its emergency operations plan (EOP), the community contracted with the Disaster Research Center to request consultation services during the creation of their plan. In order to provide this outreach service, DRC applied expertise in the social science of disasters and research findings in order to create a document that not only meets the technical needs of Delaware City, but also takes into account a number of important principles of emergency management as discussed in the disaster research field. The following issues are the key elements that drove our approach to the creation of this document:

"All Hazards" Oriented
While different hazards (e.g. hurricane, flood, chemical release) will create different needs, planning under the constraints of a real world budget cannot account for every possibility. As a result, it is important to identify high probability events and plan more extensively for these, but it is also vital to create a model of response that attends to the many tasks that might be performed in any type of event.

Community Tailored
While the basic elements of formal emergency plans are fairly similar across communities that have engaged in planning activities, it is important to recognize that these plans are not simply interchangeable. It is extremely important to understand community demographics, resources, and special needs if an emergency plan is to be successful in making responses better. By taking into account the characteristics of the community, we can reduce unknowns and increase the appropriateness and rapidity of disaster response.

Moving Towards an Integrated Network
It is well documented that planning is most effective when it is integrated rather than

fragmented. Given this reality we need to understand this plan as a way of linking together both private and public organizations and people that will likely perform disaster related tasks in this community. By brining together these groups we can facilitate the pooling of collective strengths and capacities….

"Living Document"
As Clarke points out in his book Mission Improbable, "Some plans are highly instrumental, but others are little more than vague hopes of remote futures with no connection to human will or capacity." This suggestion serves as a powerful warning to all who engage in planning activities. Creating a book, document, or plan is simply the beginning of the process. As suggested by many organizational and disaster specialists true preparedness as the planning community become more like a high-reliability system with a constant reflective capacity. In essence, focus on "planning" rather than "the plan." Such systems thrive through constant communication, self-questioning, and adaptation. It is the Center's hope that this plan will become a living document that is revisited, revised, and constantly questioned. As a result a number of discussions were facilitated and suggestions made which were intended to help encourage the plan's evolution. In essence the "plan" is only half as important as the planning process. The former creates a document; the latter builds knowledge, creates familiarity, and leads to education." (**DRC**, *2007 Annual* Report, p. 43)

Disaster Epidemiology: "The medical discipline that studies the influence of such factors as the life style, biological constitution and other personal or social determinants on the incidence and distribution of disease as it concerns disasters." (**UNDHA**, *Disaster Mgmt. Glossary*, 1992, 27)

Disaster Field Office (DFO): "The office established in or near the designated area of a Presidentially declared major disaster to support Federal and State response and recovery operations. The DFO houses the FCO and ERT, and where possible, the SCO and support staff." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), 1996, p. GLO-1)

[See **"Interagency Center**" for predecessor to the DFO.]

Disaster Finance Center (DFC): "The DFC is a permanent facility that provides financial services under the Disaster Relief Fund (DRF). The DFC is responsible for coordinating the review, approval, and payment of all bills submitted by departments and agencies for costs incurred in performing mission assignments." (**FEMA**, *Mission Assignment SOPs*, 2007, p. 4; see also p. 49)

Disaster Housing Assistance Program (DHAP): "On July 26, 2007, FEMA and HUD executed an Interagency Agreement (IAA) establishing the DHAP, a temporary housing rental assistance and case management program for eligible individuals and households displaced by Hurricanes Katrina and Rita. The program is currently being administered through HUD's existing infrastructure of Public Housing Agencies (PHAs). Local PHAs were awarded grants to provide rent subsidies to eligible individuals and households for a period not to exceed 15 months beginning December 1, 2007 and ending March 1, 2009. The designated PHAs will also provide case management services, which will include a needs assessment and individual development plan (IDP) for each family. The objective of the case management services is to

promote self-sufficiency for the participating individuals and households. Ultimately, over 40,000 eligible residents displaced by the 2005 Gulf Coast hurricanes will have been provided assistance through this partnership with HUD." (FEMA, *Written Statement of Carlos J. Castillo,* June 4, 2008, p. 6)

Disaster Insurance: "Government sponsored or private insurance policies for protection against economic losses resulting from disaster." (**UNDHA**, *DM Glossary*, 1992, 28; cites PAHO)

Disaster Insurance, Cross-Subsidization: "In most property and casualty insurance lines, state assessments are often passed through to policyholders. As a result, homeowners living in less risky locations also contribute to cover the shortfall—a scenario known as cross-subsidization." (**GAO**, *Natural Disasters: Public Policy Options*, Nov 2007, 22)

Disaster Insurance, Government versus Private-Sector: "Government natural catastrophe insurance programs were created because certain perils are difficult to insure privately and because, when private insurance is available, it may not be affordable. To keep natural catastrophe insurance available and affordable, government insurance programs operate differently than private insurance companies. Private insurance companies generally rely on premiums collected from those they insure to cover operating costs and losses and set premium rates at levels that are designed to reflect the risk that the company assumes in providing the insurance. These companies may also accumulate reserves to cover large losses. Federal and state government insurance programs also collect up-front premiums, but their rates do not always reflect the risks that the programs assume. Because premiums are inadequate to cover operating costs and losses, the government programs generally have limited resources and often face deficits after disasters. However, unlike private insurers, federal insurers may obtain funds after a catastrophic event through emergency appropriations. State programs may also access postevent funding through various means, including assessments on private insurers, bonds, and private reinsurance. State programs may also be postfunded through state general revenue funds and federal disaster relief payments. This structure has several implications. First, it may encourage homeowners in catastrophe-prone locations to seek coverage from government programs, crowding out the private market and increasing the government's financial exposure. Second, homeowners may not receive appropriate price signals about the risk of living in catastrophe-prone locations. Third, taxpayers who live in less risky locations may be subsidizing those living in catastrophe-prone locations. Finally, the added burden of private insurers' assessment obligations may provide another reason for them to leave already stressed markets. Federal natural catastrophe insurance programs fill gaps in private insurance markets and help limit disaster relief payments. (**GAO**, *Natural Disasters: Public Policy Options*, Nov 2007, 17)

"Unlike private insurance companies, government natural catastrophe insurance programs often do not employ accrual accounting and are not always required to accumulate adequate resources to meet their obligations." (**GAO**, *Natural Disasters: Public Policy Options*, Nov 2007, 22)

Disaster Insurance "Overarching Principles," Financial Services Roundtable:

• Insurable events ought to be insured to the maximum extent possible by the private market rather than by the government. Put another way, it is not the government's role to assume risks

that the private marketplace is fully capable of handling, especially if the government's "insurance" is provided after-the-fact through disaster relief, which is both uncertain in amount and not priced to its potential recipients in advance and, as discussed in Chapter 4, tends to impede before-the-event mitigation efforts.

• There are risks, however, that are so large and/or so uncertain that private insurers or the capital markets either are unwilling to insure them, or that the required premiums are so high that many will not want or cannot afford the insurance. In these cases, there is a role for the federal government to "backstop" the private sector.

"We believe that the costs of some Mega-CATs are insurable, and therefore, the main object of government policy as to these risks should be to facilitate the provision of private insurance. We also believe, however, that the costs of certain other Mega-CATs – terrorism in particular -- are not insurable by the private market, and as to these the federal government has an important backstop role to fill Some Commission members believe that this federal backstop function should also extend to largescale natural Mega-CATs.

"Overall, however, the main aim of policy should be to maximize the purchase of catastrophe insurance:
• Insurance provides better financial protection for individuals and firms than after-the-fact disaster relief.

• The broader the insurance coverage, the less disaster relief will be necessary. With insurance, the costs of risk are borne by those exposed to risk. In contrast, taxpayers (currently or in the future) who may or may not directly bear risks of suffering catastrophe losses pay for disaster relief. Comparing the two systems, insurance is more efficient (because insurance premiums induce more loss avoidance and mitigation) and fairer than disaster relief." (**FSR,** *Nation Unprepared*, 2007, 44)

Disaster Insurance, Public Policy Goals: "…four public policy goals that we (GAO) identified for federal involvement in natural catastrophe insurance programs:
(1) to have premium rates fully reflect actual risks,
(2) to encourage private markets to provide natural catastrophe insurance,
(3) to encourage broad participation in natural catastrophe insurance programs, and
(4) to limit costs to taxpayers before and after a disaster." (**GAO**, *Natural Disasters*, Nov '07, 6)

Disaster Insurance, Public Policy Options:

- All-Perils Homeowners Insurance
- Federal Reinsurance for State Catastrophe Funds
- Federal Lending to State Catastrophe Funds
- Insurance Company Catastrophe Reserving
- Homeowner Catastrophe Savings Accounts
- Favorable Tax Treatment for Catastrophe Bonds
- Property Tax Assessment for Private Insurance with Federal Deductible Payment (**GAO**, *Natural Disasters: Public Policy Options.…*, Nov 2007, 34)

Disaster Insurance, Underinsured and Uninsured Problem Area: "The 2005 hurricanes made clear that, even with the federal and state natural catastrophe insurance programs, significant numbers of Americans lacked adequate insurance against natural catastrophes for their homes. These property owners were either uninsured or underinsured, for a variety of reasons. Perhaps most significantly, buying natural catastrophe insurance is in many cases voluntary, and homeowners may choose not to buy it because they do not understand their risk exposure, do not understand the protection catastrophe insurance offers, or cannot afford it. In some cases, homeowners have insurance, but it covers less than the full replacement value of their property or has other policy limitations. Underinsurance can be exacerbated following a natural catastrophe, when rebuilding costs can increase substantially. Uninsured and underinsured homeowners may compound the challenge of providing affordable natural catastrophe insurance by relying on the federal government for postdisaster assistance to rebuild their homes. These homeowners may seek federal disaster relief from several federal agencies, including grants from FEMA and HUD, and real property loans from SBA. As we found, a significant portion of post-Katrina payments to Americans have gone to homeowners who were inadequately insured. We estimated that a quarter to a third of all federal emergency appropriations after the 2005 hurricanes, or around $26 billion in grants and loans, was obligated to homeowners and renters who lacked adequate natural catastrophe insurance." (**GAO**, *Natural Disasters: Public Policy Options*, Nov, 2007, 6)

Disaster Legislation: "The body of laws and regulations that govern and designate responsibility for disaster management concerning the various phases of disaster." (**UNDHA**, *DM Glossary*, 1992, 28)

Disaster Loan Program (DLP) SBA: "SBA's Disaster Loan Program (DLP) is the primary federal program for funding long-range recovery for private sector, nonfarm disaster victims. Eligible losses include under or uninsured damages and can not duplicate benefits received from another source (i.e. insurance recovery, FEMA, etc.). The Small Business Act authorizes SBA to make available the following two types of disaster loans: (1) physical disaster home loans to homeowners, renters, and businesses of all sizes, and (2) economic injury disaster loans to small businesses. Homeowners and renters can borrow up to $40,000 for repair or replacement of household and personal effects. Homeowners can also borrow up to $200,000 to repair or replace a primary residence. Businesses of all sizes can borrow up to $1.5 million to repair or replace disaster damaged real estate, machinery and equipment, inventory, etc. Small businesses can borrow up to $1.5 million for disaster related economic injury resulting from the declared disaster. The combined loans to a business for physical loss and economic injury cannot exceed $1.5 million. Homeowners and businesses must provide reasonable assurance that they can repay the loan out of personal or business cash flow, and they must have satisfactory credit and character." (**GAO**, *Natural Disaster: Public Policy Options*…, Nov 2007, 16)

Disaster Losses: "One catastrophe modeling company predicts that catastrophe losses will double every decade or so due to growing residential and commercial density and more expensive buildings." (**Insurance Info. Institute,** *Catastrophes: Insurance Issues*, Jan 2008, 1)

Disaster Management: The entire process of planning and intervention to reduce disasters as well as the response and recovery measures. It is a neglected element of development planning. (**D&E Reference Center** 1998)

Disaster Management: "Disaster management is the process of forming common objectives and common values in order to encourage participants to plan for and deal with potential and actual disasters." (**Pearce**, 2000, Chapter 2, 11)

"A process that assists communities to respond, both pre- and post-disaster, in such a way as to save lives, to preserve property; and to maintain the ecological, economic, and political stability of the impacted region." (**Pearce** 2000, Chapter 5, p. 6)

Disaster Management: "Romano contends that disaster management includes (1) preparedness planning to assess hazard vulnerability; (2) mitigation activities to reduce hazards in the structure of the facility, its equipment, its operations, and its personnel; (3) response planning to provide for key support operations, such as first aid, search and rescue, building evacuation, emergency communications, and general personnel training; and (4) recovery, in which an organization prioritizes its operations for efficient business continuation and determines how to protect and restore these components." (Light, *Predicting Organizational Crisis Readiness*, 2008, 20; citing Catherine **Romano**, "Is Your Business Protected?" *Management Review*, August 1, 1995, 44)

Disaster Management: "The body of policy and administrative decisions and operational activities which pertain to the various stages of a disaster at all levels." (**UNDHA**, *DM Glossary*, 1992, 28; **EEA**, *EEA Environmental Glossary*, 2007))

Disaster Management Interoperability Services (DMIS): "The Disaster Management initiative also provides a free incident management toolset called Disaster Management Interoperability Services or DMIS. DMIS is made up of two components. One is the basic incident management toolset that allows registered emergency management user groups to manage incidents by creating a common situational awareness and then securely sharing that information across the nation's emergency management community as appropriate. The second component is an interoperability backbone of software and hardware that allows disparate third party incident management software applications and devices to share information through a secured, open architecture platform. Emergency responders and incident managers can learn more about DMIS and its components at: https://interop.cmiservices.org/." (**White House**, OMB, E-Gov)

Disaster Medical Assistance Team (DMAT): "The basic deployable unit of the National Disaster Medical System (NDMS). All urban search and rescue medical teams are considered a "specialized DMAT" under NDMS." (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 49)

Disaster Medicine: "The study and collaborative application of various health disciplines to the prevention, preparedness, immediate response and rehabilitation of the health problems arising from disaster, in co-operation with other disciplines involved in comprehensive disaster management." (**UNDHA**, *Disaster Management Glossary*, 1992, 28)

Disaster Mitigation Act (DMA) of 2002 (Public Law106-390, October 30, 2000)**:** "State governments have certain responsibilities for implementing Section 322, including:

- Preparing and submitting a standard or enhanced state mitigation plan;
- Reviewing and updating the state mitigation plan every three years;
- Providing technical assistance and training to local governments to assist them in developing local mitigation plans and applying for HMGP grants; and
- Reviewing and approving local plans if the state has an approved enhanced plan and is designated a managing state.

DMA 2000 is intended to facilitate cooperation between state and local authorities. It encourages and rewards local, tribal, and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network will better enable local, tribal, and state governments to articulate their needs for mitigation, resulting in faster allocation of funding and more effective risk reduction projects. To implement the new DMA 2000 requirements, FEMA prepared an Interim Final Rule, published in the Federal Register on February 26, 2002, at 44 CFR Part 201 and 206, which establishes planning and funding criteria for states, tribes, and local communities." (**FEMA**, *Developing the Mitigation Plan* (FEMA 386-3), 2003, p. i)

Disaster Mitigation Act (DMA) of 2002 (Public Law106-390, October 30, 2000)**:** "The Disaster Mitigation Act (DMA) of 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988. The DMA authorizes the creation of a pre-disaster mitigation program to make grants to State, local and tribal governments. It also includes a provision that defines mitigation planning requirements for State, local and tribal governments. This new section (Section 322) establishes a new requirement for local and tribal mitigation plans; authorizes up to 7 percent of the HMGP funds available to a State to be used for development of State, local and tribal mitigation plans; and provides for States to receive an increased percentage of HMGP funds from 15 percent to 20 percent if, at the time of the disaster declaration, the State has in effect a FEMA approved State Mitigation Plan that meets the criteria established in regulations." (**FEMA**, *National Flood Insurance Program Description*, August, 2002, pp. 35-36; DMA accessed at: http://www.fema.gov/library/viewRecord.do?id=1935)

Disaster Mitigation Act of 2002, Congressional Findings: "FINDINGS - Congress finds that—
(1) natural disasters, including earthquakes, tsunamis, tornadoes, hurricanes, flooding, and wildfires, pose great danger to human life and to property throughout the United States;
(2) greater emphasis needs to be placed on—
(A) identifying and assessing the risks to States and local governments (including Indian tribes) from natural disasters;
(B) implementing adequate measures to reduce losses from natural disasters; and
(C) ensuring that the critical services and facilities of communities will continue to function after a natural disaster;
(3) expenditures for postdisaster assistance are increasing without commensurate reductions in the likelihood of future losses from natural disasters;
(4) in the expenditure of Federal funds under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), high priority should be given to mitigation of hazards at the local level; and

(5) with a unified effort of economic incentives, awareness and education, technical assistance, and demonstrated Federal support, States and local governments (including Indian tribes) will be able to—

(A) form effective community-based partnerships for hazard mitigation purposes;
(B) implement effective hazard mitigation measures that reduce the potential damage from natural disasters;
(C) ensure continued functionality of critical services;
(D) leverage additional non-Federal resources in meeting natural disaster resistance goals; and
(E) make commitments to long-term hazard mitigation efforts to be applied to new and existing structures." (**DMA**, Title 1, Sec. 101, 2000, pp. 2-3)

Disaster Mitigation Act of 2000 Purpose: "The purpose of this title is to establish a national disaster hazard mitigation program— (1) to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters; and (2) to provide a source of predisaster hazard mitigation funding that will assist States and local governments (including Indian tribes) in implementing effective hazard mitigation measures that are designed to ensure the continued functionality of critical services and facilities after a natural disaster." (**DMA**, Title 1, Sec. 101, 2000, pp. 3)

Disaster Mortuary Operational Response Teams (DMORTs): "(DMORTs) are composed of private citizens, each with a particular expertise, who are activated in the event of a disaster to deal with the myriad issues of victim identification and mortuary services. During an emergency response, DMORTs work under the guidance of local authorities, providing technical assistance and personnel to recover, identify, and process deceased victims." (**AHRQ/HHS**, *Mass Medical Care…*, 2007, p. 114)

Disaster Mortuary Operational Response Team (DMORT): "…a Federal Level Response team designed to provide mortuary assistance in the case of a mass fatality incident or cemetery related incident. We work under the local jurisdictional authorities such as Coroner/Medical Examiners, Law Enforcement and Emergency Managers." (Disaster Mortuary Operational Response Team. (*DMORT: A National Asset Available In Times Of Need*, October 9, 2007)

Disaster Plans, Historic Weaknesses:

- Domains [areas of organization responsibilities] not clearly defined
- Domains [areas of organization responsibilities] not clearly assigned
- Conceivable new emergency domains not, or inadequately, recognized
- Methods of interorganizational coordination not clearly defined
- Tasks not integrated
- Existing resources inadequately mobilized and allocated [to operationalize the planning]
- Insufficient new resources allocated [to operationalize the planning]
- Tasks not effectively performed.
- Planning for only most likely hazards
- Missing or inadequate planning for transition from emergency period to recovery
- Missing or inadequate planning for "the inevitable movement to normalcy" (restoration)

- Disaster plans not or inadequately exercised
- Disaster plans not updated and maintained

(**Dynes, Quarantelli and Kreps**, *A Perspective on Disaster Planning* (3rd Ed.), 1981, 74-76)

Disaster Planning: "Disaster Planning is about developing the ability to respond to an interruption in services by restoring an organization's critical business functions. In essence, this is business continuity planning. Disaster recovery for computer systems and services is only one component of an effective business continuity plan… Disaster planning is meant to include the planning and preparations which are necessary to minimize loss and ensure continuity of the critical business functions of an organization in the event of disaster." (**Davis Logic Inc**., *Disaster Planning*, 2005)

Disaster Planning: "…any kind of planning has to be realistic. It has to be built upon real knowledge…not stem from theoretical speculations but studies of actual disasters. Disaster planning has to be realistic also in that it cannot presuppose an ideal situation but the probable situation…good disaster plans are developed so that they can be adjusted to people rather than attempting to force people to conform to planning. Finally, disaster planning has to be realistic in the sense that it is taken for granted that planning can be undertaken. Persons with vivid imagination can always come up with hypothetical possibilities so horrendous that they serve to immobilize any effort at planning…. It is far more realistic to assume probable situations because that is what is likely to occur and for which community planning can be undertaken." (**Dynes**, et al., *A Perspective on Disaster Planning*, 1981, p. iv)

Disaster Planning Fundamental Requirements:

- Knowledge of disaster agents and impacts
- Knowledge of [hazard] agent and response-generated demands
- Knowledge of the disaster context
- Knowledge of the basic elements of organized disaster response.
- Necessity of someone or some organization to take on leadership responsibility for developing, coordinating, communicating, exercising, proselytizing, maintaining and operationalizing the plan. (**Dynes**, Quarantelli and Kreps, *A Perspective on Disaster Planning*, 1981, pp. 77-79)

Disaster Planning Issues:

- Setting priorities for the use of organizations, people and resources.
- Overlapping responsibilities – plan for coordination and cooperation of organizations addressing the same problem.
- The division of responsibilities into tasks.
- Planning for the performance of tasks.
- Interorganizational relationships.
- Integration of various levels of disaster planning – "Disaster plans can be and are developed at the organizational level [local governmental and local non-governmental] the community level, the regional level, the state level and the federal level." (**Dynes, Quarantelli and Kreps**, *A Perspective on Disaster Planning* (3rd Ed.), 1981, pp. 68-74)

Disaster Planning Principles:

1. Planning is a continuous process.
2. Planning involves attempting to reduce the unknowns in a problematical situation.
3. Planning aims at evoking appropriate actions.
4. Planning should be based on what is likely to happen.
5. Planning must be based on knowledge.
6. Planning should focus on principles.
7. Planning is partly an educational activity.
8. Planning always has to overcome resistance. (**Dynes**, *A Perspective on Planning* (3rd Ed., 1981, pp.1-4)

Disaster Preparedness Improvement Grant Program (DPIG): Authorized under Section 201 of the Stafford Act. Annual matching awards are provided to States to improve or update their disaster assistance plans and capabilities.

Disaster Readiness and Support: "The Budget [FY2009 Request] includes $200 million in a new Disaster Readiness and Support Activities account. This account will fund advanced readiness initiatives that assist FEMA in preparing for future disasters and will allow FEMA to perform critical administrative functions that support the timely delivery of services during disasters." (DHS, *Testimony of Secretary Chertoff Before the House Subcommittee on Homeland Security Appropriations*, April 10, 2008)

Disaster Recovery Center (DRC): "Places established in the area of a Presidentially declared major disaster, as soon as practicable, to provide victims the opportunity to apply in person for assistance and/or obtain information relating to that assistance. DRCs are staffed by local, State, and Federal agency representatives, as well as staff from volunteer organizations (e.g., the ARC)." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning*, 1996, p. GLO-1; See also, FEMA, Mission Assignment SOPs Operating Draft, July 2007, p. 49))

Disaster Recovery Institute International (**DRII):** "DRI International was founded in 1988 as the Disaster Recovery Institute in order to develop a base of knowledge in contingency planning and the management of risk, a rapidly growing profession. Today DRI International administers the industry's premier educational and certification programs for those engaged in the practice of business continuity planning and management. More than 3,500 individuals throughout the world maintain professional certification through DRI International. DRII's goals are to:

- Promote a base of common knowledge for the business continuity planning/disaster recovery industry through education, assistance, and publication of the standard resource base;
- Certify qualified individuals in the discipline;

- Promote the credibility and professionalism of certified individuals." (**DRII**, *About DRII*, 2006)

Disaster Recovery Manager: "After a declaration is made, FEMA will designate the area eligible for assistance and the types of assistance available. With the declaration, the President appoints a Federal Coordinating Officer (FCO). The FCO is responsible for coordinating all Federal disaster assistance programs administered by FEMA, other Federal departments and agencies, and voluntary organizations. At the same time, the RA or one of his or her staff will be appointed as the Disaster Recovery Manager (DRM). The DRM is responsible for managing the FEMA assistance programs. The DRM authority often is delegated to the FCO." (**FEMA**, *Public Assistance Guide* (FEMA 322), June 2007)

Disaster Recovery Plan: "The management-approved document that defines the resources, actions, tasks and data required to manage the recovery effort. Usually refers to the technology recovery effort. This is a component of the BCM Program." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 52)

Disaster Recovery Plan: "The disaster recovery plan includes:
• reporting hierarchy, including executive management
• identifying primary and alternate disaster recovery team members; these are the people responsible to sustain the business operations and to restore or replace physical assets
• detailed description of each team member's responsibilities during a disaster condition
• a list of internal and external vendors and contact information
• a list of regulatory agencies and contact information
• a list of public service agencies and contact information
• appendix of control forms (report forms, expenses, etc.)
• minimum resources required to sustain the business operation while physical assets are restored or replaced." (**Glenn**, *What is Business Continuity Planning?* 2002)

Disaster Recovery Planning (DRP): "Disaster Recovery Planning (DRP) is not just about computer system availability. While this was the original concept, today, the definition of disaster recovery has been broadened to mean: "The ability to respond to an interruption in services by implementing a disaster recovery plan to restore an organization's critical business functions." Business continuity planning includes disaster recovery for computer systems and services as one component while stressing continuous availability of all critical services… Disaster recovery planning is the technological aspect of business continuity planning. This is meant to include the plans and preparations which are necessary to minimize loss and ensure continuity of the critical business functions of an organization in the event of disaster. (**Davis Logic**, *Disaster Recovery Planning*, 30 Oct 2005)

Disaster Recovery Planning (DRP): "*Disaster recovery planning* is a term used to describe IT recovery. Some companies use different terms to include the recovery of IT systems, data, information management systems and processes, and other related systems. The disaster recovery document should describe the IT and information management systems recovery strategies. The DRP should cover detailed recovery instructions that may include references to procedures, vendor references, system diagrams, and other related recovery materials. The detailed recovery procedures must be updated when system and business processes change." (**IIA**, *Business Continuity Management*, July, 2008, p. 12)

Disaster Recovery Planning (DRP): "Planning of actions an organization will take to resume normal operation if a disaster disrupts normal activity." (**Risky Thinking**, *A Glossary of Risk Related Terms*, 2007)

Disaster Reduction: "*Disaster reduction* is the sum of all the actions, which can be undertaken to reduce the vulnerability of a society to natural hazards. The solutions include proper land-use planning, aided by vulnerability mapping, to locate people in safe areas, the adoption of proper building codes in support of disaster resilient engineering, based on local hazard risk assessments, as well as ensuring the control and enforcement of such plans and codes based on economic or other incentives. Sound information and political commitment are the basis of successful disaster reduction measures. This is an ongoing process which is not limited to a singular disaster event. It motivates societies at risk to become engaged in conscious disaster management, beyond traditional response to the impact of natural phenomena. Disaster reduction is multi-sectoral and interdisciplinary in nature and involves a wide variety of interrelated activities at the local, national, regional and international level." (**UN/ISDR**, *Targeting Vulnerability: Guidelines for Local Activities and Events*, 2001, p. 3)

Disaster Reduction: "The conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development. *The disaster risk reduction framework is composed of the following fields of action, as described in ISDR's publication 2002 "Living with Risk: a global review of disaster reduction initiatives", page 23:*

- *Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis;*
- *Knowledge development including education, training, research and information;*
- *Public commitment and institutional frameworks, including organisational, policy, legislation and community action;*
- *Application of measures including environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments;*
- *Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities*." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Disaster Relief Act of 1950 (Pub. L. No. 81-875, 64 Stat. 1109): Congress for the first time authorized a coordinated federal response to major disasters. Formally passed as the Federal Disaster Relief Act of 1950). (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. 2-2)

"*Public Law 81-875* was significant for a number of reasons. Funding was authorized for a disaster relief program rather than a single-incident response. The responsibility for determining when Federal disaster relief is required was transferred from Congress to the President. The basic philosophy of Federal disaster relief was developed establishing that Federal assistance is supplemental to State and local resources. The basis for later legislation on cost-sharing between Federal and State or local governments was put into place. Provisions were made for emergency

repairs to or temporary replacement of essential public facilities. Aid was provided only to State and local governments." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. 2-5)

"The act authorized federal agencies, "[i]n any major disaster ... when directed by the President, to provide assistance" to states and localities by lending federal equipment, supplies, facilities, personnel, and other resources; "by distributing, through the Red Cross or otherwise, medicine, food, and other consumable supplies"; by donating surplus federal property; and "by performing ... protective and other work essential for the preservation of life and property, clearing debris and wreckage," repairing and temporarily replacing damaged or destroyed local public facilities, and providing grants to states and localities for these purposes. After the President determined that a natural catastrophe had overwhelmed state and local capabilities, federal aid was to be provided. The act authorized the President to coordinate related agency activities, prescribe related rules and regulations, and "exercise any power or authority conferred on him [by the act] either directly or through such Federal agency as he may designate." The President and agencies were also given budget flexibility with regard to the repair or reconstruction of damaged or destroyed federal facilities." (CRS, *Federal Emergency Management and Homeland Security Organization: Historical Developments and Legislative Options*, June 1, 2006)

Disaster Relief Act of 1969 (Public Law 91-79): "The Disaster Relief Act of 1969…became law on October 1, expands the Federal disaster assistance program. Permanent provisions of the Act include assistance (matching funds) to States in planning for State and 1oca1 aid to individuals suffering disaster losses and appointment of a Federal coordination officer for each major disaster." (*Report on Federal Disaster Assistance in 1969)*

Disaster Relief Act of 1974 (Public Law 93-288)**:** A Federal statute designed to supplement the efforts of the affected States and local governments in expediting the rendering of assistance, emergency services, and the reconstruction and rehabilitation of devastated areas (PL 93-288), as amended. (**FEMA** *Instruction 5000.2*)

"In April 1974, there was a series of devastating tornadoes that hit six Midwestern States. This confirmed the need to add individual and family assistance to the disaster relief program. As a result, the *Disaster Relief Act of 1974 (Public Law 93-288)* was established. Under this law:

- The Individuals and Households Grant Program is available.
- Federal and State disaster relief operations are conducted on a partnership basis, and a State Coordinating Officer (SCO) works jointly with an FCO.
- Federal assistance supports local, Tribal, and State activities and resources.
- Assistance is contingent upon a Presidential Declaration. (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. 2-6)

Disaster Relief Act, 1980: "…the Public Assistance (PA) Program, which provided disaster assistance to State and local governments, was in the form of a 100-percent Federal grant. The response to the eruption of Mount St. Helens in May 1980 was the first administrative

implementation of a 75-percent Federal and 25-percent State and local cost sharing of disaster expenses. This response was the first step toward a cost-sharing, full-partnership concept of managing disaster response and recovery." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. 2-6)

Disaster Relief Act of 1988 (Stafford Act): (See, also, Robert T. Stafford Act & Stafford Act):

"In November *1988, the Robert T. Stafford Disaster Relief and Emergency Assistance Act* was passed. This act provided a framework for continued disaster relief and provided the authority for FEMA's role in managing Federal disaster assistance. It also legislated a minimum 75-percent Federal/25-percent State and local cost sharing for the PA Program. The Stafford Act refocused assistance for non-natural disasters, unless caused by fire, flood, or explosion, to a more limited scope. It also confirmed the importance of individual assistance and added an emphasis on mitigation of future losses. Key features of the act are:

- State, Tribal, and local governments have the primary responsibility to respond to a disaster.

- Federal assistance is designed to supplement the efforts and available resources of State, Tribal, and local governments, and voluntary relief organizations in alleviating the damage, loss, hardship, or suffering resulting from a disaster.

- FEMA may task any Federal agency, with or without reimbursement, to provide assistance to State, Tribal, and local disaster efforts in a declared disaster.

Disaster assistance programs included in the Stafford Act are:

- Individual Assistance (IA), in the form of individual and household grants and temporary housing.

- PA, including grants for emergency work, repair and restoration, and debris removal.

Mitigation grants, to reduce long-term risk to life and property from natural or technological disasters." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, pp. 2-7, 2-8)

Disaster Relief Act, 1993: "Congress amended the Stafford Act in October 1993 to expand the scope of mitigation to include acquisition of properties in floodplains." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. 2-8)

Disaster Relief Act, 1994: "An October 1994 amendment incorporated most of the former Civil Defense Act of 1950, 50 U.S.C. App., into the Stafford Act. This amendment allows FEMA to implement an all-hazards approach to preparedness." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. 2-8)

Disaster Relief Act, 2000: "The Disaster Mitigation Act of 2000 further modified the Stafford Act to establish a national program for pre-disaster mitigation, streamline administration of

disaster relief, and control Federal costs of disaster assistance." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. 2-8)

Disaster Relief Fund (DRF): "A fund appropriated by Congress to pay for FEMA's disaster operations. This includes public assistance, individual assistance, mitigation, emergency response and recovery, and disaster management." (**FEMA**, *Mission Assignment Draft Operating SOPs*, 2007, p. 50)

Disaster Research Center (DRC): "Established at Ohio State University in 1963 by Professors E. L. Quarantelli, Russell Dynes, and Eugene Haas, and moved to its current location at the University of Delaware in 1985, DRC was the first Center in the world devoted to the social scientific study of disasters. Historically, the Center has conducted field interviews and extended research projects on group, organizational, and community preparation for, response to, and recovery from natural and technological disasters and other community-wide crises for both academic and practical development of the field of disaster research and mitigation." (DRC, *2007 Annual* **Report**, July 2008, p. 5)

Disaster Reserve Workforce, FEMA, Office of Management, Disaster Reserve Workforce Division.

Disaster Resilience: "Disaster resilience refers to the capability to prevent or protect against significant multihazard threats and incidents, including terrorist attacks, and to expeditiously recover and reconstitute critical services with minimum damage to public safety and health, the economy, and national security." (**TISP**, *Regional Disaster Resilience*, 2006, p. 2)

Disaster Resistant Community: "Becoming disaster resistant requires a community-wide effort over a long period of time. Participation and commitment are required of all sectors of the community: employers, businesses, community associations, services, and local government. Project Impact…provide guidance on how to accomplish this cooperative effort. Under Project Impact guidelines, a community goes through a number of steps in four phases, including:

Phase 1: Build the Partnership

- Form a partnership team of local officials, representatives of industry and business, infrastructure, transportation, utilities, housing, volunteer organizations, health care, government, work force, education--all community elements having a stake in reducing losses.
- Designate a project impact coordinator to provide staff assistance for the partnership team and to assist with community education and outreach.
- Establish subgroups to tackle identified issues.
- Develop or reproduce Project Impact materials to explain objectives and how to get there.

Phase 2: Identify Hazards and Community Vulnerabilities

- Determine which areas of your community can be affected by disasters, how likely it is that a disaster may occur, and how intense the disaster might be.
- Identify the facilities that are at risk and to what degree they might be affected, as well as how their damage might affect the vulnerability of other structures.

- Do a risk assessment to define the potential consequences of a disaster based on a combination of your hazard and vulnerability studies.

Phase 3: Prioritize and Take Hazard Risk-Reduction Actions

- Plan for open space acquisition of high hazard potential areas.
- Develop policies, incentives and legislation to encourage property owners to invest in projects that will reduce losses in disasters.
- Adopt policies that require consideration and mitigation of identified hazards in subdividing or consolidating parcels, changing land uses, or redevelopment.
- Support community efforts to improve or replace vulnerable utilities and transportation systems.

Phase 4: Communicate Successes

Develop and distribute promotional mitigation materials, organize a speakers bureau, and ask the news media to become partners or sponsors in communicating the value of reducing hazards and the progress toward making your community disaster resistant." (**FEMA**, *Becoming a Disaster-Resistant Community: How and Why*, Dec. 26, 1999)

Disaster Resistant University FEMA Initiative: "Five U.S. universities have been chosen to participate in the pilot phase of a unique undertaking by…FEMA to help the nation's colleges and universities limit future property and economic damage from natural disasters. The five universities will each receive about $100,000 from FEMA for the project and each university will match equally the resources provided by FEMA. The five pilot Disaster Resistant Universities are Tulane University, University of Alaska/ Fairbanks, University of Miami, University of North Carolina/Wilmington and the University of Washington at Seattle.

"These five universities have already shown their commitment to making their campuses more disaster resistant," said FEMA Director James Lee Witt. "When an institution takes action like these universities are doing, their activities will improve the ability of their surrounding community and regions to recover from a major disaster."

"FEMA's Disaster Resistant Universities initiative uses the same strategic approach as FEMA's Project Impact: Building Disaster Resistant Communities. Through Project Impact communities are encouraged to come together to assess their vulnerabilities to natural hazards and implement strategies to limit damage before disasters occur. Project Impact bases its work and planning on three simple principles: Risks must be identified and preventive actions decided at the local level; private-public partnerships are essential; and long-term efforts and investments in prevention measures are necessary.

"The first part of the project consisted of a University of California at Berkeley study of the economic consequences of a disaster on a university and its surrounding community and state. The study substantiated the premise that a disaster in a community's predominant business - the university - will have severe economic consequences locally and even statewide. As part of the study, UC Berkeley also developed a plan to limit future disaster losses and guidelines for other universities to use in the pilot phase of the initiative. "It is clear that disasters do much more than destroy buildings," FEMA Director James Lee Witt said. "They impact a locality in many different ways for a long time." The federal government alone invests nearly $15 billion per year in university-based research… "Witt said that he expects the Disaster Resistant University

initiative will be an important component of FEMA's efforts to change the way America deals with disasters." (**FEMA**, *Five U.S. Universities Selected to Participate in Pilot Phase of FEMA Initiative to Help Universities Avoid Damage from Natural Disasters*, September 28, 2000)

Disaster Response: "A sum of decisions and actions taken during and after disaster, including immediate relief, rehabilitation, and reconstruction." (**UNDHA**, *DM Glossary*, 1992, 29; **EEA**, *EEA Environmental Glossary*, 2007)

Disaster Response Organizational Requirements: "The constructin and maintenance of a coherent response to an emergency situation…represents a considerable accomplishement. The organizational approach must

- Continually map to the requisite variety of a dynamic and risky situation…
- Be able to expand and contract, change strategic orientation, modity or switch tactics, and so forth, as an incident unfolds…." (**Bigley and Roberts**, "The Incident Command System..." 2001, p. 1286)

Disaster Risk: "The chance of a hazard event occurring and resulting in a disaster." (**National Science and Technology Council** 2005, 17)

Disaster Risk Indexing: "A quantitative analysis technique that uses statistical indicators to measure and compare risk variables. Benefits of the technique are efficiency in measuring key elements of risk, repetitive application of the indictor system may allow the monitoring of disaster risk reduction progress, and because the system can be applied rapidly and with little cost it is also a useful tool for the national level to identify risk exposed communities. Limitations of the technique include the use of indicators that may not reflect the complex reality; local and sub-national databases are not currently using uniform data collection and analysis frameworks; lack of availability of data with a suitable coverage and accuracy; and while indexing allows a comparison of relative risk between geographic areas, it cannot be used to depict actual risk for any one area." (**UNDAP**, *Techniques Used in Disaster Risk Asmt.*, 2008)

Disaster Risk Management: "Disaster risk management and reduction are about looking beyond hazards alone to considering prevailing conditions of vulnerability. It is the social, cultural, economic, and political setting in a country that makes people vulnerable to unfortunate events. The basis of this understanding is simple: the national character and chosen form of governance can be as much of a determinant in understanding the risks in a given country, as are the various social, economic and environmental determinants." (**UN/ISDR**, *Internationally Agreed Glossary of Basic Terms Related to Disaster Management*, 2002, p. 27)

Disaster Risk Management: "The systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Disaster Risk Reduction (DRR): "…the broad development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout society.1 DRR is a systematic approach to identifying, assessing and reducing the risks of disaster. It aims to reduce socio-economic vulnerabilities to disaster as well as dealing with the environmental and other hazards that trigger them…. The term 'disaster reduction' is often used to mean much the same thing. 'Disaster risk management' is also sometimes used in this way, although it is normally applied specifically to the practical implementation of DRR initiatives." (Twigg, *Characteristics of a Disaster-resilient Community A Guidance Note*, August 2007, p. 6)

Disaster Risk Reduction: "The systematic development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) adverse impact of hazards, within the broad context of sustainable development." (**UN/ISDR**, *Internationally Agreed Glossary of Basic Terms Related to Disaster Management*, 2002, p. 25)

Disaster Risk Reduction: "The conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development. *The disaster risk reduction framework is composed of the following fields of action, as described in ISDR's publication 2002 "Living with Risk: a global review of disaster reduction initiatives", page 23:*

- *Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis;*
- *Knowledge development including education, training, research and information;*
- *Public commitment and institutional frameworks, including organisational, policy, legislation and community action;*
- *Application of measures including environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments;*
- *Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities*." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Disaster Situational Awareness Teams (DSATs): "These teams deploy at the discretion of the Secretary of DHS. Members report to the Principal Federal Official—or Joint Field Office Coordination Group if the Principal Federal Official is not on site—upon arrival in the affected areas." (**FEMA**, *Federal Interim Contingency Plan--Predecisional Draft: NMSZ*, Dec. 2007, 20)

Disaster Situational Awareness Teams (DSATs): "These teams are to be comprised of field staff from Immigrations and Customs Enforcement since they can be more easily deployed and are to be at a site within 24 hours to provide situational awareness reporting and other assistance." (GAO, *Homeland Security: Guidance from Operations Directorate*…, 2007, 17)

Disaster Syndrome: "A form of shock reaction, called a 'disaster syndrome,' has sometimes been observed in the aftermath of relatively sudden and extensive disasters. This reaction involves an apathetic response and some disorientation in thinking, However, the 'disaster syndrome' does not appear in great numbers of people; seems confined only to the most sudden traumatic kinds of disasters; has been reported only in certain cultural settings; and is generally of short duration, hours only, if not minutes." (**Dynes**, *A Perspective on Disaster Planning*, 1981, p. 20)

Disaster Team: "Multidisciplinary, multisectoral group of persons qualified to evaluate a disaster and to bring the necessary relief." (**UNDHA**, *DM Glossary*, 1992, 29)

Disaster Time Phases: "There are several discernible phases in the history of any disaster. The *pre-disaster phase* is the everyday situation in the community. A *pre-impact phase* begins with the earliest sign of possible danger and is the time between initial warning and actual impact. Warning may be official as in the case of a weather bulletin, or spontaneous such as the spotting of a gas leak by a passerby. The *impact phase* is that period when the disaster actually strikes… this period may be of limited or long duration, from a few minutes (tornado) to several weeks or more (flooding). The *emergency phase* is the period of response to the immediate demands presented by the agent. *Recovery* is the final phase and includes attempts to mitigate any long-term effects of the disaster agent and return the community to normal, everyday conditions." (**Dynes**, et al, *A Perspective on Disaster Planning* (3rd Ed.), 1981, p. 8)

Disaster Typology – The Suiter Scale:

- Incident
- Emergency
- Disaster
- Catastrophe
- Chaos
- Anarchy

(**Woodbury**, *Catastrophic Disaster Planning and Lessons Learned from Hurricanes Katrina and Rita*. December 2, 2005, slide 3)

DISC: Disaster Information Systems Clearinghouse. (**DHS**, *JFO Activation*…, 2006, p. 2)

Discharge (synonym flux, rate of flow): "Volume of water flowing through a river (or channel) cross-section in unit time." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 29)

Disciplines: "A group of personnel with similar job roles and responsibilities. [e.g. law enforcement, firefighting, Hazardous Materials (HazMat), Emergency Medical Services (EMS)]. (**FEMA**, *Glossary of Key Terms*, Incident Management Systems Division, March 12, 2008)

Disciplines, First Responder and Related Served by Training and Exercise Integration Secretariat Training Operations, NIC, NPD, FEMA:

- Emergency Management Agency (EMA)
- Emergency Medical Services (EMS)

- Fire Service (FS)
- Governmental Administrative (GA)
- Hazardous Materials Personnel (HZ)
- Healthcare (HC)
- Law Enforcement (LE)
- Public Safety Communications (PSC)
- Public Health (PH)
- Public Works (PW) (**FEMA**, TEI/TO *Course Catalog*, 2008, pp. 2-3)

Disciplines, NIMS:

- Emergency Management
- Law Enforcement
- Firefighting
- HazMat
- Search & Rescue
- Emergency Medical Services
- Hospital
- Public Health
- Coroner/Medical Examiner
- Amateur Radio
- Public Safety Communications
- Public Works/Utilities
- Agriculture/Natural Resources
- Public Administration
- Educational Institution
- Private Industry
- Community Group/Volunteer Agency
- Transportation Authorities
- Animal Control & Care
- Non-Governmental Organization. (**FEMA**, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 12)

Disciplines, State and Urban Area Homeland Security Illustrative Disciplines:

- Emergency Management
- Law Enforcement
- Fire
- Public Health and Healthcare
- Public Works (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidelines on Aligning Strategies with the NPG*, 2005, p. 9)

Discussion-Based Exercises: "Discussion-based exercises are normally used as a starting point in the *building-block approach* to the cycle, mix, and range of exercises. Discussion-based exercises include *seminars*, *workshops*, *TTXs*, and *games*. These types of exercises typically highlight existing plans, policies, mutual aid agreements (MAAs), and procedures, and are

exceptional tools to familiarize agencies and personnel with current or expected jurisdictional *capabilities*. Discussion-based exercises typically focus on strategic, policy-oriented issues, whereas *operations-based* exercises tend to focus more on tactical, response-related issues. *Facilitators* and/or presenters usually lead the discussion and keep *participants* on track to meet exercise *objectives*." (**FEMA**, *HSEEP Glossary*, 2008)

Discussions-based Exercises: "Discussions-based Exercises familiarize participants with current plans, policies, agreements and procedures, or may be used to develop new plans, policies, agreements, and procedures. Types of Discussion-based Exercises include:

- *Seminar.* A seminar is an informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., a seminar to review a new Evacuation Standard Operating Procedure).

- *Workshop.* A workshop resembles a seminar, but is employed to build specific products, such as a draft plan or policy (e.g., a Training and Exercise Plan Workshop is used to develop a Multi-year Training and Exercise Plan).

- *Tabletop Exercise (TTX).* A tabletop exercise involves key personnel discussing simulated scenarios in an informal setting. TTXs can be used to assess plans, policies, and procedures.

- *Games.* A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedure designed to depict an actual or assumed real-life situation." (**FEMA**, *About HSEEP*, 2008)

Disease Control: "All policies, precautions and measures taken to prevent the outbreak or spread of communicable diseases." (**UNDHA**, *Disaster Mgmt. Glossary*, 1992, p. 30)

Disk Mirroring: "Disk mirroring is the duplication of data on separate disks in real time to ensure its continuous availability, currency and accuracy. Disk mirroring can function as a disaster recovery solution by performing the mirroring remotely. True mirroring will enable a zero recovery point objective. Depending on the technologies used, mirroring can be performed synchronously, asynchronously, semi-synchronously, or point-in-time. Similar terms: data mirroring, data replication, file shadowing, and journaling." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 54)

Displaced Person: "Persons who, for different reasons or circumstances, have been compelled to leave their homes. They may or may not reside in their country of origin, but are not legally regarded as refugees." (**UNDHA**, *Disaster Mgmt. Glossary*, 1992, p. 30)

Disruption: "Incident, whether anticipated (e.g. hurricane) or unanticipated (e.g. a blackout or earthquake) which disrupts the normal course of operations at an organization location." (**ISO 22399**, *Societal Security*…, 2007, 2)

Dissemination: "The timely release, distribution and delivery of raw intelligence and finished intelligence products to the appropriate recipients in compliance with defined protocols. Dissemination is the general policy and rule; and, raw and finished intelligence and information will be disseminated unless the dissemination is legally or procedurally prohibited. These prohibitions, also known as Dissemination restrictions/caveats, are not a level of Classification, but they are used in conjunction with the appropriate Classification level and caveat the sharing, distribution and delivery of intelligence/information. Some examples of Dissemination restrictions/caveats are:

- ORCON (Dissemination and Extraction of Information Controlled by Originator) – no further dissemination can occur without the prior approval of the originator
- NOFORN (Not Releasable to Foreign Nationals) – may not be provided, in any form, to foreign governments, international organizations, coalition partners, foreign nationals or immigrant aliens
- REL TO – authorized for release to… (specify country)
- RELIDO – Releasable by Information Disclosure Officer
- FISA – Foreign Intelligence Surveillance Act
- Grand Jury Information – protected by Federal and State statute
- Taxpayer Information – protected by Federal statute." (**FEMA**, *IIFOG Ver 3 Draft*, 2008, p. 35)

Distribution Management Strategy Working Group: "The LMD [Logistics Mgmt. Directorate, FEMA] initiated a Distribution Management Strategy Working Group, with federal, private and nongovernmental organizations logistics partners, to conduct a comprehensive analysis to develop and approve a comprehensive distribution and supply chain management policy. Partners in this group include GSA, DoD, Defense Logistics Agency (DLA), Health and Human Services, U.S. Army Corps of Engineers, and the American Red Cross. This group's analysis includes rightsizing inventory levels and determining the most effective strategic supply and service infrastructure locations in order to transition into a regional area support strategy. The working group is considering all critical distribution and supply chain management criteria in developing a concept that is effective in meeting our emergency management support responsibilities." (**FEMA**, *LMD Fact Sheet*, January 31, 2008 modification)

Division (NIMS): "The partition of an incident into geographical areas of operation. Divisions are established when the number of resources exceeds the manageable span of control of the Operations Chief. A division is located within the ICS organization between the branch and resources in the Operations Section." (**DHS**, *NIMS*, 2004, p. 128)

Division of Bioterrorism Preparedness and Response (DBPR) CDC: The DBPR "provides leadership for CCID in preparedness for infectious disease emergencies as well as operational support for non-infectious disease emergencies such as natural disasters. Since the program's establishment in 1999, DBPR has been involved in virtually all of CDC's large-scale responses. Major projects include the LRN, the Early Aberration Reporting System, and the All Threats Agent Content System." (**CDC**, *About the National Center for Preparedness, Detection, and Control of Infectious Diseases (NCPDCID)*, December 26, 2007 update)

DLA: Defense Logistics Agency. (**Senate HSGA**, *Katrina: A Nation Still Unprepared*, p. 631)

DLP: Disaster Loan Program, SBA. (**GAO**, *Natural Disaster: Public Policy*…, Nov 2007, 16)

DM: Adamsite. (**Dept. of the Army**, *WMD-CST Operations*, Dec 2007, Glossary-2)

DM: Disaster Management.

DMA: Disaster Mitigation Act of 2002. (**Public Law 106-390**, October 30, 2000)

DMAT: Disaster Medical Assistance Team. (**FEMA**, *Mission Assignment SOPs*, 2007, p. 49)

DMF: Disaster Medical Facility. (**NV Hospital Assoc**., May 2006, p. 17)

DMIS: Disaster Management Interoperability Services. (White House, OMB, E-Gov)

DMORT: Disaster Mortuary Operational Response Team. (**Senate HSGA**, *A Nation Still Unprepared*, p. 631)

DMSDS: Direct Mail Shelter Development System. (**DCPA**, *Foresight, FY73*, 1974, p. 17)

DND: Domestic Nuclear Defense. (**DHS**, *Opening Statement of Vayl Oxford*, 8Mar07, 9)

DNDO: Domestic Nuclear Detection Office, DHS. (**FEMA**, *Statement of Cannon*, 2007, 10)

DNI: Director, National Intelligence. (**DHS**, *FCD 1*, Nov. 2007)

DO: Domestic Operations. (**Dept. of the Army**, *WMD-CST Ops*, Dec 2007, Glossary-2)

Doctrine: "*Doctrine* is a body of knowledge for guiding collective action. Good doctrine does not tell people what to think, but it guides them in how to think, particularly in how to address complex, ambiguous, and unanticipated challenges when time and resources are both in short supply." (**Carafano**, "Managing Mayhem," *JFQ*, 2008, p. 136)

Doctrine: An "authoritative statement of one or more guiding principles. Doctrine encompasses the fundamental principles which guide an organization and 'shapes the effort.' Policy includes the process implemented through plans and procedures towards realization of doctrine and 'guides the effort.' Strategy is the course of action to achieve policy goals and 'accomplishes the effort'. Example: DHS doctrine describes the planning process for incidents of national significance." (**DHS**, *DHS Lexicon: Terms.*…, Oct 2007, 9)

Doctrine: "Doctrine influences the way in which policy and plans are developed, forces are organized and trained, and equipment is procured. It promotes unity of purpose, guides professional judgment and enables [first responders] to fulfill their responsibilities."[25]

[25] Sited: *United States Coast Guard: America's Maritime Guardian*, Coast Guard Publication 1 (Washington, DC: January 2002, second printing), p. 3. The term "doctrine" has clear and rich meaning

(**DHS,** *National Response Framework* (Comment Draft), September 10, 2007, p. 8)

Doctrine: The NRF is grounded in "doctrine that demands a tested inventory of common organizational structures and capabilities that are scalable, flexible and adaptable for diverse operations. Its adoption across all levels of government and with businesses and NGOs will facilitate interoperability and improve operational coordination." (**DHS,** *NRF Draft*, Sep07, 10)

Doctrine: "Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application." (**DOD** *Dictionary of Military and Associated Terms*, 2007, p. 166)

Doctrine: "Within the NWL [Navy Warfare Library], doctrine refers to overarching guidance that allows collections of Navy units to operate effectively as a Navy force. Doctrine therefore refers to both fundamental principles and operational-level guidance. This operational-level doctrine is distinct from the tactics, techniques, and procedures (TTP) used to guide the specific operation of platforms and systems. Doctrine is issued in top-level JPs, NDPs, and NWPs. Navy doctrine forms a bridge between the naval component of our nation's military strategy and our TTP. A commander, however, cannot operate solely under the guidance of broad strategy. Neither can the commander make appropriate mission decisions if guided only by TTP. Doctrine guides our actions toward well-defined goals and provides the basis for mutual understanding within and among the Services and the national policymakers. It ensures our familiarity and efficiency in the execution of procedures and tactics." (**Navy**, *Navy Warfare Library*, 2005, 1-1)

Doctrine: "Doctrine is a set of fundamental principles which guide actions - authoritative, but requiring judgment in application. They are most important during periods of great chaos, such as on a battlefield or during a major natural disaster when communications and unity of command are difficult." (**Perkins**, *Shaping DHS Doctrine for Operational Success*, July 2007, 1)

"**…**doctrine reduces "mission creep." The Coast Guard, for example, has long prided itself on 'getting the job done' no matter what was asked of it, completing unusual missions timely and effectively. Over a number of decades, missions accreted even while resources dried up, eventually resulting in a "dull knife". Doctrine outlines what a service or agency must be competent in and, in general or specific terms, how it should do it. With only 40,000 active duty members, the Coast Guard cannot be all things to all people. Doctrine will describe what can be done and what can't without reducing its flexibility." (Ibid, 4)

"Clear doctrine prevents or at least reduces miscommunication by creating common frames of reference. It shows at a glance what other organizations will do, and therefore improves clarity of purpose and definition of roles in disaster prevention and response." (Ibid, 6)

"Sound doctrine enables sound training, and it is training that permits thoughtful action during periods of chaos." (Ibid, 7)

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as a guide to action within the military services. See also U.S. Department of Defense's *Joint Operations Planning and Execution System*; overview at http://www.dtic.mil/doctrine/jel/other_pubs/jopes.pdf

"*The Doctrine-Training-Operations Cycle*: Any organization that tries to stay efficient creates a structure that enables a cycle of continuous improvement. New procedures (doctrine) and methods are taught to new members and to senior staff in refresher courses. Training results in operations that are consistent with the new and improved doctrine. Based upon feedback, the procedures are further modified and new training is given until the desired end result indicates that doctrine and training are producing the best results reasonably achievable." (Ibid, 10)

"*Doctrine Pyramids*: For any…organization, doctrine should assume the shape of a multi-tiered pyramid…that guides operations in increasing detail with each level down. Each component of an organization or service within the Department should have its own doctrine pyramid that is guided by the overarching Department's pyramid. The highest level doctrine is typically summed up in a single book so that a new member or student can quickly get a sense of key concepts (by convention this single book is often titled Doctrine Publication 1)." (Ibid, 11)

Doctrine: "Like strategy, doctrine should assume a top-down direction and permeate the entire pyramid…" (**Read**, "Irregular Warfare…" *Air & Space Power*, Winter 2007, p. 47)

Doctrine: "…doctrine; that is, fundamental principles that guide our actions in support of the nation's objectives…. Doctrine influences the way in which policy and plans are developed, forces are organized and trained, and equipment is procured. It promotes unity of purpose, guides professional judgment, and enables Coast Guard men and women to best fulfill their responsibilities." (**USCG** *Pub 1*, 2002, p. 3)

Doctrine: "Fundamental principles by which military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application." (**USCG** *Pub 1*, 2002, p. 60)

Doctrine, Environmental: "Environmental doctrine is a compilation of beliefs about the employment of military forces within a particular operating medium; thus, land, sea, and air doctrine fit in this category…. Environmental doctrine is…international in its application and should thus apply equally well to any nation's military force." (**Friedenstein**, "The Uniqueness of Space Doctrine," *Air University Review,* Nov-Dec 1985)

Doctrine, Fundamental: "Fundamental doctrine is grounded in an examination of history, and it applies in all operating mediums in any nation. Instantly recognized as elements of fundamental doctrine are purposes of the military, the nature of war, and the relationship of the military to other national instruments of power. Since fundamental doctrine is characterized by its timeless significance and universal application, it is rarely, if ever, rewritten in response to technological change." (**Friedenstein**, "The Uniqueness of Space Doctrine," *Air University Review,* Nov-Dec 1985)

Doctrine, Homeland Security: "Doctrine describes the fundamental principles and concepts that shape the Nation's homeland security effort. It broadly tells us what planning is supposed to achieve, how it is structured and resourced, and how it is executed. Doctrine describes the systems, processes, intellectual underpinnings, and terminology that are the bedrock of homeland security planning. The doctrinal concepts and principles laid out here are consistent with

planning systems already in place, or being considered for adoption. Specifically, this doctrine underpins and supports:

- Homeland Security Presidential Directive-5 (HSPD-5)
- Homeland Security Presidential Directive–8 (HSPD-8), Annex I
- National Response Framework (NRF)
- National Incident Management System (NIMS)
- National Preparedness Guidelines (NPG)
- National Strategy for Homeland Security (NSHS)

(**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-1)

Doctrine, Multi-Direction: "Federated planning is a 'multi-direction' doctrine — it flows bottom-up, top-down, left-right, and right-left. It recognizes that planning begins with strategic direction from senior executives at each level of government. This strategic direction is converted to concept plans (CONPLANS), which are, in turn, converted to operations plans (OPLANS). This planning process takes place throughout the planning community, with planners at each level interacting with each other and often with planners at other levels to acquire and integrate support." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-2)

Doctrine, Organizational: "Organizational doctrine defines the basic beliefs of a particular military organization about how best to conduct warfare in its operating medium. Soviet and U.S. doctrine would diverge at this point. Organizational doctrine is very dependent on technology and is often tempered by local political constraints. If a statement of doctrine did not apply a decade ago or if it is obviously tied to the capability of a particular weapon system, it is organizational doctrine." (**Friedenstein**, "The Uniqueness of Space Doctrine," *Air University Review,* Nov-Dec 1985)

DOA: Department of the Army.

DOC: Department of Commerce.

DOC: Department Operations Center. (**DHS**, *NIMS,* 2004, p. 27)

Documentation Unit: "The unit within the Planning Section responsible for collecting, recording and protecting all documents related to the incident." (**Capital Health Region**, Canada, *Incident Command System Training Student Manual*, March 2007, 52)

DOD or DoD: U.S. Department of Defense. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-2)

DoD Immediate Response: "…the majority of DOD support is coordinated using the concept of DSCA. However, imminently serious conditions resulting from any civil emergency may require immediate action to save lives, prevent human suffering or mitigate property damage. When such conditions exist, and time does not permit approval from higher headquarters, local military commanders and responsible officials from DOD components and agencies are

authorized to take necessary action to respond to requests from civil authorities. This response must be consistent with the Posse Comitatus Act, which generally prohibits Federal military personnel (and units of the National Guard when they are acting under Federal authority) from acting in a law enforcement capacity (e.g., search, seizures, arrests) within the United States, except where expressly authorized by the Constitution or Congress." (**DHS**, *National Response Framework -- Federal Partner Guide* (Comment Draft), September 10, 2007, p. 20)

DODD: Department of Defense Directive. (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005)

DODD 2000.12: *DOD Antiterrorism (AT) Program,* 18 August 2003.

DODD 2000.15: *Support to Special Events*, 21 November 1994.

DODD 2060.2: Department of Defense (DOD) Combating WMD Policy.

DODD 3020: Defense Critical Infrastructure Program (Draft, 15 June 2004).

DODD 3020.26: Defense Continuity Program, September8, 2004.

DODD 3020.36: Assignment of National Security Emergency Preparedness (NSEP) Responsibilities to DOD Components, November 2, 1988.

DODD 3020.40: Defense Critical Infrastructure Program (DCIP), August 19, 2005.

DODD 3025.1: Military Support to Civil Authorities, 15 January 1993.

DODD 3025.12: Military Assistance for Civil Disturbances, 4 February 1994.

DODD 3025.15: Military Assistance to Civil Authorities, 18 February 1997.

DODD 3150.5: DOD Response to Improvised Nuclear Device (IND) Incidents, 24 March 1987.

DODD 3150.8: DOD Response to Radiological Accidents**.**

DODD 5525.5: DOD Cooperation with Civilian Law Enforcement Officials.

DODI: Department of Defense Instruction.

DODI 2000.18: Department of Defense Installation Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive Emergency Response Guidelines.

DODI 3020: Implementation of the Critical Infrastructure Program. (Draft)

DOE: U.S. Department of Energy.

DOG: Deployable Operations Group**,** USCG, DHS. (**DHS**, *Testimony of Secretary Michael Chertoff before the House Committee on Homeland Security*. (Remarks as Prepared), 5Sep2007)

DOI: U.S. Department of the Interior.

DOJ: U. S. Department of Justice. (**Senate HSGA**, *Katrina: A Nation Still Unprepared*, p. 631)

DOM: Devolution of Operations Plan. (**FEMA**, *Continuity of Operations Programs*, 2007)

Domain. "A major grouping of activities related to the "life cycle" of a domestic incident. The four domains are prevention, preparedness, response, and recovery." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 74)

Domain Awareness: "…obtaining effective knowledge of activities, events, and persons in the dimensions of air, land, sea, and cyber-space." (**Sauter & Carafano** 2005, 243)

Domain, Air: "`Air Domain' is defined as the global airspace, including domestic, international, and foreign airspace, as well as all manned and unmanned aircraft operating, and people and cargo present in that airspace, and all aviation-related infrastructure." (**DH**S, *Air Domain Surveillance and Intelligence Integration…*, March 26, 2007, p. i)

Domain, Air: "The air domain consists of both the skies above the United States, and the skies that allow entry into U.S. airspace. As the National Strategy for Aviation Security notes, "the differences between ground-based and airborne aviation security measures implemented in different jurisdictions throughout the world, the volume of domestic and international air traffic, the speed with which events unfold, and the complexity of aviation assets make the Air Domain uniquely susceptible to attack or exploitation by terrorist groups, hostile nation-states, and criminals." (**DHS**, *Capstone Doctrine Pub 1 Draft*, Chapter 2, 2008, p. 2-6)

Domain, Land: "The homeland security land domain entails the entire geographic area of the United States and its territories. Protecting the land domain entails both border protection, to prevent illicit entry of people and goods into the U.S., as well as protection of the country's infrastructure. This involves both a "borders out" and a "borders in" approach to security operations." (DHS, Capstone Doctrine Pub 1 Draft, Chapter 2, 2008, p. 2-6)

Domain, Maritime: "The maritime domain is all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime related activities, infrastructure, people, cargo, and vessels and other conveyances."[26] (**DHS**, *Capstone Doctrine Pub 1 Draft*, Chapter 2, 2008, p. 2-6)

Domain, Cyber: "The cyber domain is composed of hundreds of thousands of interconnected computers, servers, routers, switches, and fiber optic cables that allow the Nation's critical infrastructures to work. Thus, the healthy functioning of cyberspace is essential to the economy and the Nation's well-being."[27] (**DHS**, *Capstone Doctrine Pub 1 Draft*, Chapter 2, 2008, p. 2-6)

[26] Definition from "The National Strategy for Maritime Security."
[27] Definition of cyber space from "The National Strategy to Secure Cyberspace"

Domain, Security: "Security domains are those areas of flow of goods, people, and technologies, where a breach in security with malicious intent threatens the overall homeland security of the country. Achieving homeland security means exercising dominion over each of the homeland security domains so as to have information about the threats and vulnerabilities within the domains and be able to prevent, protect, respond and recover from security incidents in that domain. For example, achieving security in the cyber domain is not merely related to building fire-walls to prevent cyber attacks, but also includes increasing domain awareness, building a cyber response and recovery system, and developing partnerships among a range of legitimate participants in activities (including commerce) in cyber space, particularly the private sector, to reduce the consequences of an attack to the cyber network." (**DHS**, *Capstone Doctrine Pub 1 Draft*, Chapter 2, 2008, p. 2-6)

Dome: "Lava which is too viscous to flow laterally and therefore forms a dome above the erupting vent." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 30)

Domestic Battlespace: "…the placed formerly known as our communities and homes…" (Tierney, *The 9/11 Commission and Disaster Management,* 2005, p. 5)

Domestic Battlespace: "Homeland security should not be viewed as exclusively or even primarily a military task. Securing the "domestic battlespace"--a highly complex environment--requires Federal departments and agencies, state and local governments, the private sector, and individual citizens to perform many strategic, operational, and tactical level tasks in an integrated fashion. These actions must be synchronized with others that are being taken on the international front to prosecute the war against global terrorism. The challenges and demands associated with this undertaking are immense. Success will depend largely upon the Nation's ability to achieve unity of effort at all levels of government." (**Tomisek**, "Homeland Security…, Feb. 2002)

Domestic Battlespace: The US in a homeland security context. (**USCG**, *Charting a Course for Homeland Security Strategic Studies*, November 2004)

Domestic Chemical, Biological, Radiological, Nuclear, High-Yield Explosives Crisis Management: "Domestic CBRNE CM are those actions taken to maintain or restore essential services and manage and mitigate problems resulting from disasters and catastrophes, including natural, manmade, or terrorist incidents." (**JCS/DoD**, *CBRNE CM*, 2006, p. vi)

Domestic Emergencies: "Emergencies affecting the public welfare and occurring within the 50 states, District of Columbia, Commonwealth of Puerto Rico, US possessions and territories, or any political subdivision thereof, as a result of enemy attack, insurrection, civil disturbance, earthquake, fire, flood, or other public disasters or equivalent emergencies that endanger life and property or disrupt the usual process of government. Domestic emergencies include civil defense emergencies, civil disturbances, major disasters, and natural disasters. (This term and its definition modify the existing term and its definition and are approved for inclusion in JP 1-02.)" (**DOD**, *Homeland Defense*, 2007, p. GL-8 (177).

Domestic Emergency: "Any natural disaster or other emergency that does not seriously endanger national security, but which is of such a catastrophic nature that it cannot be managed effectively without substantial Federal presence, or which arises within spheres of activity in which there is an established Federal role." (**FEMA** *Disaster Dictionary* 2001, 36; cites *Domestic Emergencies Handbook*, US Army Forces Command, March 15, 1999).

Domestic Emergency Support Team (DEST): "Relative to terrorism incident operations, an organization formed by the Federal Bureau of Investigation (FBI) to provide expert advice and assistance to the FBI On-Scene Commander (OSC) related to the capabilities of the DEST agencies and to coordinate follow-on response assets. When deployed, the DEST merges into the existing Joint Operations Center (JOC) structure." (**FEMA** *Disaster Dictionary* 2001, 36; cites FEMA FRP, "Terrorism Incident Annex")

Domestic Incident Management: "(3) To prevent, prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies, the United States Government shall establish a single, comprehensive approach to domestic incident management. The objective of the United States Government is to ensure that all levels of government across the Nation have the capability to work efficiently and effectively together, using a national approach to domestic incident management. In these efforts, with regard to domestic incidents, the United States Government treats crisis management and consequence management as a single, integrated function, rather than as two separate functions.

"(4) The Secretary of Homeland Security is the principal Federal official for domestic incident management. Pursuant to the Homeland Security Act of 2002, the Secretary is responsible for coordinating Federal operations within the United States to prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies. The Secretary shall coordinate the Federal Government's resources utilized in response to or recovery from terrorist attacks, major disasters, or other emergencies if and when any one of the following four conditions applies: (1) a Federal department or agency acting under its own authority has requested the assistance of the Secretary; (2) the resources of State and local authorities are overwhelmed and Federal assistance has been requested by the appropriate State and local authorities; (3) more than one Federal department or agency has become substantially involved in responding to the incident; or (4) the Secretary has been directed to assume responsibility for managing the domestic incident by the President.

"(5) Nothing in this directive alters, or impedes the ability to carry out, the authorities of Federal departments and agencies to perform their responsibilities under law. All Federal departments and agencies shall cooperate with the Secretary in the Secretary's domestic incident management role.

"(6) The Federal Government recognizes the roles and responsibilities of State and local authorities in domestic incident management. Initial responsibility for managing domestic incidents generally falls on State and local authorities. The Federal Government will assist State and local authorities when their resources are overwhelmed, or when Federal interests are involved. The Secretary will coordinate with State and local governments to ensure adequate planning, equipment, training, and exercise activities. The Secretary will also provide assistance

to State and local governments to develop all-hazards plans and capabilities, including those of greatest importance to the security of the United States, and will ensure that State, local, and Federal plans are compatible….

"(15) The Secretary shall develop, submit for review to the Homeland Security Council, and administer a National Incident Management System (NIMS). This system will provide a consistent nationwide approach for Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multi-agency coordination systems; unified command; training; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources.

"(16) The Secretary shall develop, submit for review to the Homeland Security Council, and administer a National Response Plan (NRP). The Secretary shall consult with appropriate Assistants to the President (including the Assistant to the President for Economic Policy) and the Director of the Office of Science and Technology Policy, and other such Federal officials as may be appropriate, in developing and implementing the NRP. This plan shall integrate Federal Government domestic prevention, preparedness, response, and recovery plans into one all-discipline, all-hazards plan. The NRP shall be unclassified. If certain operational aspects require classification, they shall be included in classified annexes to the NRP.

(a) The NRP, using the NIMS, shall, with regard to response to domestic incidents, provide the structure and mechanisms for national level policy and operational direction for Federal support to State and local incident managers and for exercising direct Federal authorities and responsibilities, as appropriate….

"(18) The heads of Federal departments and agencies shall adopt the NIMS within their departments and agencies and shall provide support and assistance to the Secretary in the development and maintenance of the NIMS. All Federal departments and agencies will use the NIMS in their domestic incident management and emergency prevention, preparedness, response, recovery, and mitigation activities, as well as those actions taken in support of State or local entities. The heads of Federal departments and agencies shall participate in the NRP, shall assist and support the Secretary in the development and maintenance of the NRP, and shall participate in and use domestic incident reporting systems and protocols established by the Secretary." (**White House**, *Homeland Security Presidential Directive 5 (Management of Domestic Incidents*), Feb 28, 2003)

Domestic Incident Manager: The Secretary of the Department of Homeland Security. (**DHS**, *Statement of Frank DiFalco, Director of the National Operations Center*, June 20, 2007, p. 1)

Domestic Nuclear Defense Policy Coordinating Committee: "Created in 2004 by the Homeland Security Council and the National Security Council, the committee is a joint policy coordination body that is made up of representatives of all federal agencies with management

responsibilities for nuclear defense, detection, and interdiction. This committee has been instrumental in providing guidance on developing DNDO's nuclear detection response protocols. Policy Coordinating Committee meetings are attended by an under or assistant secretary of each cabinet department." (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, p. 16)

Domestic Nuclear Defense Research and Development Working Group: Federal interagency entity. (**DHS/OIG**, *DNDO Progress*…, Dec 2007, p. 35)

Domestic Nuclear Defense Research and Development Working Group: "This interagency working group addresses the coordination of: R&D strategies for domestic nuclear defense; the identification and filling of critical technology gaps, enhance efforts to develop and sustain critical capabilities through appropriate investments in the foundational science and research, interagency funding for necessary science and technology; and collaboration and exchange of vital R&D information." (**DHS**, *Opening Statement of Vayl Oxford*, July 27, 2006, p. 3)

Domestic Nuclear Detection Office (DNDO): "The Domestic Nuclear Detection Office (DNDO) is a jointly staffed office established April 15, 2005 to improve the Nation's capability to detect and report unauthorized attempts to import, possess, store, develop, or transport nuclear or radiological material for use against the Nation, and to further enhance this capability over time.
Strategic Objectives

- Develop the global nuclear detection and reporting architecture
- Develop, acquire, and support the domestic nuclear detection and reporting system
- Fully characterize detector system performance before deployment
- Establish situational awareness through information sharing and analysis
- Establish operation protocols to ensure detection leads to effective response
- Conduct a transformational research and development program
- Establish the National Technical Nuclear Forensics Center to provide planning, integration, and improvements to USG nuclear forensics capabilities."

(**DHS**, *DNDO*, Oct. 12, 2007 mod.)

[Note: The DNDO was established as a statutory entity via Section 501 of the *SAFE Port Act of 2006*. (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, p. 3)

Domestic Nuclear Detection Office (DNDO) Advisory Council: "Members of the Advisory Council include intra-agency senior officials from CBP, TSA, the U.S. Coast Guard, and other DHS components as appropriate. The Advisory Council provides guidance to DNDO, and is the forum used to address intra-agency issues and activities related to DNDO strategies and initiatives. It also plays a role in coordinating and communicating across DHS components on nuclear detection requirements and related security programs." (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, p. 17)

Domestic Nuclear Detection Office (DNDO) Domestic State and Local Integrated Product Team: "DNDO's Domestic State and Local Integrated Product Team manages all DNDO activities with states to ensure outreach efforts are coordinated. The team is made up of DNDO staff from each directorate. The team identifies state requirements for preventative radiological

and nuclear detection and ensures DNDO working groups, exercises, training, and technical assistance for detector deployment programs are coordinated to benefit state and local entities. The team reviews fixed and portable detectors to identify personnel, equipment, and network requirements, as well as training, exercise, and operational procedure needs." (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, p. 26)

Domestic Nuclear Detection Office (DNDO) Exercise Program: "The U.S. Department of Homeland Security Domestic Nuclear Detection Office (DNDO), Operations Support Directorate is responsible for establishing and operating a real-time situational awareness and support capability. In this capacity, the Exercise Program provides exercise support as a validation instrument to test and evaluate the radiological/nuclear (RN) detection, deterrence, prevention, reporting, vulnerability reduction, and capabilities in a risk-free environment. The utilization of these services assist in validating that the equipment is properly employed and the alarm adjudication process is in accordance with federal, state, and local alarm adjudication protocols and appropriate notifications are escalated to the proper agencies at the national and international level, as appropriate. The Exercise Program assists in the development and implementation of improvement plans and protocols, as well as the design, development, and conduct of radiological/nuclear prevention exercises for state and local entities, in compliance with the Homeland Security Exercise and Evaluation Program (HSEEP) methodology. DNDO exercise support is available to states and designated Urban Area Security Initiative (UASI) jurisdictions to help develop, test, and improve their radiological/nuclear prevention and detection capabilities." (**DHS**, *DNDO Exercises*, 2007)

Domestic Nuclear Detection Office (DNDO) Interior Layer Detection Program: "*Mission:* Reduce risk to high-density urban areas by developing, demonstrating, acquiring, and supporting the deployment of integrated rad/nuc detection and reporting systems for the domestic interior layer.
Strategic Objectives:

- Develop urban and regional detector deployment strategies and CONOPs
- Identify effective and operationally-feasible detector systems
- Integrate detection reporting systems into regional and national command and control networks
- Establish support infrastructure, including training, response protocols, and technical reachback
- Identify alternatives for Federal support to State and local detection operations during periods of heightened risk
- Engage State and local agencies to facilitate the development of informed grant applications in support of the domestic detection architecture." (**DHS/DNDO**, *DNDO Overview*, April 20, 2007, slide 24)

Domestic Nuclear Detection Office (DNDO) Red Team: "DNDO is working toward implementing a red team program to assess the effectiveness of deployed detection systems. The term red team is used to describe adversarial role-playing to test a system's security vulnerabilities or readiness. Red teams provide DNDO the ability to identify vulnerabilities or gaps within radiological and nuclear detection and reporting systems before adversaries can exploit them." (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, p. 18)

Domestic Nuclear Detection Office (DNDO) Southeast Transportation Corridor Pilot: "In an effort to build upon existing state collaboration on transportation initiatives, DNDO has engaged states in the Southeast region through the Southeast Transportation Corridor Pilot. With this pilot, DNDO has supported Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and the District of Columbia in deploying radiological and nuclear detectors that target commercial traffic on highways and at interstate weigh stations. Through the Southeast Transportation Corridor Pilot, DNDO assists states with developing radiological and nuclear threat detection capabilities." (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, pp. 27-28)

Domestic Nuclear Detection Office (DNDO) State and Local Affairs Office: "DNDO's State and Local Affairs Office has engaged state Homeland Security Advisors and other state officials and has informed those officials of DNDO's mission and programs. DNDO uses its State and Local Working Group as a forum to provide information to states, and for states to exchange information on best practices. DNDO also uses the working group as means to obtain information on states' detection capabilities, requirements, and future plans. The State and Local Affairs Office assists states with developing grant applications for preventative radiological and nuclear equipment and projects. Also, DNDO holds working group meetings to discuss ongoing or upcoming preventative detection initiatives." (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, p. 25)

Domestic Nuclear Detection Office (DNDO) State and Local Stakeholder Working Group: "The DNDO State and Local Stakeholder Working Group works to improve concepts of operations development and to identify environments where detection equipment may be used. The group is made up of DNDO staff, and state and local officials. The group considers various factors affecting the deployment and function of detectors such as operational environments, detector capabilities, and the potential for connecting newly acquired detection equipment with existing radiological and nuclear detection systems. Through the State and Local Stakeholder Working Group, DNDO incorporates stakeholder concerns and feedback into exercise development and training opportunities to assist detector users better." (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, p. 26)

Domestic Readiness Group (DRG). "The DRG is an interagency body convened on a regular basis to develop and coordinate preparedness, response, and incident management policy. This staff-level group evaluates various policy issues of interagency import regarding domestic preparedness and incident management and makes recommendations to Cabinet and agency deputies and principals for decision. As appropriate, the chair of the HSC [Homeland Security Council] and Cabinet principals will present such policy issues to the President for decision. The DRG has *no role regarding operational management* during an actual incident." (**DHS,** *National Response Framework* (Comment Draft), September 10, 2007, p. 51)

Domestic Readiness Group (DRG): "The DRG is an interagency body convened on a regular basis to develop and coordinate preparedness, response, and incident management policy. This group evaluates various policy issues of interagency importance regarding domestic preparedness and incident management and makes recommendations to senior levels of the

policymaking structure for decision. During an incident, the DRG may be convened by DHS to evaluate relevant interagency policy issues regarding response and develop recommendations as may be required." (**DHS**, *NRF*, 2008, 54)

Domestic Readiness Group (DRG): "The DRG is activated and directed by the White House to provide strategic direction to the national response to a major incident or catastrophic event. The DRG facilitates interagency coordination, resolves policy issues and addresses national-level resource allocation issues that cannot be resolved by the NRCC." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 4; see also, p. 50)

Domestic Terrorist Incident: "A form of civil disturbance, that is a distinct criminal act that is committed or threatened to be committed by a group or single individual to advance a political objective, and which endangers safety of people, property, or a Federal function in the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. territories and possessions." (**DoD**, *MACDIS*, 1994, p. 18)

DOMS: Director of Military Support. (**DoD**, *MACA*, 1997, p. 3; **DA**, *WMD-CST Ops*, 2007)

DOMS: Directorate of Military Support. (**DoD**, *MACDIS*, 1994, p. 11) Transferred from the Secretary of the Army to the Assistant Secretary of Defense for Homeland Defense, May 2003.

DO: Devolution of Operations, COOP/COG.

DOP: Devolution of Operations Plan/Planning, COOP/COG.

DOR: Disaster Operations and Recovery Section, Emergency Management Institute, FEMA.

DOT: Department of Transportation. (**Senate HSGA**, *Katrina: A Nation Still Unprepared*, 631)

DP: Diphosgene. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, Glossary-2)

DPA: Defense Production Act of 1950.

DPG: Defense Planning Guidance. (**DA**, *WMD-CST Operations*, December 2007, Glossary-2)

DPMU: Disaster Portable Morgue Unit. (**DHS**, *TCL*, 2007, p. 527)

DPP: Domestic Preparedness Program. (**Skidmore**, *Acute Care Center…*, 2003, v)

DR: Disaster Recovery. (**DigitalCare**, *State of Oregon BC Workshop Desk Ref*., 2006, p. 8)

Drainage Basin (synonym catchment, river basin, watershed): "Area having a common outlet for its run-off." (**UNDHA**, *DM Glossary*, 1992, p. 30)

DRBA: Disaster Recovery Business Alliance.

DRC: Disaster Recovery Center.

DRC: Disaster Research Center, University of Delaware.

DRF: Disaster Relief Fund, FEMA

DRG: Domestic Readiness Group.

DRII: Disaster Recovery Institute International.

Drill: "A standardized technique or procedure that prepares students to execute critical collective tasks in an instinctive and spontaneous manner. The drill includes the methods by which it is trained." (**DHS**, *DHS Training Glossary*, 2006, p. 22)

Drill: "A drill is a coordinated, supervised activity usually employed to validate a specific operation or function in a single agency or organization. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Drills are narrow in scope and typically focus on a specific aspect of an operation…. Drills can be used to determine if plans can be executed as designed, to assess whether more training is required, or to reinforce best practices. In addition to being a valuable stand-alone tool, a series of individual drills can also be useful in preparation for a larger exercise." (**DHS**, *HSEEP*, Vol. V, 2005, p. 40)

Drill. "A drill is a coordinated, supervised activity usually employed to test a single, specific operation or function within a single entity (e.g., a fire department conducts a decontamination drill)." (**FEMA**, *About HSEEP*, 2008)

Drill: "A coordinated, supervised activity usually used to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Typical attributes include the following: A narrow focus, measured against established standards; Instant feedback; Performance in isolation; Realistic environment." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For FY 2007), Oct.23, 2006, p. 3) [See "Exercise Types"]

Drive-Away Kit: "A kit prepared by, and for, an individual who expects to deploy to an alternate location during an emergency. The kit contains items needed to minimally satisfy an individual's personal and professional needs during deployment." (**DHS**, *FCD 1*, 2007, P-3)

DRM: Disaster Recovery Manager.

Drop Ship: "A strategy for **a)** Delivering equipment, supplies, and materials at the time of a business continuity event or exercise. **b)** Providing replacement hardware within a specified time period via prearranged contractual arrangements with an equipment supplier at the time of a business continuity event. Similar term: quick ship." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, p. 54)

Drought: "A prolonged period with no rain, particularly during the planting and growing season in agricultural areas. Drought can also affect urban areas particularly those dependent in reservoirs for their water. Decreased water levels due to insufficient rain can lead to the restriction of water use to certain amounts and types of uses. Droughts are difficult to predict or forecast both as to when they may begin and how long they will last. Increased pumping of groundwater and surface irrigation occurring in drought periods can result in severe land subsidence problems. Almost all areas of the country are subject to direct impact of drought as it affects their water supply systems. The most vulnerable regions are the arid southwest and the semiarid part of the mid-continent, particularly the Great Plains. During the last 100 years, major sustained droughts have occurred in these regions roughly once every 20 years." (**FEMA**, *IEMS HICA MYDP* (CPG-1-34), 1985, p. A-1)

Drought: (1) Prolonged absence or marked deficiency of precipitation. (2) period of abnormally dry weather sufficiently prolonged for the lack of precipitation to cause a serious hydrological imbalance. (**WMO** 1992, 198)

Drought Index: "Computed value which is related to some of the cumulative effects of a prolonged and abnormal moisture deficiency." (**UNDHA**, *DM Glossary*, 1992, p. 31)

DRP: Devolution Response Group, COOP.

DRP: Disaster Recovery Planning. (**Davis Logic**, *Disaster Recovery Planning*, 30 Oct 2005)

DRR: Disaster Risk Reduction.

Dry Spell: "Period of abnormally dry weather. Use of the term should be confined to conditions less severe than those of a drought." (**UNDHA**, *DM Glossary*, 1992, p. 31)

DSA: Disaster Support Account, FEMA Emergency Management Institute funding account, 2008.

DSAT: DHS Situational Awareness Team, Department of Homeland Security. (**DHS**, *Notice of Change to the National Response Plan*, May 25, 2006, Version 5.0, p. 23)

DSAT: Disaster Situational Awareness Team, Department of Homeland Security.

DSB: Defense Science Board.

DSCA: Defense Support of Civil Authorities. (**Senate HSGA**, *A Nation Still Unprepared*, p. 631)

DSN: Defense Switched Network. (**DA**, *WMD-CST Operations*, December 2007, Glossary-2)

DSS: Disaster Social Services (**Capital Health Region**, Canada, *ICS Training SM*, 2007, 52)

DTE: Disaster Temporary Employees. (**Senate HSGA**, *A Nation Still Unprepared*, p. 631)

DTG: Date, Time Group. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, Glossary-2)

DTRA: Defense Threat Reduction Agency, Department of Defense.

DTRIM: Domestic Threat Response and Incident Management Policy Coordinating Committee, Office of Homeland Security (OHS), Executive Office of the President. [Became the Homeland Security Council during the George W. Bush Administration..] (**NRT**, *Reconciling Federal Emergency Response Plans*…, Nov. 13, 2003, Foreword)

Dual-Use (1972): From a 1972 "Presidential decision that the U.S. should maintain the 'current overall level of effort in its civil defense activities' and that there should be 'increased emphasis on dual-use plans, procedures and preparedness [for peacetime as well as attack emergencies] within the limitations of existing authority'." (**Chipman**, *CD for the 1980's*, 1979, pp. 4-5)

"The views and judgments of those in DCPA familiar with dual-use issues can be summarized as follows:

1. In general, the Federal view has been that attack preparedness is the primary objective of the CD program, with improved State and local readiness for peacetime emergencies being a secondary but desirable objective….The State and local vies is in general the reverse – attack preparedness tends to be seen as the secondary but desirable objective.
2. State and local CD agencies are responsible for preparedness for peacetime emergencies, under their own legislation, whereas the Federal Civil Defense Act of 1950 as amended, defines CD solely in terms of attack preparedness operations….
3. The historical record for two decades is conclusive that if the Federal Government wishes to develop attack readiness, it must provide full funding for the programs required. Examples include the procurement as well as the maintenance of radiological defense instruments, the shelter survey (started in 1962), development of local plans for use of shelters, crisis relocation (evacuation) planning, and training.
4. Local governments, including CD Directors, will however cooperate to the extent necessary to develop attack readiness in communities throughout the country, provided the Federal Government takes the lead and provides assistance on-site in attack-oriented planning, training, and related areas….
5. The State and local view that attack preparedness is primarily (though not entirely) a Federal responsibility is clearly consistent with both the Constitution and the Federal Civil Defense Act.
6. State and local concern for peacetime preparedness has increased progressively since the latter 1960's, influenced primarily by the ever-decreasing Federal budget and patent lack of commitment of CD attack preparedness, also by the climate of détente. Increased concentration on peacetime disaster has been seen as essential to their survival, by local and State CD agencies, as well as having merit in its own right and being their legal responsibility….
7. State and local concern for peacetime preparedness has advantages for attack-oriented preparedness, such as motivating State and local officials to commit some funds and effort to general emergency preparedness, in addition to the obvious desirability on the merits of saving live and property in a tornado or other peacetime disaster. Also, planning and training for peacetime emergencies has considerable benefit for attack readiness – as do local operations in an actual peacetime emergency….

8. Assets provided under the civil defense program have been of great value in peacetime emergencies: Emergency Operating Centers have been used to good effect on many occasions… CD sirens are routinely used to warn the public of tornadoes….
9. Reasonable attack readiness cannot be developed as a bonus or by-product of readiness for peacetime emergencies. The latter type of preparedness gets a community perhaps 20 or 30 percent of the way to a reasonable level of attack readiness – which requires a large number of additional, special systems and capabilities.
10. Developing attack preparedness, however, cannot help but improve local and State readiness for peacetime emergencies…
11. The *modus vivendi* that has evolved over the past two decades is in general that the Federal Government provides full funding for uniquely attack-oriented systems and capabilities…while the capabilities supported by matching funds are for the most part 'dual-use' in nature – necessary for both peacetime and attack emergencies (e.g., support of local and State CD staffs, or local warning systems).
12. This *modus vivendi* works well in practice, notwithstanding the difference in Federal as contrasted to State and local priorities and concerns. However, it is essential that *balance* be maintained: Some local and State governments, if left to their own devices, will emphasize peacetime disaster readiness to the exclusion of attack preparedness. That is, their notion of 'dual' use is not in fact dual.
13. The rhetoric, and to a degree, policy, of the Federal agency has varied over the years: In the early 1960's, nearly total emphasis on attack preparedness, under the accelerated CD program of President Kennedy; mid- and latter 1960's some recognition of peacetime preparedness; early to mid-1970's, stronger emphasis on peacetime preparedness… FY 1977, attack-only (per OMB direction); FY 1978-1979, significant emphasis again on peacetime preparedness but with attack preparedness being the primary objective….
14. ….
15. Opinion in Congress has been to the effect that attack preparedness is the primary mission, under the Federal Civil Defense Act, but that assistance provided under the Act can be used to prepare for peacetime disasters, provided this benefits both the attack and peacetime-preparedness missions.
16. ….
17. Many thus feel that FEMA would do well to stress attack preparedness while of course recognizing preparedness for peacetime disasters as a welcome bonus, and a significant and legitimate concern of States and localities. The latter can be relied on to add an ample tincture of emphasis on peacetime disaster readiness, so there is no compelling need for FEMA to stress peacetime preparedness at the expense (real or perceived) of attack readiness." (**Chipman**, *CD for the 1980's*, 1979, pp. 63-66)

Dual-Use (1974): "Local government is the keystone of civil preparedness. The Federal and State governments provide guidance and assistance to municipal and county governments in this readiness effort. The objective at all levels is to develop the capability to protect life and property in any type of disaster. In furthering that objective, the 'dual-use' concept long advocated by the Defense Civil Preparedness Agency is applied wherever possible. This is the concept of developing emergency systems useful both in the everyday routine of government as well as during emergencies; and of being useful both during peacetime or in event of war." (**DCPA**, *Foresight (FY 1973 DCPA Annual Report)*, 1974, p. 1)

"The main thrust of the National Civil Preparedness Program is to help States and communities develop dual-use emergency systems to protect people from both peacetime disasters or the effects of nuclear attack." (**DCPA**, *Foresight*, 1974, p. 4)

Dual-Use (1974): "A major objective of the DCPA public information program during the fiscal year was to reorient the American public, both in the public and private sector, about the new, dual-purpose nature of the national civil preparedness program. For many years, the objective of the national program was to prepare Americans solely to cope with the effects of nuclear attack. Now it is two-fold: to protect people from the emergencies and disasters of peacetime as well as from the effects of nuclear attack." (**DCPA**, *Foresight*, 1974, p. 23)

Dual-Use (1971): "There is…a growing awareness that communities prepared to meet the effects of attack are better prepared to deal with peacetime hazards and disasters. The nationwide civil defense system—involving federal, state, and local governments—affords an ever-increasing capability for protecting the citizen from environmental hazards and from natural as well as man-made disasters.

"During fiscal year 1971, increased emphasis was placed on finding ways and means to increase civil defense capabilities through the dual use of people, equipment, and dollars to meet critical peacetime community needs. Communications, education, and training for emergencies were stressed, and exchange of information on lifesaving emergency operations was encouraged…. Dual use is encouraged by OCD [Office of Civil Defense, DOA]" (**DOA Center of Military History**, *Department of the Army Historical Summary: FY 1971* (Chapter II, Operational Forces, Section "Civil Defense"), 1973, pp. 19-21)

Dual-Use (1953): "Communities, Cities and States throughout the Nation learned that an organized, trained Civil Defense was an important asset whenever and wherever natural disaster struck. In 1953 Civil Defense truly became a recognized community service – a new dimentsion of peacetime citizenship." (**FCDA**, *1953 Annual Report*, p. 1) "Our local Civil Defense organizations even now are gaining much needed experience – and paying their way – by serving in rescue and relief capacities in time of fire, flood, drought, or tornado damage. I count the dedication of the Federal Civil Defense Administration to these worthy emergency causes as one of the most practicable and forward-looking acts of the new administration." (**FCDA**, *1953 Annual Report*, p. 6)

Due Care: "A concept involving either the performance of an assessment of a business or person, or the performance of an act with a certain standard of care. Although "due care" can connote a legal obligation, it is commonly used when discussing voluntary assessments." (**DHS**, *Federal Continuity Directive* 1, November 2007, P-3)

DUNS: Data Universal Numbering System.

Dust Storm (Sand Storm): "Dust (sand) energetically lifted to great heights by strong and turbulent winds." (**UNDHA**, *DM Glossary*, 1992, p. 31)

DWG: Devolution Working Group (COOP). (**FEMA**, *Devolution of Operations Plan Template*)

Dynamic Testing: "Analysis of the response of structures under simulated loads of the type imposed by natural hazards." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 31)

EA: Enterprise Archtecture.

EAG: EMAC Advisory Group.

Early Warning: "The provision of timely and effective information, through identified institutions, that allows individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response. *Early warning systems include a chain of concerns, namely: understanding and mapping the hazard; monitoring and forecasting impending events; processing and disseminating understandable warnings to political authorities and the population, and undertaking appropriate and timely actions in response to the warnings*." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Earth Flow: "A mass movement characterized by down slope translation of loose material." (**UNDHA**, *DM Glossary*, 1992, 31-32)

Earthquake: "The sudden motion or trembling in the earth caused by an abrupt release of slowly accumulating strain which results in ground shaking, surface faulting, or ground failures. Most areas of the United States are subject to earthquakes, and they occur literally thousands of times per year. Most earthquake occurrences result in little or no damage; however, even a moderate earthquake (magnitude 6-7) such as the San Fernando quake in 1971 can result in $500 million in damages and the loss of life of 60 or more people." (**FEMA**, *IEMS, HICA MYDP* (CPG 1-34), 1985, p. A-1)

Earthquake: "An earthquake is the sudden, sometimes violent movement of the earth's surface from the release of energy in the earth's crust. Earthquakes are one of the most costly natural hazards faced by the Nation, posing a risk to 79 million Americans in 39 states. Although there are no guarantees of safety during an earthquake, identifying potential hazards ahead of time and advance planning can save lives and significantly reduce injuries and property damage. The number one cause of death in an earthquake is running out of a building and being struck by falling debris! With the stringent construction standards in force in the U.S. today, you are far safer staying **inside** a building when an earthquake occurs." (**FEMA**, "Fact Sheet – Earthquake" (FEMA 559), January 2007. p. 1)

Earthquake: "An earthquake is a sudden and rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth's surface. This shaking can sometimes trigger landslides, avalanches, flash floods, fires and tsunamis. Unlike other natural disasters such as hurricanes, there are no specific seasons for earthquakes…. In the United States about 5,000 quakes strike each year. Since 1900 earthquakes have occurred in 39 states and caused damage in all 50…. The potential cost of earthquakes has been growing because of increasing urban development in seismically active areas and the vulnerability of older buildings, which may not have been built or upgraded to current building codes…. only about 12 percent of homeowners in California now

buy earthquake coverage…. In April 2008 experts from the U.S. Geological Survey, USC's Southern California Earthquake Center and the State Geological Survey released an earthquake forecast indicating that a huge quake is far more likely in Southern California than in Northern California in the next 30 years. The report also concluded that the state is virtually certain to be hit by a major earthquake by 2028. The researchers found that the chance of a 6.7 magnitude temblor, equal to the 1994 Northridge quake, is 97 percent in Southern California and 93 percent in Northern California. The likelihood of a 7.5 quake, which is 16 times more intense than a 6.7 quake, is 37 percent in Southern California and 15 percent in Northern California. The study used new information about prehistoric earthquakes, locations of faults and their slip rates, and satellite data of the movement of the Earth's crust to calculate the likelihood of earthquakes in the state. Thomas Jordan, director of the Southern California Earthquake Center, said that both the data and the method of its collection have been improving. The report will be used to update seismic hazard maps that warn residents and local governments about areas at highest risk of property damage and loss of life." (**III**, *Earthquakes: Risk & Insurance Issues*, May 2008)

Earthquake: "Ground shaking caused by a sudden movement on a fault or by volcanic disturbance." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Earthquake Hazards Reduction Act of 1977, Public Law 95-124 (USC 7701 et. Seq.) as amended by Public Laws 101614, 105-47, 106-503, and 108-360.]: "SECTION 3. PURPOSE. It is the purpose of the Congress in this Act to reduce the risks of life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. The objectives of such program shall include:

(1) the education of the public, including State and local officials, as to earthquake phenomena, the identification of locations and structures which are especially susceptible to earthquake damage, ways to reduce the adverse consequences of an earthquake, and related matters;

(2) the development of technologically and economically feasible design and construction methods and procedures to make new and existing structures, in areas of seismic risk, earthquake resistant, giving priority to the development of such methods and procedures for power generating plants, dams, hospitals, schools, public utilities and other lifelines, public safety structures, high occupancy buildings, and other structures which are especially needed in time of disaster;

(3) the implementation, to the greatest extent practicable, in all areas of high or moderate seismic risk, of a system (including personnel, technology, and procedures) for predicting damaging earthquakes and for identifying, evaluating, and accurately characterizing seismic hazards;

(4) the development, publication, and promotion, in conjunction with State and local officials and professional organizations, of model building codes and other means to encourage consideration of information about seismic risk in making decisions about land-use policy and construction activity;

(5) the development, in areas of seismic risk, of improved understanding of, and capability with respect to, earthquake-related issues, including methods of mitigating the risks from earthquakes,

planning to prevent such risks, disseminating warnings of earthquakes, organizing emergency services, and planning for reconstruction and redevelopment after an earthquake;

(6) the development of ways to increase the use of existing scientific and engineering knowledge to mitigate earthquake hazards; and

(7) the development of ways to assure the availability of affordable earthquake insurance."

Earthquake Hypocenter (focus): "The place inside the earth where the faulting which is associated with the earthquake originated." (**UNDHA**, *DM Glossary*, 1992, 32)

Earthquake Legislation: "In 1977 the United States Congress enacted the Earthquake Hazards Reduction Act, in recognition of the fact that earthquakes pose the greatest potential threat of any single-event natural hazard confronting the nation. The Act directed the President to "establish and maintain an effective earthquake hazards reduction program."

Congress then created the National Earthquake Hazards Reduction Program, which gave lead responsibility to the federal government to provide direction, coordination, research and other support to efforts aimed at earthquake hazard mitigation and preparedness. The Federal Emergency Management Agency (FEMA), the United States Geological Survey, the National Science Foundation, and the National Institute of Standards and Technology were assigned specific roles. Recommendations were included on the duties of state governments, local governments, private organizations and individuals." (**III**, *Earthquakes*…, May 2008)

Earthquake Measurement: "The size and magnitude of an earthquake is measured in several different ways. The *Richter Scale* measures the size of earthquake waves. It was developed by Charles Richter in the 1930s and is a logarithmic measurement of the amount of energy released by an earthquake, see below. The *Mercalli Intensity Scale* evaluates the intensity of a quake according to observed severity at specific locations. It rates the intensity on a Roman numeral scale that ranges from I to XII. Today, seismologists are using the *Moment Magnitude Scale*, which measures the size of the earthquake's fault, and how much of the earth slips at the time of the quake. A number of readings are taken, averaged and then adjusted to generate numbers similar to the *Richter Scale*. This allows the magnitude of earthquakes measured on these new scales to be compared with earthquakes recorded earlier. According to the Moment Magnitude Scale, the severity of an earthquake is categorized as the following:

5.0 Small
5.0 – 6.0 Moderate
6.0 – 7.0 Large
7.0 - 7.8 Major
7.8 Great" (**Insurance Information Institute**, *Earthquakes*…, May 2008)

Earthquake Preparedness – Top 10 Recommendations: "As part of the preparations for the centennial of the 1906 San Francisco earthquake and fire, earthquake scientists, engineers, and emergency management experts in Northern California developed a top ten list of action items to

increase safety, reduce losses, and ensure a speedier recovery from the next major earthquake. Their list follows:

Develop a Culture of Preparedness
1. Every household, government agency, and business must know the seismic risks of the buildings they occupy, the transportation systems they use, and the utilities that serve them, as well as the actions they can take to protect themselves.
2. Every household, government agency, and business needs to be prepared to be self-sufficient for at least three days (72 hours) following a disaster.
3. Citizens and governments need to take steps to ensure adequate response care for special needs and vulnerable populations.
4. Government agencies, the region's major industries, and earthquake professionals have to work together to prepare the region to respond to and recover from major earthquakes. This can be done through region-wide, multi-organizational plans, training, exercises and coordination assessments, as well as continuing improvements in our collective understanding of seismic risks.
Invest in Reducing Losses
5. Building owners, governments, and the earth science and engineering professions must target potential collapse-hazard buildings for seismic mitigation, through retrofit, reduced occupancy, or reconstruction.
6. Governments and other relevant agencies must retrofit or replace all facilities essential for emergency response to ensure that they function following earthquakes. These facilities include fire and police stations, emergency communications centers, medical facilities, schools, shelters, and other community-serving facilities.
7. Governments and other relevant agencies must set priorities and retrofit or replace vulnerable response- and community-serving infrastructure, including cellular communications, airports, ports, roads and bridges, transportation, water, dams and levees, sewage and energy supplies, to ensure that functions can be resumed rapidly after earthquakes.
Ensure Resiliency in Recovery
8. Government agencies, the region's major industries, and earthquake professionals have to plan collaboratively for the housing, both short- and long-term, of residents displaced by potential fires, large numbers of uninhabitable buildings, and widespread economic and infrastructure disruption following a major earthquake.
9. Every household, government agency, and business has to assess and plan for financing the likely repair and recovery costs following a major earthquake.
10. Federal, state and local governments, the insurance industry, and the region's major industries have to collaborate to ensure adequate post-event funding to provide economic relief to individuals and communities after a major earthquake, when resources are most scarce yet crucial for recovery and reconstruction." (**Moehle**, *Risk of a Major Earthquake*…, 2007, pp. 5-6)

Earthquake Preparedness Center of Expertise: USACE, San Francisco. Renamed as a Readiness Support Center in 1998.

Earthquake Risk Nationally: "The first national study of earthquake risk in the United States was released by the Federal Emergency Management Agency (FEMA) in September 2000. The study estimated that over time earthquake losses in the United States could average $4.4 billion

dollars a year. This estimate includes only capital losses, such as repairing or replacing buildings, contents and inventory ($3.49 billion), and loss of income, including business interruption, rental income and wage losses ($0.93 billion). It does not cover damage and losses to critical facilities, transportation and utility lines or indirect economic losses.

The $4.4 billion estimate of probable annual earthquakes losses is close to the losses from floods and hurricanes. Flood losses averaged $5.2 billion annually during the period 1989 to 1998, according to the National Weather Service. The National Climatic Data Center estimates $5.4 billion in annual hurricane losses for the same period.

The report also points out that the potential cost of earthquakes has been growing because of increasing urban development in seismically active areas and the vulnerability of older buildings, which may not have been built or upgraded to current building codes. According to the study, 84 percent of the nation's annual losses are expected to occur in California, Oregon and Washington, with California accounting for the lion's share. Other areas at risk include the central United States, within the New Madrid Seismic zone, which includes parts of Illinois, Kentucky, Tennessee, Missouri, and Arkansas, and the Charleston, South Carolina area. In addition to California metropolitan areas, cities ranked among the top 40 high-loss potential urban areas include Seattle, Portland, New York City, Salt Lake City and St. Louis.

The study pointed out the need for increased recognition of metropolitan areas with "low seismic hazard" but "high seismic risk," such as New York City and Boston, which have high concentrations of buildings and an infrastructure that was built without taking into account seismic codes. Although the likelihood of catastrophic quakes occurring in these areas is statistically low, the potential cost is very high. In addition, because of the perception of low risk, neither the public nor the private sector has developed earthquake preparedness programs that teach people how to protect against earthquake damage and injury.

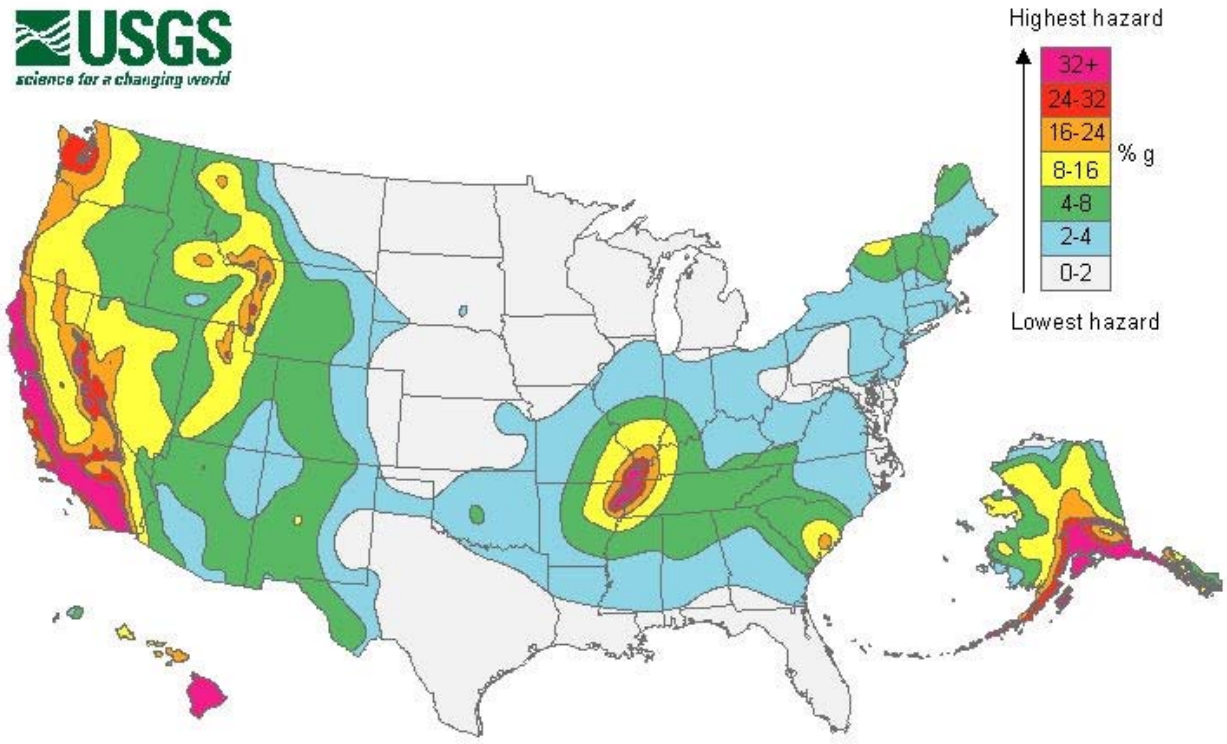
In the continental United States, earthquakes occur most frequently west of the Rocky Mountains. While the United States experiences only two percent of the world's earthquakes, some 90 percent of its population lives in seismically active areas. Statistics show that since 1900, earthquakes have occurred in 39 states and caused damage in all 50 states. More than 3,300 Americans have died in earthquakes during the last century.

Historically, the most violent earthquakes have occurred in the central United States. The largest earthquake in the continental United States was along the New Madrid Fault in Missouri, where a three-month long series of quakes in 1811-1812 included three quakes larger than a magnitude of 8. The state with the most major earthquakes is Alaska, but the one with the most damaging earthquakes is California." (**Insurance Information Institute**, *Earthquakes*…, May 2008)

Earthquake Risk Nationally: "Earthquakes pose the greatest natural danger in the United States for potential casualties and damage to buildings and infrastructure. According to a 2006 National Research Council (NRC) report,[28] 42 states have some degree of earthquake risk and 18 of those states have areas of high or very high seismicity. Over 75 million Americans live in

[28] National Research Council, *Improved Seismic Monitoring, Improved Decision Making – Assessing the Value of Reduced Uncertainty*, 2006.

urban areas with moderate to high earthquake risk. The NRC report notes that the estimated value of structures in all states prone to earthquake damage is approximately $8.6 trillion (2003 dollars)." (**NEHRP**, *Strategic Plan for the National Earthquake Hazards Reduction Program Fiscal Years 2008-2012* (Draft), April 2008, p.1)



The USGS National Seismic Hazard Maps emphasize that earthquakes are a national challenge with moderate to high hazard in 38 states. The data from these maps are incorporated into seismic provisions of model building codes — one of the central ways that NEHRP translates knowledge into practice. Image courtesy of USGS.

Earthquake Swarm: "A series of minor earth tremors (none of which may be identified as the main shock) that occurs within a limited area and time." (**UNDHA**, *DM Glossary*, 1992, 33)

EAS: Emergency Alert System.

ECAPS: Enterprise Coordination & Approval Processing System. (**FEMA**, *FAAT List*, 2005)

ECG: Enduring Constitutional Government. (**White House**, *HSPD-20*, May 9, 2007)

Ecological Disaster: See, "Disaster, Ecological"

Economic Injury Disaster Loan (EIDL, SBA): "Small businesses and small agricultural cooperatives that have suffered substantial economic injury resulting from a physical disaster or an agricultural production disaster designated by the Secretary of Agriculture may be eligible for the SBA's Economic Injury Disaster Loan Program. Substantial economic injury is the inability

of a business to meet its obligations as they mature and to pay its ordinary and necessary operating expenses. An EIDL can help you meet necessary financial obligations that your business could have met had the disaster not occurred. It provides relief from economic injury caused directly by the disaster and permits you to maintain a reasonable working capital position during the period affected by the disaster. The SBA provides EIDL assistance only to those businesses we determine are unable to obtain credit elsewhere. The SBA can provide up to $1.5 million in disaster assistance to a business. This loan cap includes both economic injury and physical damage assistance. Your loan amount will be based on your actual economic injury and financial needs. The interest rate on EIDLs cannot exceed 4 percent per year. The term of these loans cannot exceed 30 years. Your term will be determined by your ability to repay the loan. (See SBA publication No. DA-2, Physical Disaster Business Loans.) (**SBA**, *Economic Injury Loans*, 2007)

Economy Act (Title 31 USC, Section 1535). "The Economy Act permits one federal agency to request the support of another provided that the requested services cannot be obtained more cheaply or conveniently by contract. Under this act, a federal agency with lead responsibility may request the support of DOD without a Presidential declaration of an emergency as required by the Stafford Act." (**JCS/DoD**, *Civil Support*, 2007, p. F-2)

Economy of Effort: "A principle of design process that says that design and production time should be in proportion to the value it produces in the quality of the final product serving users' needs." (**Usability First**, *Usability Glossary: Economy of Effort*, 2005)

Ecosystem: "Basic ecological unit formed by the living environment of the animal and vegetable organisms interacting as a single functional entity." (**UNDHA**, *DM Gloss*., 1992, 33)

EDAP: Excess Delivery Acquisition Program. (**FEMA**, *TEI/TO Course Catalog*, 2008, 6)

Education: "Programs or courses designed to increase cognition or understanding of a subject as opposed to training which is provided to increase proficiency of a stated task." (**DHS**, *DHS Training Glossary*, 2006, p. 23)

EDXL: Emergency Data Exchange Language.

EEA: European Environmental Agency.

EEG: Exercise Evaluation Guides. (**DHS**, *HSEEP*, Vol. IV, 2006, p. 4)

EEGL: Exercise Evaluation Guide Library. (**FEMA**, *Welcome to the EEGL*, 2008)

EEI: Essential Elements of Information. (**USACE,** *Response Planning Guide*, 1995, p. 3-2)

EF: Essential Function. (**DHS**, *FCD 1*, Nov. 2007, p. O-1)

Effective Dose: "a measure of dose which takes into account both the type of radiation involved

and the radiological sensitivities of the organs and tissues irradiated…" (**Commonwealth of Australia, National Occupational Health & Safety Commission**, *Recommendations for Limiting Exposure to Ionizing Radiation*, 1995, Glossary, p. r-33)

Effective Dose: "The effective dose is a quantity developed by the International Commission on Radiological Protection (1991) for purposes of radiation protection. The effective dose is assumed to be related to the risk of a radiation-induced cancer or a severe hereditary effect. It takes into account (1) the absorbed doses that will be delivered to the separate organs or tissues of the body during the lifetime of an individual due to intakes of radioactive materials, (2) the absorbed doses due to irradiation by external sources, (3) the relative effectiveness of different radiation types in inducing cancers or severe hereditary effects, (4) the susceptibility of individual organs to develop a radiation-related cancer or severe hereditary effect, (5) considerations of the relative importance of fatal and nonfatal effects, and (6) the average years of life lost from a fatal health effect." (**Health Physics Society**, *Guidance for Protective Actions Following a Radiological Terrorist Event*, 2004, p. 4)

Effectiveness Assessment Used to Adjust Risk Scores in DHS Terrorism Risk Assessment: "Since fiscal year 2006, DHS has also implemented an Effectiveness Assessment to assess and score the effectiveness of the proposed investments submitted by grant applicants in addition to determining relative risk using the risk analysis model. This effectiveness assessment process has remained largely unchanged since it was first introduced by DHS. To assess the anticipated effectiveness of the various risk mitigation investments that states and urban areas proposed, DHS required states and urban areas to submit investment justifications as part of their grant application. The investment justifications included up to 15 "investments" or proposed solutions to address homeland security needs, which were identified by the states and urban areas through their strategic planning process. DHS used subject-matter experts as peer reviewers to assess these investment justifications. The criteria reviewers used to score the investment justifications included the following categories: relevance to the National Preparedness Guidance and to state and local homeland security plans, anticipated impact, sustainability, regionalism, and the implementation of each proposed investment. Reviewers on each panel assigned scores for these investment justifications, which according to DHS officials were averaged to determine a final effectiveness score for each state and urban area applicant. DHS then used these effectiveness assessment scores to calculate the final allocation of funds to states and urban areas." (**GAO**, *Homeland Security*: *DHS Improved its Risk-Based Grant Programs' Allocation and Management Methods, But Measuring Programs' Impact on National Capabilities Remains a Challenge*, March 11, 2008, p. 12)

EHP: Environmental Historic Program. (**FEMA**, *Region III Annual Report 2007*, 2008, 30)

EHS: Emergency Health Services. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B-36)

EHS: Extremely Hazardous Substance. (**EPA** *Technical Guidance for Hazards Analysis* 1987, i)

EIA: Environmental Impact Assessment. (**UNDAP**, *Techniques Used in Dstr. Risk Asmt.*, 2008)

EIDL: Economic Injury Disaster Loan (Small Business Administration)

Eight National Preparedness Priorities, 2007:

1. Expand Regional Collaboration
2. Implement NIMS and National Response Plan
3. Implement National Infrastructure Protection Plan
4. Strengthen Information Sharing and Collaboration Capabilities
5. Strengthen Interoperable and Operable Communications Capabilities
6. Strengthen CBRNE Detection, Response, and Decontamination Capabilities
7. Strengthen Medical Surge and Mass Prophylaxis Capabilities
8. Strengthen Planning and Citizen Preparedness (DHS, *NPG*, 2007, p. 11)

EIIP: Emergency Information Infrastructure Project.

Ejecta: "Material ejected from a volcano, including large fragments (bombs), cindery material (scoria), pebbles (lapilli) and fine particles (ash)." (**UNDHA**, *DM Glossary*, 1992, 33)

El Niño: "An anomalous warming of ocean water resulting from the oscillation of a current in the South Pacific, usually accompanied by heavy rain fall in the coastal region of Peru and Chile, and reduction of rainfall in equatorial Africa and Australia." (**UNDHA**, *DM Glossary*, 1992, 33)

ELE: Extinction Level Event. (**BBC**, *Extinction Level Events*, 1999)

Electro-Magnetic Pulse (EMP): "In addition to other effects, a nuclear weapon detonated in or above the earth's atmosphere can create an electromagnetic pulse (EMP), a high-density electrical field. An EMP acts like a stroke of lightning but is stronger, faster, and shorter. An EMP can seriously damage electronic devices connected to power sources or antennas. This includes communication systems, computers, electrical appliances, and automobile or aircraft ignition systems. The damage could range from a minor interruption to actual burnout of components. Most electronic equipment within 1,000 miles of a high-altitude nuclear detonation could be affected. Battery-powered radios with short antennas generally would not be affected. Although an EMP is unlikely to harm most people, it could harm those with pacemakers or other implanted electronic devices." (**FEMA,** *Are You Ready? Nuclear Blast*, March 23, 2006)

Electro-Magnetic Pulse (EMP): "EMP damage from a nuclear detonation may cause national disruptions in the information and communications infrastructures. EMP will be widespread, possibly across entire continental areas if nuclear detonation occurs at high altitudes, generally several tens to hundreds of miles above the ground. Nuclear detonations at any height will generate EMP, but the intensity and duration of the pulse and the affected area will vary with the height of detonation. It is expected that at a minimum, local disruptions in information and communications infrastructures will result from EMP. Nuclear detonations may also affect radio transmissions for some hours after the burst. It is important to understand that commercial electromagnetic interference standards are not designed to protect against EMP attacks. During such an event, there could be widespread disruption of electronics. All electronics may not be affected; however, because in order to do so, they would need to be connected to some larger

"antenna." For example, a turned-off computer without any cables or wires attached to it would likely avoid damage from an EMP, since the physical size of the computer may be small enough that it may not collect enough energy to be affected. But when it is plugged in, and/or when other cables are attached, it becomes part of a much larger network of wires, which form an antenna. Additionally, national concern triggered by the incident will demand immediate, accurate information flow both to the public and for emergency managers and leaders at all levels of government to manage the response effectively and efficiently." (**JCS**, *CBRNE CM*, 2006, I-9)

Electromagnetic Pulse (EMP) Vulnerability and Threat: "States or terrorists may well calculate that using a nuclear weapon for EMP attack offers the greatest utility

- EMP offers a "bigger bang for the buck" against US military forces in a regional conflict; or a means of damaging the US homeland
- EMP may be less provocative of US massive retaliation, compared to a nuclear attack on a US city that inflicts many prompt casualties
- Strategically and politically, EMP attack can: threaten entire regional or national infrastructures that are vital to US military strength and societal survival; challenge the integrity of allied regional coalitions; and pose an asymmetrical threat more dangerous to the high-tech West than to rogue states
- Technically and operationally, EMP attack can compensate for deficiencies in missile accuracy, fusing, range, reentry vehicle design, target location intelligence, and missile defense penetration." (**Commission to Access the Threat from High Altitude Electromagnetic Pulse (EMP)**, *Overview*. November 10, 2004, slide 7)

- "EMP is one of a small number of threats that may
  – Hold at risk the continued existence of today's US civil society
  – Disrupt our military forces and our ability to project military power
- The number of US adversaries capable of EMP attack is greater than during the Cold War
- Potential adversaries are aware of the EMP strategic attack option." (**EMP Commission**, 2004, slide 10)

Electronic Vaulting: "Electronically forwarding backup data to an offsite server or storage facility. Vaulting eliminates the need for tape shipment and therefore significantly shortens the time required to move the data offsite. Similar terms: vaulting, electronic backup. Associated terms: electronic journaling." (**DigitalCare**, *State of OR Business Continuity Wkshop*, 2006, 54)

Elements at Risk: "The population, buildings and civil engineering works, economic activities, public services and infrastructure, etc. exposed to hazards." (**UNDHA**, *DM Glossary*, 1992, 34)

Elevations in the Threat Alert Level: "The term 'elevations in the threat alert level' means any designation (including those that are less than national in scope) that raises the homeland security threat level to either the highest second highest threat level under the Homeland Security Advisory System." (U.S. Congress, *Implementing the 9/11 Commission Recommendations Act of 2007*, August 7, 2007, pp. 8-9)

Eligible Receiver: "Eligible Receiver is the code name of a 1997 internal exercise initiated by the Department of Defense. A "red team" of hackers from the National Security Agency (NSA)

was organized to infiltrate the Pentagon systems. The red team was only allowed to use publicly available computer equipment and hacking software. Although many details about Eligible Receiver are still classified, it is known that the red team was able to infiltrate and take control of the Pacific command center computers, as well as power grids and 911 systems in nine major U.S. cities." (**PBS Frontline**, *Cyber War*!, April 24, 2003)

ELT: Evacuation Liaison Team. (**NEMA**, *NEMA Committee Reports*, 2007 Annual Conf., p. 7)

EM: Emergency Management

EMA: Emergency Management Agency. (**DHS/ODP**, *FY 2006 EMPG Program*, 2005, p. B1)

EMAC: Emergency Management Assistance Compact. (**Senate HSGA**, *A Nation Still Unprepared*, p. 631) [See, "Emergency Management Assistance Compact"]

EMAC Advisory Group (EAG): "The EAG, comprised of representatives from national organizations whose membership are EMAC stakeholders, facilitates the effective integration of multi-discipline emergency response and recovery assets for nation-wide mutual aid through EMAC. Many of these resources are local teams which need the ability to be brought on as temporary state employees." (**NEMA**, *2007 EMAC Operational Manual*, April 2007. p. V-2)

EMAP: Emergency Management Accreditation Program.

Embedded Assessment: "Embedded assessment is a process whereby a faculty member consciously, explicitly and systematically monitors whether or not students are meeting the core curriculum goals in a specific core curriculum course. Assessment items are incorporated into existing evaluative instruments (e.g., exams, quizzes, short papers) already being administered in a course. The Purpose of Embedded Assessment: Embedded assessment allows a faculty member teaching a core curriculum course to determine whether or not students are fulfilling the core curriculum goals relevant that faculty member's course. In many cases, this knowledge will enable a faculty member to confirm that his or her pedagogical approach is effective in giving students the opportunity to meet core curriculum goals. When data indicate that students are not meeting core curriculum goals, a faculty member may want to reflect on how he or she might alter pedagogical approaches to provide more opportunity for students to master core goals." (**Raymond**, *Embedded Assessment Plan*, 2004, p. 1)

Emergencies, Disasters, and Crises: "What do emergencies, disasters, and crises have in common? Simply, that something bad has happened or is happening. When something bad and/or unexpected happens, it may be called an emergency, a disaster, or a crisis depending on the magnitude of the event and the current phase of the event." (**CDC,** *CERC*, 2002, p. 6)

Emergencies Involving Chemical or Biological Weapons: "Pursuant to 10 U.S.C. 382, in response to an emergency involving biological or chemical WMD that is beyond the capabilities of civilian authorities to handle, the Attorney General may request DOD assistance directly. Assistance to be provided includes monitoring, containing, disabling, and disposing of the weapon, as well as direct law enforcement assistance that would otherwise violate the Posse

Comitatus Act. Among other factors, such assistance must be considered necessary for the immediate protection of human life." (**DHS**, *NRP* (Draft #1), February 25, 2004, 70)

Emergencies Involving Nuclear Materials. "18 U.S.C. 831(e) authorizes the Attorney General to request DOD law enforcement assistance – including the authority to arrest and conduct searches – notwithstanding the prohibitions of the Posse Comitatus Act -- when both the Attorney General and Secretary of Defense agree that an "emergency situation" exists and the Secretary of Defense determines that the requested assistance will not impede military readiness. An emergency situations involving nuclear material is defined as a circumstance that poses a serious threat to the United States in which (1) enforcement of the law would be seriously impaired if the assistance were not provided and (2) civilian law enforcement personnel are not capable of enforcing the law. In addition, the statute authorizes DOD personnel to engage in "such other activity as is incident to the enforcement of this section, or to the protection of persons or property from conduct that violates this section." (**DHS**, *NRP* (Draft #1), Feb 25, 2004, pp. 70-71)

Emergency: "A condition of disaster or of extreme peril to the safety of persons and property caused by such conditions as air pollution, fire, flood, hazardous material incident, storm, epidemic, riot, drought, sudden and severe energy shortage, plant or animal infestations or disease, the Governor's warning of an earthquake or volcanic prediction, or an earthquake or other conditions, other than conditions resulting from a labor controversy." (**CA OES**, *SEMS Guidelines*, Glossary, p. 7)

Emergency/Exigent Circumstances: "Circumstances that may include the existence of a threat to public health or public safety, or other unique circumstances that warrant immediate action." (**DHS**, *Procedural Manual…CVI*, June 2007, p. 7)

Emergency: "An unexpected event which places life and/or property in danger and requires an immediate response through the use of routine community resources and procedures. Examples would be a multi-automobile wreck, especially involving injury or death, and a fire caused by lightning strike which spreads to other buildings." Emergencies can be handled with local resources. (**Drabek** 1996, Session 2, p. 3)

Emergency: Any hurricane, tornado, storm, flood, highwater, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, explosion, nuclear accident, or other natural or manmade catastrophe in any part of the United States. Any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety or to lessen the threat of a catastrophe in any part of the United States. (**FEMA**, *Definitions of Terms*, **1990**)

Emergency: "Any occasion or instance--such as a hurricane, tornado, storm, flood, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, fire, explosion, nuclear accident, or any other natural or man-made catastrophe--that warrants action to save lives and to protect property, public health, and safety." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), **1996**, p. GLO-2)

Emergency: "Any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States. The Governor of a State, or the Acting Governor in his/her absence, may request that the President declare an emergency when an incident occurs or threatens to occur in a State which would not qualify under the definition of a major disaster. Assistance authorized by an emergency declaration is limited to immediate and short-term assistance, and may not exceed $5 million, except when authorized by the FEMA Associate Director for Response and Recovery under certain conditions." (**FEMA** *Disaster Dictionary* **2001**, 39; cites Robert T Stafford Act 102; 44 CFR 206.2, 206.35; 206.63, 206.66, and 503)

Emergency: "Emergencies include acts of terrorism, hurricanes and severe storms." (**FEMA**, *Strategic Plan* (Draft), October 10, 2007, p. 1)

Emergency: "Sudden, urgent, usually unexpected occurrence or event requiring immediate action." (**ISO 22399**, *Societal Security*…, 2007, 2)

Emergency: "An event that threatens people, property, business continuity, or the community and may develop into a disaster or critical incident." (**Jones**, *Critical Incident* Protocol, 2000, 37)

Emergency: "Any event requiring increased coordination or response beyond the routine in order to save lives, protect property, protect the public health and safety, or lessen or avert the threat of a disaster." (**Michigan EMD** 1998, 6)

Emergency: "A sudden and unexpected event calling for immediate action." (**NFPA 471**, 1997, p. 7)

Emergency: A more serious situation than an incident, but less serious than a disaster. (**Oxford Canadian Dictionary**, 1998; noted by Pearce 2000, Chapter 2, 2)

Emergency: "…an unexpected occurrence or sudden situation that requires immediate action…It may involve communities (as a disaster does) or individuals (which a disaster does not)…" (**Porfiriev** 1995, 291).

Emergency: An event in which established emergency organizations (such as the American Red Cross or utilities) need to expand their activities. (**Quarantelli** 1987, 25.)

Emergency: An extraordinary situation in which people are unable to meet their basic survival needs, or there are serious and immediate threats to human life and well being. An emergency situation may arise as a result of a disaster, a cumulative process of neglect or environmental degradation, or when a disaster threatens and emergency measures have to be taken to prevent or at least limit the effects of the eventual impact. (**Simeon Institute** 1998)

Emergency: "Any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts to save lives and to protect property and

public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States." (**Stafford Act**, (FEMA 592), June 2007, p. 14)

Emergency: "…a sudden critical juncture demanding immediate remedial action." (**Terry** 2001, 327)

Emergency: "A sudden and usually unforeseen event that calls for immediate measures to minimize its adverse consequences." (**UNDHA**, *Disaster Management Glossary*, 1992, 34)

Emergency, States of Emergency (California State Law):[29]

Local emergency: Conditions of disaster or extreme peril to the safety of persons and property within a city or county, which require the combined forces of other cities or counties to combat.

State of emergency: Conditions of disaster or of extreme peril to the safety of persons and property that require the combined forces of one or more of the state's six mutual aid regions to combat.

State of war emergency: When the state or nation is attacked by an enemy of the United States, or upon receipt by the state of a warning from the federal government indicating that such an enemy attack is probable or imminent." (**Little Hoover**, *Safeguarding Golden State*, 2007, 7)

Emergency Alert System (EAS): "A national communications network and public warning system started in 1994 that replaced the Emergency Broadcast System jointly administered by the Federal Communications Commission, FEMA, and the National Weather Service. The System requires broadcasters, cable television systems, wireless cable systems, satellite digital audio radio service (SDARS) providers and, effective in May 2007, direct broadcast satellite (DBS) service providers to provide the communications capability to the President to address the American public during a national emergency. The system also may be used by state and local authorities to deliver important emergency information such as AMBER alerts and weather information targeted to a specific area." (**HSC**, *NCPIP*, August 2007, p. 61)

Emergency Alert System (EAS) Purpose and Scope:

- National-level EAS provides the President & senior officials an assured method for addressing the nation during emergencies
- Provides unlimited duration audio message; auto-seizes radio/TV networks
- National-level EAS activation rests solely with President
- National-level EAS cascades from the FEMA Operations Center (FOC) →Primary Entry Point (PEP) stations →all major radio/TV broadcasters
- Planned Digital EAS will allow President and senior officials to send text, voice, and video messages; permits a voluntary broadcast option
- State and local EAS activations permitted/encouraged:
    - Audio message length of up to two minutes; voluntary broadcast

[29] Cited: California Government Code, Chapter 7. *Emergency Services Act*. http://www.leginfo.ca.gov. Also, State of California. September 2005. *Emergency Plan*.

- Used frequently; National Weather Service originates ~ 80% of EAS alerts
- EAS is also used as the main method to disseminate AMBER Alerts. (**FEMA** *IPAWS Update*, 2007, slide 11)

Emergency Assessment/Diagnosis: "The ability to achieve and maintain a common operating picture, including the ability to detect an incident, determine its impact, determine its likely evolution and course, classify the incident, and make government notifications." (**Homeland Security Council**, *National Planning Scenarios*, 2006, p. vi)

Emergency Assistance: "Assistance required by individuals, families, and their communities to ensure that immediate needs beyond the scope of the traditional "mass care" services provided at the local level are addressed. These services include support to evacuations (including registration and tracking of evacuees); reunification of families; pet evacuation and sheltering; support to specialized shelters; support to medical shelters; nonconventional shelter management; coordination of donated goods and services; and coordination of voluntary agency assistance." (**DHS**, *National Response Framework Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex* (Comment Draft), September 10, 2007, p. 2)

Emergency Assistance Declaration Procedure, Stafford Act (Title V, Sec. 501, 42 U.S.C. 5191): "(a) Request and declaration - All requests for a declaration by the President that an emergency exists shall be made by the Governor of the affected State. Such a request shall be based on a finding that the situation is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments and that Federal assistance is necessary. As a part of such request, and as a prerequisite to emergency assistance under this Act, the Governor shall take appropriate action under State law and direct execution of the State's emergency plan. The Governor shall furnish information describing the State and local efforts and resources which have been or will be used to alleviate the emergency, and will define the type and extent of Federal aid required. Based upon such Governor's request, the President may declare that an emergency exists.

(b) Certain emergencies involving Federal primary responsibility - The President may exercise any authority vested in him by section 502 or section 503 with respect to an emergency when he determines that an emergency exists for which the primary responsibility for response rests with the United States because the emergency involves a subject area for which, under the Constitution or laws of the United States, the United States exercises exclusive or preeminent responsibility and authority. In determining whether or not such an emergency exists, the President shall consult the Governor of any affected State, if practicable. The President's determination may be made without regard to subsection (a)." (**Stafford Act**, June 2007 (**FEMA 592**), p. 51)

Emergency Coordinator: "The key senior official appointed within an organizational element or higher, who serves as the coordinator for all National Response Framework (NRF) and National Incident Management System (NIMS) continuity of operations related issues." (**DHS**, *Federal Continuity Directive 1*, November 2007, P-3)

Emergency Declaration: Under the Stafford Act, "An **emergency declaration** is more limited in scope and without the long-term Federal recovery programs of a major disaster declaration." **(DHS**, *NRF Comment Draft*, September 2007, p. 39)

Emergency/Disaster Management: "An ongoing process to prevent, mitigate, prepare for, respond to, and recover from an incident that threatens life, property, operations, or the environment." (**NFPA 1600**, 2007, p. 7)

Emergency Health Services: "**SEC. 1102 Definitions.** As used in this part:
(1) "Emergency health services" means medical and dental care for the civilian population in all of their specialties and adjunct therapeutic fields, and the planning, provision, and operation of first aid stations, hospitals, and clinics; preventive health services, including detection, identification and control of communicable diseases, their vectors, and other public health hazards, inspection and control of purity and safety of food, drugs, and biologicals; vital statistics services; rehabilitation and related services for disabled survivors; preventive and curative care related to human exposure to radiological, chemical, and biological warfare agents; sanitary aspects of disposal of the dead; food and milk sanitation; community solid waste disposal; emergency public water supply; and the determination of the health significance of water pollution and the provision of other services pertaining to health aspects of water use and water-borne wastes as set forth in an agreement between the Secretary of Health, Education, and Welfare and the Secretary of the Interior, approved by the President, pursuant to Reorganization Plan No. 2 of 1966, which plan placed upon the Secretary of the Interior responsibilities for the prevention and control of water pollution. It shall be understood that health services for the purposes of this order, however, do not encompass the following areas for which the Department of Agriculture has responsibility: plant and animal diseases and pest prevention, control, and eradication, wholesomeness of meat and meat products, and poultry and poultry products in establishments under continuous inspection service by the Department of Agriculture, veterinary biologicals, agricultural commodities and products owned by the Commodity Credit Corporation or the Secretary of Agriculture, livestock, agricultural commodities stored or harvestable on farms and ranches, agricultural lands and water, and registration of pesticides." (**White House**, *Executive Order 11490, Assigning Emergency Preparedness Functions to Federal Departments and Agencies*, October 28, 1969) [Note 1: Revoked and replaced by *Executive Order 12656*, *Assignment of Emergency Preparedness Responsibilities* (**White House** (President Ronald Reagan) November 18, 1988). Note 2: See E.O. 11001, Feb 16, 1962 for earlier and similar definition.]

Emergency Incident: "Any situation to which the emergency services organization responds to deliver emergency services, including rescue, fire suppression, emergency medical care, special operations, law enforcement and other forms of hazard control and mitigation." (**Capital Health Region**, Canada, *ICS Training SM*, 2007, 53)

Emergency Information Infrastructure Project (EIIP): The EIIP "is a non-profit educational organization, dedicated to enhancing the practice of emergency management, and thereby public safety, through offering professional development opportunities to practitioners and other interested persons. One of the ways It achieves this goal is through…presentations in the "Virtual

Forum" of timely disaster-related topics by experts in their fields, by means of Internet-based Live Chat technology." (**EIIP**, *About the EIIP and the Virtual Forum*, 2000)

Emergency Management: "Definition: the coordination and integration of all activities necessary to build, sustain and improve the capabilities to prepare for, respond to, recover from, or mitigate against threatened or actual disasters or emergencies, regardless of cause. Extended Definition: emergency management activities in response to an incident are a component of overall incident management and are aligned with parallel response processes associated with prevention and protection. Annotation: The body of knowledge with respect to comprehensive emergency management includes the concept of emergency management "programs." These "programs" are comprised of functional areas including operations and procedures, hazard and risk identification, plans and procedures (strategic plans, operational plans, recovery plans), hazard mitigation, public information and public education, finance and administration, etc. etc." (**DHS**, *Lexicon*, October 23, 2007, p. 9)

Emergency Management: The entire process of planning and intervention for rescue and relief to reduce impact of emergencies as well as the response and recovery measures, to mitigate the significant social, economic and environmental consequences to communities and ultimately to the country, usually through an emergency operation center, EOC. (**Disaster and Emergency Reference Center** 1998)

Emergency Management: The process by which the uncertainties that exist in potentially hazardous situations can be minimized and public safety maximized. The goal is to limit the costs of emergencies or disasters through the implementation of a series of strategies and tactics reflecting the full life cycle of disaster, i.e., preparedness, response, recovery, and mitigation. (**Drabek**1997)

Emergency Management: "Emergency management is the discipline and profession of applying science, technology, planning, and management to deal with extreme events that can injure or kill large numbers of people, do extensive damage to property, and disrupt community life." (**Drabek and Hoetmer** 1991, xvii).

Emergency Management: "Activities that include prevention, preparedness, response, recovery, rehabilitation, advocacy, and legislation, of emergencies irrespective of their type, size, and location, and whose purpose is reduction in death, disability, damage, and destruction." (**Dykstra** 2003, 3)

"…improving the livelihoods of individuals, communities and nations by measures required to put a stop to unwarranted deaths, disability, damage, and destruction." (**Dykstra** 2003, 4)

Emergency Management: "…the managerial function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters." (**EM Roundtable**, 2007, p. 4)

Emergency Management: Organized analysis, planning, decision-making, and assignment of available resources to mitigate (lessen the effect of or prevent) prepare for, respond to, and recover

from the effects of all hazards. The goal of emergency management is to save lives, prevent injuries, and protect property and the environment if an emergency occurs. (**FEMA** 1995, I-6).

Emergency Management: "The process through which America prepares for emergencies and disasters, responds to them, recovers from them, rebuilds, and mitigates their future effects." (**FEMA**, *Disaster Dictionary* 2001, 40, citing FEMA Strategic Plan)

Emergency Management: "The process through which the Nation prepares for emergencies and disasters, mitigates their effects, and responds to and recovers from them." (**FEMA**, *A Nation Prepared – FEMA Strategic Plan – Fiscal Years 2003-2008*, 2002, p. 57)

Emergency Management: "Emergency management is really about building relationships, whether you are in the public or private sector. And in building those relationships, it is important to remember not to *tell*, but to *talk*." (**Gabriel**, Edward, Director of Crisis Management at Walt Disney Corp., cited in **AHRQ**, Mass Medical Care, 2007, p. 44 in Chapter 4, "Prehospital Care")

Emergency Management: "A simple definition is that emergency management is the discipline dealing with risk and risk avoidance." (**Haddow and Bullock** 2003, 1)

Emergency Management: "Describes the science of managing complex systems and multidisciplinary personnel to address extreme events, across all hazards, and through the phases of mitigation, preparedness, response, and recovery." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-3, Glossary)

Emergency Management: "…'emergency management' means the preparation for and the coordination of all emergency functions, other than functions for which military forces or other federal agencies are primarily responsible, to prevent, minimize, and repair injury and damage resulting from disasters. The functions include the following:

(1) Firefighting services.
(2) Police services.
(3) Medical and health services.
(4) Rescue.
(5) Engineering.
(6) Warning services.
(7) Communications.
(8) Radiological, chemical, and other special weapons defense.
(9) Evacuation of persons from stricken areas.
(10) Emergency welfare services.
(11) Emergency transportation.
(12) Plant protection.
(13) Temporary restoration of public utility services.
(14) Other functions related to civilian protection.
(15) All other activities necessary or incidental to the preparation for and coordination of the functions described in subdivisions (1) through (14). (**Indiana Code,** 2005)

Emergency Management: "Imagine that you were somehow able to watch, from a distance, a major disaster unfold. You would see suffering and devastation, but that would only be part of the story. You would also see lots of people move into action – people from government agencies, private organizations, businesses, and volunteer groups. You would see them **working as a team** to keep the essential services in operation, provide first aid, food and water, clear debris, rebuild homes and businesses, and prevent the disaster from happening again.

"Over time you would begin to see a pattern to this activity. You would see how people work together when disasters occur. You would see how "first responders" risk their lives to help others. You would see the results of planning and coordination in the execution of an effective response. And you would learn that communities and individuals could lessen the damage that disasters cause, and sometimes avoid it altogether.

"The pattern behind this activity is called emergency management. It is the process through which America prepares for emergencies and disasters, responds to them, recovers from them, rebuilds and mitigates their future effects." (**Libby**, *Statement by*, July 19, 2007, pp. 2-3)

Emergency Management: "A Comprehensive system of policies, practices, and procedures designed to protect people and property from the effects of emergencies or disasters. It includes programs, resources, and capabilities to mitigate against, prepare for, respond to, and recover from effects of all hazards." (**Michigan DEM** 1998, 6)

Emergency Management: "An ongoing process to prevent, mitigate, prepare for, respond to, and recover from an incident that threatens life, property, operations, or the environment." (**NFPA 1600**, 2007, p. 7)

"The emergency management and business continuity community comprises many different entities including the government at distinct levels (e.g., federal, state/provincial, territorial, tribal, indigenous, and local levels); business and industry; nongovernmental organizations; and individual citizens. Each of these entities has its own focus, unique missions and responsibilities, varied resources and capabilities, and operating principles and procedures. Each entity can have its own definition of disaster. (**NFPA 1600**, 2007, p. 11)

Emergency Management: "...the term 'emergency management' means the governmental function that coordinates and integrates all activities to build, sustain, and improve the capability to prepare for, protect against, respond to, recover from, or mitigate against threatened or actual natural disasters, acts of terrorism or other man-made disasters;..." (**Public Law 109-295 (120 Stat. 1394)** October 4, 2006, *Department of Homeland Security Appropriations Act, 2007* (also referred to as **Post-Katrina Emergency Management Reform Act of 2006**), Title 6, p. 40).

Emergency Management: Emergency management refers to "the expert systems that manage people and resources to deal with disasters." (**Rubin** 2000, 1)

Emergency Management: A range of measures to manage risks to communities and the environment. It involves the development and maintenance of arrangements to prevent the effect of,

prepare for, respond to or recover from events causing significant community disruption or environmental damage. (**Salter** 1997–98, 28)

Emergency Management: "The organization and management of resources and responsibilities for dealing with all aspects of emergencies, in particularly preparedness, response and rehabilitation. *Emergency management involves plans, structures and arrangements established to engage the normal endeavours of government, voluntary and private agencies in a comprehensive and coordinated way to respond to the whole spectrum of emergency needs. This is also known as disaster management*." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Emergency Management: The organization and management of resources for dealing with all aspects of emergencies. Emergency management involves the plans, structures and arrangements which are established to bring together the normal endeavors of government, voluntary and private agencies in a comprehensive and coordinated way to deal with the whole spectrum of emergency needs including prevention, response and recovery. (**Victorian Department of Justice** 1997)

Emergency Management: "In simplest terms, emergency management is the management of risk so that societies can live with environmental and technical hazards and deal with the disasters that they cause." (**Waugh** 2000, 3)

Emergency Management, 1st Usage in a FEMA Predecessor Organization Known to Drafter: "The Staff College gave 8 courses to a total of 263 persons. The courses were 'Elements of Nonmilitary Defense for State and Local Officials,' given three times; 'State and Local Action in Natural Disasters,' given twice; and 'Emergency Management and Operations for State and Local Officials,' 'Emergency Management and Operations for County Officials,' and 'Federal Action in Major Disasters," each given once." (**FCDA**, *Annual Report 1958*, 20)

Emergency Management (Local): "Local emergency management programs mitigate, prepare for, and coordinate the response to and recovery from both natural and human-caused disasters. In doing so, local emergency management performs the tasks required to meet local government's first responsibility to protect lives, preserve property and the environment, and protect public health." (**Wa State EM Council**, *A Study of Emergency Management at the Local Program Level*, 2004, p. 12)

Emergency Management (Local): "Local emergency management is most successful when it is supported by a system of national guidelines, state outreach, local priority, and public awareness." (**Wa State EM Council**, *A Study of EM at the Local Program Level*, 2004, p. 22)

Emergency Management Agency (EMA): "Organizations, both local and State, that coordinate preparation, recognition, response, and recovery for WMD and/or catastrophic incidents." (**FEMA**, *TIE/TO Course Catalog*, 2008, p. 2)

Emergency Management (and/or Business Continuity Advisory Committees): "Members of the advisory committee should participate with the clear understanding that the objective is to minimize turnover of committee members to maintain an effective committee. Within the

private sector, representatives can include, but are not limited to, information technology and communications, plant operations, transportation, maintenance, engineering, personnel, public relations, environment, legal, finance, risk management, health and safety, security, stakeholders, and fire fighting/rescue. Within the public sector, representatives can include police, fire, emergency medical services, engineering, public works, environmental protection, public health, finance, education, emergency management, legal, transportation authorities, homeland security, stakeholders, and the military (e.g., the National Guard). When determining the representation on the committee, consideration should be given to public sector representation on a private sector committee and vice versa. This will help to establish a coordinated and cooperative approach to the program." (**NFPA 1600**, 2007, p. 12)

Emergency Management and Response Information Sharing and Analysis Center (**EMR-ISC):** "About EMR-ISAC: The U.S. Fire Administration established the Emergency Management and Response-Information Sharing and Analysis Center (EMR-ISAC) to:
• Collect, analyze and disseminate Critical Infrastructure Protection (CIP) information in support of federal government initiatives, and
• Encourage the leaders, owners and operators of the ESS throughout the nation to practice CIP [Critical Infrastructure Protection]." (**EMR-ISC**, *MRISC Brochure*, March 2005)

Emergency Management and Response Information Sharing and Analysis Center (**EMR-ISC) Mission:** "The Mission of EMR-ISAC: The EMR-ISAC promotes CIP by providing timely and consequential information to the nation's ESS. It performs the following major tasks to accomplish this mission:
• Facilitates CIP information sharing between DHS and ESS.
• Disseminates CIP For Official Use Only (FOUO) Notices.
• Conducts daily research for current CIP issues.
• Publishes weekly INFOGRAMs and periodic CIP Bulletins.
• Develops instructional materials for CIP implementation or training needs.
• Provides no-cost technical CIP assistance to the ESS leadership.
• Encourages the reporting of CIP suspicious activities to the NICC." (**EMR-ISC**, *Brochure*)

Emergency Management Assistance Compact (EMAC): "The EMAC was congressionally ratified in 1996 to provide a fast and flexible response system through which States send requested personnel and equipment to help disaster relief efforts in other States. All 50 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands have enacted legislation to become members of the EMAC." (**DHS**, *National Preparedness Guidelines*, Sep. 2007, p. 12)

Emergency Management Assistance Compact (EMAC): "Administered by the National Emergency Management Association, EMAC is a congressionally ratified organization that provides form and structure to the interstate mutual aid and assistance process. Through EMAC, a State can request and receive assistance from other member States." (**DHS**, *NRF Comment Draft*, 2007, p. 38) For more detail about EMAC, see http://www.emacweb.org/.

Emergency Management Assistance Compact (EMAC): "EMAC, Emergency Management Assistance Compact, is a national Governor's interstate mutual aid compact that facilitates the

sharing of resources, personnel and equipment across state lines during times of disaster and emergency. EMAC is formalized into law by member parties. (**EMAC**, *EMAC Overview*, 2007)

Emergency Management Assistance Compact (EMAC): "EMAP uses NFPA 1600 as the basis for guidelines that are used to accredit state, local, and tribal emergency management programs. Accreditation involves review of documentation, observations, and interviews with program officials (e.g., officials with the emergency management agency and from partner agencies, such as transportation, health, utilities, environmental, and law enforcement). (**NFPA 1600**, 2007, 11)

Emergency Management Assistance Compact (EMAC): "Because of the scale of the Hurricane Andrew disaster in 1992, the governors of the Southern states organized a regional mutual aid system to facilitate the sharing of resources among their states. The EMAC system was created to supplement state and local resources and to provide essential manpower and equipment in the early stages of disaster. In 1995, the compact was expanded into a national state-to-state mutual aid agreement, and it has become a critical resource for dealing with catastrophic disasters. Its also serves as a mechanism for collaboration at the local, state, and federal levels…It facilitates the sharing of resources across state borders and encourages similar arrangements within state borders…. The EMAC system requires that governors formally request assistance and that funding be available — or at least anticipated — to cover the negotiated expenses. " (**Waugh**, "EMAC, Katrina, and the Governors of Louisiana." *Public Administration Review* (Special Edition), December 2007, pp. 107-108)

EMAC is administered by the National Emergency Management Association, the professional organization for state emergency management directors, through its National Coordination Group. EMAC supports a broadcast system for the sharing of information, processes requests for assistance, and provides a Web site with the operations manual, points of contact for state contract officers, and other information… When governors declare states of emergency, EMAC deploys Advance Teams (also known as "A-Teams") to assist with the process for requesting assistance. The request is communicated to member states by email, the EMAC broadcast system, the EMAC Web site, and other means. Member states consider available resources and costs and contact the state needing assistance. The requesting state considers the offers, makes its choice, and negotiates the terms of the agreement. Changes in mission require further negotiation." (Ibid, p. 109)

Emergency Management Challenges/Problems/Areas for Improvement:

- While performance standards for emergency management are gaining broader acceptance, the absence of a single standard applied consistently across the nation makes it difficult to define baseline capabilities or assess current levels of preparedness.

- EM capabilities at the local level often do not meet…basic needs of local jurisdictions.[30]

[30] Of the jurisdictions surveyed in this study, those with full-time emergency management directors or managers, rate overall preparedness higher than those whose directors or managers are not full-time. Overall preparedness is significantly lower in jurisdictions with directors or managers who are only able to devote less than 20 percent of their time to these responsibilities. Small cities in particular struggle to maintain readiness for a disaster. Cities with a population less than 5,000 that are responsible for their own emergency management consistently report

- While most state and local laws are sufficient to support local emergency management efforts, a lack of procedural compliance and limited enforcement contribute to a patchwork of capable and less-than-capable emergency management programs as well as inconsistencies in disaster preparedness.[31]

- Disparities in resources for local programs have led to significant inconsistencies in State capability and preparedness.[32]

- A lack of adequate dedicated support resources available at the state level contributes to lower levels of overall local preparedness, specifically inadequate capability levels in mitigation and planning, and insufficient training and exercises, regional collaboration, and local outreach.[33]

- There is a lack of routine communication within and among local jurisdictions regarding emergency management requirements, roles, responsibilities, and resources.[34]

- A lack of consistent emergency management…education programs for local elected officials has created uncertainty among those officials concerning their statutory and

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inadequate capability to mitigate, plan for, respond to, and recover from an emergency or disaster. Such cities commonly delegate emergency management responsibilities to a director who is not full-time and who also occupies another significant position, such as city mayor, administrator, police, or fire official. (p. 19)

[31] Existing state law requires each political subdivision to establish a local emergency management organization, or to be a member of a joint local organization. The law also directs political subdivisions to appoint a director, develop a comprehensive emergency management plan, and submit an annual emergency management program paper. It further encourages local programs to develop hazard mitigation plans, and to use a uniform incident command system for disaster response operations. Existing state law does little, however, to measure the quality of local programs or the commitment of emergency management directors. It does not compel cities and counties to meet these requirements, nor does it give the Washington State Emergency Management Division (EMD) the authority to compel local jurisdictions to comply. State law does not establish a mechanism to enforce the law, nor does it clarify such terms as "local organization," or "director." Many jurisdictions currently comply with this law by delegating emergency management responsibilities to a sheriff, police chief or fire chief as additional duties. The result is a mix of capable and less-than-capable emergency management programs across the state. This wide range of response capability, from very capable to inadequate, compromises overall preparedness, especially in multi-jurisdictional emergencies and disasters. (p. 18)

[32] "....survey findings and research results of this study demonstrate that inconsistencies across local emergency management programs compromise overall statewide disaster preparedness." (p. 15)

[33] The short turn-around time and tremendous administrative requirements of homeland security grants have subsumed other activities at the Washington State Emergency Management Division (EMD), according to both EMD staff and local directors. As a result, mitigation activities, local planning assistance, and outreach efforts are not being performed at previous levels and are inadequate to effectively support local emergency management programs. Many local programs, struggling to maintain even a minimum of preparedness, report that a state liaison that is able to provide assistance, guidance and technical expertise could make the most significant impact on local preparedness and capabilities. (p. 19)

[34] Many of these small cities, as well as other jurisdictions participating in this study, identify a lack of planning assistance, training and exercise support, sample documents, guidelines, and other technical resources. Many of these resources, however, are available to varying degrees from the Washington State Emergency Management Division (EMD), the Washington State Emergency Management Association (WSEMA), Municipal Research and Services Center (MRSC) and other sources. While many local programs use this resource sharing, many others are unaware that such resources exist. (pp. 19-20)

operational…[EM] responsibilities. Such ambiguities contribute to statewide inconsistencies in funding, resources, and prioritizing of emergency management.[35]

- Though increasing, the still limited collection of local public education programs has left the general public largely unaware of its role in emergency preparedness and its responsibilities when a disaster occurs.[36]

- Reliance on funding sources that are sometimes insufficient, inaccessible, or restricted is increasing the administrative requirements for grants management and limiting local programs' ability to effectively maintain adequate disaster preparedness.[37] (Derived from **WA State EM Council**, *A Study of EM at the Local Program Level,* 2004, pp. x-xi)

Emergency Management Community:

- Fire and Rescue Community

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[35] Local governing bodies are an integral part of the statewide system of emergency management in Washington. They are the legal entities that establish policy, enact legislation, and hold the legal authority to determine the ways public and private monies are acquired, used, and disposed of. Washington state law assigns to local elected officials the responsibility for emergency management, establishing a local program, and appointing an emergency management director. Nonetheless, local jurisdictions participating in the study report that local support for emergency management is well below what it should be. This is partly due to the lack of consistent, ongoing training and education for local officials on the scope and importance of their emergency management responsibilities. Approximately two out of every five local programs that participated in this study report lacking an effective way to communicate with their chief elected or appointed official during a disaster. Frequent turnover, limited training or education, lack of familiarity with state requirements and local ordinances, and lack of communication and interaction with the emergency management program and its delegated director leaves some local elected officials ill equipped to meet their primary responsibilities during an emergency or disaster. While emergency management training courses for elected officials have been developed jointly by the Washington State Emergency Management Association (WSEMA), the Association of Washington Cities (AWC) and the Washington State Association of Counties (WSAC), no standard approved curriculum exists. The official training that is offered is unavailable on an ongoing basis and further limited by inadequate local funds to support travel and training. (p. 20)

[36] According to the Washington State Emergency Management Council's (EMC) 2004 Annual Assessment, much of the public is still largely unaware of its responsibilities when a disaster occurs. Residents tend to be confused about what assistance to expect and what may be required of them until that assistance arrives. Only 58 percent of jurisdictions participating in this study have an emergency preparedness public education program. Even fewer have a Public Information Officer. Citizen Corps is expanding public awareness and increasing the number of Washington residents trained in neighborhood preparedness. Nevertheless, much more public outreach, education, and training are still required to reach the majority of Washington's residents. (pp. 20-21)

[37] In Washington, funding for local programs is complex, due to the large number of funding sources that must be managed. Furthermore, available funding may fluctuate each year, rendering the process somewhat unpredictable. Managing homeland security costs and funding add to this complexity. The majority of jurisdictions participating in this study report that available funding is inadequate to meet all of emergency management's needs. As a result, planning and response efforts are emphasized and mitigation, training, exercises, and long-term recovery efforts are compromised. Local programs rely largely upon grants and federal dollars, in addition to some state funding. The most common federal grant program is the Emergency Management Performance Grant (EMPG). However, the EMPG requires non-federal matching funds, leaving some small jurisdictions without these grant dollars altogether. Furthermore, there is a real concern that EMPG funding will be reduced nationwide in the near future. The State Emergency Management Division (EMD) is funded by an annual allocation from the State General Fund as well as a variety of state and federal grants, including EMPG funds that require non-federal matching dollars and homeland security funds. Without these multiple federal funding sources, EMD would be unable to sustain program operations or its current levels of service and support to local programs, even considering their significant restrictions governing expenditures.

- Transportation/HAZMAT Community
- Infrastructure Community
- Military/National Guard
- Resident/Tribal/NGO Community
- Volunteer Community
- Law Enforcement Community
- Retail Community
- Local Community
- State Community
- Federal Community
- Medical Community (**DHS**, *NCR First Responder Partnership Initiative*, 2005, slide 6)

Emergency Management Coordinator: "The individual within each jurisdiction that is delegated the day-to-day responsibility for the development and maintenance of all emergency management coordination efforts." (**CA OES**, *SEMS Guidelines*, 2006, Glossary, pp. 7-8)

Emergency Management Coordinator/Director Core Responsibilities:

"*Building strong partnerships.* Partnering with other state leaders, local government, academia, the private sector, the public and the media is central to the role of the emergency services leader. These partnerships will bolster preparedness by facilitating recruitment and training, establishing credibility and enabling collaboration, creating a reliable communication mechanism, and leveraging new knowledge to assess risks and manage response. And the director will rely on these partnerships when leading response to catastrophic events.

Infusing preparedness throughout the executive branch. The emergency services leader must build upon the relationships established with leaders of other agencies to integrate emergency preparedness as a priority in the operations of all state departments.

Using fiscal policy to meet goals. The emergency services leader must be aware of state and federal fiscal policies to enable the leader to fully leverage available resources and to achieve outcomes.

Empowering civil servants to work for outcomes. The director must inspire in emergency managers the confidence, innovation and passion necessary to protect…[a jurisdiction's residents].

Viewing residents as customers. The best interest of victims of past and future events must be at the core of every decision made by the emergency services leader. Each stage of policy formation, resource allocation and management decisions must focus on the needs of [residents]. Soliciting feedback from victims and residents about the department's prevention and mitigation, preparation, response, and recovery efforts – and improving service based on satisfaction levels – is essential." (**James Lee Witt**, March 16, 2006 communication with Little Hoover Commission and included in *Safeguarding the Golden State: Preparing for Catastrophic Events, 2006, 38)*

Emergency Management Director (Emergency Services Director): "The individual within each political subdivision that has overall responsibility for jurisdiction emergency management. For cities and counties, this responsibility is commonly assigned by local ordinance." (**CA OES**, *SEMS Guidelines*, 2006, Glossary, p. 8)

Emergency Management Effectiveness: "While most counties and cities with local emergency management programs have established sufficient planning and response capabilities, the survey and research results of this study indicate that most local programs lack the funding, training, exercises, facilities, equipment, and staff to adequately mitigate and recover from emergencies or disasters." (**WA State EM Council**, *A Study of Emergency Management…Local Program Level,* 2004, 18)

Emergency Management for Higher Education Grant (EMHE): Inaugurated in April 2008. "This grant program is designed to fund higher education institution projects to develop, or review and improve, and fully integrate all-hazards campus-based emergency management planning efforts. A program funded under this absolute priority is required to use the framework of the four phases of emergency management (Prevention-Mitigation, Preparedness, Response, and Recovery) to:

1. Develop, or review and improve, and fully integrate a campus-wide emergency management plan;
2. Train campus staff, faculty, and students in emergency management procedures;
3. Ensure coordination of planning and communication across all relevant offices and departments on the campus;
4. Coordinate with local and State government emergency management efforts;
5. Develop a written plan that incorporates medical, mental health, communication, and transportation needs to include those with disabilities, special needs, and other circumstances (such as cultural, language, location relative to campus, etc.) into emergency protocols;
6. Develop or update a written plan that prepares the campus for a possible infectious disease outbreak, such as pandemic influenza, methicillin-resistant Staphylococcus aureus (MRSA), or food contamination; and
7. Develop or enhance a written plan for preventing violence by assessing and addressing the mental health needs of students who may be at risk of causing harm to self or others.

Types of Projects

An EMHE grant will enable higher education institution to develop, or review and improve, and fully integrate, all-hazards emergency management planning efforts to include:

1. All four phases of emergency management: Prevention-Mitigation, Preparedness, Response and Recovery;
2. Training for campus staff, faculty, and students in emergency management procedures;
3. Coordination of planning and communication across all relevant departments within the institution of postsecondary education;
4. Coordination with local and State government emergency management efforts;
5. Coordination with the State or local Homeland Security Plan;
6. Support of the National Incident Management System;
7. A comprehensive plan that is based on an all-hazards approach;
8. Support from top leadership within the institution;
9. Pre-established roles for faculty, staff, students and first responders;

10. Drills and exercises for faculty, staff, and students;
11. A plan that meets the needs of students, staff, and faculty-addressing the medical, mental health, communication, and transportation needs to include those with disabilities, special needs, and other circumstances (such as cultural, language, location relative to campus, etc.) into emergency protocols;
12. A written plan that prepares the higher education institution for a possible infectious disease outbreak, such as pandemic influenza, methicillin-resistant *Staphylococcus aureus* (MRSA), or food contamination;
13. A written plan that seeks to prevent violence by assessing and addressing the mental health needs of students who may be at-risk of causing harm to self or others; and
14. Emergency equipment and technology (but not as a majority of the requested funding)." (**Depart of Ed**, *Emergency Management for Higher Education*, April 23, 2008)

Emergency Management Framework: "I'd like to talk for a minute about the standard framework for managing a disaster….

"By law, local government is responsible for providing for the safety and security of citizens in advance of a hurricane. That means they are in charge of developing emergency plans, determining evacuation routes, providing public transportation for those who can't self-evacuate, and setting up and stocking local shelters with relief supplies.

"State government is responsible for mobilizing the National Guard, pre-positioning certain assets and supplies, and setting up the state's emergency management functions. They are also in charge of requests for Federal support though the formal disaster declaration process.

"The Federal government is responsible for meeting those requests from the state – both during the disaster and in its aftermath. As we saw during Katrina, that includes logistical support for search and rescue, providing food, water and ice, establishing disaster centers and processing federal disaster claims, and participating in short- and long-term public works projects – such as debris removal and infrastructure rebuilding. This is the basic framework." (**DHS**, *Remarks as Prepared for Delivery by Homeland Security Secretary Michael Chertoff at the National Hurricane Conference*, April 12, 2006)

Emergency Management Functional Areas (See Emergency Support Functions):

1. Emergency Management Organization
2. Emergency Operations Planning
3. Resource Management
4. Direction and Control
5. Emergency Communication
6. Alerting and Warning
7. Emergency Public Information
8. Continuity of Government
9. Shelter Protection
10. Evacuation
11. Protective Measures

12. Emergency Support Services
13. Training and Education
14. Tests and Exercises (**FEMA**, *IEMS MYDP*, 1984, p. II-5 (FEMA Form 76-20)

Emergency Management Functions (EMF): Those "identified through the EMAP Standard (e.,., Resource Management, Communications and Warning, etc.)." (**FEMA**, *EMPG Work Plans* (FY08), 2008, p. 2)

Emergency Management Information Management System (EMIMS): "As part of the ongoing NRCC [National Response Coordination Center (FEMA HQ)] capabilities upgrade, a new Emergency Management Information Management System (EMIMS) is being installed. EMIMS is a web-based software system that will provide greater support to the NRCC, RRCCs, and JFOs in managing disaster response operations and information flow, maintaining situational awareness, and coordinating information sharing. Our intent is to incorporate the initial RDD list already developed by the Office of Operations Coordination, expand it, and incorporate it into EMIMS as a secure resource module. Ultimately, with the capability provided by EMIMS, vital statistics on the location and content of RDD teams and resources can be loaded into the system by location and continuously updated by the responsible Federal department or agency and used on a real time basis by the interagency community to support responses. Our longer term goal is to use EMIMS to create a larger national asset database containing all Federal response teams and resources for all-hazards responses. This expanded database would also be protected and available to the interagency community for use to support disaster response." (**FEMA**, *Statement of Glenn Cannon*, November 2007, p. 5)

Emergency Management Institute (EMI), FEMA: Component of FEMA's National Emergency Training Center at Emmitsburg, MD. Under the National Integration Center of the National Preparedness Directorate in the Federal Emergency Management Agency. "The EMI maintains responsibility for emergency management training by developing and conducting courses for Federal, State, local, and tribal; emergency responders; and the public." (**FEMA/NPD/NIC**, slide 3)

Emergency Management Mission: "Emergency management protects communities by coordinating and integrating all activities necessary to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters." (**EM Roundtable**, 2007, p. 4)

Emergency Management Mission: "The mission of emergency management agencies today is much broader than the mission given the predecessor civil defense agencies of the 1950s and 1960s. Today emergency management agencies respond to almost all disasters and emergencies that occur…natural disasters…as well as man-made and homeland security type incidents." (**NEMA.** *If Disaster Strikes Today Are You Ready To Lead?: A Governor's Primer on All-Hazards Emergency* Management, 2003)

Emergency Management of the Transportation System: "In emergencies, the Secretary of Homeland Security is the principal Federal official for domestic incident management. However, DOT is responsible for the emergency management of the transportation system, coordination of

alternative transportation services, the restoration and recovery of transportation infrastructure, and other functions. FRA has the lead role in investigating rail accidents and for reporting and coordinating accident response until it is determined that the accident may have been deliberately caused, at which time TSA gets involved." (**House Transportation and Infrastructure Committee**. *Hearing, Subcommittees on Highways & Transit, and Railroads, Pipelines, & Hazardous Materials – Transit & Rail Security*, March 7, 2007)

Emergency Management Performance Grants: "State emergency management agencies use EMPG funding to enhance their emergency management capabilities, structure programs based on targeted needs and build capabilities for priorities outlined in the interim National Preparedness Goal." (DHS, *DHS Announces Additional $*260M…, 16 Aug 2007)

Emergency Management Performance Grants: "…to sustain and enhance emergency management capabilities in support of the Goal [National Preparedness Goal], the Emergency Management Performance Grants (EMPG) program is designed to assist States and Urban Areas achieve the target levels of capability to sustain and enhance the effectiveness of their emergency management program." (**DHS/ODP**, *Fiscal Year 2006 Emergency Management Performance Grants: Program Guidance and Applications Kit*, November 2005, 40 pages, p. 4).

"A comprehensive state emergency management system must be inclusive of local programs and input. Local emergency management organizations should remain informed and have the opportunity to provide input to State planning processes. Although DHS expects States to include support for their local jurisdictions in the EMPG programs, each State is responsible for determining the appropriate amount of funding to be passed through to support the development or enhancement of local emergency management capabilities." (**DHS/ODP**, *FY 06 EMPG*, p. 6)

"As a condition for receipt of funds, States must also comply with FY06 NIMS implementation Requirements… States are not required to receive accreditation under the EMAP Standard, but are required to use the EMAP Standard, the NEMB-CAP process, the NRP, and NIMS as a baseline around which to design their EMPG work plans." (**DHS/ODP**, *FY 06 EMPG*, p. 7)

"EMPG has a 50% Federal and 50% State cost-share cash or in-kind match requirement. Unless otherwise authorized by law, Federal funds can not be matched with other Federal funds." (**DHS/ODP**, *FY 06 EMPG*, p. 11)

"EMPG allowable costs are divided into planning, organization, equipment, training, and exercises categories. In addition, management and administration (M&A) costs are allowable." (**DHS/ODP**, *FY 06 EMPG*, p. 13)

"While the EMPG program is not intended to support construction activities, DHS recognizes that an updated, functioning emergency operations center (EOC), accessible to and usable by individuals with disabilities, is a core component of an effective emergency management system. Therefore, limited construction and renovation activities for EOCs are allowable under EMPG, consistent with past EMPG practices. The State must match 50% of any money used for construction and must comply with the Davis-Bacon Act." (**DHS/ODP**, *FY 06 EMPG*, p. 16)

Emergency Management Performance Grants Eligibility: "FY 2008 EMPG allocations are determined as authorized by the Implementing Recommendations of the 9/11 Commission Act of 2007. All 50 States, the District of Columbia, and Puerto Rico will receive a base amount of 0.75 percent of the total available grant funding. Four Territories (American Samoa, Guam, Northern Mariana Islands, and the U.S. Virgin Islands) will receive a base amount of 0.25 percent of the total available grant funding. The balance of EMPG funds is distributed on a population-share basis. Pursuant to the Compact of Free Association, funds are available for the Federated States of Micronesia and for the Republic of the Marshall Islands." (**FEMA**, *EMPG Overview*, 1 Feb 2008)

Emergency Management Performance Grants, Fiscal Year 2008 Priority: "The principal priority for the FY 2008 EMPG funds is to sustain and enhance catastrophic planning capabilities, to include addressing the findings of the FEMA gap analysis program and similar capability assessment efforts, and assisting state and local jurisdictions to address national and regional catastrophic planning needs. State and local jurisdictions should also continue to focus on addressing state-specific planning issues identified through the 2006 Nationwide Plan Review. In FY 2008, specific planning focus areas of evacuation planning, logistics and resource management, continuity of operations (COOP) / continuity of government (COG) planning, and recovery planning have been identified as national planning focus areas. Total Funding Awarded in FY 2008: $291,450,000." (**FEMA**, *EMPG Overview*, 1 Feb 2008)

Emergency Management Performance Grants, Fiscal Year 2009 Request: "The EMPG request of $200 million helps states and urban areas achieve target levels of capability to sustain and enhance the effectiveness of their emergency management programs. The EMPG Program provides critical planning and staffing assistance to sustain and enhance state and local emergency management capabilities." (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*, March 11, 2008, p. 6)

Emergency Management Phases: "Emergency Management Phases: Emergency-related activities are clustered into four phases that are related by time and function to all types of disasters. The phases are also related to each other, and each involves different types of skills." [Mitigation, Preparedness, Response, Recovery.] (**NGA**, *CEM Governors' Guide*, 1979, p. 12)

Emergency Management Professionalism: "Emergency management…has been strengthened by a growing trend toward professionalization in the discipline. As emergency management systems nationwide mature, emergency management is increasingly recognized as a vital discipline and a growing profession….. The emergency management profession benefits from a proliferation of training and educational opportunities." (**WA State EM Council**, *A Study of Emergency Management at the Local Program Level*, 2004, p. 15)

Emergency Management Program: "…the CAE [Chief Audit Executive] must understand the role of BCM as one of three elements of an Emergency Management Program…

Emergency response (ER) is the first action that focuses on avoiding, deterring, and preventing disasters and preparing the organization to respond to a disaster. The goal of ER is lifesaving, safety, and initial efforts to limit the impact to asset damage.

Crisis management (CM) focuses on managing external — and in some companies, internal — communications and senior management activities during a disaster. Even in an environment where ER and CM are mature and effective, BCM may remain inadequately addressed. BCM capabilities are focused on the recovery of critical business processes to minimize the financial and other impacts to a business caused during a disaster or business disruption.

BCM [Business Continuity Management] must be integrated with ER and CM but should be a separate program. (**IIA**, *Business Continuity Management*, July, 2008, page 2).

Emergency Management Program: "A program that implements the mission, vision, and strategic goals and objectives as well as the management framework of the program and organization." (**NFPA 1600**, 2007, p. 7)

Emergency Management Program Coordinator: "The program coordinator should ensure the preparation, implementation, evaluation, and revision of the program. It is not the intent of this standard to restrict the users to program coordinator titles. It is recognized that different entities use various forms and names for their program coordinator that performs the functions identified in the standard. An example of a title for the public sector is emergency manager, and an example of a title for the private sector is business continuity manager. A written position description should be provided." (**NFPA 1600**, 2007, p. 12)

Emergency Management/Response: "The ability to direct, control, and coordinate a response; manage resources; and provide emergency public information – this outcome includes direction and control through the Incident Command System (ICS), Multiagency Coordination Systems, and Public Information Systems." (**Homeland Security Council**, *National Planning Scenarios*, 2006, p. vi)

Emergency Management/Response Personnel: "Emergency management/response personnel include Federal, State, territorial, tribal, substate regional, and local governments, private sector organizations, critical infrastructure owners and operators, nongovernmental organizations, and all other organizations and individuals who assume an emergency management role." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 23)

Emergency Management Responsibility – Federal and State/Local "Joint" Responsibility: "The purpose of this title is to provide a system of emergency preparedness for the protection of life and property in the United States from hazards and to vest responsibility for emergency preparedness jointly in the Federal Government and the States and their political subdivisions. The Congress recognizes that the organizational structure established jointly by the Federal Government and the States and their political subdivisions for emergency preparedness purposes can be effectively utilized to provide relief and assistance to people in areas of the United States struck by a hazard. The Federal Government shall provide necessary direction, coordination, and guidance, and shall provide necessary assistance, as authorized in this title so that a

comprehensive emergency preparedness system exists for all hazards. (**Robert T. Stafford Act**, Title VI -- Emergency Preparedness Sec. 601. Declaration of policy (42 U.S.C. 5195)

Emergency Management Standards: "While performance standards for emergency management are gaining broader acceptance, the absence of a single standard applied consistently across the state makes it difficult to define baseline capabilities or assess current levels of preparedness. One of the earliest attempts at developing standards for emergency management can be traced back to the Civil Preparedness Guide, published by the U.S. Defense Civil Preparedness Agency—forerunner to the Federal Emergency Management Agency (FEMA)—in 1972. More than 30 years later, no commonly accepted national standards for emergency preparedness exist. As a result, the essential capabilities that every jurisdiction of a particular size should have or have immediate access to are not understood consistently across the nation.

While there have been more recent attempts to establish minimum standards, such as the National Fire Protection Association's (NFPA) *Standard on Disaster/Emergency Management and Business Continuity Programs*, these standards remain voluntary and have not been formally adopted by local jurisdictions in Washington." (**WA State EM Council**, *A Study of Emergency Management at the Local Program Level*, 2004, p. 17)

Emergency Management System Central Premise: The EMC [WA State Emergency Management Council] believes that local ability to respond effectively to any emergency is central to the system of emergency management…" (**WA State EMC**, *A Study of Emergency Management at the Local Program Level*, 2004, p. viii)

Emergency Management System Premise: All Disasters are local disasters first. (Blanchard)

Emergency Management Team: "The Business Continuity Institute defines the EMT as 'the group of management staff who command the resources needed to recover the enterprise's operations at the recovery site.' I prefer to extend that concept to mean the group of executives who manage and control an emergency situation on behalf of the enterprise. In other words, these people are in charge of the destiny of the total enterprise, with all the attendant responsibility. Indeed it can be said that their influence extends beyond their own enterprise and may affect the long term success of a whole industry. It is crucial that they perform well, both as individuals and as a well-matched team." (**Burtles**, "Building a Capable Emergency Management Team." *Continuity Central*, January 21, 2005)

Emergency Management Team Gold, Silver and Bronze Levels: "The Gold, Silver and Bronze control model is commonly used by the police and other authorities and can easily be adapted for our purposes. Gold provides the high level strategic command unit, Silver is the management level operational command whilst Bronze is the functional level tactical command that may comprise more than one unit.

"It provides empowerment and control in a manner that everyone can understand and respect. In the typical crisis situation **Bronze Control** would take charge of the actual incident area. Bronze Control would be a single point of contact, in charge of liaison, access and communications

within that inner zone. Access to this region would normally be restricted to the recovery and salvage teams, together with the emergency services.

"The immediate surroundings, perhaps the whole building or the whole site would come under the supervision of **Silver Control**. This would be another single point of contact, perhaps with a higher level of authority, in charge of liaison, access and communications within the middle zone of the incident. Typically they would be responsible for organising and controlling the essential border activities such as parking arrangements, dealing with members of staff and the public in and around the site. They would co-ordinate deliveries and supplies into and out of the site area.

"Meanwhile, **Gold Control** would be more concerned with dealing with external interests, such as customers, the media and the authorities. This would be the highest level of corporate authority representing the company's interests and taking full responsibility for the ongoing management of the incident. Regular communication between these three parties ensures everyone sings from the same hymn sheet and the recovery efforts are neither restricted by lack of support nor compromised by interruptions and distractions." (**Burtles**, "Building a Capable Emergency Management Team." *Continuity Central*, January 21, 2005)

Emergency Management versus Homeland Security: "Deciphering Specialties: Emergency management and homeland security are not the same, nor are they two differing views of the same core competencies. They draw on some of the same supporting specialties, they are both multidisciplinary by definition and regularly overlap, especially at the operational or post-event level.

To use a very crude and rather limited set of comparisons:

- Emergency management is very local and is about preserving life, property and, with voter approved limitations, ensuring freedom.

- Homeland security starts as far from home as possible and is about denying freedom to those who believe violence and intimidation are legitimate means to an end.

- Building on that, emergency management is a specific and critical function of local government, while homeland security is essentially, but not solely, a federal government function.

- Using a different lens, emergency management focuses on science, facts and the environment in its broadest sense, while homeland security focuses on people, beliefs and ideology…..

The U.S. Department of Homeland Security (DHS) absorbed the Federal Emergency Management Agency (FEMA) including FEMA's mission, but has yet to figure out how to manage that mission. In crafting the DHS, Congress has created a multibillion dollar funding stream for training, education and research, but it also consistently uses language that has forced everyone - not just academic institutions - to alter their product offerings so they meet what are

basically arbitrary, and oftentimes capricious, homeland security definitions terms, and conditions - not emergency management definitions, terms and conditions.

The size of that funding stream and the limiting language that the DHS adopted has led to the creation of many new programs in homeland security. This is all well and good, but unfortunately the larger effect has been a slowdown in emergency management funding, the forcing of many institutions to reconfigure existing and planned emergency management programs to look like homeland security programs so they qualify for DHS money, and the general de-emphasis on the critical importance of a separate emergency management discipline - all to further solidify a DHS supremacy….

Neither discipline is inherently more important or better than the other. The issue is determining your strengths and deciding how or where you want to grow….

If you want to help build strong and resilient communities and contribute directly to your community's well-being on a daily basis - whether that community is local, regional or state - then emergency management is the track to pursue.

If you want to protect the public from bad people, then homeland security is the track to pursue. (Jaffin, "Education: Emergncy Management and Homeland Security Aren't the Same." *Emergency Management* (Government Technology), June 27, 2008)

Emergency Management Vision: "Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters." (**EM Roundtable**, 2007, p. 4)

Emergency Manager: The person who has the day-to-day responsibility for emergency management programs and activities. The role is one of coordinating all aspects of a jurisdiction's mitigation, preparedness, response, and recovery capabilities.

(The local emergency management position is referred to with different titles across the country, such as civil defense coordinator or director, civil preparedness coordinator or director, disaster services director, and emergency services director.)

Emergency Manager: "The local emergency manager has the day-to-day responsibility of overseeing emergency management programs and activities. He or she works with chief elected and appointed officials to ensure that there are unified objectives with regard to the community's emergency response plans and activities. This role entails coordinating all aspects of a jurisdiction's *mitigation, preparedness, response and recovery* capabilities.[38] The emergency manager coordinates all components of the emergency management program for the community, to include assessing the availability and readiness of local resources most likely required during an incident and identifying any shortfalls. Other duties of the local emergency manager might include the following:

[38] The italicized words were dropped in the Jan 2008 NRF, p. 16.

- Coordinate the planning process and work cooperatively with other community agencies and private sector enterprises.
- *Oversee* damage assessments during an incident. (Changed to "Coordinating," NRF 2008 17)
- Advise and inform local officials about emergency management activities during an incident.
- Develop and execute public awareness and education programs.
- Involve private sector businesses and relief organizations[39] in planning, training and exercises." (**DHS**, *NRF Comment Draft*, September 2007, p. 14)
- Developing mutual aid and assistance agreements. (Added in Jan 2008 NRF, p. 17)
- Conducting exercises to test plans and systems and obtain lessons learned. (NRF 2008, 17

Emergency Manager: "Responders and emergency managers are both doers and planners, which is to say that to lead **response** and **recovery** efforts effectively, they must also **prepare** effectively (i.e., plan, organize, equip, train, exercise, and continuously evaluate actual performance)." (**DHS**, *NRF*, Jan 2008, 27)

Emergency Manager: "Emergency managers are professionals who practice the discipline of emergency management by applying science, technology, planning and management techniques to coordinate the activities of a wide array of agencies and organizations dedicated to preventing and responding to extreme events that threaten, disrupt, or destroy lives or property." (**Drabek** 2002, Student Handout 1-2)

Emergency Managers Weather Information Network (EMWIN): "As an integral part of its mission, the NWS recognizes the need to provide the emergency management community with access to a set of NWS warnings, watches, forecasts, and other products at no recurring cost. Toward that end, the Emergency Managers Weather Information Network (EMWIN) system was developed. In partnership with the Federal Emergency Management Agency (FEMA) and other public and private organizations, EMWIN is now evolving into a fully operational and supported NWS service. EMWIN is a suite of data access methods which make available a live stream of weather and other critical emergency information. Each method has unique advantages. EMWIN's present methods in use or under development for disseminating the basic datastream include: Radio; Internet; Satellite." (**NOAA**, *Emergency Mgrs. Weather Information Network*)

Emergency Medical Services (EMS): "Individuals who, on a full-time, part-time, or voluntary basis, serve as first responders, emergency medical technicians (EMT) (basic), and paramedics (advanced) with ground-based and aero-medical services to provide pre-hospital care." (**FEMA**, *TEI/TO Course Catalog*, 2008, 2)

Emergency Medical System (EMS): "The aggregate of resources and personnel required to deliver medical care to those with an unpredicted, immediate health need outside established medical facilities." (**UNDHA**, *Disaster Management Glossary*, 1992, 34)

Emergency Medical Technician (EMT): "A health-care specialist with particular skills and knowledge in pre-hospital emergency medicine." (**CA OES**, *SEMS Guidelines*, Glossary, p. 8)

[39] "Relief organizations" changed to "NGOs" in Jan 2008 NRF, p. 17.

Emergency Medical Technicians (EMTs): "…the Nation's 600,000 emergency medical technicians serve 36,000 plus communities." (**DHS**, Chap. 2, *Capstone Doctrine Pub Draft*, 08)

Emergency Medicine: "The specialized institutional system and resources required to meet immediate and unexpected medical needs." (**UNDHA**, *DM Glossary*, 1992, 34)

Emergency of Primary Federal Responsibility: "An emergency for which the primary responsibility for response rests with the United States (rather than a State) because the emergency involves a subject area for which, under the Constitution or laws of the United States, the Federal government exercises exclusive or pre-eminent responsibility and authority. In determining whether such an emergency exists, the President consults the Governor of the affected State, if practicable." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 50)

Emergency Operating Records: "Records that support the execution of an agency's essential functions." (**DHS**, *Federal Continuity Directive 1*, December 2007, P-3)

Emergency Operating Records (COOP): "Vital records, regardless of media, essential to the continued functioning or reconstitution of an organization during and after an emergency. Included are emergency plans and directives; orders of succession; delegations of authority; staffing assignments; and related records of a policy or procedural nature that provide agency staff with guidance and information resources necessary for conducting operations during any emergency, and for resuming formal operations at its conclusion." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template,* December 2007)

Emergency Operations: "Commitment and efficient use of *all* community resources, as required, to minimize the effects of an extraordinary emergency." (**DCPA**, *Local Disaster Preparedness Course Syllabus*, 1973, p. 127)

Emergency Operations Center (EOC): "A location from which centralized emergency management can be performed. EOC facilities are established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency." (**CA OES,** *SEMS Guidelines*, 2006, Glossary, p. 8)

Emergency Operations Center (EOC): "Local EOCs are the physical location where multi-agency coordination occurs. EOCs help form a **common operating picture** of the incident, relieve on-scene command of the burden of external coordination and secure additional resources. The core functions of an EOC include coordination, communications, resource dispatch and tracking and information collection, analysis and dissemination. EOCs may be permanent organizations and facilities that are staffed 24 hours a day, 7 days a week, or they may be established to meet short-term needs. Standing EOCs – or those activated to support larger, more complex incidents – are typically established in a central or permanently established facility. Such permanent facilities in larger communities are typically directed by a full-time emergency manager. EOCs may be organized by discipline (fire, law enforcement, medical services, etc.), by jurisdiction (city, county, region, etc.), by Emergency Support Function (communications, public works, engineering, transportation, resource support, etc.) or, more likely, by some combination thereof." (**DHS**, *NRF Comment Draft*, 2007, pp. 48-49)

Emergency Operations Center (EOC): "The operating facility that serves as the command and control point for emergency management officials (State, local, and/or Federal) responding to, or preparing for, the onset of an incident." (**FEMA**, *Mission Assignment SOPs*, 2007, p. 50)

Emergency Operations Center (EOC): "The EOC is a location where senior public sector officials who represent primary governmental functions assemble to resolve a critical incident. Monitors and directs emergency response and recovery activities. Supplies the public sector Incident Commander with the necessary resources to resolve the critical incident. Analogous to the private sector Crisis Management Team (CMT). (**Jones**, *Critical Incident* Protocol, 2000, 37)

Emergency Operations Center (EOC): Emergency operations centers (EOCs) represent the physical location at which the coordination of information and resources to support incident management activities normally takes place." (**NFPA 1600**, 2007, p. 18)

Emergency Operations Center (EOC): "The pre-designated facility established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency. The EOC coordinates information and resources to support domestic incident management activities." (**USCG**, *IM Handbook*, 2006, Glossary 25-6)

Emergency Operations Center (EOC) Functions and Problems:

1. "There is often both lack of clarity and consensus, even in pre-planned local EOCs, on the major function of EOCs and the specific tasks to be undertaken therein.
2. Irrespective of prior planning or intent, at least six different tasks are typically carried on at EOCs: coordination, policy making, operational, information gathering, dispersal of public information, and hosting of visitors.
3. Coordination tasks (i.e., those directed at relating organizations to one another effectively, and relating capabilities of organizations to disaster demands are usually handled initially rather poorly because of lack of adequate information inputs.
4. Policy making (i.e., those tasks involving decision making vis-à-vis the overall community response) often is given precedence over coordination even to the point of organizational officials looking for matters on which to make decisions.
5. Operations (i.e., those tasks which directly meet disaster demands rather than those directed at coordination or other response demands) are particularly entered into if some slack or failure is seen in the activities of operational emergency organizations.
6. Information gathering tasks (i.e., those directed at efforts to determine the nature and extent of disaster conditions) are not just always the initial focus of activities of EOCs, but at times are continued to the extent that they degenerate into the seeking of information for information's sake.
7. Dispersal of public information (i.e., those tasks directed at informing the news media and the general public) at times dominates and in fact may interfere with other EOC tasks.
8. Hosting of visitors (i.e., those tasks necessary to handle the convergence of VIPs and others in EOCs) is frequently a major source of conflict and stress, although often kept latent, between local community officials and people, and all outsiders.
9. The very concept of coordination is interpreted in a wide variety of ways ranging from the formulizing of overall community priorities on emergency problems, to the act of an organization announcing to others what it has already done.

10. The role of chief coordinator at EOC's is far from standardized either as to who should take or how the role is to be played - although generally it is taken by an official usually associated with civil defense in some way, with the effort to exercise influence depending more on pre-emergency social ties than on formal or planned official relationships.
11. There sometimes develops at EOCs a high degree of coordination within clusters of organizations working on the same or similar disaster problems, a coordination not extended to groups outside of the given cluster.
12. EOCs are more effective at gathering than at exchanging information, and more effective at exchanging information than distributing it between organizations.

13. In general record keeping is rather poor at most EOCs.
14. More specific tasks in an EOC are emergent than is usually recognized in pre-planning, especially with respect to the obtaining and processing of information.

Overall, local EOCs tend to have multiple and far from integrated functions and tasks, and particularly have a variety of problems both with respect to coordination and information." (**Quarantelli**, *Problems and Difficulties in the Use of Local EOC's in Natural Dis.*, 1972, 2-3)

Emergency Operations Center (EOC) Management, Capability Definition: "Emergency Operations Center (EOC) Management is the capability to provide multi-agency coordination (MAC) for incident management by activating and operating an EOC for a pre-planned or no-notice event. EOC management includes EOC activation, notification, staffing, and deactivation; management, direction, control, and coordination of response and recovery activities; coordination of efforts among neighboring governments at each level and among local, regional, State, and Federal EOCs; coordination public information and warning; and maintenance of the information and communication necessary for coordinating response and recovery activities. Similar entities may include the National (or Regional) Response Coordination Center (NRCC or RRCC), Joint Field Offices (JFO), National Operating Center (NOC), Joint Operations Center (JOC), Multi-Agency Coordination Center (MACC), Initial Operating Facility (IOF), etc." (**DHS**, *Target Capabilities List*,, 2007)

Emergency Operations Plan (EOP): An all-hazards document that specifies actions to be taken in the event of an emergency or disaster event; identifies authorities, relationships, and the actions to be taken by whom, what, when, and where, based on predetermined assumptions, objectives, and existing capabilities.

Emergency Operations Plan (EOP): "The plan that each jurisdiction has and maintains for responding to appropriate hazards." (**CA OES**, *SEMS Guidelines*, 2006, Glossary, p. 8)

Emergency Operations Plan: "The "steady-state" plan maintained by various jurisdictional levels for responding to a wide variety of potential hazards." (**DHS,** *NIMS*, 2004, p. 129)

Emergency Operations Plan (EOP): "A plan should be developed with functional annexes common to the hazards identified in Step 1 [Hazard Analysis]. Those activities unique to specific hazards should be described separately, perhaps in appendices to the appropriate functional annexes. This approach is a departure from previous guidance which stressed development of hazard-specific plans. Existing plans should be reviewed and modified as

necessary to ensure their applicability to all hazards that pose a potential threat to the jurisdiction. The exact format of the plan is less important than the assurance that the planning process considers each function from a multihazard perspective." (**FEMA**, *IEMS Process Overview*, **1983**, p. 8)

Emergency Operations Plan (EOP): "A jurisdiction's emergency operations plan is a document that:

- Assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in an emergency that exceeds the capability or routine responsibility of any one agency, e.g., the fire department.
- Sets forth lines of authority and organizational relationships, and shows how all actions will be coordinated.
- Describes how people and property will be protected in emergencies and disasters.
- Identifies personnel, equipment, facilities, supplies, and other resources available--within the jurisdiction or by agreement with other jurisdictions--for use during response and recovery operations.
- Identifies steps to address mitigation concerns during response and recovery activities.

"As a public document, an EOP also cites its legal basis, states its objectives, and acknowledges assumptions." ." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), **1996**, p. 1-1)

Emergency Operations Plan (EOP): "A document that: describes how people and property will be protected in disaster and disaster threat situations; details who is responsible for carrying out specific actions; identifies the personnel, equipment, facilities, supplies, and other resources available for use in the disaster; and outlines how all actions will be coordinated." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), **1996**, p. GLO-4)

Emergency Operations Plan (EOP): "The 'response' plan that an entity (facility, jurisdiction, State, etc.) maintains for reacting to any hazard event. It provides action guidance for management and emergency response personnel." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-4, Glossary)

Emergency Operations Plan Annexes/Appendices (Recommended to Localities, 1978):

- Radiological Defense
- Fire
- Rescue
- Police
- Public Works Engineering
- Emergency Health and Medical-Health
- Emergency Welfare
- Schools
- Industry (**DCPA**, *Standards for Local Civil Preparedness* (CPG 1-5, 1978, pp. 19-20)

Emergency Operations Plan (EOP) Annexes (Recommended to States by FEMA, 1984):

- Warning

- Communications
- Shelter
- RADEF
- Crisis Relocation
- Fire
- Law Enforcement
- Health, Medical
- Emergency Public Information
- Damage Assessment
- Public Works, Engineering
- Transportation
- Resources Management
- EOC
- Evacuation
- Hazard Mitigation
- Hazardous Materials
- Rescue
- Crisis Counseling
- Training
- Legal Services (**FEMA**, *IEMS MYDP*, 1984, p. III-18)

Emergency Operations Plan (EOP) Annexes (Recommended to States by FEMA, 1993):

- Direction and Control
- Commutations
- Warning
- Emergency Public Information
- Evacuation
- Reception and Care
- In-Place Protective Shelter
- Health and Medical
- Law Enforcement
- Public Works
- Fire and Rescue
- Radiological Defense
- Human Services
- Resources Management

(**FEMA**, *Survivable Crisis Management: Plan Development Guide*, April 1993)

(Compare to Federal Response Plan Essential Support Functions, FEMA, **1996**)

- Direction and Control
- Communications
- Warning
- Emergency Public Information
- Evacuation

- Mass Care
- Health and Medical
- Resource Management Federal Emergency Management Agency.

(*State and Local Guide (SLG 101) Guide For All-Hazard Emergency Operations Planning*, Sep)

(Compare to National Response Framework Essential Support Functions, **2007**)

- Transportation
- Communications
- Public Works and Engineering
- Firefighting
- Emergency Management
- Mass Care, Emergency Assistance, Housing/Human Services
- Resource Support
- Public Health and Medical Services
- Search & Rescue
- Oil and Hazardous Materials Response
- Agriculture and Natural Resources
- Energy
- Public Safety and Security
- Long Term Community Recovery
- External Affairs

(**DHS**, *NRF Comment Review*, September 2007, pp. 56-57; includes expanded list)

Emergency Operations Plan (EOP) Components (Organization and Content): 'No standard format or organization is specified for a local government's emergency plan…. While the organization of local plans is not specified, there are a number of emergency functions that should be covered in the plans of each local jurisdiction. First, it is essential that the local plan outline the organizations, systems, and procedures which add up to the jurisdictions *basic emergency operating capability*. This refers to the jurisdiction's ability to handle any of the types of major emergency identified in the hazard analysis. The elements of this basic operating capability are usually reflected in the jurisdiction's Basic Plan and in certain additional parts or annexes in the overall local emergency plan. The Basis Plan is a relatively brief 'umbrella' for the balance of the emergency plan, and as such covers organization, responsibilities, and operations in any type of emergency.

"The parts of the local plan which reflect the basic operating capability are those of general *applicability*, outlining functions needed in any emergency severe enough to call for coordinated emergency operations. These supporting parts of the plan are often designated as annexes to the Basis Plan, and should cover:

(1) Direction and Control, spelling out local emergency organization for centralized direction of coordinated operations by key officials. Emphasis is on EOC organization and functions.
(2) Warning, spelling out responsibilities and procedures for warning the population of impending threats.
(3) Emergency Communications.

(4) Emergency Public Information, spelling out responsibilities and procedures for getting official information and instructions to the public promptly, before, during, and as necessary after an emergency.

"Radiological Defense for both peacetime and attack emergencies is sometimes also covered in an annex of general applicability. However, it is preferable to cover radiological defense operations for attack emergencies separately from those for peacetime emergencies (e.g., a transportation accident involving radioactive material, or a severe accident at a nuclear power plant). This is because different concepts of operation, assessment methodologies, and protective actions are involved in peacetime radiological emergencies.

"The balance of the local plan addresses operations which many be required in specific types of emergencies." (**DCPA**, *Standards for Local Emergency Preparedness* (CPG 1-5) 1978, p. 16)

"Certain additional nuclear-related contingencies should be covered in local emergency plans, where applicable. These may include

(1) plans for peacetime radiological emergencies…
(2) plans for warning the population should warning ever be received of an accidental missile launch,, or any other unauthorized or unexplained incident involving a possible detonation of a nuclear device; and
(3) plans for a possible threat by terrorists or criminals, involving an alleged nuclear device or weapon." (**DCPA**, *Standards for Local Emergency Preparedness*, 1978, p. 17)

Emergency Operations Plan (EOP) Components (Organization and Content): "EOPs developed using the functional approach consist of a Basic Plan, functional annexes, and hazard-specific appendices. These are supplemented by the SOPs and checklists necessary for implementation of the EOP." (**FEMA**, *SLG 101*, 1996, p. 37)

Emergency Operations Plan (EOP) Components Checklist:

1. Does your EOP define the scope of preparedness and incident management activities necessary for your local or tribal jurisdiction?
2. Does your EOP describe organizational structures, roles and responsibilities, policies, and protocols for providing emergency support?
3. Does your EOP facilitate response and short-term recovery activities?
4. Is your EOP flexible enough to use in all emergencies?
5. Does your EOP have a description of its purpose?
6. Does your EOP describe the situation and assumptions?
7. Does your EOP describe the concept of operations?
8. Does your EOP describe the organization and assignment of responsibilities?
9. Does your EOP describe administration and logistics?
10. Does your EOP contain a section that covers the development and maintenance of your EOP?
11. Does your EOP contain authorities and references?
12. Does your EOP contain functional annexes?

13. Does your EOP contain hazard-specific appendices?
14. Does your EOP contain a glossary?
15. Does your EOP pre-designate functional area responsibilities to the Emergency Operations Center/Multi-agency Coordination System?
16. Does your EOP include pre-incident and post-incident public awareness, education, and communications plans and protocols?" (**DHS**, *Local and Tribal NIMS Integration: Integrating the National Incident Management System into Local and Tribal Emergency Operations Plans and Standard Operating Procedures* (Version 1.0), 15 Nov 2005, p. 5)

Emergency Operations Plan Elements:

1. *Purpose:* The plan discusses how emergency operations planning fits into the applicable government overall emergency planning structure.
2. *Structure and Assumptions:* The plan describes, in general terms, situations pertinent to the jurisdiction and their potential scope and impact. Assumptions about the emergency organization in relation to emergency preparedness capabilities should be stated.
3. *Concept of Operations:* The plan describes the various levels of government roles in the four phases (preparedness, mitigation, response, and recovery) of emergency management including capabilities, interjurisdictional and Interorganizational relationships, authorities, and responsibilities for continuity of government (COG) as addressed in the seven COG measures in CPG 1-10,
4. *Organization and Assignment of Responsibilities:* This element of the plan expands item 3 in detail. It should include procedures for monitoring/evaluating assignment accomplishments.
5. *Administration and Logistics:* The plan describes implementation alternatives to regular procedures for transition to emergency operations. The plan further includes administrative details for State Government transport and establishment of emergency operations from an alternate EOC.
6. *Plan Development and Maintenance:* The plan describes the process of determining hazard identification, required capabilities, available resources, organizational structure, agreements, and vulnerabilities. It provides processes for implementation, evaluation, review, and revision/updating. It contains annexes as needed.
7. *Authorities and References:* The plan cites applicable laws, ordinances, and agreements and the plan's implementation.
8. *Definition of Terms:* The plan defines unique specialized terms and vocabulary to aid effective communication." (**FEMA**, *Survivable Crisis Management: Plan Development Guide*, April 1993

Emergency Operations Plan Evaluation: "The outcome of…emergency operations…should be analyzed and assessed in terms of actual vs. required capabilities and considered in subsequent updates…. Tests and exercises should be undertaken for the purpose of evaluation, especially where disasters occur infrequently." (**FEMA**, *IEMS Process Overview*, 1983, p. 8)

Emergency Operations Plan (EOP), Need For and Utility: "Conducting coordinated operations in peacetime or attack-caused emergencies is basically executing or carrying out local emergency plans. The payoff from emergency operations is the lives that are saved and the property that is preserved. This payoff results from the forces that have emergency missions

doing 'the right thing at the right time,' making maximum effective use of *existing* resources and capabilities. Taking prompt and effective action in emergencies is facilitated by planning. Experience in peacetime disasters has shown repeatedly that when emergency plans are known to the heads of local operating departments and their forces, and operations are conducted in accordance with these plans, reaction times are reduced and coordination improved. On the other hand, *'paper plans' prepared by the civil preparedness Director/Coordinator alone, with little participation by local operating departments, are of little value – because they are not used.*…the *process of planning* that leads to the development of a written plan is extremely valuable." (**DCPA/DOD**, *Standards for Local Civil Preparedness* (CPG 1-5), 1978, p. 15)

Emergency Operations Plan (EOP) Planning Process: "The local government's emergency plan should…document and reflect a planning process conducted by a local government planning team. This team should include representatives from each department of local government with an emergency mission, and from each non-governmental group to which such a mission should be assigned (e.g., news media, county medical society, Red Cross chapter). The chief executive himself should if possible participate in the work of the planning team. The emergency planning process should be led and coordinated by the local civil preparedness Director/Coordinator, on behalf of the chief executive. As part of this planning leadership, the Director/Coordinator is responsible to inform the planners of local operating departments, as well as non-governmental planners, of the special conditions arising out of nuclear attack or peacetime disasters that would call for a modification of traditional operating techniques…. In many jurisdictions, the local planning agency can play an important role in emergency planning, working in close cooperation with the civil preparedness Director/Coordinator and planners of the operating departments." (**DCPA/DOD**, *Standards for Local Civil Preparedness*, 1978, p. 15)

Emergency Operations Plan (EOP) Planning Process: "Following are the basics for development and continual refinement of an EOP. They may be adapted to the needs of a jurisdiction."

- Research
  - Review jurisdictions planning process
  - Analyze hazards faced by the jurisdiction
  - Determine resource base
  - Note characteristics of jurisdiction that could affect emergency operations
- Review
  - Review local and/or State laws, rules, regulations, executive orders
  - Review Federal regulatory requirements
  - Review guidance, existing plans for the jurisdiction, neighboring jurisdiction plans
  - Review agreements with neighboring jurisdictions, military installations, private sector organizations, etc.
  - Become familiar with plans of higher levels of government
- Development
  - Develop rough draft of basic plan, functional annexes, and hazard-specific appendices to serve as point of departure for the planning team
  - Develop agenda and invitation lists for first cycle of planning meetings

  - Brief the "CEO"
  - Conduct a presentation meeting, establish committees for parts of the EOP, appoint committee chairs, schedule a follow-up meeting
  - Work with committees on successive drafts
  - Prepared graphics (e.g., maps, organizational charts)
  - Produce a final draft and circulate to planning team for review and comment
  - Hole meeting to incorporate final changes, discuss implementation strategy and distribution, obtain commitments to provide information that could necessitate revision
  - Obtain concurrence from organizations with identified responsibilities for EOP implementation
  - Present EOP to local elected officials and obtain official promulgation of the EOP (advise the local media in advance)
  - Print and distribute, with a copy or press release to local media
- Validation
  - Consult next level of government about EOP review cycle
  - Conduct "table top" exercise involving key representatives of each tasked organization
  - Conduct functional and full scale emergency management exercises
- Maintenance
  - Establish a remedial action process to help planning team identify, illuminate, and correct problems
  - Establish revision process
  - Ensure that each tasked organization or individual develops necessary implementing documents, such as SOPs (**FEMA**, SLG 101, 1997, pp. 2-1-12)

Emergency Operations Plan (EOP) Standard Operating Procedures: "Standing Operating Procedures…shall be developed by operating departments concerned, as necessary to supplement and detail annexes. An SOP important to both peacetime and attack-emergency operations is an inventory of publicly and privately owned operational equipment or resources that would be available to the jurisdiction in emergencies (e.g., earthmoving equipment). SOP's for attack emergencies shall include provision for sheltering the dependents of emergency service personnel (e.g., policemen, firefighters, auxiliaries). Other SOP's that may be needed include warning system procedures, call-up or alerting lists, RADEF system procedures, decontamination priorities and procedures, and specific traffic control and shelter assignments of police and other personnel. All governmental and auxiliary personnel with emergency assignments should be issued an appropriate identification card." (**DCPA**, *Standards for Local Civil Preparedness*, 1978, p. 20)

Emergency Operations Simulation (EOS): An exercise meant "to inform and train key officials and department heads in emergency operations….EOS is an experience which motivates. Few local executives undergo it without resolving that civil preparedness needs more of their attention, or more funds, better planning, or additional equipment and personnel. EOS also provides a test of existing facilities – it can demonstrate to top officials and budget-makers whether an EOC or emergency plans are equal to the potential disasters for which they are designed. In on on-site assistance project, an EOS may be used to evaluate a community's

resources, pinpoint its deficiencies, or show the steps needed to remove them" (**DCPA**, *Foresight, DCPA Annual Report FY73*, 1974, p. 13)

Emergency Planning: "Emergency planning is a cycle of planning, training, exercising, and revision that continues throughout the five phases of the emergency management cycle (preparedness, prevention, response, recovery, and mitigation). One purpose of the planning process is the development and maintenance of an up-to-date EOP….Emergency planning is a team effort and requires collaboration with personnel from other agencies and organizations. Building an effective team takes time and effort as members go through several stages." (**FEMA**, *Emergency Planning* IS-235, May 24, 2007 update, p. 2.16)

Emergency Planning & Community Right to Know Act (42 U.S.C. 11001 et seq., 1986): "Also known as Title III of SARA, EPCRA was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERC's were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district. Broad representation by fire fighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented." (**EPA**, EPCRA)

Emergency Planning & Community Right to Know Act, 1986 (Title III, SARA): "The objectives of Title Ill are to improve local chemical emergency response capabilities (primarily through improved emergency planning and notification) and to provide citizens and local governments access to information about chemicals in their localities. Title Ill addresses planning by: (1) identifying the EHSs that trigger the planning process: (2) requiring facilities to identify themselves if they have quantities of EHSs exceeding the TPQs [Threshold Planning Quantities]; (3) requiring the establishment of a State and local planning structure and process (including specifics on committee membership); (4) requiring facilities to make information available to local planners: and (5) specifying the minimum contents of local emergency plans." (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, 13)

Emergency Planning Zones (EPZ): "Areas around a facility for which planning is needed to ensure prompt and effective actions are taken to protect the health and safety of the public if an accident occurs. The REP [Radiological Emergency Preparedness] Program and CSEPP use the EPZ concept." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning*, 1996, GLO-3)

Emergency Preparedness: "The discipline that ensures an organization or community's readiness to respond to an emergency in a coordinated, timely, and effective manner to prevent the loss of life and minimize injury and property damage." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 54)

Emergency Preparedness: "The term 'emergency preparedness' means all those activities and measures designed or undertaken to prepare for or minimize the effects of a hazard upon the civilian population, to deal with the immediate emergency conditions which would be created by

the hazard, and to effectuate emergency repairs to, or the emergency restoration of, vital utilities and facilities destroyed or damaged by the hazard. Such term includes the following:

(A) Measures to be undertaken in preparation for anticipated hazards (including the establishment of appropriate organizations, operational plans, and supporting agreements, the recruitment and training of personnel, the conduct of research, the procurement and stockpiling of necessary materials and supplies, the provision of suitable warning systems, the construction or preparation of shelters, shelter areas, and control centers, and, when appropriate, the nonmilitary evacuation of the civilian population).

(B) Measures to be undertaken during a hazard (including the enforcement of passive defense regulations prescribed by duly established military or civil authorities, the evacuation of personnel to shelter areas, the control of traffic and panic, and the control and use of lighting and civil communications).

(C) Measures to be undertaken following a hazard (including activities for fire fighting, rescue, emergency medical, health and sanitation services, monitoring for specific dangers of special weapons, unexploded bomb reconnaissance, essential debris clearance, emergency welfare measures, and immediately essential emergency repair or restoration of damaged vital facilities)." (**Stafford Act**, Title VI, Emergency Preparedness, Sec. 602. Definitions (42 U.S.C. 5195a), June 2007 (FEMA 592), pp. 54-55)

Emergency Preparedness Atlas: The *Emergency Preparedness Atlas: U.S. Nursing Home and Hospital Facilities* "is intended to help local communities identify the health care facilities (hospitals and nursing homes) that could be available and prepared to provide assistance under emergency conditions in their communities. [It]…includes six case studies in North Carolina, Oregon, Pennsylvania, southern California, Washington, and Utah that each include a series of maps depicting the locations and capacity of nursing homes and hospitals as well as their geographic relationship to a variety of emergency management and bioterrorism preparedness regions, such as HAZMAT response regions, emergency management regions, and Red Cross chapters. The *Atlas* includes maps for all 50 states with the location of hospitals and nursing homes in each state, and it displays the locations relative to the distribution of the elderly population in the case study states." (**AHRQ**, "New AHRQ Resources…" July 19, 2007)

Emergency Preparedness Liaison Officer (EPLO): "A senior reserve officer who represents their Service at the appropriate joint field office conducting planning and coordination responsibilities in support of civil authorities. Also called EPLO." (**JCS/DoD**, *Civil Support*, 2007, p. GL-8)

Emergency Preparedness Mobilization Board (EMPB): A "senior level inter-agency forum to coordinate all aspects of national preparedness [in the early 1980s]. The EMPB was chaired by the National Security Advisor and consisted of the deputy secretaries of the departments and the heads of several independent agencies. During the EMPB era, a national plan was prepared and approved by President Reagan, and actions were taken to implement it…. From 1981 until 1984, the Emergency Mobilization Preparedness Board (EMPB) was the primary interagency coordination mechanism within the executive branch of the federal government for all matters

pertaining to emergency preparedness, civil defense, and what is now termed homeland security. The EMPB was designed not only to coordinate matters but also to ensure that the President's policies and programs were carried out. The EMPB was a high-level leadership structure. Initially and for several years, the EMPB was a success, but ultimately it failed." (**Brinkerhoff**, *The EMPB*, October 2001)

Emergency Preparedness Mobilization Board (EMPB): "Resource mobilization planning for a coordinated federal response was energized when on December 17, 1981, the President through the Assistant to the President for National Security Affairs signed a memorandum establishing the Emergency Preparedness Mobilization Board (hereinafter EMPB). This action was taken in response to a Memorandum for Edwin Meese, III, Counselor to the President from Frank C. Carlucci, Deputy Secretary of Defense and Louis O. Giuffrida, Director of FEMA, dated May 26, 1981

"Two National Security Decisions (NSD 30 "Managing Terrorist Incidents" April 10, 1982 and NSD 47 "Emergency Mobilization Preparedness" July 22, 1982) were soon issued that established two fundamentals. First in the event of threatened or actual terrorist attacks lead agencies were designated as responsible, principally State for international terrorism, Justice for domestic terrorism, and FEMA for response to actual events. Second, the principal was established that even natural disasters could impact national security, and a single system was required for the national security community and its assets to respond. NSD 47 in particular identified a large catastrophic earthquake (the placement of the principal research, development, and manufacturing capability of the nation for the technology sector in California was the specific catalyst) as potentially damaging national security. It therefore concluded that a single response system was necessary and empowered the EMPB to design such as system. By 1985, in NSD 188 the EMPB was disestablished having completed a plan of action. (It should be noted that the Los Angeles Olympics had energized the Department of Justice in the assigned lead role in domestic terrorism and DOJ was increasingly anxious to assert that role)." (**Cumming**, "The NSC's 1988 Staff Effort to Create a National Security Emergency Plan for Large Scale Domestic Events," *VLG Backgrounder*, October 2005, 1-2)

Emergency Preparedness Resource Inventory (EPRI), AHRQ, HHS: "The Emergency Preparedness Resource Inventory (EPRI) is a tool allowing local or regional planners to assemble an inventory of critical resources that would be useful in responding to a bioterrorist attack. In addition to a Web-based software tool, EPRI includes an Implementation Report, a Technical Manual, and an Appendix." (**Hassol**, *EPRI: A Tool for Local, Regional and State Planners*, 2005)

Emergency Preparedness System and Responsibilities, Stafford Act (Title VI, Sec. 601. Declaration of Policy (42 U.S.C. 5195)):

"The purpose of this title is to provide a system of emergency preparedness for the protection of life and property in the United States from hazards and to vest responsibility for emergency preparedness *jointly in the Federal Government and the States and their political subdivisions*. The Congress recognizes that the organizational structure established jointly by the Federal Government and the States and their political subdivisions for emergency preparedness purposes

can be effectively utilized to provide relief and assistance to people in areas of the United States struck by a hazard. The Federal Government shall provide necessary direction, coordination, and guidance, and shall provide necessary assistance, as authorized in this title so that a comprehensive emergency preparedness system exists for all hazards." (**Stafford Act**, 1994; see FEMA 592, p. 54)

Emergency Procedures: "A plan of action to commence immediately to prevent the loss of life and minimize injury and property damage." (**DigitalCare**, *State of OR BC Workshop*, 2006, 54)

Emergency Program, NFIP, FEMA: "The Emergency Program is the initial phase of a community's participation in the NFIP if no flood hazard information is available or the community has a Flood Hazard Boundary Map (FHBM), but no Flood Insurance Rate Map (FIRM). A limited amount of flood insurance coverage at less than actuarial rates is available for all residents of the community. The community is required to adopt minimum floodplain management standards to control future use of its floodplains. Communities are converted to the Regular Program upon completion of a Flood Insurance Study and issuance of a FIRM or a determination that the community has no special flood areas (NSFHA). Under the Regular Program, more comprehensive floodplain management requirements are required of the community and higher amounts of flood insurance coverage are provided." (**FEMA**, *Emergency Program*, 2007)

Emergency Protective Measures: "Actions (other than debris removal) eligible as Category B measures, including installation of plastic sheeting for temporary roofing, generators requiring installation, and shoring or demolition of unsafe structures." (**FEMA**, *100% Funding for Direct Federal Assistance and Grant Assistance*, June 9, 2006)

Emergency Public Information (EPI): "The EPI function gives the public accurate, timely, and useful information and instructions throughout the emergency period. The EPI organization initially focuses on the dissemination of information and instructions to the people at risk in the community. However, the EPI organization also must deal with the wider public's interest and desire to help or seek information. People may call to find out about loved ones. They may call to offer help, or simply send donations. They may even urge Federal action. Good, timely information can help prevent overloading a jurisdiction's communications network, its transportation infrastructure, and its staff." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (State and Local Guide (SLG) 101), **1996**, p. 5-D-1)

Emergency Public Information (EPI): "Information that is disseminated primarily in anticipation of, during, or after an emergency that relates to the emergency and provides public safety or other information for the general welfare of the public." (**FEMA**, *Accommodating Individuals With Disabilities In The Provision Of Disaster Mass Care, Housing, And Human Services: Reference Guide*, **2007**, Glossary)

Emergency Public Information (EPI): Information which is disseminated primarily in anticipation of an emergency or at the actual time of an emergency and in addition to providing information as such, frequently directs actions, instructs, and transmits direct orders. (**Simeon Institute** 1998)

Emergency Public Information (EPI) Causes of Credibility Gaps:

- Rumors
- False Information
- Inconsistent Information
- Feel Information is being withheld
- Multiple Sources of Information
- Information given in bits so people add them up wrong.
- Errors in translation/transmission. (**DCPA**, *Local Disaster Preparedness Course,* 1973, p. 69)

Emergency Public Transportation: "Temporary public transportation assistance authorized by the FCO to meet emergency needs and to provide transportation to governmental offices, supply centers, stores, post offices, schools, major employment centers, and other places necessary to enable the community to resume its normal pattern of life as soon as possible." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 50)

Emergency Readiness: "`Emergency readiness' means that a community is prepared to react promptly to save life and protect property if it is threatened or hit by a disaster or major emergency of any type. This requires that planning and preparatory actions be taken *before* there is an emergency." (**DCPA**, *Disaster Operations* (CPG 1-6), 1972, p. 3)

Emergency Readiness: "Local emergency readiness is the ability actually to conduct coordinated operations in extraordinary emergencies, making maximum use both of existing governmental forces and resources and of non-governmental groups (doctors, hospitals, news media), that have emergency capabilities. Emphasis is on tying together, and making operationally effective, local capabilities in the areas of facilities and equipment and of trained manpower. This means the ability to execute emergency plans. This Standard establishes criteria for evaluating the ability of local governments to conduct such coordinated emergency operations…. Local readiness for emergencies, to assure that all forces with lifesaving capability would actually "do the right things at the right time," is built by a repetitive cycle of planning, exercising, planning, and so on." (**DCPA**, *Standards for Local Civil Preparedness* (CPG 1-5), 1978, p. 35)

Emergency Relocation Group (ERG): "Pre-designated staff who move to a relocation site to continue essential functions in the event that their normal work locations are threatened or have been incapacitated by an incident. The ERG is composed of an advance team plus emergency personnel." (**DHS**, *Federal Continuity Directive 1*, November 2007, P-4)

Emergency Relocation Group (ERG): "Pre-designated… principals and staff who will move to an emergency relocation site to continue…HQ essential functions in the event the…HQ building is threatened or otherwise unavailable." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Emergency Relocation Group (ERG) Member: "A person who has been assigned responsibility to report to an alternate site, as required, to perform agency essential functions or other tasks related to continuity of operations." (**DHS**, *Fed. Cont. Direct. 1*, Nov 2007, P-4)

Emergency Relocation Sites (ERS): "By definition, an ERS is a site located outside a prime target area to which all or portions of a civilian or military headquarters may be moved. The ERS location must provide adequate protection from blast, heat, fire, and radiation. Although no area of the United States is safe from fallout, prevailing winds and target locations provide areas with a higher probability of reduced radiological hazard in the event of a nuclear attack. In that the danger zone for heat and fire are smaller than the danger zone for blast over-pressures, the effects of nuclear blast over-pressures are used as the primary consideration to identify safe distances from targets. The hazard zone, of course, depends upon the size of the explosion. For planning purposes, a location which limits the maximum over-pressure to 1.0 p.s.i. was used. For a 1 MT surface burst, the less than 1.0 p.s.i. over-pressure zone starts at approximately 7.0 miles from point of impact. For a 5 MT surface burst the distance is approximately 13 miles and for a 25 MT surface burst the distance is approximately 22 miles." (**USACE**, *Planning and Operations Guidelines*, *Annex B: ERS*, 1985, pp. B-3, B-4))

Emergency Responder: "As used in this plan [FEMA Strategic Plan, 2002] an individual who performs an operational role in responding to an incident." (**FEMA**, *A Nation Prepared – FEMA Strategic Plan – Fiscal Years 2003-2008*, 2002, p. 58 (Glossary))

Emergency Responder: "Anyone involved in the response to an incident, and therefore contributing to the resolution of the problems brought about by the incident. The same definition is applied to an emergency response organization. Emergency Responders may therefore include the private sector, non-governmental organizations, and/or the public sector (community/municipal, ministry, provincial, federal)." (**Emergency Management Ontario**, *Incident Management System*, November 2007 Draft, p. 122)

Emergency Response: "Coordinated emergency response requires survivable and compatible communications and information collection, processing and reporting capabilities, and comprehensive plans that are exercised and tested with all levels of government." (**FEMA**, *An Introduction to SCM*, Sep 1992, 3)

Emergency Response: "Emergency response (ER) is the first action that focuses on avoiding, deterring, and preventing disasters and preparing the organization to respond to a disaster. The goal of ER is lifesaving, safety, and initial efforts to limit the impact to asset damage." (**IIA**, *Business Continuity Management*, July, 2008, pages 1-2)

Emergency Response: "Emergency response is generally described as the tactical planning and practical activities designed to protect life and property immediately following some type of event…. Some of the key elements of an ER program include:

- Evacuation planning and assembly.
- Escalation protocols.
- Damage assessment and reporting.
- Hazmat response and spill control.

- Medical response.
- Salvage and reclamation.
- Specialty issues such as fire brigades, first aid, high angle or confined space rescue, etc." (**IIA**, *Business Continuity Management*, 2008, 19)

Emergency Response Agency: "Any organization responding to an emergency, or providing mutual aid support to such an organization, whether in the field, at the scene of an incident, or to an operations center." (**CA OES**, *SEMS Guidelines*, 2006, p. 8)

Emergency Response Personnel: "Personnel involved with an agency's response to an emergency." (**CA OES**, *SEMS Guidelines*, 2006, p. 8)

Emergency Response Capability Key Personnel Requirements: "In personnel terms, the keys to an effective emergency response capability are: (1) well qualified emergency response personnel with clearly assigned roles and responsibilities, and (2) thorough training, followed by frequent, periodic exercising and retraining of personnel in their specific roles. To borrow a term from the military, good training is a 'force multiplier'." (**FEMA**, *An Introduction to SCM*, Sep 1992, 3)

Emergency Response Provider: "Includes Federal, State, local, and tribal emergency public safety, law enforcement, emergency response, emergency medical (including hospital emergency facilities), and related personnel, agencies, and authorities. (See section 2(6), Homeland Security Act of 2002, Public Law 17-296, 116 Stat. 2135 (2002).)" (**DHS**, *UTL 2.1*, 2005, p. B-1 (142))

Emergency Response Team (ERT): "(1) A team composed of Federal program and support personnel, which FEMA activates and deploys into an area affected by a major disaster or emergency. This team assists the FCO in carrying out his/her responsibilities under the Stafford Act, the declaration, applicable laws, regulations, and the FEMA-State agreement. (2) The team is an interagency team, consisting of the lead representative from each Federal department or agency assigned primary responsibility for an Emergency support Function and key members of the FCO's staff, formed to assist the FCO in carrying out his/her responsibilities. The team provides a forum for coordinating the overall Federal consequence management response requirements." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B: Definitions)

Emergency Response Teams (ERT): "The ERT is the principal interagency group that supports the PFO and/or the FCO in coordinating the overall Federal incident operation. The ERT can be augmented by an advanced element known as the ERT-A and/or a national headquarters-level team, known as the ERT-N, deployed for large-scale high visibility events. The ERT provides staffing for the JFO and ensures Federal resources are available to meet incident management and State requirements identified by the State Coordinating Officer. The size and composition of the ERT is scalable and can range from a small organization focusing on recovery operations to all ESF primary and support agencies undertaking the full range of prevention, preparedness, response and recovery activities." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 36)

[Note: "to be replaced by the Federal Incident Response Support Teams (FIRST) and Incident Management Assistance Teams (IMAT)." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 35)]

Emergency Response Team (ERT): "A team composed of Federal program and support personnel, which the FCO activates and deploys into an area affected by a major disaster or emergency. This team assists the FCO in carrying out his/her responsibilities under the Stafford Act, the declaration, applicable laws, regulation, and the FEMA/State agreement. Any Federal agency can be directed to detail personnel within the Federal agency's administrative jurisdiction to temporary duty with the FCO. The ERT provides a forum for coordinating the overall Federal response, reporting on the conduct of specific operations, exchanging information, and resolving issues related to ESFs and other response requirements." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 50)

Emergency Response Teams - Advanced Element (ERT-A): "The ERT-A responds during the early stages of an incident. It is headed by a team leader from FEMA and is composed of program and support staff and representatives from selected ESF primary agencies. A part of the ERT-A deploys to the State EOC or to other locations to work directly with the State to obtaining information on the impact of the event and to identify specific State requests for Federal incident management assistance. Other elements of the ERT-A (including Mobile Emergency Response Support (MERS) personnel and equipment) deploy directly to or near the affected area to establish field communications, locate and establish field facilities, and set up operations. The ERT-A identifies or validates the suitability of candidate sites for the location of mobilization center(s) and the JFO." (**DHS**, *National Response Plan* (Draft #1), 25Feb2004, 36)

[Note: "to be replaced by the Federal Incident Response Support Teams (FIRST) and Incident Management Assistance Teams (IMAT)." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 35)]

Emergency Response Team–Advanced Element (ERT-A): "The ERT-A is a small interagency "advance" team that deploys to the State Emergency Operations Center (EOC). Normally the ERT-A does not issue mission assignments but communicates with the RRCC to ensure that any requirements identified by the State for Federal assistance are passed to the RRCC for action." (**FEMA**, *Mission Assignment SOPs Operating Procedures*, 2007, p. 4; p.50)

Emergency Response Teams – Advanced Element (ERT-A): "ERT-As are located in each of FEMA's Regions and are deployed in the early phases of an incident to work directly with the States to assess the disaster impact, gain situational awareness, help coordinate the disaster response, and supports specific State requests for assistance. ERT-As are made up of approximately 25 individuals who establish an initial presence in a State EOC. They can later staff the JFO to support the disaster response. The ERT-As deploy with basic communications capabilities including cell phones, wireless laptop computers, and a limited number of satellite cell phones. A small component of an ERT-A, the Rapid Needs Assessment Team, also provides the capability to collect disaster information in the field needed to determine more specific disaster response requirements." (**FEMA**, *Statement of Glenn Cannon*, Nov.15, 2007, pp. 6-7)

Emergency Response Teams – National (ERT-N): "An ERT-N is a headquarters-level national team that deploys to large-scale, high visibility incidents. An ERT-N may pre-deploy based on threat conditions. The Secretary of Homeland Security determines the need for ERT-N deployment, coordinating the plans with the affected region and other Federal agencies. The ERT-N includes staff from FEMA Headquarters and regional offices as well as other Federal agencies. (Three ERT-N teams are structured with one team on call every third month. A fourth standing team is on-call year-round exclusively to respond to incidents in the National Capital Region (NCR)). (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 36)

[Note: "to be replaced by the Federal Incident Response Support Teams (FIRST) and Incident Management Assistance Teams (IMAT)." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 35)]

Emergency Response Team–National (ERT-N): "The ERT-N is a nationally organized ERT that is deployed by the FEMA Administrator for high visibility or catastrophic disasters." (**FEMA,** *Mission Assignment SOPs Operating Draft*, July 2007, p. 4)

Emergency Response Teams – National (ERT-N): "FEMA's ERT-Ns are deployed by FEMA Headquarters in response to significant disaster events… Their purpose is to coordinate disaster response activities, coordinate and deploy key national response assets and resources, provide situational awareness, and maintain connectivity with key DHS operations centers and components. ERT-Ns are made up of approximately 32 individuals and are organized according to National Incident Management System/Incident Command System (NIMS/ICS) standards to provide a systematic, proactive, and coordinated response approach. ERT-N members can provide the initial staffing for a JFO." (**FEMA**, *Statement of Glenn Cannon*, November, 2007, 6)

Emergency Risk Management: "Emergency risk management is a 'systematic process that produces a range of measures that contribute to the well-being of communities and the environment'. It includes: context definition; risk identification; risk analysis; risk evaluation; risk treatment; monitoring and reviewing; and, communicating and consulting." (**Emergency Management Australia** 2000, 1)

Emergency Services Personnel:
1.1 million firefighters, 750,000 volunteer – 1 for every 265 people.[40]
465,000 sworn law enforcement personnel; 291,000 shorn sheriff's office personnel – 1 for every 334 people.[41]
890,000 all levels of pre-hospital services (basic EMT, intermediate EMT, paramedic) – 1 for every 324 people.[42] (Citizen Corps, *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide presentation, slide 4)

Emergency Services Sector (ESS): "The emergency services sector (ESS) is our first line of defense: local police, fire and rescue, emergency medical services, public health departments,

[40] Cites *National Fire Protection Association*, 2003.
[41] Cites *National Law Enforcement Officers Memorial Fund*, 2003.
[42] Cites *Journal of Emergency Medical Services*, 2004.

and public works departments." (**University Consortium for Infrastructure Protection**, *Critical Infrastructure Protection in the National Capital Region*, September 2005, p. 4)

Emergency Services Sector (ESS) Personnel: "Our nation's three million firefighters, police officers, and EMTs are the first on the scene in a crisis and the last to leave." (DHS, *The Nomination of The Honorable Tom Ridge to be Secretary of the DHS*, January 19, 2003)

Emergency Severity Index (ESI): The ESI is a five-level ED triage algorithm that provides clinically relevant stratification of patients into five groups, from 1 (most urgent) to 5 (least urgent), on the basis of acuity and resource needs. (**AHRQ/HHS**, Mass Casualty Care, 2007, 72)

Emergency Support Function (ESF): "A functional grouping of Federal agencies providing the types of Federal response assistance that a State is most likely to need. Each ESF is headed by a primary Federal agency designated based on its authorities, resources, and capabilities in the particular functional area. Other agencies have been designated as support agencies for one or more ESFs based on their resources and capabilities to support the functional areas." (**FEMA** Mission Assignment SOPs Operating Draft, July 2007, p. 51)

Emergency Support Function (ESF): "From the National Response Plan (NRP), a grouping of government and certain private-sector capabilities into an organizational structure to provide support, resources, and services." (**HSC**, *NCPIP*, August 2007, p. 61; **DHS**, *FCD 1*, 2007, P-3)

Emergency Support Function (ESF): "A functional area of response activity established to facilitate coordinated Federal delivery of assistance required during the response phase to save lives, protect property and health, and maintain public safety. These functions represent those types of Federal assistance which the State likely will need most because of the overwhelming impact of a catastrophic event on local and State resources." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B: Definitions)

Emergency Support Function Leaders Group (ESFLG): "At Headquarters, the principal body that addresses NRP planning and implementation at the working level. It handles issue formulation and resolution, review of after-action reports, significant changes to NRP planning and implementation and NRP strategies, and other NRP-related operations issues that cannot be resolved at the working level." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, 51)

Emergency Support Functions (ESFs): "ESFs provide the structure for coordinating Federal interagency support for a Federal response to an incident. ESFs may be selectively activated for both Stafford Act and non-Stafford Act incidents where Federal departments or agencies request DHS assistance or under other circumstances as defined in HSPD-5. Not all national incidents result in the activation of ESFs. ESFs may be activated to support headquarters, regional and/or field activities." (**DHS**, *Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework* (Draft), September 10, 2007, p. 9)

Emergency Support Functions (ESFs): "A grouping of government and certain private-sector capabilities into an organizational structure to provide the support, resources, program implementation, and services that are most likely to be needed to save lives, protect property and the

environment, restore essential services and critical infrastructure, and help victims and communities return to normal, when feasible, following domestic incidents. Also called ESFs." (**DoD**, *DOD Dictionary of Military and Associated Terms*, 2007)

Emergency Support Functions (ESFs): "The Federal Government organizes much of its resources and capabilities – as well as those of certain private sector and non-governmental organizations – under 15 Emergency Support Functions. ESFs align categories of resources and provide strategic objectives for their use. ESFs utilize standardized resource management concepts such as typing, inventorying and tracking to facilitate the dispatch, deployment and recovery of resources before, during and after an incident. The *Framework* identifies primary ESF agencies on the basis of authorities and resources. Support agencies are assigned based on the availability of resources in a given functional area. ESFs provide the greatest possible access to Federal department and agency resources regardless of which organization has those resources." (**DHS**, *NRF Comment Draft*, September 2007, p. 28) The ESFs are:

ESF #1: Transportation (Coordinator: Department of Transportation)
ESF #2: Communications (Coordinator: DHS, National Communications Systems)
ESF #3: Public Works and Engineering (Coordinator: DOD, Army Corps of Engineers)
ESF #4: Firefighting (Coordinator: USDA, U.S. Forest Service)
ESF #5: Emergency Management (Coordinator: DHS: FEMA)
ESF #6: Mass Care, Emergency Assistance, Housing/Human Services (DHS, FEMA)
ESF #7: Resource Support (Coordinator: General Services Administration)
ESF #8: Public Health and Medical Services (Coordinator: HHS)
ESF #9: Search & Rescue (Coordinator: DHS, FEMA)
ESF #10: Oil and Hazardous Materials Response (Coordinator: EPA)
ESF #11: Agriculture and Natural Resources (Coordinator: USDA)
ESF #12: Energy (Coordinator: Department of Energy)
ESF #13: Public Safety and Security (Coordinator: Department of Justice)
ESF #14: Long Term Community Recovery (Coordinator: DHS, FEMA)
ESF #15: External Affairs (Coordinator: DHS)
(**DHS**, *NRF Comment Review*, September 2007, pp. 56-57; includes expanded list)

Emergency Support Function (ESF) #1 – Transportation: Purpose: "provides support to the Department of Homeland Security (DHS) by assisting Federal, State, tribal, and local governmental entities, voluntary organizations, nongovernmental organizations, and the private sector in the management of transportation systems and infrastructure during domestic threats or in response to incidents. ESF #1 also participates in prevention, preparedness, and recovery activities. ESF #1 carries out the Department of Transportation (DOT)'s statutory responsibilities, including regulation of transportation, management of the Nation's airspace, and ensuring the safety and security of the national transportation system." (**DHS**, *NRF Emergency Support Function #1 – Transportation Annex* (Comment Draft). September 10, 2007, p. 1)

Emergency Support Function (ESF) #2 – Communications: Purpose: "supports the restoration of public communications infrastructure, facilitates the recovery of systems and applications from cyber attacks, and coordinates Federal communications support to response efforts during incidents requiring a coordinated Federal response (hereafter referred to as

"Incidents"). This ESF implements the provisions of the Office of Science and Technology Policy (OSTP) National Plan for Telecommunications Support in Non-Wartime Emergencies (NPTS). ESF #2 also provides communications support to State, tribal and local first responders when their systems have been impacted, and provides communications and information technology support to the Joint Field Office (JFO) and JFO field teams. With the rapid convergence of communications, Internet, and information technology (IT), the National Communications System (NCS) and the National Cyber Security Division (NCSD) work closely to coordinate the ESF #2 response. This convergence requires increased synchronization of effort and capabilities between the communications and information technology sectors." (**DHS**, *NRF Emergency Support Function #1 – Communications Annex* (Comment Draft). September 10, 2007, p. 1)

Emergency Support Function (ESF) #3 -- Public Works and Engineering: "Scope: ESF #3 is structured to provide public works and engineering-related support for the changing requirements of domestic incident management to include preparedness, response, and recovery actions. Activities within the scope of this function include conducting preincident and postincident assessments of public works and infrastructure; executing emergency contract support for life-saving and life-sustaining services; providing technical assistance to include engineering expertise, construction management, and contracting and real estate services; providing emergency repair of damaged infrastructure and critical facilities; and implementing and managing the DHS/Federal Emergency Management Agency (FEMA) Public Assistance Program and other recovery programs." (DHS, *NRF Emergency Support Function #3 – Public Works and Engineering Annex* (Comment Draft), September 10, 2007, p. 1)

Emergency Support Function (ESF) #4 – Firefighting: "Purpose: Emergency Support Function (ESF) #4 – Firefighting provides Federal support for the detection and suppression of wildland, rural, and urban fires resulting from, or occurring coincidentally with, an incident requiring a coordinated Federal response for assistance. Scope: ESF #4 manages and coordinates firefighting activities, including the detection and suppression of fires on Federal lands, and provides personnel, equipment, and supplies in support of State, tribal, and local agencies involved in rural and urban firefighting operations." (**DHS**, *National Response Framework Emergency Support Function #4 – Firefighting Annex* (Comment Draft), Sep.10, 2007, p. 1)

Emergency Support Function (ESF) #5 – Emergency Management: "Purpose: ESF #5 – Emergency Management is responsible for supporting overall activities of the Federal Government for domestic incident management. ESF #5 provides the core management and administrative functions in support of National Response Coordination Center (NRCC), Regional Response Coordination Center (RRCC), and Joint Field Office (JFO) operations. Scope: ESF #5 serves as the coordination ESF for all Federal departments and agencies across the spectrum of domestic incident management from hazard mitigation and preparedness to response and recovery. ESF #5 will identify resources for alert, activation, and subsequent deployment for quick and effective response." (**DHS**, *NRF Emergency Support Function #5 – Emergency Management Annex* (Comment Draft), September 10, 2007, p. 1)

Emergency Support Function (ESF) #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex: "Purpose: Emergency Support Function (ESF) #6 – Mass Care, Emergency Assistance, Housing, and Human Services supports and augments State, regional,

tribal, local, and nongovernmental organization (NGO) mass care, emergency assistance, housing, and human services missions. The purpose of this ESF is to ensure that the needs of disaster-impacted populations are addressed by coordinating Federal assistance to impacted areas…. Scope: When directed by the President, ESF #6 services and programs are implemented to assist individuals and households impacted by potential or actual disaster incidents. The Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA) coordinates and leads Federal resources as required to support State, tribal, and local governments and NGOs in the performance of mass care, emergency assistance, housing, and human services missions." (**DHS**, *National Response Framework Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex* (Comment Draft), September 10, 2007, p. 2)

Emergency Support Function #7 – Resource Support Annex: "*Purpose* -- Emergency Support Function (ESF) #7 – Resource Support assists the Department of Homeland Security (DHS), supporting Federal agencies and State, tribal, and local governments requiring resource support prior to, during, and/or after incidents requiring a coordinated Federal response. *Scope* -- Resource support to Federal, State, tribal, and local governments consists of emergency relief supplies, facility space, office equipment, office supplies, telecommunications (in accordance with the Office of Science and Technology Policy (OSTP) National Plan for Telecommunications Support in Non-Wartime Emergencies), contracting services, transportation services (in coordination with ESF #1 – Transportation), and personnel required to support immediate response activities. ESF #7 provides support for requirements not specifically identified in other ESFs, including excess and surplus property. Resource support may continue until the disposition of excess and surplus property, if any, is completed." (**DHS**, *NRF ESF #7 – Resource Support Annex* (Comment Draft), September 10, 2007, p. 1)

Emergency Support Function (ESF) #8 – Public Health and Medical Services: "…provides the mechanism for coordinated Federal assistance to supplement State, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated Federal response, and/or during a developing potential health and medical emergency. Public Health and Medical Services includes behavioral health needs consisting of both mental health and substance abuse considerations for incident victims and response workers and, as appropriate, at-risk population groups defined in the Base Plan as individuals in need of additional medical response assistance, and veterinary and/or animal health issues." (**DHS**, *NRF ESF #8 – Public Health and Medical Services Annex* (Comment Draft), September 10, 2007, p.1)

Emergency Support Function (ESF) #9 – Search and Rescue (SAR): '…rapidly deploys components of the Federal SAR Response System to provide specialized lifesaving assistance to State, tribal, and local authorities when activated for incidents or potential incidents requiring a coordinated Federal response. The Federal SAR Response System is composed of the primary agencies that provide specialized SAR operations during incidents or potential incidents requiring a coordinated Federal response.

- Structure Collapse (Urban) Search and Rescue (US&R)
- Waterborne Search and Rescue
- Inland/Wilderness Search and Rescue
- Aeronautical Search and Rescue

SAR services include the performance of distress monitoring, communications, location of distressed personnel, coordination, and execution of rescue operations including extrication or evacuation along with the provisioning of medical assistance and civilian services through the use of public and private resources to assist persons and property in potential or actual distress." (**DHS**, *NRF ESF #9 –* Search *and Rescue Annex* (Comment Draft), September 10, 2007, p.1)

Emergency Support Function (ESF) #10 – Oil and Hazardous Materials Response: "ESF #10 provides for a coordinated response to actual or potential oil and hazardous materials incidents by placing the hazard-specific response mechanisms of the NCP within the broader National Response Framework coordination structure. ESF #10 includes the appropriate response and recovery actions to prepare for, prevent, minimize, or mitigate a threat to public health, welfare, or the environment caused by actual or potential oil and hazardous materials incidents. Hazardous materials addressed under the NCP include chemical, biological, and radiological substances, whether accidentally or intentionally released. These include certain chemical, biological, and radiological substances considered weapons of mass destruction (WMD)." (**DHS**, *National Response Framework Emergency Support Function #10 – Oil and Hazardous Materials Response Annex* (Comment Draft), September 10, 2007, p. 1)

Emergency Support Function (ESF) #11 – Agriculture and Natural Resources: "…supports State, tribal, and local authorities and other Federal agency efforts to address:
(1) provision of nutrition assistance;
(2) control and eradication of an outbreak of a highly contagious or economically devastating animal/zoonotic disease, highly infective exotic plant pest, or economically devastating plant pest infestation;
(3) assurance of the safety and security of the commercial food supply (under Department of Agriculture (USDA) jurisdictions and authorities);
(4) protection of natural and cultural resources and historic properties (NCH) resources when activated by the Secretary for incidents requiring a coordinated Federal response; and
(5) the safety and well-being of household pets." (**DHS**, *National Response Framework Emergency Support Function #11 – Agriculture and Natural Resources Annex* (Comment Draft), Sep. 10, 2007, p. 1)

Emergency Support Function (ESF) #12 – Energy: ESF12 "is intended to facilitate the restoration of damaged energy systems and components when activated by the Secretary for incidents requiring a coordinated Federal response. Under Department of Energy (DOE) leadership, ESF #12 is an integral part of the larger DOE responsibility of maintaining continuous and reliable energy supplies for the United States through preventive measures and restoration and recovery actions. ESF #12 collects, evaluates, and shares information on energy system damage and estimations on the impact of energy system outages within affected areas. Additionally, ESF #12 provides information concerning the energy restoration process such as projected schedules, percent completion of restoration, geographic information on the restoration, and other information as appropriate. ESF #12 facilitates the restoration of energy systems through legal authorities and waivers. ESF #12 also provides technical expertise to the utilities, conducts field assessments, and assists government and private-sector stakeholders to overcome challenges in restoring the energy system." (**DHS**, *NRF Emergency Support Function #12 –Energy Annex* (Comment Draft). September 10, 2007, p.1)

Emergency Support Function (ESF) #13 – Public Safety and Security: ESF 13 "integrates Federal public safety and security capabilities and resources to support the full range of incident management activities associated with potential or actual incidents requiring a coordinated Federal response. ESF #13 provides a mechanism for coordinating and providing Federal-to-Federal support; Federal support to State, tribal, and local authorities; and/or support to other ESFs, consisting of noninvestigative law enforcement, public safety, and security capabilities and resources during potential or actual incidents requiring a coordinated Federal response. ESF #13 capabilities support incident management requirements including but not limited to, force and critical infrastructure protection, security planning and technical assistance, technology support, and general law enforcement assistance in both pre-incident and pos-incident situations. ESF #13 is activated in situations requiring extensive public safety and security and where State and local government resources are overwhelmed or are inadequate, or in pre-incident or post-incident situations that require protective solutions or capabilities unique to the Federal Government." (**DHS**, *National Response Framework Emergency Support Function #13 –Public Safety and Security Annex* (Comment Draft), Sep.2007, 1)

Emergency Support Function (ESF) #14 – Long Term Community Recovery Annex: "…provides a mechanism for coordinating Federal support to State, tribal, regional, and local governments, nongovernmental organizations (NGOs), and the private sector to enable community recovery from the long-term consequences of extraordinary disasters. ESF #14 accomplishes this by identifying and facilitating availability and use of sources of recovery funding, and providing technical assistance (such as impact analyses) for community recovery and recovery planning support." (**DHS**, *NRF ESF #14*, Jan 2008, 1)

Emergency Support Function (ESF) #15 – External Affairs Annex: "Purpose… ensures that sufficient Federal assets are deployed to the field during incidents requiring a coordinated Federal response to provide accurate, coordinated, timely, and accessible information to affected audiences, including governments, media, the private sector, and the local populace, including the special needs population. ESF #15 provides the resource support and mechanisms to implement the *National Response Framework (NRF)* Incident Communications Emergency Policy and Procedures (ICEPP) described in the Public Affairs Support Annex…. ESF #15 integrates Public Affairs, Congressional Affairs, Intergovernmental Affairs (State, tribal, and local coordination), Community Relations, and the private sector under the coordinating auspices of External Affairs. Another component, the Joint Information Center (JIC), ensures the coordinated release of information under ESF #15. The Planning and Products component of External Affairs develops all external and internal communications strategies and products for the ESF #15 organization." (**DHS**, *NRF ESF 15*, Jan 2008, 1)

Emergency Support Functions Coordinator: "The ESF coordinator is the entity with management oversight for that particular ESF. The coordinator has ongoing responsibilities throughout the preparedness, response, and recovery phases of incident management." (**DHS**, *Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework* (Draft), September 10, 2007, p. 10)

Emergency Support Functions Primary Agency(ies): "An ESF primary agency is a Federal agency with significant authorities, resources, or capabilities for a particular function within an ESF. Some ESFs have more than one primary function and, therefore, more than one primary agency. ESFs with multiple primary agencies designate one of those primary agencies to serve as the ESF coordinator for the purposes of pre-incident planning and coordination." (**DHS**, *Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework* (Draft), Sep.10, 2007, p. 10)

Emergency Support Functions Support Agencies: "Support agencies are those entities with specific capabilities or resources that support the primary agency(ies) in executing the mission of the ESF." (**DHS**, *Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework* (Draft), Sep.10, 2007, p. 10)

Emergency Support Function Teams (ESFTs): "FEMA coordinates incident response support from across the Federal Government by calling up, as needed, one or more of the 15 ESF teams. The ESF teams are coordinated by FEMA through its NRCC. During a response, ESFs are a critical mechanism to coordinate functional capabilities and resources provided by Federal departments and agencies, along with certain private sector and nonprofit organizations. They represent an effective way to bundle and funnel resources and capabilities to local, State and other responders. These functions are coordinated by a single agency but may rely on several agencies that provide resources for each functional area. The mission of the ESF is to provide the greatest possible access to capabilities of the Federal Government regardless of which agency has those capabilities. The ESFs serve as the primary operational-level mechanism to provide assistance in functional areas such as transportation, communications, public works and engineering, firefighting, mass care, housing, human services, public health and medical services, search and rescue, agriculture and energy." (**DHS**, *NRF Comment Draft*, 2007, p. 55)

Emergency Support Services: The departments of local government that have the capability to respond to emergencies 24 hours a day. They typically include law enforcement, fire, rescue, and public works. They may also be referred to as emergency response personnel or emergency operating forces.

Emergency Support Team (Sec. 303, 42 U.S.C. 5144): "The President shall form emergency support teams of Federal personnel to be deployed in an area affected by a major disaster or emergency. Such emergency support teams shall assist the Federal coordinating officer in carrying out his responsibilities pursuant to this Act. Upon request of the President, the head of any Federal agency is directed to detail to temporary duty with the emergency support teams on either a reimbursable or nonreimbursable basis, as is determined necessary by the President, such personnel within the administrative jurisdiction of the head of the Federal agency as the President may need or believe to be useful for carrying out the functions of the emergency support teams, each such detail to be without loss of seniority, pay, or other employee status." (**Stafford Act**, June 2007 (FEMA 592), p. 23)

Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP): "The Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) program helps states develop standardized programs for registering volunteer health professionals in advance of emergencies. Each state program collects verified information

on the identity, licensure status, clinical privileges, and professional credentials of volunteers. State ESAR-VHP systems are intended to be the mechanism for recording the registration and credential information of all potential health volunteers in a state. They will provide a single, centralized volunteer information database to facilitate intra-state, state-to-state, and state-to-federal transfer of volunteers. These systems should include information about volunteers involved in organized efforts at the local level (such as the MRC units) and the state level. The system also will serve a critical statewide role in recruiting, registering, verifying credentials, and classifying health professionals willing to serve in emergencies but not interested in being part of a trained, organized volunteer structure." (**Trust for America's Health**, *Ready or Not? 07*, 67)

Emergency Types: "Types of Emergencies: Emergencies take many forms. They can involve any combination of consequences stemming from:

- *Technological and man-made hazards:* nuclear waste disposal spills; radiological, toxic substance, or hazardous materials accidents; utilities failures; pollution; epidemics; crashes; explosions; urban fires.
- *Natural disasters:* earthquakes, floods, hurricanes, tornadoes, tsunami, sea surges, freezes, blizzards of snow and ice, extreme cold, forest fires, drought, and range infestation.
- *Internal disturbances:* civil disorders such as riots, demonstrations run amok, large-scale prison breaks, strikes leading to violence, and acts of terrorism.
- *Energy and material shortages:* from strikes, price wars, labor problems, and resource scarcity.
- *Attack:* the ultimate emergency—nuclear, conventional, chemical, or biological warfare." (**NGA**, *CEM: A Governors' Guide*, 1979. p.12.

Emergency Welfare Services: "`Emergency welfare services' means feeding; clothing; lodging in private and congregate facilities; registration; locating and reuniting families; care of unaccompanied children, the aged, the handicapped, and other groups needing specialized care or services; necessary financial or other assistance; counseling and referral services to families and individuals; aid to welfare institutions under national emergency or post-attack conditions; and all other feasible welfare aid and services to people in need during a civil defense emergency. Such measures include organization, direction, and provision of services to be instituted before attack, in the event of strategic or tactical evacuation, and after attack in the event of evacuation or of refuge in shelters." (**White House**, *Executive Order 11490, Assigning Emergency Preparedness Functions to Federal Departments and Agencies*, October 28, 1969) [Notes: Revoked and replaced by *Executive Order 12656, Assignment of Emergency Preparedness Responsibilities* (**White House** (President Ronald Reagan) November 18, 1988). See also E.O. 11001, February 16, 1962.]

Emergency Work: "All activities eligible under section 403 of the Stafford Act, including such activities when performed by a Federal agency as direct Federal assistance." (**FEMA**, *100% Funding for Direct Federal Assistance and Grant Assistance*, June 9, 2006)

Emergency Work: Relevant to public assistance, emergency work is work which must be done immediately to save lives and to protect improved property and public health and safety, or to avert or lessen the threat of a major disaster. Under the Stafford Act section related to essential

assistance, emergency work is defined to include clearance and removal of debris and wreckage, and temporary restoration of essential public facilities and services. Under a Presidential declaration, DFA costs for emergency work that is tasked during the first 72 hours following a declaration may be authorized for reimbursement at 100-percent Federal funding, if warranted." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 51)

Emergent Risk: "The term *Emergent Risk* is used to describe risks that are poorly understood, but are expected to grow greatly in significance. Unlike other risks, emergent risks do not have a track record which can be used to estimate likely probabilities and expected losses." (Risky Thinking, *A Glossary of Risk Related Terms*, 2007)

Emerging Agents: "As defined in the National Strategy for *Medical Countermeasures against Weapons of Mass Destruction...* Emerging Agents are previously unrecognized pathogens that might be naturally occurring and present a serious risk to human populations, such as the virus responsible for Severe Acute Respiratory Syndrome (SARS); and Advanced Agents are novel pathogens or other materials of biological nature that have been artificially engineered in the laboratory to bypass traditional countermeasures or produce a more severe or otherwise enhanced spectrum of disease. (**HHS**, *Public Health Emergency Medical Countermeasure Enterprise*, 2007, p. 8)

EMF: Emergency Management Functions. (**FEMA**, *EMPG Work Plans* (FY08), 2008, p. 2)

EMG: Emergency Management Group. (**FEMA**, *EM Guide for Business & Industry*, 1993, 27)

EMHE: Emergency Management for Higher Education Grant. (Depart of ED, *Emergency Management for Higher Education*, April 23, 2008)

EMHSCC: Emergency Management and Homeland Security Coordinating Council, CT.

EMI: Emergency Management Institute, FEMA/DHS, Emmitsburg, MD.

EMIMS: Emergency Management Information Management System. (**FEMA**, *Cannon* 2007, 5)

EMIS: Emergency Management Information System. (FEMA, Compendium of Federal Terrorism Training Courses, 2003, p. 6)

EMMA: Emergency Managers Mutual Aid (CA). (Orange County (CA) EM Organization Schools Committee, *SEMA Emergency Operations Center (EOC) Course for Schools*)

EMP: Electromagnetic Pulse.

EMPB: Emergency Preparedness Mobilization Board.

EMPG: Emergency Management Performance Grants.

EMPOWER: Emergency Management Professional Organization for Women's Enrichment.

EMR-ISC: Emergency Management and Response Information Sharing and Analysis Center.

EMRS: Emergency Management Reporting System. (**DHS**, *TCL*, p. 291)

EMS: Emergency Medical Services. (**Senate HSGA**, *A Nation Still Unprepared*, p. 631)

EMS: Emergency Medical System**.** (**UNDHA**, *Disaster Management Glossary*, 1992, 34)

EMS: Environmental Management System. (**DHS**, *IPG FY 2011-2015 Draft*, p. 19)

EMT: Emergency Medical Technician.

EMTS: Emergency Management of the Transportation System. (**DHS** *Doctrine*, Ch. 2, 2008)

EMWIN: Emergency Managers Weather Information Network.

Enabling Learning Objective (ELO): "A statement in behavioral terms of what is expected of the student in demonstrating mastery at the knowledge and skill level necessary for achievement of a terminal learning objective (TLO)." (**DHS**, *DHS Training Glossary*, 2006, p. 23)

E-NAWAS: Enhanced National Warning System.

ENDEC: EAS Encoder/Decoder. (**FEMA**, *IPAWS Update*, 2007, slide 28)

Enduring Constitutional Government (ECG): "`Enduring Constitutional Government,' or 'ECG,' means a cooperative effort among the executive, legislative, and judicial branches of the Federal Government, coordinated by the President, as a matter of comity with respect to the legislative and judicial branches and with proper respect for the constitutional separation of powers among the branches, to preserve the constitutional framework under which the Nation is governed and the capability of all three branches of government to execute constitutional responsibilities and provide for orderly succession, appropriate transition of leadership, and interoperability and support of the National Essential Functions during a catastrophic emergency." (**White House**, *HSPD-20*, May 9, 2007)

Energetic Materials Research and Testing Center (EMRTC), New Mexico Institute of Mining and Technology (NMIMT): "EMRTC provides specialized training that focuses on explosives and incendiary devices. This training includes controlled detonations of improvised explosives providing responders first-hand understanding of and experience with a range of improvised explosive devices from letter bombs to vehicle bombs."(**FEMA**, *TEI/TO*, 2008, 4-5)

Engaged Partnership: "The Federal Government also works to establish *engaged partnership* with States, as well as the private sector. Our national response is more effective when all levels of government work together well before an incident to develop effective plans and achieve a heightened state of preparedness." (**DHS**, *NRF Comment Draft*, Sep. 2007, p. 21)

Engaged Partnership – First of Five Key National Response Framework Principles: "Leaders at all levels must communicate and actively support engaged partnerships by developing shared goals and aligning capabilities so that no one is overwhelmed in times of crisis. Layered, mutually supporting capabilities at Federal, State, tribal, and local levels allow for planning together in times of calm and responding together effectively in times of need. Engaged partnership includes ongoing communication of incident activity among all partners to the *Framework*, and shared situational awareness for a more rapid response. In particular, the potential for terrorist incidents requires *a heightened state of readiness* and nimble, practiced capabilities baked into the heart of our preparedness and response planning." (**DHS**, *NRF*, Jan 2008, 9)

Engaged Partnership: "We are well on the way to transforming the quality of the assistance we are capable of providing to support you. FEMA will no longer wait for you to call before we consider our options. Today, FEMA is leaning further forward to plan for your needs and be ready to respond quickly. This approach is what we call "Engaged Partnership" and it is guiding our plans and our actions. (**FEMA**, *David Paulison, Administrator, FEMA, International Association of Emergency Managers Annual Conference, Reno, NV: A Declaration of Inter-Dependence*, 12 Nov 2007, p. 3)

Enhanced Agents: "As defined in the National Strategy for *Medical Countermeasures against Weapons of Mass Destruction:* Enhanced Agents are traditional agents that have been modified or selected to enhance their ability to harm human populations or circumvent current countermeasures, such as a bacterium that has been modified to resist antibiotic treatment." (**HHS**, *Public Health Emergency Medical Countermeasure Enterprise*, 2007, p. 8)

Enhanced National Warning System (E-NAWAS): "E-NAWAS (Enhanced National Warning System) upgrades NAWAS with 21st century voice, video, and data collaboration technologies, as well as including a geo-targeted alert and warning message dissemination capability." (**DHS**, *FEMA OMA FY 2009*, 2008, 15)

Enhanced National Warning System (E-NAWAS):

- Backward compatible with the existing NAWAS
- Provide two simultaneous circuits
  - One for full-time monitoring
  - One for ad-hoc point-to-point and conference calls
- Use IP packets for voice, data, and video collaboration
- Add capability to rapidly geo-target conference calls & collaboration
- Use dual-paths (landline and satellite) for greater reliability/resilience
- Add independent power and radio frequency protection
- Provide a mobile E-NAWAS capability
- Allow for EAS activation option. (**FEMA**, *IPAWS Update*, 2007, slide 21)

Enhancement Plan: "A comprehensive, statewide management plan for enhancing State homeland security programs and capabilities to align with the National Preparedness Goal

and to achieve the goals and objectives from the State Homeland Security Strategy." (DHS, *Fiscal Year 2007 Homeland Security Grant Program: Investment Justification Reference Guide*, January 2007, p. 53, Appendix A: Definitions)

Enterprise Architecture (EA): "One essential tool for facilitating organizational transformation is an enterprise architecture (EA)—a corporate blueprint that serves as an authoritative frame of reference for information technology investment decision making." (**GAO**, *Homeland Security: DHS Enterprise Architecture Continues to Evolve*…, May 2007)

Enterprise Business Services: The 7th DHS "Functional Area": "Common or shared business services supporting the core mission areas. Business services are defined by the agency business model and include the foundational mechanisms and back office services used to achieve the purpose of the agency." (**DHS**, *IPG FY 2011-2015 Draft*, 2008, p. 19)

Enterprise Coordination Approvals Processing System (eCAPS): "A Web-based software program for generating and approving mission assignment forms." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 51)

Enterprise Resilience: "Enterprise resilience is the ability and capacity to withstand infrastructure discontinuities and adapt to new risk environments. A resilient organization effectively aligns its strategy, operations, management systems, governance structure, and decision-support capabilities so that it can uncover and adjust to continually changing risks and better endure disruptions." (DoA, *Infrastructure Risk Management (Army)*, June 22, 2004, p. 14)

Enterprise Risk Management (ERM): "The underlying premise of enterprise risk management is that every entity exists to provide value for its stakeholders. All entities face uncertainty, and the challenge for management is to determine how much uncertainty to accept as it strives to grow stakeholder value. Uncertainty presents both risk and opportunity, with the potential to erode or enhance value. Enterprise risk management enables management to effectively deal with uncertainty and associated risk and opportunity, enhancing the capacity to build value. Value is maximized when management sets strategy and objectives to strike an optimal balance between growth and return goals and related risks, and efficiently and effectively deploys resources in pursuit of the entity's objectives. Enterprise risk management encompasses:

• *Aligning risk appetite and strategy* – Management considers the entity's risk appetite in evaluating strategic alternatives, setting related objectives, and developing mechanisms to manage related risks.
• *Enhancing risk response decisions* – Enterprise risk management provides the rigor to identify and select among alternative risk responses – risk avoidance, reduction, sharing, and acceptance.
• *Reducing operational surprises and losses* – Entities gain enhanced capability to identify potential events and establish responses, reducing surprises and associated costs or losses.
• *Identifying and managing multiple and cross-enterprise risks* – Every enterprise faces a myriad of risks affecting different parts of the organization, and enterprise risk

management facilitates effective response to the interrelated impacts, and integrated responses to multiple risks.
• *Seizing opportunities* – By considering a full range of potential events, management is positioned to identify and proactively realize opportunities.
• *Improving deployment of capital* – Obtaining robust risk information allows management to effectively assess overall capital needs and enhance capital allocation.

"These capabilities inherent in enterprise risk management help management achieve the entity's performance and profitability targets and prevent loss of resources. Enterprise risk management helps ensure effective reporting and compliance with laws and regulations, and helps avoid damage to the entity's reputation and associated consequences. In sum, enterprise risk management helps an entity get to where it wants to go and avoid pitfalls and surprises along the way." (**American Institute of Certified Public Accountants**. *Enterprise Risk Management – Integrated Framework: Executive Summary*, 2004, p. 1)

Enterprise Risk Management (ERM): "Under the ERM approach, all of a company's risks—whether financial or strategic, liability or regulatory compliance—are examined together with an eye toward their potential consequences for the ongoing operation." (Geisel, "Enterprise Risk Management for IT." *Business Insurance*, May 21, 2007)

Entity: "A governmental agency or jurisdiction, private or public company, partnership, nonprofit organization, or other organization that has emergency management and continuity of operations responsibilities." (**NFPA 1600**, 2007, p. 7)

Environmental Degradation: "Unfavourable modification of the ecological state and environment through natural processes and/or human activities." (**UNDHA**, *DM Glossary*, 1992, 35)

Environmental Hazard: "A condition capable of posing an unreasonable risk to air, water, or soil quality and to plants or wildlife." (**NFPA 471**, 1997, p. 8)

Environmental Health Capability Definition: "Environmental Health is the capability to protect the public from environmental hazards and manage the health effects of an environmental health emergency on the public. The capability minimizes human exposures to environmental public health hazards (e.g., contaminated food, air, water, solid waste/debris, hazardous waste, vegetation, sediments, and vectors). The capability provides the expertise to run fate and transport models; design, implement, and interpret the results of environmental field surveys and laboratory sample analyses; develop protective guidance where none exists; and use available data and judgment to recommend appropriate actions for protecting the public and environment. Environmental Health identifies environmental hazards in the affected area through rapid needs assessments and comprehensive environmental health and risk assessments. It works closely with the health community and environmental agencies to link exposures with predicted disease outcomes, provides input in the development of Crisis and Emergency Risk Communication (CERC) messages, provides guidance on personal protective measures, and advises on environmental health guidelines." (**DHS**, *TCL*, 2007, p. 309)

Environmental Historic Program (EHP): (See "FEMA Environmental Planning and Historic Preservation (EHP) Program," below.

Environmental Impact Assessment (EIA): "A policymaking tool that provides information on the environmental impacts of activities. The benefits of an EIA are encouraging the private sector and individuals to consider the impacts of their actions on vulnerability factors; as part of a detailed risk assessment it can provide alternative solutions, and it could be used to reorient disaster impact assessments as planning tools. Limitations of the technique include the current focus on post-event impact assessment and not promoting its use as part of the planning process, although the results can feed into future planning. In addition, there is still some way to go before EIA processes are fully mastered." (**UNDAP**, *Techniques Used in Dstr. Risk Asmt.*, 2008)

Environmental Protection Agency (EPA): "EPA serves as a support agency to the FBI for technical operations, and a support agency to DHS/FEMA for CM. EPA provides technical personnel and supporting equipment to the LFA during all aspects of WMD incidents. EPA assistance may include threat assessment; DEST and regional emergency response team deployment; LFA advisory requirements, technical advice, and operational support for chemical, biological, and radiological releases; consultation; agent identification; hazard detection and reduction; environmental monitoring; sample and forensic evidence collection/analysis; identification of contaminants; feasibility assessment; clean-up; and on-site safety, protection, prevention, decontamination, and restoration activities. EPA and USCG share responsibilities for response to oil discharges into navigable waters and releases of hazardous substances, pollutants, and contaminants into the natural and physical environment. EPA provides the pre-designated federal on-scene coordinator for inland areas while USCG coordinates resources for the containment, removal, and disposal activities and resources during an oil, hazardous substance, or WMD incident in coastal areas." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, pp. II 20-21)

Environmental Restoration: "Recreation of the critical business operations in an alternate location, including people, equipment and communications capability." (**DigitalCare**, *State of OR BC Workshop*, 2006, 55)

Environmental Risk: "Likelihood, or probability, of injury, disease, or death resulting from exposure to a potential environmental hazard." (*European Environmental Agency*, **EEA Environmental Glossary**, 2007; cites *ETS/CDS*, *General Environmental Multilingual Thesaurus* (GEMET), 2000)

EO: Executive Order. (**OCD**, *Abbreviations and Definitions*, 1971, p. 2)

EOC: Emergency Operations Center. (**Senate HSGA**, *A Nation Still Unprepared*, p. 631)

EOP: Emergency Operations Plan/Planning. (**Senate HSGA**, *A Nation Still Unprepared*, 631)

EOP: Executive Office of the President. (**DHS**, *FCD 1*, Nov. 2007, p. A-4)

EOS: Emergency Operation(s) Simulation**. (DCPA,** *Foresight*, 1974, p. 13)

EP: Emergency Preparedness. (**JCS/DoD**, *Homeland Security* (JP 3-26) 2005, p. I-4)

EPA: Environmental Protection Agency.

EPI: Emergency Public Information. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B-9)

Epicenter: "The point on the Earth's surface above the point at depth in the Earth's crust where an earthquake begins." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Epidemic: "The occurrence of more cases of a disease than would be expected in a community or region during a given time period. A sudden severe outbreak of a disease such as SARS. From the Greek "epi-", "upon" + "demos", "people or population" = "epidemos" = 'upon the population'." (**MedicineNet.com**, *Definition of Epidemic*, 2003)

Epidemic: "1. An unusual increase in the number of cases of an infectious disease which already exists in the region or population concerned.
2. The appearance of a significant number of cases of an infectious disease introduced in a region or population that is usually free from that disease." (**UNDHA**, *DM Glossary*, 1992, 35)

Epidemiologic Surveillance: "The term 'epidemiologic surveillance' means the process of actively gathering and analyzing data related to human health and disease in a population in order to obtain early warning of human health events, rapid characterization of human disease events, and overall situational awareness of disease activity in the human population." (**White House**, *HSPD 21*, October 18, 2007)

Epidemiological Surveillance and Investigation capability Definition: "The Epidemiological Surveillance and Investigation capability is the capacity to rapidly conduct epidemiological investigations. It includes exposure and disease (both deliberate release and naturally occurring) detection, rapid implementation of active surveillance, maintenance of ongoing surveillance activities, epidemiological investigation, analysis, and communication with the public and providers about case definitions, disease risk and mitigation, and recommendation for the implementation of control measures." (**DHS**, *TCL*, 2007, p.161)

EPLO: Emergency Preparedness Liaison Officer. (**JCS/DoD**, *Civil Support*, 2007, p. GL-8)

EP&R: Emergency Preparedness and Response.

EPR: Epidemic and Pandemic Alert and Response. (**UN WHO**, EPR, 2007)

EPRI: Emergency Preparedness Resource Inventory, AHRQ, HHS.

EQPCE: Earthquake Preparedness Center of Expertise. (USACE, Response Planning Guide, 1995, p. 6)

Equipment and Systems Capability Elements (TCL): "Paid and volunteer staff who meet relevant qualification and certification standards necessary to perform assigned missions and tasks." (**DHS**, *TCL*, 2007, p. 9)

ER: Emergency Response. (**IIA**, *Business Continuity Management*, 2008, 19)

ERAT: Emergency Response Assessment Team. (EG&G, *San Diego County Firestorms* AAR, Feb 2008, p. 59)

ERC: Emergency Response Center.

ERD: Equivalent Residual Dose. (**OCD**, *Abbreviations and Definitions*, 1971, p. 2)

ERDO: Explosive Devise Response Operations. (**DHS**, *TCL*, 2007, p. 202)

ERFOG: Emergency Responder Field Operations Guide. (**FEMA**, *IIFOG Ver 3*, 2008, 17)

ERG: Emergency Relocation Group. (**DHS**, *FCD 1*, Nov. 2007, p. J-1)

ERG: Emergency Response Guidebook. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-2)

ERM: Enterprise Risk Management. (**URMIA**, *ERM in Higher Education*, September 2007)

Erosion: "Loosing or dissolving and removal of rock or soil as a result of water, ice or wind action." (**UNDHA**, *Disaster Management Glossary*, 1992, 36)

ERP(s): Emergency Response Plan(s). (**Dept. of the Army**, *WMD-CST Ops*, Dec 2007, p. 6-2)

ERS: Emergency Relocation Site. (**USACE**, *Annex B: Emergency Relocation Sites*, 1985, p. 1)

ERSAC: Emergency Response Senior Advisory Committee/Team, HSAC, DHS.

ERT: Emergency Response Team. (**Senate HSGA**, *Katrina: A Nation Still Unprepared*, 631)

ERT-A: Emergency Response Team, Advance Element.

ERT-N: Emergency Response Team, National.

ERV: Emergency Response Vehicle, American Red Cross.

ESAR-VHP: Emergency Systems for Advance Registration of Volunteer Health Care Personnel (Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Public Law 107-188). (**AHRQ**, *Altered Standards of Care in Mass Casualty Events*, 2005, 35)

ESF: Emergency Support Function. (**DHS**, *FCD 1*, Nov. 2007, p. O-1)

ESF Coordinator: "ESFs with multiple primary agencies designate an ESF coordinator for the purposes of pre-incident planning and coordination. The ESF coordinator has ongoing responsibilities throughout the prevention, preparedness, response, recovery and mitigation phases of incident management." (**FEMA**, *Mission Assignment SOPs Draft*, 2007, 51)

ESFLG: Emergency Support Function Leaders/Leadership Group. (**FEMA**, *FEMA/DHS Draft 2008 Hurricane CONPLAN*, October 31, 2007, p. 5)

ESG: Expeditionary Strike Group, Navy.

ESI: Emergency Severity Index. (**AHRQ/HHS**, *Mass Casualty Care*…, 2007, p. 72)

ESL: English as a Second Language. (CDC, *Locating and Reaching At-Risk Populations*, 2007)

ESRI: Environmental Systems Research Institute. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-2)

ESS: Emergency Services Sector.

Essential Elements of Information (EEI): "The Essential Elements of Information provide a good starting point for information collection through the life cycle of an event. Items may be eliminated on the Information Collection Plan depending on the phase of the disaster. For example, during the initial phases of an event, the boundaries of the disaster area are of critical importance. Toward the end of the recovery effort, this item is dropped as the boundaries have become stable. However, mitigation and recovery statistics and items take on greater importance in the later stages of an event and, therefore, will be listed and likely expanded." (**FEMA**, *Federal Interim CONPLAN – Predecisional Draft: NMSZ*, December 15, 2007. p. 22)

Essential Functions (COOP): "Functions that enable Federal Executive Branch Agencies to provide vital services, exercise civil authority, maintain the safety and well-being of the general populace, and sustain the industrial and economic base during an emergency." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Essential Functions: "The critical activities that are performed by organizations, especially after a disruption of normal activities. There are three categories of essential functions: National Essential Functions (NEFs), Primary Mission Essential Functions (PMEFs), and Mission Essential Functions (MEFs)." (**HSC**, *National Continuity Policy Implementation Plan*, p. 62)

Essential Functions: "USACE functions that are considered necessary, in consonance with the direction of the Department of the Army, for the accomplishment of indispensable operations of USACE in national emergency situations. (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-2)

Essential Service: "A service without which a building would be 'disabled'. Often applied to the utilities (water, gas, electricity, etc.) it may also include standby power systems, environmental control systems or communication networks." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 55)

Essential Services Provider (within the context of the Stafford Act): "…`essential services provider' means an entity that provides: telecommunications service; electrical power; natural gas; water and sewer services; or any other essential service, as determined by the President; and is a municipal entity; a nonprofit entity; or a private, for-profit entity; and is contributing to efforts to respond to an emergency or major disaster." (**DHS**, *National Response Framework List of Authorities and References* (Draft), September 10, 2007, p. 3)

ETA: Estimated Time of Arrival. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-2)

ETA: Event-Tree Analysis. (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

ETC: Emergency Transportation Center.

ETIS: Emergency Traffic Information System. (**NEMA**, *Committee Reports*, 2007, p. 6)

ETO: Emergency Transportation Operations.

EU: European Union.

Evacuation: "The movement of employees, visitors and contractors from a site and/or building to a safe place (assembly area) in a controlled and monitored manner at time of an event." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 55)

Evacuation: "Organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas." (**DHS**, *National Response Framework* (Draft) *Glossary/Acronyms*, September 10, 2007; **DHS**, *Lexicon: Terms and Definitions*, October 23, 2007, p. 10)

Evacuation: "Organized, timed, and supervised dispersal of civilians from dangerous and potentially dangerous areas, their reception and care in safer areas, and their return to their home communities." (**FCDA**, *1954 Annual Report*, p. 31; citing FCDA Supplement 1 entitled *Evacuation of Civil Populations in Civil Defense* (September 23, 1954) to FCDA Advisory Bulletin No. 158 (Jan 1954). [Note: according to the 1954 FCDA Annual Report (Ibid), the Jan 1954 Advisory Bulletin No. 158 was "…the first definitive statement on evacuation developed in the United States."]

Evacuation: "Evacuation is the organized removal of civilians from any given area and it may be of two types:

a) Organized, voluntary evacuation wherein people leave an area under supervision of constituted authority. This usually involves the removal of priority groups.
   i) Hospitalized sick and injured.
   ii) Pre-school age children accompanied by mothers or guardians.
   iii) School age children up to and including 15 years.
   iv) Pregnant women, aged and infirm.
   v) All others, except those serving in essential capacities.

b) Organized compulsory evacuation which is the mandatory removal of a portion or all of the civilian population from an area." (**OCDP**, *Hopley Report*, 1948, pp. 220-221)

Evacuation: "Organized, phased, and supervised dispersal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B: Definitions) [Note: Compare to 1954 FCDA definition.]

Evacuation (Mandatory or Directed): "This is a warning to persons within the designated area that an imminent threat to life and property exists and individuals MUST evacuate in accordance with the instructions of local officials." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (State and Local Guide (SLG) 101), September 1996, GLO-6)

Evacuation (Non-Evacuation/Compliance Reasons): "…there are several explanations as to why people will not evacuate:

- Delay in official warning (Sorensen and Mileti, 1988)
- No request for evacuation was made (Fischer et. al., 1995)
- People downplay risk (Perry, 1983)
- Warning messages are unclear (Cutter and Barnes, 1982)
- Fear of looting (Cutter and Barnes, 1982)
- Age or the inability of the elderly to evacuate (Cutter and Barnes, 1982)
- Inconvenience (Baker, 1991)
- Expectation of re-entry delays (Dash and Morrow, 2001)
- Job constraints (Cutter and Barnes, 1982)
- Lack of economic resources (Dash and Morrow, 2001) (**Kendra**, et al., Evacuating Large Urban Areas, 2008, pp. 5-6)

Evacuation (Notice versus No-Notice). "These evacuations are also in the context of either a notice evacuation where sufficient planning time exists to warn citizens and to effectively implement a plan, or a no-notice evacuation where circumstances require immediate implementation of contingency plans." (**DOT**, *Catastrophic Hurricane Evacuation Plan Evaluation: Report to Congres*s, June 1, 2006, p. 2-2)

Evacuation (Phases of a No-Notice Emergency Evacuation): "For the purpose of this study, a no-notice disaster that results in an emergency evacuation can be divided into phases, based on a timeline of events… The six phases of activities that form a general progression of events are:

- Phase 1 – Advanced Planning
- Phase 2 – Incident Notification
- Phase 3 – Activation and Mobilization
- Phase 4 – Evacuation Operations
- Phase 5 – Re-Entry
- Phase 6 – Debrief and Assessment." (FHWA DOT, *Evacuation Transportation Management Task Five: Operational Concept*, 2006, 1)

Evacuation (Shadow): "…some people may evacuate even though they are not officially considered to be at risk. Known as an 'evacuationo shadow.' This spontaneious evacuation is prompted when people feel they are in danger and begin to leave in advance of, or in spite of, official instructions to avoid doing so (Wolshon, Hamilton, Wilmot et al., 2005; Mitchell, Cutter, and Edmonds, 2007). Shadow evacuations are not a new phenomenon. During the 1999 Hurricane Floyd evacuations in Florida, it was estimated that about one-half of the 2 million persons who evacuated were shadow evacuees (Ballingrund, 2000)." (**Kendra**, Evacuating Large Urban Areas, 2008, 5)

Evacuation (Spontaneous): "Residents or citizens in the threatened areas observe an emergency event or receive unofficial word of an actual or perceived threat and without receiving instructions to do so, elect to evacuate the area. Their movement, means, and direction of travel is unorganized and unsupervised." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (State and Local Guide (SLG) 101), September 1996, p. GLO-5)

Evacuation (Strategic, Tactical, Remidial, Assisted, Directed and Spontaneous): There are three stages in evacuation. *Strategic evacuation* during a period of international tension indicating a possible attack, when certain dependent, nonproductive people may be moved away from danger areas. *Tactical evacuation* during a period of warning after enemy planes have been detedted, when, if time permits, there will be a mass evacuation of people from target areas. *Remedial evacuation* during the period following an attack when all affected pe34rsons and those not needed for civil defense services may be removed. During any of the three types of evacuation, movement may be of three kinds: *Assisted*, where, in advance of attack warning, civil defense authorities may decide to encourage and assist the voluntary movement of priority groups out of danger areas so that essential workers in defense or production may remain at thir posts knowing their families are safe; *directed*, where, after attack warning, civil defense authorities may decide to move large segments of the population according to preattack evacuation plans; and *spontaneious*, where some parts of the populatin may feel it necessary for self-preservation, to remove themselves as rapidly as possible from an area they consider dangerous. Spontaneous evacuation usually will be unorganized and unsupervised and may be impractical and unwise." (**FCDA**, *1954 Annual Report*, p. 32)

Evacuation (Voluntary): "This is a warning to persons within a designated area that a threat to life and property exists or is likely to exists in the immediate future. Individuals issued this type of waning or order are NOT required to evacuate, however it would be to their advantage to do so." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (State and Local Guide (SLG) 101), September 1996, GLO-6)

Evacuation Exercise Problems (1954): "Two great problems were uncovered as a result of the evacuatin tests [conducted by a number of cities in 1954]. The first was getting the public to accept the plan and getting intergroup communication so that every segment of the public would be informed on plans and procedures. The second was the selection and preparatin of reception areas for the people to be evacuated, caring for the people, supplying potable water, sanitation, food, and shelter and restoring them to their home communities as rapidly as possible." (**FCDA**, *1954 Annual Report*, p. 33)

Evacuation Liaison Team (ELT): "The Evacuation Liaison Team (ELT) is made up of emergency management and transportation specialists that facilitate the coordination and sharing of information between state jurisdictions during multi-state hurricane evacuations." (**FEMA**, *National Hurricane Program*, 2007)

Evacuation Liaison Team (ELT): "Provides support in State and local emergency response efforts by compiling, analyzing, and disseminating traffic-related information that can be used to facilitate the rapid, efficient, and safe evacuation of threatened populations. Primarily operates in the State or local EOC as an extension of ESF #1–transportation." (**FEMA**, NIMSonline, *Resource: Evacuation Liaison Team (ELT)*, April 2003.

Evacuation Planning: "In this area [evacuation planning], plans must include:

- The lead time required for various scenarios, including no-notice and forewarned events.
- Weather contingencies.
- Transportation.
- Interdependencies between shelter locations and transportation.
- Provisions for special needs populations and those with household pets.

Specific procedures and protocols should augment these plans to guide rapid implementation." (**DHS**, *NRF*, Jan 2008, 28)

Evacuation Planning: "Planning for the orderly evacuation of the civilian population in any given are involves:

a) The assignment, equipment and training of individuals qualified to give leadership in an emergency.
b) The registration of every individual in the area classified with respect to his priority in the evacuation procedure.
c) The designation of one or more gathering points and assembly areas through which appropriate means of transportation to reception centers can be routed, loaded and dispatched.
d) The formulation of procedures fro keeping currently informed as to changes in the address or the status of registered civilians.
e) The coordination of plans with the Police, Transportation, and Medical and Health Services, and Civilian War Aid of the local Civil Defense organization.
f) The integration of the local plan with procedures developed by those responsible for evacuation on a state, regional or national level. (**OCDP**, *Hopley Report*, 1948, p. 220)

Evacuation Traffic Information System (ETIS): "ETIS covers the eighteen states of the eastern seaboard and Gulf states of the United States. ETIS is a GIS, Web-based tool that assists with collection and dissemination of transportation information during an evacuation. Transportation officials in each threatened State are responsible for inputting information for coastal counties on evacuation status, tourist occupancy, evacuation participation rates, and traffic count information. The ETIS provides a platform for States and the FEMA Regional Operations Center to monitor the evacuation process. The system also provides a forecast of total cross-State traffic and the likely destinations of the evacuees. Reports generated by ETIS and which can be viewed through the website include: 1) Shelter capacity by state, 2) Traffic count by state, 3) Traffic volumes by corridor, 4) Destination percentages by city, and 5) Estimated

state to state traffic. Links are provided from this main page to the state agencies that would be involved in and responsible for mass evacuations from these areas in the event of hurricanes." (**DOT**, *TRIS Online*, Jan 18, 2008)

Evacuee: "Definition: an individual subject to an organized and supervised withdrawal, dispersal, or removal from a hazardous or potentially hazardous area." (**DHS**, *Lexicon: Terms and Definitions*, October 23, 2007, 10)

EvalPlan: Evaluation Plan. (**FEMA**, *HSEEP Glossary*, 2008)

Evaluation: "One of the five phases of the exercise process, evaluation is the cornerstone of exercises; it documents strengths and opportunities for improvement in a jurisdiction's preparedness and is the first step in the improvement process. Under the *Homeland Security Exercise and Evaluation Program* (*HSEEP*), evaluations are conducted through *player* observation and the use of *Exercise Evaluation Guides (EEGs)*, which outline exercise performance measures expected from *participants*." (**FEMA**, *HSEEP Glossary*, 2008)

Evaluation: "Post disaster appraisal of all aspects of the disaster and its effects." (**UNDHA**, *DM Glossary*, 1992, 36)

Evaluation Plan (EvalPlan): "The EvalPlan is typically used for *operations-based* exercises of a large *scope* and scale; this document provides specific guidance to exercise *evaluators*. The EvalPlan is designed to help exercise evaluators understand their roles and responsibilities in exercise data collection and evaluation in order to conduct an effective *analysis* of the exercise and produce a comprehensive *AAR/IP*. For most exercises, however, the EvalPlan can be combined with a *COSIN* to produce a *C/E Handbook*." (**FEMA**, *HSEEP Glossary*, 2008)

Evaluation Team: "The evaluation team consists of evaluators trained to observe and record *participant* actions. These individuals should be familiar with the exercising jurisdiction's plans, policies, procedures, and agreements." (**FEMA**, *HSEEP Glossary*, 2008)

Evaluator: "Evaluators, selected from participating agencies, are chosen based on their expertise in the functional areas they will observe. Evaluators use *EEGs* [Exercise Evaluation Guides] to measure and assess performance, capture unresolved issues, and *analyze* exercise results. Evaluators passively assess and document participants' performance against established emergency plans and exercise evaluation criteria, in accordance with *HSEEP* standards. Evaluators have a passive role in the exercise and only note the actions/decisions of players without interfering with exercise flow." (**FEMA**, *HSEEP Glossary*, 2008)

Event: "A planned, non-emergency activity. ICS can be used as the management system for a wide range of events, e.g., parades, concerts or sporting events." (**CA OES**, *SEMS Guidelines*, 2006, Glossary, p. 8)

Event: "Definition: planned, non-emergency activity occurring in a particular place during a particular interval of time." (**DHS**, *Lexicon: Terms and Definitions*, October 23, 2007, p. 10)

Event: "Any occurrence that may lead to a business continuity incident." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 55)

Event (HSEEP): Within the *MSEL* [Master Scenario Events List] , an event is an expected action that is expected to take place during an exercise." (**FEMA**, *HSEEP Glossary*, 2008)

Event: "Occurrence of a particular set of circumstances." (**ISO 22399**, *Societal Security* 2007, 3)

Event: "A planned, non-emergency activity. ICS can be used as the management system for a wide range of events, e.g. NSSES, Opsail, parades, concerts, or sporting activities. The event IAP usually includes contingency plans for possible incidents that might occur during the event." (**USCG**, *IM Handbook*, 2006, Glossary 25-7)

Event (Catastrophic): "For purposes of this plan [NRP 2004], a catastrophic event is any natural or manmade incident, including terrorism, which leaves extraordinary levels of mass casualties, damage and disruption severely affecting the population, infrastructure, environment, and economy. A catastrophic event results in sustained national impacts over a prolonged period of time; exceeds resources normally available in the local, State, Federal, and private sectors; and significantly interrupt governmental operations and emergency services to such an extent that national security could be threatened. In contrast to a Major Disaster or Emergency as defined in the Stafford Act, a catastrophic event is characterized as an incident of low or unknown probability but extremely high consequences." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 60)

Event-Tree Analysis (ETA): "A consequence based analysis in which an event either has or has not happened or a component has or has not failed. An event tree begins with an initiating event. The consequences of the event are followed through a series of possible paths. Each path is assigned a probability of occurrence and the probability of the various possible outcomes can be calculated. The benefits of the technique are its value in analyzing the consequences arising from a failure or undesired event." (**UNDAP**, *Techniques Used in Disaster Risk Asmt.*, 2008)

EVUNS: Evaluating the Vulnerability of National Systems. (**DCPA**, *Foresight*, 1974, p. 27)

EWS: Entity Wide Security.

Exceedance Probability: "Probability that a given magnitude of an event will be equaled or exceeded." (**UNDHA**, *DM Glossary*, 1992, 36)

Exclusion Zone: See "Hot Zone."

Executive/Management Succession: "A predetermined plan for ensuring the continuity of authority, decision-making, and communication in the event that key members of senior management suddenly become incapacitated, or in the event that a crisis occurs while key members of senior management are unavailable.**"** (**DigitalCare**, *State of OR BC Wkshop*, 55)

Executive Agent: "An 'executive agent' is an individual who has been designated by his or her superior to act on behalf of that superior. This designation involves a delegation of authority from the superior to the selected subordinate. The executive agent may be limited to providing only administration and support or to coordinating common functions, or the executive agent may be delegated authority, direction, and control over specified resources for specified purposes." (**DHS**, *Fed. Cont. Direct. 1*, Nov 2007, P-4)

Executive Departments and Agencies: "Executive departments enumerated in 5 U.S.C. 101, along with DHS, independent establishments as defined by 5 U.S.C. § 104(1), Government corporations as defined by 5U.S.C. § 103(1), and the United States Postal Service." (**DHS**, *Fed. Cont. Direct. 1*, Nov 2007, P-4)

Executive Order 8248: *Establishing the Divisions of the Executive Office of the President and Defining Their Functions and Duties* (8 Sep1939). (**National Archives**, *EO 8248*, 8Sep39)

Pursuant to Executive Order 8248, the Office for Emergency Management was established in the Executive Office of the President by an administrative order of May 25, 1940. (**CRS**, *Federal Emergency Management and Homeland Security Organization: Historical Developments and Legislative Options*. June 1, 2006, 5, fn. 6)

Executive Order 8757 (May 20, 1941)**:** Established the Office of Civilian Defense within the Office of Emergency Management (which had been established in the Executive Office of the President on May 25, 1940.) (**Gessert**, *Federal Civil Defense Organization*, 1965, p. 60)

Executive Order 9134 (April 15, 1942): Expands the responsibilities of the Office of Civilian Defense. (**Gessert**, *Federal Civil Defense Organization*, 1965, p. 60)

Executive Order 9562 (June 30, 1945): Abolishes the Office of Civilian Defense (Germany signed an unconditional surrender on May 7, 1945). (**Gessert**, 1965, p. 61)

Executive Order 10186: *Establishing the Federal Civil Defense Administration in the Office for Emergency Management of the Executive Office of the President* (December 1, 1950)**:** Names Millard F. Caldwell as Administrator. (**National Archives**, *Federal Register, Executive Orders Disposition Tables: Harry S. Truman – 1950*)

Executive Order 10193: *Providing for the Conduct of the Mobilization Effort of the Government* (December 16, 1950): President Truman establishes Office of Defense Mobilization in the Executive Office of the President and assigns it the task of coordinating all mobilization activities of the Federal Government. (**Gessert** 1965, p. 66)

Executive Order 10221: *Providing for the Administration of Disaster Relief* (Federal Register, vol. 16, Mar 6, 1951, p. 2051). President "Truman issued an executive order delegating to the Housing and Home Finance Administrator (HHFA) emergency management authorities that had been delegated to the President under the Disaster Relief Act. These authorities included directing federal agencies to provide assistance and agency resources during any major disaster, coordinating these activities, proposing to the President related rules and regulations for his

issuance under the act, and proposing to the President annual and supplemental reports for his transmittal to Congress as provided for in the act. The HHFA administered disaster relief authorities until 1953, when the functions were turned over to the Federal Civil Defense Administration." (**CRS**, *Federal Emer. Mgmt. and* [HLS] *Organization: Historical Developments and Legislative Options*, 1June2006) [EO10221 revoked by EO 10427, 16Jan53]

Executive Order 10346: *Preparation by Federal Agencies of Civil Defense Emergency Plans*. (**White House** (President Harry S. Truman), April 17, 1952)

"In 1952, FCDA was given a key role in assisting federal agencies with planning for service provision and continued functioning during emergencies (now referred to as "continuity of operations"). President Truman issued an executive order directing federal departments and agencies to consult with FCDA and to "prepare plans for providing [their] personnel, materials, facilities, and services ... during ... a civil defense emergency" and plans for maintaining continuity of government during such a time." (**CRS**, *Federal Emergency Management and Homeland Security Organization: Historical Developments and Legislative Options*, 1Jun2006)

"…E.O. 10346 mandated that each federal department or agency should cooperate with the Federal Civil Defense Administration to prepare plans for providing its personnel, materials, facilities, and services during the existence of a Civil Defense Emergency….. The plans were to be designed to include continuity of department and agency operations and coordination of such arrangements with other national, state, and local civil defense plans. No consolidated emergency response plan appeared until 1958, with final issuance as a document signed by President Lyndon B. Johnson in 1964 under the auspices of the Office of Emergency Preparedness (originally, the Office of Emergency Management in WWII, and then the Office of Emergency Planning from 1958-61)." (**Cumming**, "The NSC's 1988 Staff Effort to Create a National Security Emergency Plan for Large Scale Domestic Events," *VLG Backgrounder,* 2005)

Executive Order 10421: *Providing for the Physical Security of Facilities Important to the National Defense*. (**White House**, President Harry S. Truman, December 31, 1952)

Executive Order 104273, 1953: *Administration of Disaster Relief*, January 16, 1953 [Revoked EO 10221 of 2Mar1951; was revoked by EO 11575, 31Dec1970.] (National Archives, Federal Register, Harry S. Truman – 1953) "At the Federal level, Executive Order 10427 issuede on January 16, 1953, gave FCDA responsibility for providing assistance to localities stricken by major disasters. This responsibility involved investigating and evaluating natural disasters in the States and recommending to the President whether or not the disaster was of sufficient magnitude to warrant Federal aid. The order named FCDA the coordinating agency for all Federal assistance, when authorized, to stricken areas." (**FCDA**, *1953 Annual Report*, p. 15)

Executive Order 10480: *Further Providing for the Administration of the Defense Mobilization Program*, 14 Aug 1953. [Revoked by EO 12148, July 20, 1979] (National Archives, EO 10480)

Executive Order 10660: *Providing for the Establishment of a National Defense Executive Reserve*. (**White House**, February 15, 1956)

Executive Order 10773: *Delegating and Transferring Certain Functions and Affairs to the Office of Defense and Civilian Mobilization*. (**White House**, President Dwight Eisenhower, July 1, 1958) President Eisenhower delegates all functions and responsibilities transferred to the President by Reorganization Plan No 1 of 1958 to the Office of Defense and Civilian Mobilization (later renamed the Office of Civil and Defense Mobilization). (**Gessert**, *Federal Civil Defense Organization*, 1965, p. 71; for copies of both, see Appendix 2 of *OCDM Annual Report 1959*, pp. 61-64, and Appendix 3, p. 65)

Executive Order 10782: *Amending Executive Order No. 10773 of July 1, 1958, Relating to Civil and Defense Mobilization*, 6 Sep1958. (**National Archives**, *Federal Register, Executive Orders Disposition Tables Dwight D. Eisenhower – 1958*)

Executive Order 10902: *Providing for the Issuance of Emergency Preparedness Orders by the Director of the Office of Civil and Defense Mobilization*. (**White House**, January 9, 1961; see also, **OCDM**, *Annual Report 1961*, pp. 8-10)

Executive Order 10952: *Assigning Civil Defense Responsibilities to the Secretary of Defense and Others*. (**White House**, President John F. Kennedy, July 20, 1961)

"This provided further for the later creation of the Office of Civil Defense by the transfer of certain property, facilities, personnel, and funds from the Office of Civil and Defense Mobilization to the Department of Defense, and for the reorganization of OCDM as a smaller advisory agency to be named the Office of Emergency Planning." Five days later he announces the civil defense reorganization during a televised address to the nation. (**Gessert**, *Federal Civil Defense Administration*, 1965, p. 73)

Functions transferred "included the development and execution of a fallout shelter program; a chemical, biological, and radiological warfare defense program; arrangements for warning or alerting federal military and civilian authorities, state officials, and the civilian population; various other communications functions; post-attack emergency assistance to states and localities; continuity of government plans; and funding for state civil defense needs. The Secretary of Defense was further tasked with planning for, and undertaking, postattack damage and hazard assessments and with arranging for the donation of federal surplus property as provided for in law. The Secretary of Defense established the Office of Civil Defense (OCD) to administer these functions.

"Although many operational civil defense functions were transferred to the Defense Department, the role of "coordinating ... civil defense preparations with other non-military defense preparations" remained in OCDM. Under E.O. 10952, OCDM was to "advise and assist the President" with

> (i) determining policy for, planning, directing, and coordinating the total civil defense program;
> (ii) reviewing and coordinating the civil defense activities among federal agencies and between federal agencies and the states and other countries;

(iii) determining appropriate civil defense roles of federal agencies and gaining state and local participation, mobilizing national support, evaluating program progress, and reporting to Congress on civil defense matters;
(iv) promoting and facilitating interstate civil defense compacts and reciprocal civil defense legislation; and
(v) assisting states with arranging for mutual civil defense aid with neighboring countries.

"The order also charged OCDM with developing plans, conducting programs, and coordinating preparations related to continuity of federal, state, and local governments in the event of an attack." (**CRS**, *Federal Emergency Management and Homeland Security Organization: Historical Developments and Legislative Options*, June 1, 2006)

Executive Order 10958: *Delegating Functions Respecting Civil Defense Stockpiles of Medical Supplies and Equipment and Food.* (**White House**, President John F. Kennedy, 14 Aug 1961)

"One month after issuing…executive order [10952], President Kennedy issued another executive order redelegating additional duties from OCDM. He delegated to the Secretary of Health, Education, and Welfare and the Secretary of Agriculture, respectively, certain medical stockpile and food stockpile functions contained in the Federal Civil Defense Act of 1950, and vested in the President by Reorganization Plan No. 1 of 1958." (**CRS**, *Federal Emer. Mgmt. and* [HLS] *Organization: Historical Developments and Legislative Options*, 1 June 2006)

Executive Order 10998, February 16, 1962: *Assigning Emergency Preparedness Functions to the Secretary of Agriculture*. "By virtue of the authority vested in me as President of the United States, including authority vested in me by Reorganization Plan No. 1 of 1958 (72 Stat. 1799), it is hereby ordered as follows: **SECTION 1. Scope.** The Secretary of Agriculture (hereinafter referred to as the Secretary) shall prepare national emergency plans and develop preparedness programs covering: Food resources, farm equipment, fertilizer, and food resource facilities, as defined below; rural fire control; defense against biological warfare, chemical warfare, and radiological fallout pertaining to agricultural activities; and rural defense information and education. These plans and programs shall be designed to develop a state of readiness in these areas with respect to all conditions of national emergency, including attack upon the United States." (**White House**, President John F. Kennedy)

Executive Order 11001: *Assigning Emergency Preparedness Functions to the Secretary of Health, Education, and Welfare.* February 16, 1962. "…assigned the United States Public Health Service of the Department of Health, Education, and Welfare primary responsibility for developing and coordinating programs for the prevention, detection and identificatin of human exposure to, or contamination of foods and drugs with, toxic chemicals or giologicals that might be used in an attack upon the United States." (**OCD**, *Annual Report 1962*, pp. 53-54; see also: **White House**, *Executive Order 1100*, February 16, 1962)

Executive Order 11051: *Prescribing Responsibilities of the Office of Emergency Planning in the Executive Office of the President.* (**White House**, President John F. Kennedy, 27 Sep 1962)

"WHEREAS national preparedness must be achieved and maintained to support such varying degrees of mobilization as may be required to deal with increases in international tension, with

limited war, or with general war including attack upon the United States; and WHEREAS the national security and our continuing economic growth and prosperity are interdependent, appropriate attention must be directed to effective coordination of emergency preparedness measures with national economic policies and objectives; and WHEREAS mobilization readiness and civil defense activities can be accomplished most effectively and efficiently through the performance by departments and agencies of the Government of those emergency preparedness functions related to their established roles and capabilities; and WHEREAS responsibility for emergency preparedness involves virtually every agency of the Federal Government, and there is need to provide a central point of leadership and coordination in the Executive Office of the President: NOW, THEREFORE, by virtue of the authority vested in me as President of the United States, including the authorities contained in the National Security Act of 1947, the Defense Production Act of 1950 (50 U.S.C. App. 2061 et seq.), the Federal Civil Defense Act of 1950 (50 U.S.C. App. 2251 et seq.), and other authorities of law vested in me pursuant to Reorganization Plan No. 1 of 1958 (72 Stat. 1799), and also including the authority vested in me by the provisions of Section 301 of title 3 of the United States Code, it is hereby ordered as follows: PART I. SCOPE, SECTION 101. Resume of responsibilities. The Director of the Office of Emergency Planning (hereinafter referred to as the Director) shall:
(a) Advise and assist the President in the coordination of and in the determination of policy for the emergency plans and preparedness assignments of the Federal departments and agencies (hereinafter referred to as Federal agencies) designed to make possible at Federal, State and local levels the mobilization of the human, natural and industrial resources of the nation to meet all conditions of national emergency, including attack on the United States.
(b) Under the direction of the President, be responsible for the preparation of nonmilitary plans and preparedness programs with respect to organization and functioning of the Federal Government under emergency conditions and with respect to specific areas of Federal activity necessary in time of war which are neither performed in the normal operations of the regular departments and agencies nor assigned thereto by or under the authority of the President." (**White House**, John F. Kennedy, *EO 11051*, 27 Sep 1962)

Executive Order 11179: *Providing for the National Defense Executive Reserve*, 22 Sep 1964. (**National Archives**, *Federal Register, EO 11179*)

Executive Order 11490: *Assigning Emergency Preparedness Functions to Federal Departments and Agencies.* (Federal Register page and date: 34 FR 17567; October 30, 1969): "WHEREAS our national security is dependent upon our ability to assure continuity of government, at every level, in any national emergency type situation that might conceivably confront the nation; and
WHEREAS effective national preparedness planning to meet such an emergency, including a massive nuclear attack, is essential to our national survival; and
WHEREAS effective national preparedness planning requires the identification of functions that would have to be performed during such an emergency, the assignment of responsibility for developing plans for performing these functions, and the assignment of responsibility for developing
the capability to implement those plans; and
WHEREAS the Congress has directed the development of such national emergency preparedness plans and has provided funds for the accomplishment thereof; and

WHEREAS this national emergency preparedness planning activity has been an established program of the United States Government for more than twenty years:

NOW, THEREFORE, by virtue of the authority vested in me as President of the United States, and pursuant to Reorganization Plan No. 1 of 1958 (72 Stat. 1799), the National Security Act of 1947, as amended, the Defense Production Act of 1950, as amended, and the Federal Civil Defense Act, as amended, it is hereby ordered as follows….

SEC.1O2 Scope.

(a) This order is concerned with the emergency national planning and preparedness functions of the several departments and agencies of the Federal Government which complement the military readiness planning responsibilities of the Department of Defense; together, these measures provide the basic foundation for our overall national preparedness posture, and are fundamental to our ability to survive.

(b) The departments and agencies of the Federal Government are hereby severally charged with the duty of assuring the continuity of the Federal Government in any national emergency type situation that might confront the nation. To this end, each department and agency with essential functions, whether expressly identified in this order or not, shall develop such plans and take such actions, including but not limited to those specified in this order, as may be necessary to assure that it will be able to perform its essential functions, and continue as a viable part of the Federal Government, during any emergency that might conceivably occur. These include plans for maintaining the continuity of essential functions of the department or agency at the seat of government and elsewhere, through programs concerned with:

(1) succession to office;
(2) predelegation of emergency authority;
(3) safekeeping of essential records;
(4) emergency relocation sites supported by communications and required services;
(5) emergency action steps;
(6) alternate headquarters or command facilities; and
(7) protection of Government resources, facilities, and personnel. The continuity of Government activities undertaken by the departments and agencies shall be in accordance with guidance provided by, and subject to evaluation by, the Director of the Office of Emergency Preparedness.

(c) In addition to the activities indicated above, the heads of departments and agencies described in Parts 2 through 29 of this order shall:

(1) prepare national emergency plans, develop preparedness programs, and attain an appropriate state of readiness with respect to the functions assigned to them in this order for all conditions of national emergency;
(2) give appropriate consideration to emergency preparedness factors in the conduct of the regular functions of their agencies, particularly those functions considered essential in time of emergency, and
(3) be prepared to implement, in the event of an emergency, all appropriate plans developed under this order…." (**White House**, October 28, 1969)

[Note: Revoked and replaced by Executive Order 12656, November 18, 1988, *Assignment of Emergency Preparedness Responsibilities* (**White House** (President Ronald Reagan) 18Nov88).]

Executive Order 11495: *Providing for the Administration of the Disaster Relief Act of 1969*. November 18, 1969. [Revoked on December 31, 1970 by EO 11575.] (**National Archives**, *Federal Register, Executive Orders Disposition Table, Richard Nixon-1969*)

"Under the order, OEP was given the authority to allocate road repair and reconstruction money; to provide timber-removal grants to states; to provide assistance, including grants, to states to develop relief plans and programs; to appoint a federal coordinating officer for a major disaster area; to provide temporary housing for displaced persons; to provide assistance to individuals who had lost employment due to a major disaster; to make grants and loans to states for fire suppression; to make grants to states and localities for debris removal; and to prescribe rules and regulations as needed. The order delegated authority related to the distribution of food and food coupons to the Secretary of Agriculture." (**CRS**, *Federal Emergency Mgmt. and Homeland Security Organization: Historical Developments and Legislative Options*, 1June2006, pp. 11-12)

Executive Order 11725: *Transfer of Certain Functions of the Office of Emergency Preparedness*. (**National Archives**, *Federal Register, EO 11725* (President Nixon), June 27, 1973)

Reorganization Plan No. 1 of 1973 "…went into effect on July 1, 1973, [and] transferred certain functions out of the EOP [Executive Office of the President]. Among other provisions, the plan abolished OEP [Office of Emergency Planning], and nearly all functions previously vested in that office or its director were transferred to the President. The plan also abolished the Civil Defense Advisory Council, which had been established in 1950. In his message accompanying the plan, President Nixon stated his intent to delegate the transferred functions to the Department of Housing and Urban Development (HUD), the General Services Administration (GSA), and the Department of the Treasury, and he did so by executive order [EO 11725] at the time the plan went into effect. Functions delegated to HUD included those relating to preparedness for, and relief of, civil emergencies and disasters. The Federal Disaster Assistance Administration (FDAA) was established in HUD to administer disaster relief. GSA was given responsibilities related to continuity of government in the event of a military attack, to resource mobilization, and to management of national security stockpiles — duties assigned to the Office of Preparedness, later renamed the Federal Preparedness Agency, within GSA. The Treasury Department was given responsibility for investigations of imports that might threaten national security." (**CRS**, *Federal Emergency Mgmt. and Homeland Security Organization: Historical Developments and Legislative Options*, 1 June 2006, p. 12)

Executive Order 11988: Floodplain Management: "Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions:

- acquiring, managing, and disposing of federal lands and facilities;
- providing federally-undertaken, financed, or assisted construction and improvements;

- conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

Summary of Requirements -- The guidelines address an eight-step process that agencies should carry out as part of their decision-making on projects that have potential impacts to or within the floodplain. The eight steps…reflect the decision-making process required in Section 2(a) of the Order.

- Determine if a proposed action is in the base floodplain (that area which has a one percent or greater chance of flooding in any given year).
- Conduct early public review, including public notice.
- Identify and evaluate practicable alternatives to locating in the base floodplain, including alterative sites outside of the floodplain.
- Identify impacts of the proposed action.
- If impacts cannot be avoided, develop measures to minimize the impacts and restore and preserve the floodplain, as appropriate.
- Reevaluate alternatives.
- Present the findings and a public explanation.
- Implement the action." (**FEMA**, "Executive Order 11988: Floodplain Management")

Executive Order 11988: "This EO requires the Corps to provide leadership and take action to: (1) avoid development in the base (100-year) flood plain unless it is the only practicable alternative; (2) reduce the hazards and risk associated with floods; (3) minimize the impact of floods on human safety, health and welfare; and (4) restore and preserve the natural and beneficial values of the base flood plain. In this regard, the policy of the Corps is to formulate projects which, to the extent possible, avoid or minimize adverse impacts associated with use of the base flood plain and avoid inducing development in the base flood plain unless there is no practicable alternative for the development. (**USACE**, *Water Resources Policies and Authorities…*, 1999, 13-1)

Executive Order 12127: *Federal Emergency Management Agency*.

"On March 31, 1979, President Carter issued an executive order putting Reorganization Plan No. 3 of 1978 into effect.[47] FEMA was established as an independent agency, as of April 1, and some transfers were completed at that time. The order transferred certain functions to FEMA from the Department of Commerce (fire prevention and control, certain Emergency Broadcast System functions); the Department of Housing and Urban Development (flood insurance); and the President (other Emergency Broadcast System functions)." (**CRS**, *Federal Emer. Mgmt. and Homeland Security Organization: Historical Developments and Legislative Options*, 1Jun06, 14)

Executive Order 12148: *Federal Emergency Management*, July 20, 1979, as amended. (**National Archives**, *Federal Register: Executive Order 12148* (President Carter))

"In July, the President issued a second executive order [EO 12127 was 1st] that transferred to FEMA additional functions from the Departments of Defense (civil defense) and Housing and Urban Development (federal disaster assistance), GSA (federal preparedness), and the Office of Science and Technology Policy (earthquake hazards reduction). The order also authorized

FEMA to coordinate "all civil defense and civil emergency planning, management, mitigation, and assistance functions," in addition to dam safety, "natural and nuclear disaster warning systems," and "preparedness and planning to reduce the consequences of major terrorist incidents." In addition, the order mandated establishment of the Federal Emergency Management Council, composed of FEMA and Office of Management and Budget Directors, and others as assigned by the President." (**CRS**, *Federal Emergency Management and Homeland Security Organization: Historical Developments and Legislative Options*, 1 June 2006, p. 14)

EO 12148 "…designates FEMA as the lead federal agency for coordination and direction of Federal disaster relief, emergency assistance, and emergency preparedness. The order also delegates to FEMA the President's relief and assistance authority under the Stafford Act, with the exception of the declaration of a major disaster or emergency." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 71)

[Note: "All functions vested in the President that have been delegated or assigned to the Defense Civil Preparedness Agency, Department of Defense, are transferred or reassigned to the Director of the Federal Emergency Management Agency." (E.O. Section 1-101)

Executive Order 12333: *United States Intelligence Activities*. (**WH**, Ronald Reagan, 4Dec1981)

Executive Order 12472. *Assignment of National Security and Emergency Preparedness Telecommunications Functions*, April 3, 1984.

Executive Order 12580: *Superfund Implementation.* White House, January 23, 1987.

Executive Order 12656: "Executive Order 12656, *Assignment of Emergency Preparedness Responsibilities*, November 18, 1988, as amended, assigns lead and support responsibilities to each of the Federal agencies for national security emergency preparedness. Amendment designates Department of Homeland Security as the lead agency for coordinating programs and plans among all Federal departments and agencies." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 71)

Executive Order 12657: *Federal Emergency Management Agency Assistance In Emergency Preparedness Planning At Commercial Nuclear Power Plants*. White House, Nov. 18, 1988.

Executive Order 12742: *National Security Industrial Responsiveness*. White House, 1991

Executive Order 12777: *Implementation of Section 311 of the Federal Water Pollution Control Act of October 18, 1972, as Amended, and the Oil Pollution Act of 1990*. "Sec. 1. National Contingency Plan, Area Committees, and Area Contingency Plans. (a) Section 1 of Executive Order No. 12580 of January 23, 1987, is amended to read as follows:
``Section 1. National Contingency Plan. (a)(1) The National Contingency Plan (``the NCP''), shall provide for a National Response Team (``the NRT'') composed of representatives of appropriate Federal departments and agencies for national planning and coordination of preparedness and response actions, and Regional Response Teams as the regional counterparts to the NRT for planning and coordination of regional preparedness and response actions."

(WH, Oct.18, 1991)

Executive Order 12919: *National Defense Industrial Resources Preparedness*. (June 6, 1994)

Executive Order 13010: *Critical Infrastructure Protection*, 15 July 1996. (**White House**)

Executive Order 13228: *Establishing the Office of Homeland Security and the Homeland Security Council*, October 8, 2001. (**White House**)

Executive Order 13231: *Critical Infrastructure Protection in the Information Age*, October 16, 2001. (**White House**) EO 13231 "established the President's Critical Infrastructure Protection Board and authorized a protection program to secure information systems for critical infrastructure, including emergency preparedness communications, and the physical assets that support such systems." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. A-3)

Executive Order 13286: *Executive Order Amendment of Executive Orders, and Other Actions, in Connection with the Transfer of Certain Functions to the Secretary of Homeland Security*. February 28, 2003.

Executive Order 13295: *Revised List of Quarantinable Communicable Diseases*. April 4, 2003.

Executive Order 13311: *Homeland Security Information Sharing*. July 29, 2003.

Executive Order 13347: *Individuals with Disabilities in Emergency Preparedness*. 22July2004.

Executive Order 13356: *Strengthening the Sharing of Terrorism Information to Protect Americans*, August 27, 2004. (**White House**)

Executive Order 13390: *Establishment of a Coordinator of Federal Support for the Recovery and Rebuilding of the Gulf Coast Region*. (**White House**, November 1, 2005)

Executive Order 13407: *Public Alert and Warning System* (June 26, 2006).

Executive Order 13407 Policy (*Public Alert and Warning System*, June 26, 2006):
"It is the policy of the United States to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people in situations of war, terrorist attack, natural disaster, or other hazards to public safety and well-being (public alert and warning system), taking appropriate account of the functions, capabilities, and needs of the private sector and of all levels of government in our Federal system, and to ensure that under all conditions the President can communicate with the American people." (**FEMA**, *IPAWS Update*, 2007, slide 6)

Executive Order 13407 Requirements (*Public Alert and Warning System*, June 26, 2006):

- Inventory, evaluate, and assess public alert and warning capabilities
- Adopt standards and operating procedures for public alert & warning
- Enable secure delivery of messages through many pathways
- Adapt distribution/content based on location, risks, or user preferences

- Alert those with disabilities and those without English proficiency
- Maintain/protect/restore public alert and warning system infrastructure
- Test, train, and exercise the public alert and warning system
- Conduct public education
- Coordinate with the private sector, local government, and first responders
- Administer the Emergency Alert System (EAS)
- Ensure that under all conditions the President can alert the public." (**FEMA**, *IPAWS Update*, 2007, slide 7)

Executive Order 13434: *National Security Professional Development*. (**White House**, 17May07)

Executive Order 13442: "Amending the Order of Succession in the Department of Homeland Security," issued by President George W. Bush on August 13, 2007. (**White House**)

Exercise: "A people focused activity designed to execute business continuity plans and evaluate the individual and/or organization performance against approved standards or objectives. Exercises can be announced or unannounced, and are performed for the purpose of training and conditioning team members, and validating the business continuity plan.
Exercise results identify plan gaps and limitations and are used to improve and revise the Business Continuity Plans.Types of exercises include: Table Top Exercise, Simulation Exercise, Operational Exercise, Mock Disaster, Desktop Exercise, Full Rehearsal." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 55)

Exercise: "An exercise is an instrument to train for, assess, practice, and improve performance in *prevention*, *protection*, *response*, and *recovery capabilities* in a risk-free environment. Exercises can be used for: testing and validating policies, plans, procedures, training, equipment, and interagency agreements; clarifying and training personnel in roles and responsibilities; improving interagency coordination and communications; identifying gaps in resources; improving individual performance; and identifying opportunities for improvement. (Note: an exercise is also an excellent way to demonstrate community resolve to prepare for disastrous events)." (**FEMA**, *HSEEP Glossary*, 2008)

Exercise: "A planned, staged implementation of the critical incident plan to evaluate processes that work and identify those needing improvement. Exercises may be classified as Orientation, Tabletop, Functional, or Full-scale and involve scenarios to respond to and resolve the assessed risks. See definitions of exercise types. (**Jones**, *Critical Incident* Protocol, 2000, 37)

Exercise Design: "Think of design as the framework of an exercise, and development as the building of that exercise. Exercise design includes:
- Assessing exercise needs.
- Defining the scope of the exercise.
- Writing a statement of purpose.
- Defining exercise objectives.
- Creating a scenario for the exercise." (**FEMA**, IS-120A, *Intro to Exercises*, 23Jan08, 30)

Exercise Design Process: "The exercise design process includes the following steps:
• Identify priority capabilities for improvement through exercises
• Select corresponding tasks for assessment
• Define exercise objectives based on capabilities, tasks, and jurisdiction needs
• Create a jurisdiction-specific scenario formulated specifically to meet exercise objectives."
(**DHS**, *Target Capabilities List*, 2007, p. 15)

Exercise Development: Includes:
- Creating exercise documentation.
- Arranging logistics, actors, and safety.
- Coordinating participants and media.
- Other supporting planning tasks (e.g., training controllers, evaluators, and exercise staff). (**FEMA**, IS-120A, *Intro to Exercises*, 23Jan08, 30)

Exercise Director: "The exercise director oversees all exercise functions during exercise conduct; oversees and remains in contact with *controllers* and *evaluators*; *debriefs* controllers and evaluators following the exercise; and oversees setup and cleanup of exercise and positioning of controllers and evaluators." (**FEMA**, *HSEEP Glossary*, 2008)

Exercise Evaluation Guides (EEGs): "Exercise Evaluation Guides (EEGs) help evaluators collect and interpret relevant exercise observations. EEGs provide evaluators with information on what tasks they should expect to see accomplished during an exercise, space to record observations, and questions to address after the exercise as a first step in the analysis process. In order to assist entities in exercise evaluation, standardized EEGs have been created that reflect capabilities-based planning tools, such as the Target Capabilities List (TCL) and the Universal Task List (UTL). The EEGs are not meant as report cards. Rather, they are intended to guide an evaluator's observations so that the evaluator focuses on capabilities and tasks relevant to exercise objectives to support development of the After Action Report/Improvement Plan (AAR/IP)." (**FEMA**, *About HSEEP*, 2008)

Exercise Evaluation Guides (EEGs): "Exercise Evaluation Guides (EEGs) provide evaluators with a checklist of critical tasks to be completed by participants during an exercise. EEGs contain the information to be discussed by participants, space to record evaluator observations, and questions to consider after the exercise." (**FEMA**, IS-120.A, *An Intro to Ex.*, 23Jan2008, 35)

Exercise Lead Planner/Director: "The Lead Exercise Planner (aka the Exercise Director) has complete management responsibility, assigning tasks to team members and ensuring the successful execution of the exercise." (**FEMA**, IS-120 A, *An Intro to Exercises*, 23Jan2008, 23)

Exercise Library Evaluation Guide: "An online reference library of exercise evaluation information including links to evaluator training programs, exercise evaluation documents such as the Homeland Security Exercise and Evaluation Program (HSEEP) After-Action Report/Improvement Plan (AAR/IP) Template, and other resources. An online Exercise Evaluation Guide (EEG) repository, where exercise planners, evaluators, and participants can access and download the latest versions of the HSEEP EEGs. An **EEG Builder tool**, allowing Lead Exercise Evaluators to create custom Homeland Security Exercise and Evaluation Program

(HSEEP)-compliant EEGs tailored to their specific exercise needs. (**DHS**, *Welcome to the Exercise Evaluation Guide Library*)

Exercise Mission Areas: "Most exercises focus on one of the following mission areas:

- Prevention
- Protection
- Response
- Recovery" (**FEMA**, IS-120 A, *An Introduction to Exercises*, 2008, p. 31)

Exercise Needs Assessment: "A comprehensive exercise program will already have evaluated its organization's capabilities. Referring to and updating that assessment is an important step whenever a new exercise is considered for development. The needs assessment will identify:

- Functions most requiring rehearsal.
- Potential exercise participants.
- Existing exercise requirements and capabilities.
- Plausible hazards and the priority levels of those hazards." (**FEMA**, IS-120 A, *Intro to Ex.*, 2008, p. 31)

Exercise Plan (ExPlan): "The Exercise Plan (ExPlan), typically used for operations-based exercises, provides a synopsis of the exercise and is published and distributed to players and observers prior to the start of the exercise. The ExPlan includes the exercise objectives and scope, safety procedures, and logistical considerations such as an exercise schedule. The ExPlan does not contain detailed scenario information." (**FEMA**, *About HSEEP*, 2008)

Exercise Plan (ExPlan): "ExPlans are general information documents that help *operations-based* exercises run smoothly. They are published and distributed prior to the start of exercise and provide a synopsis of the exercise. In addition to addressing exercise *objectives* and *scope*, ExPlans assign activities and responsibilities for successful exercise execution. They enable *participants* to understand their roles and responsibilities in *exercise planning*, execution, and *evaluation*. The ExPlan is intended for use by exercise *players* and *observers*—therefore, it does not contain detailed *scenario* information that may reduce the realism of the *tasks* to be performed. Players and observers should review all elements of the ExPlan prior to exercise participation." (**FEMA**, *HSEEP Glossary*, 2008)

Exercise Planning Conferences: "Planning Conferences are the official meetings held by the planning team to develop and coordinate an exercise. The conferences provide an opportunity for the team to:

- Define the exercise purpose and objectives.
- Develop the scenario.
- Coordinate logistics.
- Track design and development progress.
- Troubleshoot design or development problems.

The scope, type, size, and complexity of the exercise determine the type and number of conferences the planning team decides to conduct." (**FEMA**, IS-120 A, *Intro to Ex.*, 2008, p. 25)

Exercise Planning Team: "The exercise planning team is responsible for all aspects of an exercise, including *exercise planning*, conduct, and *evaluation*. The planning team determines exercise *capabilities*, *tasks* and *objectives*; tailors the scenario to jurisdictional needs; and develops documents used in exercise simulation, control, and evaluation. The exercise planning team should be comprised of representatives from each major participating jurisdiction and agency, but be kept to a manageable size. While jurisdictions may find it advantageous to include team members with previous exercise planning experience, membership can be modified to fit the type or *scope* of an exercise. Planning team members are ideal selections for *controller* and *evaluator* positions during the exercise because advanced scenario knowledge renders them ineligible to participate as players. A *lead exercise planner* manages the exercise planning team, which can be structured using the principles of the Incident Command System (ICS), with the following sections:

- The **Command Staff** is responsible for coordinating all exercise planning activities. Within this group is the lead exercise planner, who assigns exercise activities and responsibilities, provides guidance, establishes timelines, and monitors the development process. The safety controller and the liaison coordinator report directly to the lead exercise planner.
- The **Planning Section** is responsible for compiling and developing all exercise documentation. To accomplish this effectively, the Planning Section also collects and reviews policies, plans, and procedures that will be tested in the exercise. During the exercise, the Planning Section may be responsible for developing simulated actions by agencies not participating in the exercise and setting up a *SimCell* for exercises that necessitate one (such as *FEs*).

- The **Logistics Section** provides the supplies, materials, facilities, and services that enable the exercise to function smoothly without outside interference or disruption. This group consists of two subsections: service and support. The service section provides transportation, barricading, signage, food and drinks, real-life medical capability, and exercise-site perimeter security. The support section provides communications, purchasing, general supplies, very important personnel (VIP) / *observer* processing, and recruitment/management of *actors*.

- The **Administration/Finance Section** provides grant management and administrative support throughout exercise development. This group is also responsible for the registration process and coordinates schedules for the exercise planning team, the lead exercise planner, participating agencies, and the host community or communities.

- The **Operations Section** provides most of the technical or functional expertise for the participating agencies or jurisdictions. This group develops *scenarios*, selects evaluation tools, and has personnel with the expertise necessary to serve as evaluators." (**FEMA**, *HSEEP Glossary*, 2008)

Exercise Planning Team: Every exercise requires an Exercise Planning Team – the core group responsible for the design, development, conduct, and evaluation of an exercise. A team consists of a Lead Planner and planning team members. The Exercise Planning Team:

- Determines exercise objectives.
- Creates the scenario.
- Develops exercise documentation.
- Conducts pre-exercise briefing and training sessions.

Because of their high level of involvement, planning team members are ideal selections for exercise controller and evaluator positions. As a general rule, however, they do not participate as players." (**FEMA**, IS-120 A, *An Introduction to Exercises*, 23 Jan 2008, p. 23)

"The Exercise Planning Team should be assembled from key participating agencies, organizations and jurisdictions. The scope and type of exercise or scenario should also help determine the team's membership." (Ibid, 24)

Exercise Play Area: "The exercise play area is the site or facility where the bulk of tactical player activities and *tasks* are demonstrated during an *operations-based* exercise." (**FEMA**, *HSEEP Glossary*, 2008)

Exercise Play Rules: "Exercise play rules are the parameters that exercise participants follow during the exercise. Exercise play rules describe appropriate exercise behavior, particularly in the case of real-world emergencies." (**FEMA**, *HSEEP Glossary*, 2008)

Exercise Program Management: "Exercise program management consists of the functions required for a jurisdiction or entity to sustain a variety of exercises targeted toward preparedness priorities, on an ongoing basis. It includes project management, budgeting, grant management, staff hiring, funding allocation, and expenditure tracking. Program management functions cyclically. First, a *Multi-Year Training and Exercise Plan* is developed in consideration of a jurisdiction's preparedness priorities. Next, specific exercises are carried out according to the multi-year plan's timelines and milestones. Finally, IP [Improvement Plan] corrective actions identified in the exercises are taken into account when developing priorities for the next multi-year plan. Responsibilities for these *tasks* are complementary and require that all relevant parties collaborate to successfully administer exercises." (**FEMA**, *HSEEP Glossary*, 2008)

Exercise Program Manager: "The exercise program manager develops a self-sustaining *HSEEP* through program budget management oversight, exercise conduct, and improvement tracking monitoring and reporting." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Exercise Project Management: "Exercise project management is the next step after program management. In this step, project managers are responsible for the design, development, and execution of a specific exercise, followed by evaluation and improvement planning. Good project management involves:

- Developing a project management timeline.
- Establishing project milestones.
- Identifying the exercise planning team.
- Scheduling planning conferences." (**FEMA**, IS-120 A, *An Intro. to Ex.*, 23 Jan 2008, p. 22)

Exercise Scenario: "Scenario – A sequential, narrative account of a hypothetical incident or accident. The scenario provides the catalyst for the exercise and is intended to introduce situations that will stimulate player response(s)." (**DHS**, *Cyber Storm Exercise Report*, 2006, p. 4, footnote 5)

Exercise Scenario: "A scenario is the storyline that drives an exercise…. Scenarios should be:
- Threat-based and performance-based.
- Realistic.
- Challenging—but not so demanding that participants become overwhelmed.

A scenario should involve the participants, the threat, and the area identified in the scope." (**FEMA**, IS-120 A, *An Introduction to Exercises*, 23 Jan 2008, p. 33)

Exercise Scenario Narrative: "Scenario narratives should be designed to engage exercise participants in a way that approximates real-world responses to emergencies.
At a minimum, the narrative should address these questions:
- Where does the initiating event take place?
- How dangerous and persistent is the emergency?
- What is the impact of the incident?
- What time of day does the event take place?
- What is the sequence of events?
- What other factors would influence emergency procedures?" (**FEMA**, IS-120 A, *An Introduction to Exercises*, 23 Jan 2008, p. 34)

Exercise Scope: "Most often, scope defines the kind, rather than number, of exercise participants (i.e., levels of government/ private sector). Other interpretations include:
- Geographic size (local, national, regional).
- Number of participants.
- Responder functions.
- Hazard Type.

Exercise planners must be careful to make their scope manageable (neither too large nor too complex), selecting only those participants or actions best suited for the exercise program, type, budget, and objectives." (**FEMA**, IS-120 A, *An Introduction to Exercises*, 23 Jan 2008, p. 31)

Exercise Series: "This cycle includes exercises held at increasing levels of complexity and annual reviews of program objectives to ensure objectives are met. Multiple exercises are designed in sequence using the *building-block approach*, aimed at achieving a greater capability (e.g., a seminar that leads to a *TTX* [Tabletop Exercise], which leads to a *FE* [Full-Scale Exercise])." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Exercise Setup: "Exercise setup involves the pre-staging and dispersal of exercise materials. It includes registration materials, documentation, signage, and other equipment, as appropriate." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Exercise Timeline: "Exercise project managers build timelines to include:
- A schedule of key conferences and milestones.
- A Master Task List.

• Planning team task assignments." (**FEMA**, IS-120 A, *An Intro to Exercises*, 23Jan08, 23)

Exercise Types:
Discussion-Based Exercises: "Discussion-based exercises familiarize participants with current plans, policies, agreements, and procedures. These exercises may also be used to develop new plans, policies, agreements, and procedures. Types of discussion-based exercises include the following:

- *Seminar.* A seminar is an informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., a seminar to review a new Evacuation Standard Operating Procedure).
- *Workshop.* A workshop resembles a seminar, but is employed to build specific products, such as a draft plan or policy (e.g., a Training and Exercise Plan Workshop is used to develop a Multi-year Training and Exercise Plan).
- *Tabletop Exercise (TTX).* A tabletop exercise involves key personnel discussing simulated scenarios in an informal setting. TTXs can be used to assess plans, policies, and procedures.
- *Game.* A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedure designed to depict an actual or assumed real-life situation." (**DHS**, *FCD 1*, Nov. 2007, p. K-2)

Exercise Types:
"*Drill*: A coordinated, supervised activity usually used to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Typical attributes include the following: A narrow focus, measured against established standards; Instant feedback; Performance in isolation; Realistic environment.

Full Scale Exercise (FSE): A multi-agency, multi-jurisdictional, multi-organizational activity that tests many facets of preparedness. They focus on implementing and analyzing the plans, policies, procedures, and cooperative agreements developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. In FSEs, the reality of operations in multiple functional areas presents complex and realistic problems that require critical thinking, rapid problem solving, and effective responses by trained personnel. During FSEs, events are projected through a scripted exercise scenario with built-in flexibility to allow updates to drive activity. FSEs are conducted in a real-time, stressful environment that closely mirrors real events.

Functional Exercise (FE): An activity designed to test and evaluate individual capabilities, multiple functions, activities within a function, or interdependent groups of functions. Events are projected through an exercise scenario with event updates that drive activity at the management level. An FE simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment.

Tabletop Exercise (TTX): An activity that involves key personnel discussing simulated scenarios in an informal setting. This type of exercise can be used to assess plans, policies, and procedures or to assess the systems needed to guide the prevention of, response to, and recovery from a

defined incident. TTXs typically are aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and achieving changes in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem solving, rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For FY 2007), Oct.23, 2006, pp. 3-4)

[Note: See, also, "Emergency Operations Simulation," and "Total Systems Exercises".]

Exercise Types: "There are seven types of exercises in the building block approach. Each exercise type falls into one of two categories. The two categories of exercises are Discussion-based exercises and Operations-based exercises… Discussion-based exercises, as the name suggests, center on participant discussion… Operations-based exercises focus on action-oriented activities such as deployment of resources and personnel." (**FEMA**, IS-120.A, *An Introduction to Exercises*, 23 Jan 2008, p. 7)

- Discussion-Based
  - Seminars
  - Workshops
  - Tabletop
  - Games
- Operations Based
  - Drills
  - Functional Exercises
  - Full-Scale." (Ibid, 8-11)

Exercise Types: "…discussion-based and operations-based exercises differ in their complexity and in their planning processes. There are key differences in how the two types of exercises are conducted as well. Conduct characteristics differ principally in:

- Time.
- Venue.
- Equipment.
- Number of participants and participant activities.
- Number of planning team members and their activities.

Operations-based exercises usually require additional logistical considerations such as providing blankets for victim actors in case they have to lie on the ground for a long time, or ensuring that roads will be closed to normal traffic at the exercise venue." (**FEMA**, IS-120.A, *An Introduction to Exercises*, 23 Jan 2008, p. 39)

Exercises: "Exercises provide opportunities to test plans and improve proficiency in a risk-free environment. Exercises assess and validate proficiency levels. They also clarify and familiarize personnel with roles and responsibilities. Well-designed exercises improve interagency coordination and communications, highlight capability gaps, and identify opportunities for improvement. Exercises should:

- Include multidisciplinary, multijurisdictional incidents.
- Include participation of private-sector and nongovernmental organizations.
- Cover aspects of preparedness plans, particularly the processes and procedures for activating local, intrastate, or interstate mutual aid and assistance agreements.

• Contain a mechanism for incorporating corrective actions." (**DHS**, *NRF*, Jan 2008, 31)

Exercises: "Exercises provide opportunities to practice and test…capabilities and to improve and maintain proficiency in a controlled environment. Exercises assess and validate policies, plans, and procedures, and clarify and familiarize personnel with roles and responsibilities. Exercises improve interagency coordination and communication, highlight gaps, and identify opportunities for improvement." (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, p. 5)

Exercises, Evaluations, and Corrective Actions Capability Elements (TCL): "Exercises, self-assessments, peer-assessments, outside review, compliance monitoring, and actual major events that provide opportunities to demonstrate, evaluate, and improve the combined capability and interoperability of the other elements to perform assigned missions and tasks to standards necessary to achieve successful outcomes." (**DHS**, *TCL*, 2007, p. 9)

Excess-of-loss (XOL) Catastrophe Reinsurance Contracts: "…contracts…proposed by the Clinton Administration [which] would provide per-occurrence excess-of-loss reinsurance coverage to private insurers and reinsurers, where both the coverage layer and the fixed payout of the contract are based on insurance industry losses, not company losses. In financial terms, the Federal government would be selling earthquake and hurricane catastrophe call options to the insurance industry to cover catastrophic losses in a loss layer above that currently available in the private reinsurance market. The contracts would be sold annually at auction, with a reservation price designed to avoid a government subsidy and ensure that the program would be self supporting in expected value. If a loss were to occur that resulted in payouts in excess of the premiums collected under the policies, the Federal government would use its ability to borrow at the risk-free rate to fund the losses. During periods when the accumulated premiums paid into the program exceed the losses paid, the buyers of the contracts implicitly would be lending money to the Treasury, reducing the costs of government debt. The expected interest on these "loans" offsets the expected financing (borrowing) costs of the program as long as the contracts are priced appropriately. By accessing the Federal government's superior ability to diversify risk inter-temporally, the contracts could be sold at a rate lower than would be required in conventional reinsurance markets, which would potentially require a high cost of capital due to the possibility that a major catastrophe could bankrupt some reinsurers. By pricing the contacts at least to break even, the program would provide for eventual private-market "crowding out" through catastrophe derivatives and other innovative catastrophic risk financing mechanisms." (**Cummins**, *Pricing Excess-of-loss Reinsurance Contracts Against…,* 1998, 1)

Exigent Circumstances: "Circumstances that may include the existence of a threat to public health or public safety or other unique circumstances that warrant immediate action." (**DHS**, *Chemical-terrorism Vulnerability Information Glossary*, November 2007, p. 2)

Expanded Regional Collaboration, National Preparedness Guidelines Priority # 1: "Major events, especially terrorism, will invariably have cross-geographic consequences and impact. The expanded regional collaboration priority highlights the need for embracing partnership across multiple jurisdictions, regions, and States in building capabilities cooperatively. Successful regional collaboration allows for a multijurisdictional and multi-disciplinary approach to building capabilities for all four mission areas [prevent, protect,

respond, recover], spreading costs, and sharing risk across geographic areas. This approach increases opportunities to create efficiency and leverage capabilities across the country. Regional collaboration focuses on expanding mutual aid and assistance compacts among contiguous State, local, and tribal entities, and their private and non-governmental partners, and extending the scope of those compacts to include pre-incident preparedness activities (i.e., planning, training, exercising). The intent is to locate capabilities strategically to maximize coverage of the U.S. population and the Nation's high priority critical infrastructure and key resources. The Goal does not mandate that State and local governments adopt a regional governmental structure, but it does require that all levels of government embrace a *regional approach to building capabilities.*" (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidelines on Aligning Strategies with the NPG*, 2005, pp. 8-9)

Expanded Regional Collaboration, National Preparedness Guidelines Priority # 1:
"Expanded Regional Collaboration is identified as the first priority in the National Preparedness Guidelines in recognition that large scale events may require a shared response across jurisdictions, levels of government, and the public/private sectors depending on the scale of the event. States are encouraged to define geographic areas or regions, in consultation with local and tribal governments that share risk and responsibility for a major event. The expanded region facilitates the strengthening of relationships among participants, regional preparedness planning and operations support, and joint implementation of a capabilities-based approach. Regions may be intra- or inter-State geographic areas, as appropriate, based on shared risk and the need for joint planning and operations. Standardization of geographic regions will enable the States, working with local and tribal government and other partners, to coordinate preparedness activities more effectively, spread costs, pool resources, share risk, and thereby increase the overall return on investment." (**DHS**, *TCL*, 2007, p. 11)

Experiential Learning: "Experiential learning occurs when a learning activity having a behavioral-based hierarchy allows the student to experience and practice job-related tasks and functions during a training session. Any learning based on experiencing, doing, exploring, and even living can be termed experiential." (**DHS**, *DHS Training Glossary*, 2006, p. 24)

Experiential Learning: "Experiential learning has come to mean two different types of learning:
1. learning by yourself and
2. experiential education [experiential learning through programs structured by others][43]

1. *Experiential learning by yourself:*
Learning from experience by yourself might be called "nature's way of learning". It is "education that occurs as a direct participation in the events of life" (Houle, 1980, p. 221, quoted in Smith, 2003). It includes learning that comes about through reflection on everyday experiences. Experiential learning by yourself is also known as "informal education" and includes learning that is organised by learners themselves. Related terms: Auto-didacticism, Self-teaching.

[43] Smith, M. K. (2001). David A. Kolb on experiential learning. the encyclopedia of informal education, http://www.infed.org/b-explrn.htm

2. *Experiential education:*
(Experiential learning through programs & activities structured by others). Principles of experiential learning are used to design of *experiential education* programs. Emphasis is placed on the nature of participants' subjective experiences. An experiential educator's role is to organize and facilitate *direct experiences of phenomenon* under the assumption that this will lead to genuine (meaningful and long-lasting) learning. This often also requires preparatory and reflective exercises. Experiential education is often contrasted with *didactic education*, in which the teacher's role is to "give" information/knowledge to student and to prescribe study/learning exercises which have "information/knowledge transmission" as the main goal." (**Neill**, What is Experiential Learning?," January 31, 2005)

Expert: "An expert is a person who is specially qualified by education and experience to perform difficult and challenging tasks in a particular field beyond the usual range of achievement of competent persons in that field. An expert is regarded by other persons in the field as an authority or practitioner of unusual competence and skill in a professional, scientific, technical or other activity. [5 CFR 304.102] [HRO Part 1, Chapter 7, Employment of Experts and Consultants]" (**DHS**, *DHS Training Glossary*, 2006, p. 24)

EXPLAN: Exercise Plan. (**FEMA**, IS 120.A, *An Introduction to Exercises*, 2 Feb 2008, p. 34)

Explosivity Index: "Percentage of pyroclastic ejecta among the total product of a volcanic eruption." (**UNDHA**, *DM Glossary*, 1992, 37)

Exposure: "The number, types, qualities, and monetary values of various types of property or infrastructure and life that may be subject to an undesirable or injurious hazard event." (**American Planning Association**, *Planning For A Disaster-Resistant Community*, 2005, p. 81)

Exposure: "`Exposure' is another component of disaster risk, and refers to that which is affected by natural disasters, such as people and property." (**Asian Disaster Reduction Center**, *Total Disaster Risk Management – Good Practices*, 2005, p. 1)

Exposure (and Vulnerability): "In Order to contract infectious disease, you need to be exposed to the microbe that causes the disease. However, some people are exposed and never become ill, while others may die from the same exposure. If we call the person who is exposed a 'host', the host may have certain vulnerabilities or strengths that alter the outcome of the exposure. The host may have inherited genetic traits that limit his or her vulnerability to a certain class of microbes, or may have previous experience with the specific microbe, and thus have an immune-response system that is poised and ready to fight off the microbial invader." (**Bissell** 2005)

Exposure: An example of lessening one's exposure is acquiring insurance to cover some or all of one's losses. One's exposure is lowered but nothing has been done to address hazard or vulnerability. One is just as vulnerable to, say, flooding, but less "exposed" to personal financial loss. One still is vulnerable to material loss. (**Blanchard**)

Exposure: "Exposure describes the number of people, and the value of structures and activities that will experience…hazards and may be adversely impacted by them." (**Darlington and Lambert** 2001, 135)

Exposure: "Exposure means the number, types, qualities, and monetary values of various types of property of infrastructure and life that may be subject to an undesirable or injurious hazard event." (**FEMA**, *Multi Hazard Identification and Risk Assessment*, 1997, p. xxv)

Exposure: "People, property, systems, or functions at risk of loss exposed to hazards." (**Multihazard Mitigation Council**, 2002, 30)

Exposure: "The process by which people, animals, the environment, and equipment are subjected to or come in contact with a hazardous material. The magnitude of exposure is dependent primarily upon the duration of exposure and the concentration of the hazardous material. This term is also used to describe a person, animal, the environment, or a piece of equipment." (**NFPA 471**, 1997, p. 9)

Exposure: "The condition of being susceptible to loss due to a threat." (**Risky Thinking**, *A Glossary of Risk Related Terms*, 2007)

Exposure Assessment: "The process of estimating or measuring the intensity, frequency, and duration of exposure to an agent. Ideally, it describes the sources, pathways, routes, magnitude, duration, and patters of exposure; the characteristics of the population exposed; and the uncertainties in the assessment." (**European Environment Agency**, *EEA Multilingual Environmental Glossary*, 2007; cites *The International Programme on Chemical Safety, Glossary on Key Exposure Assessment Terms*, 2001)

Exposure Time: "The time period of interest for seismic risk calculations, seismic hazard calculations, or design of structures. For structures, the exposure time is often chosen to be equal to the design lifetime of the structure." (**UNDHA**, *DM Glossary*, 1992, 37)

EXSUMS: Executive Summaries. (*DHS*, *Statement of Frank DiFalco, NOC Director*, 20Jun07)

Extinction Level Event (ELE): "An extinction level event is a catastrophic occurrence which has the potential to terminate entire species of animals and plants: i.e., to cause a mass extinction. Such events are decidedly rare, but geological evidence shows that they have happened on many occasions since multicellular life became abundant on the planet almost a billion years ago." (**BBC**, *Extinction Level Events*, 1999)

Extreme Events: Extreme events are not only [rare and] severe, but also outside the normal range of experience of the system in question." (**Bier**, et al, 1999, 84)

Extreme Events: An extreme event in the context of the natural world is an act of nature, "such as a lightning stroke or a flood [that] may be a productive resource and a hazard at the same time. Lightning may kill an animal but also start a fire essential to the preservation of a forest ecosystem. A flood may destroy a farmstead while fertilizing the fields" (**Burton** et al. 1993, 34).

Extreme Heat: "Heat kills by pushing the human body beyond its limits. In extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature. Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults, young children, and those who are sick or overweight are more likely to succumb to extreme heat. Conditions that can induce heat-related illnesses include stagnant atmospheric conditions and poor air quality. Consequently, people living in urban areas may be at greater risk from the effects of a prolonged heat wave than those living in rural areas. Also, asphalt and concrete store heat longer and gradually release heat at night, which can produce higher nighttime temperatures known as the 'urban heat island effect'." (**FEMA**, "Fact Sheet – Extreme Heat," June 2007, p. 1)

Extreme Weather: The U.S. National Oceanic and Atmospheric Administration (NOAA) uses a definition of extreme weather based on an event's climatologically-expected distribution. An event is called extreme if occurs, for example, only five per cent or less of the time. NOAA notes, however, that the exact choice of cut-off of the climatologically probability value used in the definition is somewhat arbitrary. A simple example of extreme weather is therefore when the temperature drops to a level which occurs less than five per cent of the time, say below -20 C. Extreme events, by definition, are rare. (Zhu and Toth. *Extreme Weather Events and Their Probabilistic Prediction by the NCEP Ensemble Forecase System*)

Extremely Hazardous Substances (EHS): "Chemicals with high acute lethality have the potential for causing death in unprotected populations after relatively short exposure periods at low doses. On the basis of toxicity criteria…EPA identified a list of chemicals with high acute toxicity…from the more than 60,000 chemicals in commerce. This is the list of EHSs required by Title Ill of SARA. Because airborne releases of acutely lethal substances, while infrequent, can be catastrophic, Title Ill requires consideration of these EHSs in emergency plans." (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, p. 2-2)

Eye (of the storm): "The calm center of a tropical cyclone." (**UNDHA**, *DM Glossary*, 1992, 37)

FAAT List: *FEMA Acronyms, Abbreviations and Terms.*

Facilitated Discussion: "A facilitated discussion is the focused discussion of specific issues through a *facilitator* with functional area or subject matter expertise. Facilitated group discussions occur at individual tables organized by discipline or agency/organization. Facilitated discussions take place before moderated discussions." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Facilitator: "During a *discussion-based* exercise, the facilitator is responsible for keeping *participant* discussions on track with the exercise design *objectives* and making sure all issues and objectives are explored as thoroughly as possible within time constraints." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Facilities: "Locations where an organization's leadership and staff operate. Leadership and staff may be co-located in one facility or dispersed across many locations and connected by

communications systems. Facilities must be able to provide staff with survivable protection and must enable continued and endurable operations." (**DHS**, *FCD 1*, Nov 2007, P-5)

Facilities Unit (ICS): "A unit within the Support Branch of the Logistics Unit that provides fixed facilities for an incident. These facilities may include eating areas, sleeping areas, Incident Base, etc." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 53)

Facility Response Plan (FRP): "Describes how the facility will respond to, contain, and clean up a spill." (**GAO**, *Maritime Security*, December 2007, p. 57)

Failure Modes and Effects Analysis (FMEA): "An analytical technique, which explores the effects of failures or malfunctions of individual components in a system - i.e. "If this part fails, in this manner, what will be the result?" The level of risk is determined by: Risk = probability of failure x severity category. An FMEA can be used for a single point failure but can be extended to cover parallel failures and is valuable for future reviews and as a basis for other risk assessment techniques. The limitations to the technique are that it can be a costly and time-consuming process." (**UN DAP**, *Techniques Used in Risk Assessment*, 2008)

Fallout: "The process or phenomenon of the descent to the earth's surface of particles contaminated with radioactive material from the radioactive cloud. The term is also applied in a collective sense to the contaminated particulate matter itself. The early (or local fallout is defined, somewhat arbitrarily, as those particles which reach the earth within 24 hours after a nuclear explosion. The delayed (or worldwide) fallout consists of the smaller particles which ascend into the upper troposphere and into the stratosphere and are carried by winds to all parts of the earth. The delayed fallout is brought to earth, mainly by rain and snow, over extended periods ranging from months to years." (**Glasstone**, *Effects of Nuclear Weapons*, 1977, p. 633)

Fallout: "The deposition of radioactive particles from the atmosphere arising from:
1) natural causes
2) nuclear bomb explosions and
3) induced radioactivity and atomic reactor accidents." (**UNDHA**, *DM Glossary*, 1992, 37)

Fallout Shelter Licensing: "A Fallout Shelter License or Privilege form authorizes the marking of public fallout shelters and temporary access by the public to specific fallout shelter space in emergencies. It also authorizes storage of shelter provisions in the facility, and inspection by government officials." (**DCPA**, *Foresight, DCPA Annual Report FY73*, 1974, p. 17)

Fallout Shelter Supplies Program: Discontinued by DCPA in fiscal year 1972, "except for radiological monitoring kits… emphasis now is on the maintenance, care, and inspection of supplies at local level. Guidance has been issued to assist in this effort to preserve supplies now in place, and for disposal of deteriorating supplies as deemed necessary by local governments. The Defense Supply Agency in its final accounting for the general supply items procured under the Federal Shelter Stocking Program showed that 105,873 shelter facilities had been provided with Federal supplies sufficient to take care of approximately 107.6 million persons for 8 days, or nearly 65.5 million for 14 days." (**DCPA**, *Foresight, Annual Report FY73*, 1974, 17-18)

Family Action Program (FCDA): "The Family Action Program was developed by FCDA during 1953 to carry the civil defensee story to the homes of the Nation. It is a program of home protection exercises giving each citizen the opportunity to participate directly in civil defense, and encourages every citizen to cooperate with the neighborhood civil defense groups.

"As part of this individual- and family-action plan, a package of informational and educational materials has been prepared for club and organiation use. It includes a kit containing sample press releases, radio-TV spot announcemnts and scripts, speeches, and ideas for promoting community activities that tie in with the program. In addition there are twelve lesson plans and film strips for wardens.

"A booklet of self-protection home exercises was developed and placed in the kit to help Americans meet the common problems arising from disaster. These seven family-action exercised are: (1) Preparing Your Shelter, (2) What To Do When the Alert Sounds, (3) Home Fire Protection, (4) Home Fire Fighting, (5) Emergency Action to Save Lives, (6) What To Do If Someone Is Trapped, and (7) Safe Food and Water in Emergencies." (**FCDA**, *1953 Annual Report*, p. 77)

Family Assistance Center: "Is established to facilitate the exchange of information between disaster responders and the family members and friends of decedents, those injured, and those missing/unidentified. Family Assistance Center personnel address the immediate emotional needs of the victim's families and friends and provide accurate and timely information in an appropriate setting and compassionate manner. The Family Assistance Center must also address the basic physical needs of these family members and friends of victims, including food, shelter transportation, internet access, telephone, child care, language translation, disaster mental health services, and emergency medical services, if necessary." (**FEMA**, *IIFOG Ver 3 Draft*, 2008, 35)

Family Disaster Plan:

- Discuss with your family the hazards that could impact your local area, the potential for community evacuation or sheltering, and your community's warning systems and what to do if they are used.
- Determine where to meet in the event of an emergency. Designate one location right outside your home in case of a sudden emergency, like a fire, and another location outside your neighborhood in case you can't return home.
- Ask an out-of-town friend or relative to be your emergency contact. Following a disaster, family members should call this person and tell them where they are.
- Make a communication plan where all family members know how to contact each other. A form for recording this information can be found at www.ready.gov - or at www.redcross.org/contactcard.
- Include provisions for your pets in your family disaster plan.
- Practice the plan. (**FEMA & ARC**, *Helping Children Cope with Disaster*, 2005)

Family Disaster Preparedness: "You can cope with disaster by preparing in advance and by working with your family as a team. Follow the steps listed in this booklet to be prepared.
1. Get informed
2. Make a plan

3. Assemble a kit
4. Maintain your plan and kit.

Knowing what to do is your best protection and your responsibility." (**FEMA & ARC**, *Preparing for Disaster*, 2005)

Family Disaster Supplies Kit: "Every household should assemble a disaster supplies kit and keep in up to date. A disaster supplies kit can help your family stay safe and be more comfortable during and after a disaster. Though local officials and relief workers will be on the scene after a disaster, they cannot reach everyone immediately. Also, if you need to evacuate at a moment's notice you probably will not have the opportunity to shop or search for the supplies you and your family will need.

- Pack disaster supplies in an easy-to-carry container, such as a duffel bag or backpack and label the container clearly.
- Ask your children to think of items that they would like to include in the kit, such as books, games or nonperishable snack food items.
- Include such items as:
- Three-day supply of non-perishable food and manual can opener.
- Three-day supply of water (one gallon of water per person per day).
- Portable, battery-powered radio or television and extra batteries.
- Flashlights and extra batteries.
- First aid kit and first aid manual.
- Photocopies of credit cards and identification cards.
- Sanitation and hygiene items (hand sanitizer, moist towelettes and toilet paper).
- Matches in a waterproof container.
- Whistle.
- Clothing, blankets, kitchen accessories and cooking utensils.
- Special needs items, such as prescription medications, spare eye-glasses, hearing aid batteries.
- Items for infants, such as formula, diapers, bottles and pacifiers.
- Tools, pet supplies, a map of the local area, and other items to meet your unique family needs.
- Ask your children to help you remember to keep your kit updated by marking dates on a calendar to regularly review and update your kit.
- Consider having emergency supplies in each vehicle and at your place of employment." (**FEMA & ARC**, *Helping Children Cope with Disaster*, 2005)

Family Emergency Food Supplies: "Even though it is unlikely that an emergency would cut off your food supply for two weeks, consider maintaining a supply that will last that long…. As you stock food, take into account your family's unique needs and tastes. Familiar foods are important. They lift morale and give a feeling of security in times of stress. Try to include foods that they will enjoy and that are also high in calories and nutrition. Foods that require no refrigeration, water, special preparation, or cooking are best. Individuals with special diets and allergies will need particular attention, as will babies, toddlers, and the elderly. Nursing mothers may need liquid formula, in case they are unable to nurse. Canned dietetic foods, juices, and soups may be helpful for ill or elderly people. Make sure you have a manual can opener and disposable utensils.

Don't forget nonperishable foods for your pets." (**FEMA & ARC**, *Food and Water in an Emergency* (FEMA 477), 2004, pp. 2-3)

Family Emergency Water Supplies: "Having an ample supply of clean water is a top priority in an emergency. A normally active person needs to drink at least two quarts (half gallon) of water each day. People in hot environments, children, nursing mothers, and ill people will require even more. You will also need water for food preparation and hygiene. Store at least one gallon per person, per day. Consider storing at least a two-week supply of water for each member of your family. If you are unable to store this quantity, store as much as you can. If supplies run low, never ration water. Drink the amount you need today, and try to find more for tomorrow. You can minimize the amount of water your body needs by reducing activity and staying cool." (**FEMA & ARC**, *Food and Water in an Emergency* (FEMA 477), 2004, p. 7)

Famine: "A catastrophic food shortage affecting large numbers of people due to climatic, environmental and socio-economic reasons." (**UNDHA**, *DM Glossary*, 1992, 38)

Fantasy Documents: "These are catastrophic response plans whose purpose is to convince or reassure rather than to guide acutal activities…. Large-scale evacuations are in many instances the principal means of preserving life, yet in very large events rely on fragmfented and poorly-understood capabilities and hopeful assumptions that may not be supported by actual resources. Evacuation, as a strategy, then takes on characteristics similar to Clarke's (1999) concept of 'fantasy documents'…. Fantasy documents are created by organizations under circumstances where problems are complex and ambiguous, yet it is necessary to exert some type of control over the situation. Fantasy documents are not naked lies; rather they can be characterized as generous and unrealistic assumptions of how organizations will perform in a crisis (Perrow, 1999)." (**Kendra**, "Evacuating Large Urban Areas," 2008)

FAQs: Frequently Asked Questions.

FAOC: FEMA Alternate Operations Center. (**FEMA**, *Devolution of Ops. Plan Template*, 2006)

FAsT: Field Assessment Team. (**USACE**, *Response Planning Guide*, 1995, p. B-2)

Fatality Management: "Complete documentation and recovery of human remains and items of evidence (except in cases where the health risks posed to personnel outweigh the benefits of recovery of remains). Remains receive surface decontamination (if indicated) and, unless catastrophic circumstances dictate otherwise, are examined, identified, and released to the next-of-kin's funeral home with a complete certified death certificate. Reports of missing persons and ante mortem data are efficiently collected. Victims' family members receive updated information prior to the media release. All hazardous material regulations are reviewed and any restrictions on the transportation and disposition of remains are made clear by those with the authority and responsibility to establish the standards. Law enforcement agencies are given all information needed to investigate and prosecute the case successfully. Families are provided incident-specific support services." (**DHS**, *National Preparedness Guidelines*, 2007, p. 8)

Fatality Management: "Fatality Management is the capability to effectively perform scene documentation; the complete collection and recovery of the dead, victim's personal effects, and items of evidence; decontamination of remains and personal effects (if required); transportation, storage, documentation, and recovery of forensic and physical evidence; determination of the nature and extent of injury; identification of the fatalities using scientific means; certification of the cause and manner of death; processing and returning of human remains and personal effects of the victims to the legally authorized person(s) (if possible); and interaction with and provision of legal, customary, compassionate, and culturally competent required services to the families of deceased within the context of the family assistance center. All activities should be sufficiently documented for admissibility in criminal and/or civil courts. Fatality management activities also need to be incorporated in the surveillance and intelligence sharing networks, to identify sentinel cases of bioterrorism and other public health threats." (**DHS**, *TCL*, 2007, p. 519)

Fault: "A planar or gently curved fracture in the earth's upper layers across which displacement occurs." (**UNDHA**, *DM Glossary*, 1992, 38)

Fault: "A fracture or crack along which two blocks of rock slide past one another. This movement may occur rapidly, in the form of an earthquake, or slowly, in the form of creep." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Fault-Tree Analysis (FTA): "This is a graphical technique that provides a description of the combinations of possible occurrences in a system, which can result in an undesirable outcome. The most serious outcome is selected and called the Top Event. The analysis proceeds by determining how these top events can be caused by individual or combined lower level failures or events. The benefits of the approach are the identification of the basic causes of failures, and the investigation of the reliability and safety of complex and large systems. The limitations of the approach are that it does not measure probability, therefore counter measures identified by the process may not be those with the greatest potential for reducing risk." (**UN DAP**, *Techniques Used in Risk Assessment*, 2008)

FBCO: Faith-Based and Community Organizations. (**Carafano**, *Grassroots Disaster*…, 2007)

FBI: Federal Bureau of Investigation, United States Department of Justice.

FBI Hazardous Materials Response Unit: "provides technical response capabilities including management of WMD crime scene activities and collection of evidence in hazardous environments." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, 2007, p. 12)

FBIIC: Financial and Banking Information Infrastructure Committee. (**Treasury**, *B&F CIP*, 2006)

FBO: Faith Based Organization. (**CDC/HHS**, *Locating and Reaching At-Risk Populations*, 2007)

FCD: Federal Continuity Directive. (**DHS**, *FCD 1*, November 2007, p. i)

FCD 1: *Federal Continuity Directive 1*, superseding Federal Preparedness Circular 65, *Federal Executive Branch Continuity of Operations*, dated June 15, 2004. (**DHS**, *FCD 1*, Nov 2007, 1)

FCD 2: *Federal Continuity Directive 2, Federal Executive Branch Mission Essential Functions and Primary Mission Essential Function Identification and Submissions Process*, November 2007.

FCDA: Federal Civil Defense Administration, 1951-1958.

FCDA Regulation 1707 of 1952: Established the United States Civil Defense Corps. The Corps consisted of 11 civil defense services:

- Communications
- Engineering
- Fire
- Health
- Police
- Rescue
- Staff
- Supply
- Transportation
- Warden
- Welfare [Mass Care] (**FCDA**, *Annual Report for 1952*, pp. 73-74)

FCDG: Federal Civil Defense Guide. (**OCD**, *Abbreviations and Definitions*, 1971, 2) [Defunct]

FCIP: Federal Crop Insurance Program.

FCO: Federal Coordinating Officer, FEMA.

FDAA: Federal Disaster Assistance Administration. (Functions incorporated into FEMA in 1979)

FE: Functional Exercise(s). **(DHS**, *HSEEP*, Vol. V, 2005, p. 41)

FEA: Federal Executive Association(s). (**DHS**, *Federal Continuity Directive 1*, Nov 2007, P-5)

FEB: Federal Executive Board. (**DHS**, *Federal Continuity Directive 1*, Nov 2007, O-1)

FEBA: Forward Edge of the Battle Area. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-2)

FECC: Federal Emergency Communications Coordinator. (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 52)

Federal Agency: "Any department, independent establishment, government corporation, or other agency of the executive branch of the Federal government, including the U.S. Postal Service, but not including the ARC." (FEMA, Mission Assignment SOPs Draft, 2007, p. 51)

Federal Agency Civil Defense Delegations Program: "Progress was made during 1955 in integrating the civil defense program into the Federal Government. Two delegations were approved by President Eisenhower in 1954. By the end of 1955, 2 more delegations had been

made, assigning a total of 33 specific responsibilities to 7 Federal agencies. Under these delegatins, the Executive agencies have assumed responsibility fo specific civil defense activity directly related to their day-to-day wrok.

The goal is organization of civil defense leadership with standby plans in all Federal agencies. In case of enemy attack or natural disaster, full facilities of the Government could then be quickly shifted to emergency operations for support to States. Delegations policy and review, and coordination of emergency action, are provided by FCDA….

Delegations 1 and 2 were made in 1954, the first to the Department of Health, Education, and Welfare, and the second to the Departments of Agriculture, Commerce, Justice, and Labor, and the Housing and Home Finance Agency. In 1955 delegations 3 and 4 set forth responsibilities for the Department of Interior. Also, delegation 3 assigned additional responsibilities to the Department of Commerce." (**FCDA**, *1955 Annual Report*, p. 46)

Federal Approving Official (FAO): "The FAO is a function as opposed to a position within one of the operational organizations. The FAO is a FEMA employee who is delegated the authority to approve and obligate funds for the mission assignment. The RRCC [Regional Response Coordination Center] Director and NRRC [National Response Coordination Center] Manager are delegated FAO signature authority as well as the Operations Section Chiefs at each location active in the response." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, 8)

Federal Assistance: "Federal disaster assistance is often thought of as synonymous with Presidential declarations and the Stafford Act. The fact is that Federal assistance can be provided to State, tribal and local jurisdictions, and to other Federal departments and agencies, in a number of different ways through various mechanisms and authorities. The majority of Federal assistance does not require coordination by the Department of Homeland Security (DHS) and can be provided without a Presidential major disaster or emergency declaration. Federal assistance for incidents that do not require DHS coordination may be led by other Federal departments and agencies consistent with their authorities. The Secretary of Homeland Security may monitor such incidents and may activate *Framework* mechanisms to support departments and agencies without assuming overall leadership for the Federal response to the incident." (**DHS,** *Overview [NRF] ESFs*, September 2007, p. 4)

Federal Civil Defense Act of 1950 (Public Law 81-920): "Sec. 2. **Declaration of Policy**: It is the policy and intent of Congress to provide a plan of civil defense for the protection of life and property in the United States from attack. It is further declared to be the policy and intent of Congress that this responsibility for civil defense shall be vested primarily in the several States and their political subdivisions. The Federal Government shall provide necessary coordination and guidance; shall be responsible for the operations of the Federal Civil Defense Administration as set forth in this Act; and shall provide necessary assistance as hereinafter authorized." (**FCDA of 1950**, January 12, 1951; reproduced in FCDA Annual Report 1951 (Appendix 5) pp. 89-105). [Note: Abolished by Public Law 103-337: National Defense Authorization Act for Fiscal Year 1995, (Title XXXIV – Civil Defense – Sec. 3411. "Restatement of Federal Civil Defense Authorities in the Robert T. Stafford Disaster Relief and Emergency Assistance Act," which incorporated selected provisions into the Stafford Act.]

Federal Civil Defense Administration (FCDA): "On September 1, 1954 the national Federal Civil Defense Office moved to Battle Creek, Michigan. This has increased the chances that the FCDA national headquarters will be operational in event of enemy attack." (**FCDA**, *1954 Annual Report*, p. 1)

Federal Civil Defense Administration (FCDA), Office of Emergency Management, Executive Office of the President (EOP), 1950-1951. (National Archives, *Records of the Defense Civil Preparedness Agency (DCPA)*. President Truman created the FCDA by Executive Order. This move was communicated to the Congress with the transmittal of the Hopley Report "United States Civil Defense," wherein Truman noted concern with "the potential damage of devastating modern weapons." (**Truman**, *Public Papers of the Presidents of the US,*18Sep1950)

Federal Civil Defense Administration (FCDA), 1951-1958. Signed into law on January 12, 1951 by President Harry S Truman. First Director was former Florida Governor, Millard Caldwell. (**FCDA**, *Annual Report 1951*, 1952, p. 106) From the President's Message Transmitting Bill for Civil Defense: "The federal Government can and will provide the necessary coordination and guidance for the civil defense program….It is the expressed policy and intent of Congress, however, that the responsibility for civil defense should be vested primarily in the states and their political subdivisions." (**NYT**, January 13, 1951, p.7)

Federal Civil Defense Administration General Order 232, Establishing Natural Disaster Office: On February 16, 1956, FCDA Administrator Val Peterson approves FGeneral Order 232 "establishing a natural disaster office at the National Headquarters of the Federal Civil Defense Administration, Battle Creek, Mich. The order also outlined the functions of the office in fulfilling the responsibility of FCDA for direction, coordination, and control of Federal assistance to State and local governments in areas of major natural disasters….After the northeast and west coast floods in the fall of 1955 and early 1956, it was recognized that additional staff was necessary. A separate disaster office therefore was established by the Administrator of FCDA." (**FCDA**, *1956 Annual Report*, 1957, p. 33)

Federal Civil Defense Staff College, Olney, MD: Opened on April 30, 1951. (**FCDA**, *Annual Report 1951*, 1952, p. 21)

"The Federal Civil Defense Staff College at Olney, Md., has given 25 courses to State and local administrative personnel since its opening April 30, 1951. A total of 1,016 students have attended its six-day courses. They have come from all 48 States, the District of Columbia, Alaska, Hawaii, Puerto Rico, and the Virgin Islands. The vast majority of the students have been State and local administrators of civil defense. Many have come from industry, labor, and national organizations. Fourteen have been from the Red Cross, 12 from the Atomic Energy Commission, 94 from the three branches of the Department of Defense, and 58 from various other Federal agencies, such as Department of Agriculture, General Services Administration, Federal Security Agency, Department of Justice, and Department of the Treasury. In addition, 17 civil defense officials have attended from Canada and 4 from England.

Among topic covered in discussions, demonstrations, and exercises were the following: Organization of Civil Defense; Vulnerability Analysis; The System of Web Defense; Zoning and

Zone Control for Civil Defense; Mutual Aid and Mobile Support; Attack Warning and Communications; Civil Defense Operational Services; Postattack Estimates.

Training officials visited 35 States in 1951, to advise and assist State and local civil defense officials. Training officers are already assignede to six of the nine regional offices….

The major accomplishment of FCDA in Training and Education during 1951 was the establishment of a national civil defense training system, including setting up a national staff college [Olney, MD] and three training schools [the Central Training school, Stillwater, OK, which opened July 30, 1951; the Western Training School, St. Mary's CA, which opened October 8, 1951 [closed Sep 1953][44]; and the Eastern Training School, which opened at Abington, PA on February 4, 1952]." This leadership is designed to provide help to the States in speeding up their own training programs so as to give adequate instruction to the millions of volunteers who are needed to establish the United States Civil Defense Corps." (**FCDA**, *1952 Annual Report*, pp. 22, 23-24)

Federal Continuity Categories within the Executive Branch: "To support its continuity requirements the Federal executive branch prioritizes the following three categories of essential functions:

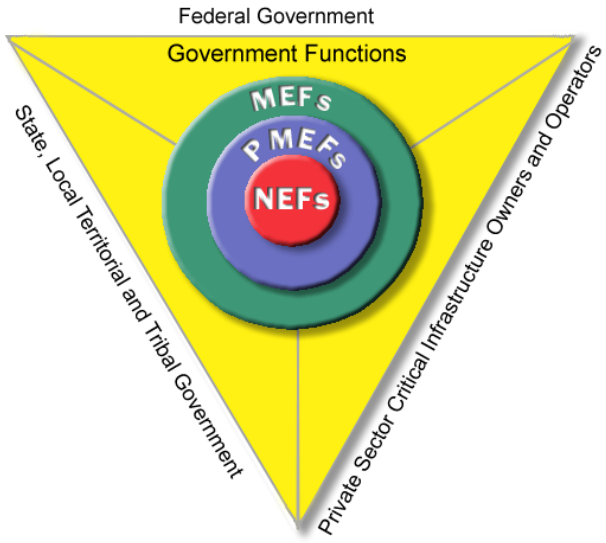
- MEFs [Mission Essential Functions]: The limited set of agency-level government functions that must be continued after a disruption of normal activities
- PMEFs [Primary Mission Essential Functions]: A subset of agency MEFs that directly support the NEFs
- NEFs [National Essential Functions]: The eight functions the President and national leadership will focus on to lead and sustain the Nation during a catastrophic emergency." (**DHS**, *FCD 1*, November 2007, p. D-1)

Federal Continuity Directive (FCD): "A document developed and promulgated by DHS, in coordination with the CAG [Continuity Advisory Group] and in consultation with the Continuity PCC [Policy Coordination Committee], which directs executive branch departments and agencies to carry out identified continuity planning requirements and assessment criteria." (**HSC**, *National Continuity Policy Implementation Plan*, 2007, p. 62; **DHS**, *FCD 1*, 2007, P-5)

Federal Continuity Directive (FCD) 1: "The purpose of this FCD is to provide direction for the development of continuity plans and programs for the Federal executive branch. Effective continuity planning and programs facilitate the performance of essential functions during all-hazards emergencies or other situations that may disrupt normal operations. The primary goal of continuity in the executive branch is the continuation of essential functions." (**DHS**, *FCD-1*, DHS Secretary Michael Chertoff Statement, p. ii)

[Note: See Figure 13, p. D-6, FCD 1]

[44] Due to budget cuts all the FCDA training schools were closed in 1953, leaving only the National CD Staff College and National Rescue Instructor Training Center near Olney, MD. FCDA, 1953 Annual Report, p. 40.

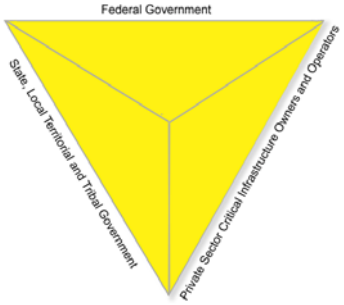


Federal Continuity Directive 2: *Federal Executive Branch Mission Essential Function and Primary Mission Essential Function Identification and Submission Process* (Nov 2007).
Purpose: This Federal Continuity Directive (FCD) provides guidance and direction to Federal executive branch departments and agencies for identification of their Mission Essential Functions (MEFs) and potential Primary Mission Essential Functions (PMEFs). It includes guidance and checklists to assist departments and agencies in assessing their essential functions through a risk management process and in identifying potential PMEFs that support the National Essential Functions (NEFs) – the most critical functions necessary to lead and sustain the nation during a catastrophic emergency. The FCD provides direction on the formalized process for submission of a department's or agency's potential PMEFs that are supportive of the NEFs. It also includes guidance on the processes for conducting a Business Process Analysis (BPA) and Business Impact Analysis (BIA) for each of the potential PMEFs that assist in identifying essential function relationships and interdependencies, time sensitivities, threat and vulnerability analyses, and mitigation strategies that impact and support the PMEFs." (**DHS**, *FCD 2*, 2007, 1)

Federal Continuity of Operations and Government Policy: "It is the policy of the United States to maintain a comprehensive and effective continuity capability composed of Continuity of Operations (COOP) and Continuity of Government (COG) programs to ensure the preservation of our form of Government under the Constitution and the continuing performance of NEFs under all conditions (National Security Presidential Directive (NSPD)-51/Homeland Security Presidential Directive (HSPD)-20, *National Continuity Policy*). Continuity requirements must be incorporated into the daily operations of all agencies to ensure seamless and immediate continuation of Primary Mission Essential Function (PMEF) capabilities to ensure critical government functions and services remain available to the Nation's citizens. Continuity planning will occur simultaneously with the development and execution of Federal agency programs. This means that organizations must incorporate redundancy and resiliency as a means and an end. In support of this policy, the Federal executive branch has developed and implemented a continuity of operations program which is composed of efforts within individual agencies to ensure that their Mission Essential Functions (MEFs) continue to be performed during a wide range of emergencies including localized acts of nature, accidents, and

technological or attack-related emergencies. These efforts include plans and procedures, under all readiness levels, that delineate essential functions, specify succession to office and emergency delegations of authority, provide for the safekeeping of vital records, identify a range of continuity facilities and locations, provide for interoperable communications, provide for human capital planning, validate these capabilities through tests, training, and exercises (TT&E), specify a devolution of control and direction, and provide for reconstitution. All agencies, regardless of their size or location, shall have in place a viable continuity capability to ensure continued performance of those agencies' essential functions under all conditions." (**DHS**, *FCD 1*, 2007, 2)

Federal Continuity Partners: "Continuity cannot occur without the commitment and dedication of many others who play integral roles in ensuring homeland security and provide critical functions and services to the Nation's citizens.



Those partners include the following (see Figure 1):

- Federal Government: legislative branch, executive branch (including all departments and agencies), and judicial branch;
- State, local, territorial, and tribal governments; and
- Private Sector Critical Infrastructure Owners and Operators." (**DHS**, *FCD-2*, Nov 2007, p A-1)

Figure 1

Federal Coordinating Officer (FCO): "The FCO manages Federal resource support activities related to Stafford Act disasters and emergencies. The FCO supports the PFO, when one is appointed, and assists the Unified Command. The FCO is responsible for directing and coordinating the timely delivery of Federal disaster assistance resources and programs to the affected State, and local governments, individual victims, and the private sector. The FCO works closely with the PFO, Senior Federal Law Enforcement Official (SFLEO), and other Senior Federal Officials (SFOs) representing other Federal agencies engaged in the incident management effort. In non-terrorist situations where a PFO has not been assigned, the FCO leads the Federal components of the Joint Field Office (JFO) and works in partnership with the State Coordinating Officer (SCO). (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, pp. 19-20)

Federal Coordinating Officer (FCO). "For Stafford Act events, upon the recommendation of the FEMA Administrator and the Secretary of Homeland Security, the President appoints an FCO. *The FCO is a senior FEMA official trained, certified and well experienced in emergency management, and specifically appointed to coordinate Federal support in the response to and recovery from emergencies and major disasters.* The FCO executes Stafford Act authorities, including commitment of FEMA resources and the mission assignment of other Federal departments or agencies. If a major disaster or emergency declaration covers a geographic area that spans all or parts of more than one State, the President may decide to appoint a single FCO for the entire incident, with other individuals as needed serving as Deputy FCOs.

In all cases, the FCO represents the FEMA Administrator in the field to discharge all FEMA responsibilities for the response and recovery efforts underway. For Stafford Act events – and if the Secretary has *not* appointed a PFO – the FCO is the primary Federal representative with

whom State and local officials interface to determine the most urgent needs and set objectives for an effective response in collaboration with the Unified Coordination Group.

In such events, the FCO is the focal point of coordination within the Unified Coordination Group, ensuring overall integration of Federal emergency management, resource allocation and seamless integration of Federal activities in support of, and in coordination with, State, tribal and local requirements. When a PFO is not assigned to a Stafford Act response, the FCO serves locally as a primary, although not exclusive, point of contact for Federal interfaces with the media and the private sector.

Some FCO-certified FEMA executives are given additional, specialized training regarding unusually complex incidents. For example, one may be further trained for catastrophic earthquake response, whereas another might cultivate unique skills for response related to weapons of mass destruction or pandemic influenza." (**DHS**, *NRF Comment Draft*, September 2007, pp. 64-65)

Federal Coordinating Officer (FCO): "Under the provisions of the Stafford Act, the FCO is the overall coordinator of the disaster relief effort on behalf of the President. The FCO provides the overall operational priorities to the JFO ERT and the Section Chiefs to develop and implement actions to meet the FCO direction. Although the FCO may direct the issuance of specific mission assignments, generally the Operations Section Chief translates direction from the FCO or requests for Federal assistance from the State into the mission assignments." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 5)

"The person appointed by FEMA following a declaration of a major disaster, or declaration of an emergency by the President, to coordinate Federal assistance. The FCO initiates action immediately to assure that Federal assistance is provided in accordance with the declaration, applicable laws, regulations and the FEMA/State agreement." (Ibid, pp. 51-52)

Federal Coordinating Officer (FCO): "(a) Appointment of Federal coordinating officer - Immediately upon his declaration of a major disaster or emergency, the President shall appoint a Federal coordinating officer to operate in the affected area.
(b) Functions of Federal coordinating officer - In order to effectuate the purposes of this Act, the Federal coordinating officer, within the affected area, shall

(1) make an initial appraisal of the types of relief most urgently needed;
(2) establish such field offices as he deems necessary and as are authorized by the President;
(3) coordinate the administration of relief, including activities of the State and local governments, the American National Red Cross, the Salvation Army, the Mennonite Disaster Service, and other relief or disaster assistance organizations, which agree to operate under his advice or direction, except that nothing contained in this Act shall limit or in any way affect the responsibilities of the American National Red Cross under the Act of January 5, 1905, as amended (33 Stat. 599) and
(4) take such other action, consistent with authority delegated to him by the President, and consistent with the provisions of this Act, as he may deem necessary to assist local citizens and public officials in promptly obtaining assistance to which they are entitled.

(c) State Coordinating officer - When the President determines assistance under this Act is necessary, he shall request that the Governor of the affected State designate a State coordinating officer for the purpose of coordinating State and local disaster assistance efforts with those of the Federal Government.
(d) Where the area affected by a major disaster or emergency includes parts of more than 1 State, the President, at the discretion of the President, may appoint a single Federal coordinating officer for the entire affected area, and may appoint such deputy Federal coordinating officers to assist the Federal coordinating officer as the President determines appropriate." (**Stafford Act**, June 2007 (FEMA 592), pp. 22-23)

Federal Coordinating Officer (FCO): "The Federal officer who is appointed to manage Federal resource support activities related to Stafford Act disasters and emergencies. The FCO is responsible for coordinating the timely delivery of Federal disaster assistance resources and programs to the affected State and local governments, individual victims, and the private sector." (**USCG**, *IM Handbook*, 2006, Glossary 25-8)

Federal Coordinating Officer (FCO): "(1) The person appointed by the FEMA Director or in his/her absence, the FEMA Deputy Director, or alternatively the FEMA Associate Director for Response and Recovery, following a declaration of a major disaster or of an emergency by the President, to coordinate Federal assistance. The FCO initiates action immediately to assure that Federal Assistance is provided in accordance with the declaration, applicable laws, regulations, and the FEMA-State agreement. (2) The FCO is the senior Federal official appointed in accordance with the provisions of Public Law 93-288, as amended (the Stafford Act), to coordinate the overall consequence management response and recovery activities. The FCO represents the President as provided by Section 303 of the Stafford Act for the purpose of coordinating the administration of Federal relief activities in the designated area. Additionally, the FCO is delegated responsibilities and performs those for the FEMA Director as outlined in Executive Order 12148 and those responsibilities delegated to the FEMA Regional Director in the Code of Federal Regulations, Title 44, Part 205." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B: Definitions)

Federal Crop Insurance Corporation (FCIC): The FCIC "currently insures crops for losses from multiple perils…" (**GAO**, *Natural Disasters: Public Policy Options*, Nov. 2007, 5)

"A 1937 study by the Executive Committee on Crop Insurance, which noted that commercial attempts to insure against crop losses had been unsuccessful, provided the impetus for creating FCIC in 1938. Initially, the program was experimental and suffered heavy losses. The Federal Crop Insurance Act of 1980 expanded the program to replace free disaster coverage (in the form of compensation to farmers who were unable to plant crops and who suffer yield losses) with insurance." (**GAO**, *Natural Disasters: Public Policy Options*, Nov. 2007, 18)

Federal Disaster Act of 1950 (Public Law 875): "Public Law 875, the Federal Disaster Act of 1950, gives the President broad authority to make use of Federal departments and agencies and their personnel and resources to assist State and local governments in disaster of major proportions. Assistance authorized under the law covers emergency repair or temporary

replacement of public facilities. The disasters are specifically defined as fires, floods, droughts, hurricanes, earthquakes, and storms.

Executive Order 10427 delegates the responsibility for administering Federal disaster assistance, other than that for which statutory authority is given other agencies, to the Federal Civil Defense Administrator. The provisions of the Disaster Act can be invoked only when the President declares the occurrence a 'major disaster.' The Governor of the State involved must request assistance of the President and give assurance that the situation cannot be handled by the State or local government.

In passing this Act, Congress recognized that relief from disaster situations is the responsibility of the State and local governments but that in critical cases Federal assistance is needed.

Aid under Public Law 875 might consist of: surplus Federal equipment and supplies, either loaned or donated to State governments for redistribution; use of Federal equipment, facilities, supplies, and personnel; credit facilities of the Federal Government; and grant assistance.

In 1953, assistance was given under the Act in 24 States and the Territories of Alaska and Hawaii in 30 major disasters…. In all of these cases, FCDA administered the Act, evaluating and making its recommendations to the President, and, when declaration of a major disaster was made, coordinated the Federal assistance given to the State or locality involved." (**FCDA**, *1953 Annual Report,* p. 18. Note: Appendix D of this report contains a copy of the Act.)

Federal Disaster Assistance and Insurance Programs, Organizational History:

- Federal Civil Defense Administration, 1953.
- Office of Defense Mobilization (ODM, Executive Office of the President, 1953-1958)
- Office of Defense and Civilian Mobilization(ODCM, EOP, 1958)
- Office of Civil and Defense Mobilization (OCDM, EOP, 1958-1961)
- Office of Emergency Planning (OEP, Executive Office of the President, 1961-1968)
- Office of Emergency Preparedness (OEP, 1968-1973)
- Federal Disaster Assistance Administration (FDAA, HUD, 1973-1979)
- Federal Insurance Administration (FIA, HUD, 1968-1979)
- Federal Emergency Management Agency (FEMA, 1979-Currently (2007))

(**National Archives**, *Guide to Federal Records*, Records of FEMA, Record Group 311, p. 2)

Federal Disaster Assistance and Relief: "Since the issuance of Executive Order 10427 on January 16, 1953, a total of $25,525,000 has been allocated to the States, Territories, and Federal agencies for relief in 48 major disasters." (**FCDA**, *1955 Annual Report*, p. 39)

Federal Disaster Assistance and Relief: Executive Order 104273, 1953: *Administration of Disaster Relief*, January 16, 1953 [Revoked EO 10221 of 2Mar1951; was revoked by EO 11575, 31Dec1970.] (National Archives, Federal Register, Harry S. Truman – 1953)

"At the Federal level, Executive Order 10427 issued on January 16, 1953, gave FCDA [Federal Civil Defense Administration] responsibility for providing assistance to localities stricken by

major disasters. This responsibility involved investigating and evaluating natural disasters in the States and recommending to the President whether or not the disaster was of sufficient magnitude to warrant Federal aid. The order named FCDA the coordinating agency for all Federal assistance, when authorized, to stricken areas." (**FCDA**, *1953 Annual Report*, p. 15)

[See, also, Interagency Centers.]

Federal Emergency Communications Coordinator (FECC): "That person, assigned by GSA, who functions as the principal Federal manager for emergency telecommunications requirements in major disasters, emergencies, and extraordinary situations, when requested by the FCO or FRC." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 52)

Federal Emergency Management Agency: See "FEMA"

Federal Evacuation Planning Assumptions: "Federal evacuation measures will be taken:

- When State, tribal, or local governments indicate that their resources may or have become overwhelmed and the Governor(s) or tribal official(s) request Federal assistance; or
- In catastrophic incidents when State and local governments are incapacitated, and the President directs that Federal mass evacuation support is required." (**FEMA**, *Mass Evacuation Incident Annex* (National Response Framework), June 2008, p. 2)

Federal Executive Associations (FEAs): "A forum, modeled after but independent of the Federal Executive Boards, for communication and collaboration among Federal agencies outside of Washington, DC, utilized to help coordinate the field activities of Federal departments and agencies primarily in localized sections of the Nation." (**HSC**, *NCPIP*, August 2007, p. 62; **DHS**, *FCD 1*, Nov 2007, P-5)

Federal Incident Response Support Team (FIRST): "Per the National Response Plan, a quick and readily deployable Emergency Response Team providing on-scene support to the local incident command. The FIRST is a forward extension of the Emergency Response Team-Advanced (ERT-A) providing the ERT-A Team Leader and, after a Stafford Act Declaration, the Federal Coordinating Officer (FCO). FIRST has an Incident Command System (ICS) structure and each team has five permanent team members including a Team Leader, Operations Section Chief, Planning Section Chief, Logistics Section Chief, and a Communications Unit Leader. A State may chose to assign a person(s) to respond with the FIRST. Other Federal expertise may be assigned to augment the FIRST on an as-needed basis. The FIRST is considered a National Asset but is stationed in a FEMA Region and on a day-to-day basis reports to the Regional Response and Recovery (R&R) Division Director." (**DHS**, *TCL*, 2007, p. 205)

Federal Incident Response Support Team (FIRST): "FIRSTs are emergency response teams consisting of approximately five individuals who can be immediately deployed to a significant incident or disaster. FEMA's two FIRSTs are located in Region IV in Atlanta, Georgia, and in Region V in Chicago, Illinois. They serve as the forward component of the ERT-A and provide the core preliminary on-scene Federal management in support of the local incident commander to ensure an integrated, inter-jurisdictional response. Federal incident response support provided

by these teams includes a command vehicle and multiple communications capabilities." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, p. 7)

Federal Incident Response Support Team (FIRST): "A forward component of the ERT-A [Emergency Response Team] that provides on-scene support to the local Incident Command or Area Command structure." (**USCG**, *IM Handbook* 2006, Glossary 25-8)

Federal Information Processing Standard (FIPS) 201 (FPIS): "…approved by the National Institute of Standards and Technology. This non-proprietary standard, issued in response to Homeland Security Presidential Directive 12, establishes a common process and technology for sharing secure personnel identification and achieving interoperability across multiple jurisdictions. (**FEMA**, *Statement of Marko* Bourne, 15Nov07, p. 2)

Federal Insurance Administration: "The Federal Insurance Administration (FIA) administers the National Flood Insurance Program, available nationwide. These programs provide insurance coverage for events that are not covered by traditional homeowner's policies. By partnering with private insurance companies, FIA makes insurance available to many people who would otherwise be unprotected." (**FEMA**, *About FEMA: Federal Insurance Administration*, 2007)

Federal Law Enforcement Assistance: "State and local governments may request Federal law enforcement assistance under the Emergency Federal Law Enforcement Assistance Act without a Presidential major disaster or emergency declaration. In addition, Federal agencies may request public safety and security or general law enforcement support from another Federal agency during a large-scale incident. The ESF #13 Annex [NRF] provides further guidance on the integration of public safety and security resources to support the full range of incident management functions." (**DHS**, *Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework* (Draft), September 10, 2007, p. 6)

Federal Levees: "Flood Control Works (Levees/Flood Protection Projects) built by and maintained by the Corps of Engineers. (**USACE**, *Fact Sheet: National Levee Safety Program*. February 1, 2007, 2)

Federal Medical Station (FMS): "FMSs are designed to provide surge medical capacity (equipment, material, pharmaceuticals) to communities overwhelmed by mass casualties. They can provide rapidly deployable health and medical care to those patients who have nonacute medical, mental health, or other health-related needs that cannot be accommodated or provided for in a general shelter population. They also provide health and medical care for patients with needs such as:

- Conditions that require observation, assessment, or maintenance.
- Chronic conditions which require assistance with the activities of daily living but do not require hospitalization.
- Medications and vital sign monitoring, particularly for patients who are unable to do so at home." (**AHRQ/HHS**, *Mass Medical Care*…, 2007, p. 81)

Federal On-Scene Commander (FOSC): "The Federal official designated upon JOC activation to ensure appropriate coordination of the overall United States government response with Federal, State and local authorities." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 75 (Glossary))

Federal On-Scene Coordinator (FOSC): "The Federal official pre-designated by the EPA or the USCG to coordinate responses under subpart D of the NCP [National Contingency Plan] (40 CFR 300) or the government official designated to coordinate and direct removal actions under subpart E of the NCP. A FOSC can also be designated as the Incident Commander." (**USCG**, *IM Handbook*, 2006, Glossary 25-8)

Federal Operational Staging Areas (FOSAs): "Temporary facilities at which commodities, equipment and personnel are received and pre-positioned for deployment within one designated state as required; commodities under the control of the Operations Section of the Joint Field Office (JFO) or Regional Response Coordination Center (RRCC); commodities usually supplied from MOB Centers, Logistics Centers or direct shipped from vendor; generally projected to hold 1 - 2 days of commodities." (**FEMA**, *Logistics Supply Chain*, 2006)

Federal Operations Support (FOS) (Object Class 2501): A type of Mission Assignment "defined as one Federal agency providing direct technical, operational, or logistical support to FEMA or another responding Federal agency. FOS is 100-percent federally funded and may be provided prior to a Presidential declaration of a major disaster or emergency.

Example: A mission assignment issued to U.S. Forest Service (USFS) to establish and operate a base camp to provide housing for Federal disaster workers. (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 10; see also p. 52)

Federal Plan for Disaster Response, 1954: "In conformance with Executive Order 10427, the FCDA has developed a predisaster plan with various Federal agencies which will facilitate Federal assistance in a disaster situation. Every agency of the Federal Government, with major disaster assistance capabilities, is included in this plan which, in most cases, is represented by formal agreement in 'Memoranda of Understanding'." (**FCDA**, *1954 Annual Report*, p. 52)

"FCDA in cooperation with the Defense Air Transportation Administration has prepared plans for the nationwide mobilization and emergency operation of all types of civil aircraft. There are more than 96,000 of these…. Statements of understanding of the role of civil aircraft in the national plan are in edevelopment." (**FCDA**, *1954 Annual Report*, p. 71)

"The 1953 agreement between FCDA and the U.S. Coast Guard established a pilot model organization to provide guidance in plannning for the emergency utilization of small craft. The plan is now in use as a pattern for establishing similar activities in all port areas where emergency mobilization of small craft may be necessary." (**FCDA**, *1954 Annual Report*, 72)

Federal Plan for Response to a Catastrophic Earthquake, FEMA. 1988

Federal Planning Structure: "The Federal planning structure consists of multiple elements:

- the *National Preparedness Guidelines…*
- the *15 National Planning Scenarios* and core capabilities;
- the *National Incident Management System*;
- the *National Response Framework*;
- the *National Infrastructure Protection Plan* and the 17 sector-specific plans;
- a *DHS strategic plan* and overall Federal concept of operations for each of the National Planning Scenarios;
- a *National Exercise Schedule* that incorporates Federal, State and local activity; and
- an *incident management Playbook* that allows the Secretary of Homeland Security, as the principal Federal official for domestic incident management, to ensure effective management of the high-consequence threat scenarios." (**DHS**, *NRF Comment Draft*, 2007, p. 70)

Federal Planning Structure: "The Federal planning structure supports the *Framework* and the State, tribal, and local planning structure through the *National Preparedness Guidelines*, including the National Planning Scenarios and core capabilities; the *NIMS*; the *NIPP* and sector-specific plans; Federal strategic and concept plans for each set of National Planning Scenarios, supported by department and agency operations plans; **National Continuity policies and directives**; and a National Exercise Schedule that incorporates Federal, State, tribal, and local exercises." (**DHS**, *NRF*, 2008, 73; emphasis added for added component)

Federal Preparedness Circulars (FPCs): FPCs detail a series of government policies specific to COOP planning and national security emergency preparedness.

Federal Preparedness Circular (FPC) 65: *Federal Executive Branch Continuity of Operations (COOP)*, June 2004.

Federal Preparedness Coordinators (FPCs): "The conferees are concerned with the concept of creating a Federal Preparedness Coordinator (FPC) for placement in each Federal Emergency Management Agency (FEMA) Regional Office. The conferees agree that an official overseeing preparedness by region is appropriate. However, the conferees are not convinced that creating a senior executive position in the Preparedness Directorate, who reports through a chain of command that does not include response and recovery personnel in FEMA, will further the nation's readiness. Separating preparedness and response functions is detrimental during a disaster and, as demonstrated in past disasters, leads to a lack of communication and a lack of situational awareness, with dire consequences. During emergencies, state emergency managers need clear communications and missions, not confusion and redundancy. The conferees direct the Under Secretary to focus NPIP funding on plan modernization and resolving interoperability issues, as outlined by the Under Secretary, and discourage the use of funds to hire FPCs." (**Congressional Record – House**, "Conference Report on H.R. 5441, Department of Homeland Security Appropriations Act, 2007," September 28, 2007, Pp. H7825)

Federal Preparedness Coordinators (FPCs): "The FEMA Regions are the vehicles for implementing the National Preparedness System across the federal, state, tribal, and local jurisdictional levels, non-governmental organizations, the private sector, and citizen partners. This effort is led in each Region by the FPC, who have three primary roles, each contributing elements to achieve the objectives of the NPG:

- Meeting Regional and National Needs….
- Preparedness Program Management – Building Capabilities…
- Building a Regional Network….” (**FEMA**, *Regional-National Preparedness CONOPS*, 8Feb08, 4)

Federal Preparedness Coordinators (FPCs): “As the Nation’s Preeminent Emergency Management Agency, we will promote the integration and synchronization of preparedness across jurisdictions and all levels of governments by establishing a network of Federal Preparedness Coordinators. Strengthening preparedness requires a dedicated, locally-based DHS senior executive to support the networks of Federal, State, local, tribal, and private-sector partners to plan, train and exercise in preparation for coordinated contingency missions, as well as to share information on a routine basis. Therefore, FPCs will play a vital role in building regional preparedness across jurisdictions through focused planning, information sharing and partnership building. They will strengthen preparedness within their assigned Regions to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by establishing a Regional domestic all-hazards preparedness goal, integrating mechanisms for improved delivery of Federal preparedness assistance to State and local governments and outlining actions to strengthen preparedness capabilities. Their efforts will lead the integration of DHS’ Regional preparedness efforts, including measurable readiness priorities and targets goals that appropriately balance the potential threat and magnitude of terrorist attacks, major disasters, and other emergencies with the resources required to prevent, respond to, and recover from them.” (**FEMA**, *Vision for New FEMA*, December 12, 2006, p. 24)

Federal Radiological Emergency Response Plan (FRERP): “The plan used by Federal agencies to respond to a radiological emergency, with or without a Stafford Act declaration. Without a Stafford Act declaration, Federal agencies respond to radiological emergencies using the FRERP, each agency in accordance with existing statutory authorities and funding resources. The Lead Federal Agency has responsibility for coordination of the overall Federal response to the emergency. FEMA is responsible for coordinating non-radiological support using the structure of the Federal Response Plan. When a major disaster or emergency is declared under the Stafford Act and an associated radiological emergency exists, the functions and responsibilities of the FRERP remain the same. The Lead Federal Agency coordinates the management of the radiological response with the Federal Coordinating Officer. Although the direction of the radiological response remains the same with the Lead Federal Agency, the FCO has the overall responsibility for coordination of Federal assistance in support of State and local governments using the Federal Response Plan.” (**FEMA**, *FRERP***,** 1996)

Federal Radiological Monitoring and Assessment Center (FRMAC): The FRMAC “gathers radiological information such as plume and deposition predictions, air and ground concentrations, exposure rates and dose projections, assurance of data quality, and current meteorological conditions and weather forecasts. FRMAC provides the results of the data collection, sample analysis, evaluations, assessments, and interpretations to the key decision makers in the affected areas of the emergency. Monitoring continues until all of the surrounding areas where radioactivity was released are fully evaluated.

The FRMAC is one of the emergency response resources, or assets, administered by the National Nuclear Security Administration (NNSA) Nevada Site Office. The Federal government maintains an extensive response capability for radiological monitoring and assessment. In the unlikely event of a major radiological incident, the full resources of the U.S. government will be coordinated to support state, local and Tribal governments. The efforts of 17 Federal agencies are coordinated under the Federal Radiological Emergency Response Plan (FRERP) to integrate the Federal response to a radiological emergency." (**DOE**, *The Federal Radiological Monitoring and Assessment Center (FRMAC)*, October 4, 2007 update)

Federal Resource Coordinator (FRC): "In non-Stafford Act situations, when a Federal department or agency acting under its own authority has requested the assistance of the Secretary of Homeland Security to obtain support from other Federal departments and agencies, DHS may designate an FRC. In these situations, the FRC coordinates support through interagency agreements and memorandums of understanding. Relying on the same skill set, DHS may select the FRC from the FCO cadre or other personnel with equivalent knowledge, skills and abilities. The FRC is responsible for coordinating timely delivery of resources to the requesting agency." (**DHS**, *NRF Comment Draft*, September 2007, p. 66; see, also, **DHS**, *NRF*, 2008, 68))

Federal Resource Coordinator (FRC): "The Federal official appointed to manage Federal resource support activities related to non-Stafford Act incidents. The FRC is responsible for coordinating support from other Federal departments and agencies using interagency agreements and MOU's." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 52; **USCG**, *IM Handbook*, 2006, Glossary 25-8)

Federal Response Plan (FRP): 1) The plan designed to address the consequences of any disaster or emergency situation in which there is a need for Federal assistance under the authorities of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 et seq. 2) The FRP is the Federal government's plan of action for assisting affected States and local jurisdictions in the event of a major disaster or emergency. As the implementing document for the Stafford Act, the FRP organizes the Federal response by grouping potential response requirements into 12 functional categories, called Emergency Support Functions. The FRP was completed in April 1992, and 29 Federal departments and agencies are signatories to the plan. (**FRERP**)

Federal Response Plan (FRP). "The plan designed to address the consequences of any disaster or emergency situation in which there is a need for Federal assistance under the authorities of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U. S.C. 5 121 et seq." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B: Definitions; See also, **DHS**, *NRP* (Draft #1), February 25, 2004, p. 75) [Note: The FRP has been replaced by the National Response Plan.]

Federal Response Plan for a Catastrophic Earthquake. (FEMA, Nov 1978)

Federal Response Operations Coordination: "The **Secretary of Homeland Security** is the principal Federal official responsible for domestic incident management. This includes coordinating **Federal operations** and resource deployments within the United States to prepare

for, respond to, and recover from terrorist attacks, major disasters, or other emergencies.[45] All Federal departments and agencies may play significant roles in incident management and response activities, depending on the nature and size of an event. The policies, operational structures, and capabilities to support an integrated Federal response have grown swiftly since the 9/11 attacks, and continue to evolve. Many of these arrangements are defined in the Emergency Support Functions, coordinated through pre-scripted mission assignments, and formalized in interagency agreements." (**DHS**, *NRF,* 2008, 54; emphasis in original)

Federal Response Policy Development: "The President leads the Nation in responding effectively and ensuring the necessary coordinating structure, leadership, and resources are applied quickly and efficiently to large-scale incidents. The Homeland Security Council (HSC) and National Security Council (NSC) advise the President on national strategic and policy during large-scale incidents. The HSC and NSC ensure coordination for all homeland and national security-related activities among executive departments and agencies and promote effective development and implementation of related policy. The HSC and NSC ensure unified leadership across the Federal Government. The Assistant to the President for Homeland Security and Counterterrorism and the Assistant to the President for National Security Affairs coordinate interagency policy for domestic and international incident management, respectively, and convene interagency meetings to coordinate policy issues. Both Councils use well-established policy development structures to identify issues that require interagency coordination. To support domestic interagency policy coordination on a routine basis, HSC and NSC deputies and principals convene to resolve significant policy issues. They are supported by the following two Policy Coordination Committees at the assistant secretary level:

- Domestic Readiness Group (DRG)…
- Counterterrorism Security Group (CSG). (**DHS**, *NRF,* 2008, pp. 53-54)

Federal Risk Assessment Working Group (FRAWG): "The National Strategy for Homeland Security challenges agencies "to develop interconnected and complementary systems that are reinforcing rather than duplicative and that ensure essential requirements are met." In an effort to be consistent with and support implementation of the National Strategy, a group of Federal agency assessment practitioners created the Federal Risk Assessment Working Group (FRAWG) to promote inter-agency coordination and information sharing. Representatives from participating Federal agencies meet once a month to encourage and ensure information sharing regarding risk assessments and other related homeland security issues." (**DHS**, *FRAWG*, 2006, p.1)

Federal Standards: "Common rules, conditions, guidelines or characteristics, established by the Federal Government." (**FEMA**, *FY 2007 NIMS Compliance Metrics Terms of Reference*, October 23, 2006, p. 2)

Federal Supply Chain Collaboration Strategy: "At least annually, logistics representatives from DHS/FEMA Headquarters, DHS/FEMA regions, and national resources will meet with their primary partners from the ESFs to review requirements and determine the best sources for

[45] Per HSPD-5, paragraph 8, the Secretary of Homeland Security's operational coordination role excludes law enforcement coordination activities assigned to the Attorney General and generally delegated to the Director of the FBI.

filling them. DHS/FEMA Logistics will employ collaborative supply chain best practices within the ESF structure that include: collaborative planning, forecasting and replenishment, customer relationship management, and supplier relationship management." (**DHS**, *NRF Logistics Management Support Annex,* September 2007 Draft, p. 7)

Federalism: "…the nation's federalist form of government lies at the root of many of the challenges that make providing homeland security so difficult, as the federal government lacks authority over state governors or even locally elected mayors. The U.S. Constitution grants the states and territories a wide range of sovereign rights and responsibilities, which are taken very seriously by elected officials at the state and local levels. For all the clamor in the wake of Hurricane Katrina for someone, anyone, to be in charge, it is not possible to achieve "unity of command" in the military sense of the term during a domestic catastrophe unless the American public agrees to rewrite the Constitution. No governor or city mayor—elected by constituents and entrusted with the responsibility of developing a plan at the state or local level to handle an emergency—will stand idly by and let a federal official impose, from outside, a plan created in Washington. Preventing, protecting against, preparing for, and responding to catastrophes inside the United States requires a *national* approach based fundamentally on coordination and cooperation horizontally between different types of organizations such as governments, the private sector, nonprofit organizations, and individuals and vertically between the federal, state, and local levels of government." (**Wormuth**, *Managing the Next Catastrophe*, 2008, 6)

Federally Built and Locally Maintained Levees: "Federal projects built by the Corps or congressionally authorized into the Corps program and turned over to a local sponsor to maintain. These projects are included in the Inspection of Completed Works (ICW) program, and are automatically incorporated into the Rehabilitation and Inspection Program (RIP). These projects, if properly maintained and operated by the community, may stay in the program. (**USACE**, *Fact Sheet: National Levee Safety Program*. February 1, 2007, 2)

Federated Planning: "Federated Planning. The Federal framework of the United States assigns, by law, unique responsibilities and authorities to each member of the homeland security community. It also imposes, by law and practice, a requirement to share responsibilities and authorities to provide for common defense and security. The planning doctrine that best accounts for the separate and shared security responsibilities of Federal, State, municipal and Tribal authorities can be labeled "federated planning."

a. Federated planning is a 'multi-direction' doctrine — it flows bottom-up, top-down, left-right, and right-left. It recognizes that planning begins with strategic direction from senior executives at each level of government. This strategic direction is converted to concept plans (CONPLANS), which are, in turn, converted to operations plans (OPLANS). This planning process takes place throughout the planning community, with planners at each level interacting with each other and often with planners at other levels to acquire and integrate support.

b. Government leaders at every level generate strategic goals and requirements that must be converted to executable action plans. The majority of strategic requirements are determined and levied by local leaders. Local officials deploy and employ the majority of

homeland security assets to prevent, protect against, respond to, and recover from major disaster, terrorist attacks, and other emergencies.

c. Municipal leaders make strategic assessments and formulate the strategic guidance necessary to acquire, train, maintain, and employ the assets and personnel needed to protect lives and property. The scope of their strategic planning and decision-making varies widely, depending on the size and location of their municipality.

d. Like their municipal counterparts, State leaders have unique, legally mandated responsibilities to provide security within their jurisdictional boundaries. Much of their responsibility is reinforcing local officials with resources and authorities not available to them in normal circumstances. State officials strategically plan to acquire, position, and allocate: funding, State police forces, State militia, National Guard elements, communications, hospitals, and other critical elements. They also identify requirements and opportunities to make security related compacts with other jurisdictions. In addition to supporting municipalities, State leaders conduct the strategic, operational, and tactical planning necessary to secure State owned properties, installations, and other infrastructure.

e. Federal officials perform a role similar to State officials but on a larger, broader scale. Like their State and regional counterparts, they reinforce local officials, private enterprise, and nongovernmental organizations with funding, training, equipment, authorities, and security forces. They establish the national level structures needed to ensure that the Nation's security elements operate in a coherent, mutually reinforcing manner. Federal authorities have primary responsibility for organizing and synchronizing the national effort. They accomplish this by guiding national investments in preparedness, facilitating standardized planning processes, and facilitating the robust training and exercise programs required to ensure national integrated preparedness.

f. Many Federal officials have 'localized' responsibility for securing Federal properties, installations, and assets under their control. In executing this responsibility, Federal authorities often require significant community support, including that provided by State and municipal officials, private entities, and other Federal agencies. In planning to secure specific sites and assets, Federal authorities mirror the actions of municipal leaders; they determine what must be done, identify the resources required (including authorities and permissions), and coordinate with other levels of government and the private sector to obtain them." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-2 & 2-3)

FEMA: Federal Emergency Management Agency. "FEMA was formed in 1979[46] by executive order of the President,[47] combining Federal programs that deal with all phases of emergency

[46] Effective April 1, 1979 (White House, *Federal Emergency Management Agency Appointment of Gordon Vickery as Acting Director*, March 31, 1979).

[47] White House. *Executive Order 12127 – Federal Emergency Management Agency*. Washington, DC: The White House, March 31, 1979.

management, for disasters of all types, into a single agency." (**FEMA**, *A Nation Prepared*, 2002, p.1) John W. Macy, Jr. was the first FEMA Director.[48]

FEMA: "Several major objectives were to be accomplished when the Federal Emergency Management Agency was created in 1979. One objective was to establish a single point of contact for State and local governments to deal with all emergency management programs at the Federal level. Another objective was to broaden the application of emergency preparedness and response resources to all hazards, and to take advantage of the similarities that exist in planning and response functions for peacetime and attack emergencies." (**FEMA**, *IEMS Process Overview*, September 1983, p. 3)

FEMA: Moved into FEMA were:

- Defense Civil Preparedness Agency (Department of Defense)
- Federal Preparedness Agency (General Services Administration)
- Federal Disaster Assistance Administration (Depart. Housing and Urban Development)
- Federal Insurance Administration (Department of Housing and Urban Development)
- National Fire Prevention and Control Administration (Department of Commerce)
- Office of Earthquake Hazard Reduction (Office of Science and Technology Policy, Executive Office of the President)
- Emergency Broadcast System and Warning Oversight, Executive Office of the President
- Response to Consequences of Terrorism
- Weather Community Preparedness Program (National Weather Service, Department of Commerce)
- Dam Safety Coordination (Office of Science and Technology Policy, Executive Office of the President)

(**President's Reorganization Project**, 1978; **National Archives**, FEMA Record Group 311)

FEMA: Reorganization Plan Number 3 of 1978 created FEMA as an independent Agency within the Executive Branch, to be headed by a Director appointed by the President (by and with the advice and consent of the Senate).[49] (**President's Reorganization Project**, 1978, p. 1) Ten regional directors "appointed by the Director" were authorized. (**President's Reorganization Project**, 1978, p. 2)

FEMA: From President Jimmy Carter's Press Release upon the transmittal to Congress of Reorganization Plan No. 3 of 1978, creating FEMA:

"Today I am transmitting Reorganization Plan No. 3 of 1978. The Plan improves Federal emergency management and assistance. By consolidating emergency preparedness, mitigation

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[48] White House. *Federal Emergency Management Agency Nomination of John W. Macy, Jr., To Be Director*. Washington, DC: The White House, May 3, 1979.

[49] Reorganization Plan Number 3 of 1978: "Prepared by the President and transmitted to the Senate and the House of Representatives in Congress assembled, June 19, 1978, pursuant to the provisions of Chapter 9 of Title 5 of the United States Code." (President's Reorganization Project, 1979, p.1)

and response activities, it cuts duplicative administrative costs and strengthens our ability to deal effectively with emergencies.

For the first time, key emergency management and assistance functions would be unified and made directly accountable to the President and Congress….

The present situation has severely hampered Federal support of State and local emergency organizations and resources, which bear the primary responsibility for preserving life and property in times of calamity. This reorganization has been developed in close cooperation with State and local governments….

This reorganization rests on several fundamental principles. First, Federal authorities to anticipate, prepare for, and respond to major civil emergencies should be supervised by one official responsible to the President and given attention by other officials at the highest levels….

Second, an effective civil defense system requires the most efficient use of all available emergency resources. At the same time, civil defense systems, organization, and resources must be prepared to cope with any disasters which threaten our people….Consolidation of civil defense functions in the new Agency will assure that attack readiness programs are effectively integrated into the preparedness organizations and programs of State and local government, private industry, and volunteer organizations.

While serving an important 'all-hazards' readiness and response role, civil defense must continue to be fully compatible with and be ready to play an important role in our Nation's overall strategic policy. Accordingly, to maintain a link between our strategic nuclear planning and our nuclear attack preparedness planning, I will make the Secretary of Defense and the National Security Council responsible for oversight of civil defense related programs and policies of the new Agency….

Third, whenever possible, emergency responsibilities should be extensions of the regular missions of Federal agencies. The primary task of the Federal Emergency Management Agency will be to coordinate and plan for emergency deployment of resources that have other routine uses. There is no need to develop a separate set of Federal skills and capabilities for those rare occasions when catastrophe occurs.

Fourth, Federal hazard mitigation activities should be closely linked with emergency preparedness and response functions….

Most State and local governments have consolidated emergency planning, preparedness and response functions on an 'all hazard' basis to take advantage of the similarities in preparing for and responding to the full range of potential emergencies. The Federal Government can and should follow this lead." (**White House**, *FEMA and the President's Reorganization Plan No. 3 of 1978*, June 19, 1978)

FEMA Administrator: "At DHS, the FEMA Administrator is the Secretary's principal advisor for matters relating to emergency management." (**DHS**, *NRF Comment Draft*, 2007, p. 52)

FEMA Administrator: "The Federal Emergency Management Agency (FEMA) Administrator is the principal advisor to the President, the Homeland Security Council (HSC) and the Secretary for all matters relating to emergency management in the United States. The Administrator partners with State, tribal and local governments and emergency responders, with Federal agencies, with the private sector and with nongovernmental sectors to utilize all the nation's resources to respond to natural disasters, acts of terrorism and other manmade disasters, including catastrophic incidents." (**DHS**, *National Response Framework -- Federal Partner Guide* (Comment Draft), September 10, 2007, pp. 2-3)

[Note: Compare the statement immediately above to the following from the Jan 2008 DHS NRP: "**The President leads the Federal Government response effort** to ensure that the necessary coordinating structures, leadership, and resources are applied quickly and efficiently to large-scale and catastrophic incidents. The President's **Homeland Security Council** and **National Security Council**, which bring together Cabinet officers and other department or agency heads as necessary, provide national strategic and policy advice to the President during large-scale incidents that affect the Nation." (p. 24; emphasis in the original.)

FEMA Administrator: "The **FEMA Administrator** is the principal advisor to the President, the Secretary of Homeland Security, and the Homeland Security Council regarding emergency management. The FEMA Administrator's duties include operation of the National Response Coordination Center, the effective support of all Emergency Support Functions, and, more generally, preparation for, protection against, response to, and recovery from all-hazards incidents. Reporting to the Secretary of Homeland Security, the Administrator also is responsible for management of the core DHS grant programs supporting homeland security." (**DHS,** *NRF*, 2008, 55)

FEMA Cabinet Status: "CABINET STATUS…The President may designate the Administrator [FEMA] to serve as a member of the Cabinet in the event of natural disasters, acts of terrorism, or other man-made disasters." (**FEMA 592**, 2007, p. 96; passage from Title V (National Emergency Management) Sec. 503. Federal Emergency Management Agency (6 U.S.C. 313), Department of Homeland Security Appropriations Act, 2007 (Pub. L. No. 109-295) amending the Homeland Security Act of 2002)

FEMA Catastrophic Disaster Housing Strategy: "In 2004, FEMA completed an initial Catastrophic Disaster Housing Strategy, which proposed several initiatives to increase FEMA's capability to provide assistance to individuals and households following an extraordinary or catastrophic disaster. The strategy provided the principles and recommended strategies that establish the framework for the catastrophic disaster housing recovery planning being done today. Key needs identified at that time included the following: an expandable disaster registration intake and applicant assistance process; the ability to provide immediate benefits payments; a plan for assisting applicants to temporarily relocate to outside the disaster area; and a strategy and prepared public messages to provide victims with information about assistance." (**FEMA**, *Statement of R. David Paulison, House Cmt. on Oversight & Gov Reform*, July 07, 16)

FEMA Community Family Preparedness Program: "Preparedness is everyone's job. Not just government agencies but all sectors of society -- service providers, businesses, civic and volunteer groups, industry associations and neighborhood associations, as well as every individual citizen -- should plan ahead for disaster. During the first few hours or days following a disaster, essential services may not be available. People must be ready to act on their own. The Community and Family Preparedness Program educates the general public about disaster awareness and preparedness. FEMA provides opportunities, information and tools to help other organizations and agencies educate the public on disaster preparedness." (**FEMA**, *About FEMA: Community and Family Preparedness Program*, 2007)

FEMA Community Preparedness Division: "The Community Preparedness Division (CPD) was successful in 2007 in its efforts to build preparedness at the community level by coordinating and encouraging citizen participation in preparedness activities. Working through the Citizen Corps program, in 2008, CPD will continue to bring community and government leaders together to increase all-hazards emergency preparedness, planning, mitigation, response and recovery efforts across this nation." (**FEMA**, *National Preparedness Directorate Draft Fact Sheet*, February 1, 2008)

FEMA Core Competencies (2007/2008:

- Service to Disaster Victims
- Operational Planning
- Incident Management
- Disaster Logistics
- Hazard Mitigation
- Emergency Communications
- Public Disaster Communications
- Integrated Preparedness
- Continuity Programs
- Business Approach to Achieving Desired Results
- Shape the Workforce

(**FEMA** *Strategic Plan*, Nov 2007 draft, p.6; **FEMA** *Strategic Plan FY 2008-2013*, Jan 2008, 3)

"The core competencies represent key operational areas in which we must excel to accomplish our mission while the supporting strategies provide the foundation that underpins operational success. The cross-cutting goals and objectives in this Strategic Plan show how we must work together to strengthen our core competencies and the organization as a whole to achieve the vision." (**FEMA**, *Strategic Plan*, November 2007, p. 7)

FEMA Core Values (1997): "FEMA has eight core values that its employees strive to exemplify:

Quality Work:	Dedication to doing the best job possible.
Customer Service:	We value our internal and external customers, and strive to meet their expressed needs.

Creativity and Innovation:	New ideas and creativity are fundamental to continued growth, improvement and problem solving.
Teamwork:	Every employee has something of value to contribute. By working cooperatively together, we can better achieve the Agency's mission and goals.
Continuous Improvement:	Continuous development of personal/professional skills and program delivery is key to better serving our customers.
Public Stewardship:	Commitment to prudent management of the taxpayers' money and dedication to providing the public with the highest quality service.
Diversity:	FEMA's employees are its most valuable resource. The diversity of their backgrounds, experiences, and skills adds to their value.
Partnership:	Reaching out and engaging FEMA's partners collaboratively is essential to our success." (**FEMA**, *Strategic Plan,*1997, p. 11)

FEMA Core Values (2002): "FEMA has ten core values that guide both the Agency as a whole and every individual within the Agency:

Accountability:	Being responsible for decisions and results while acknowledging mistakes and working to correct them.
Integrity:	Following the highest ethical standards and always being truthful with customers and colleagues.
Customer Focus:	Making customers and their needs the first priority.
Innovation:	Seeking creative new ways to better deliver our services and meet whatever challenges may arise.
Public Stewardship:	Managing resources prudently and providing the highest quality of service.
Partnership:	Working collaboratively with external partners and with each other to achieve our common goals.
Respect:	Listening to and treating customers and co-workers with dignity.
Diversity:	Enriching our work environment and our ability to perform through diversity in backgrounds, experiences, skills, and respect fore those differences.
Trust:	Relying on each other and our external partners to act in the best interest

of our customers, and earning that trust through our behavior.

Compassion: Showing concern to customers and to each other in time of need." (**FEMA**, *A Nation Prepared (Strategic Plan),* 2002, pp. iii., and 35 (Appendix B))

FEMA/DHS Preparedness Directorate Transition, April 1, 2007: The Post-Katrina Emergency Reform Act of 2006 ("the Act") amended the Homeland Security Act and the President's Katrina Lessons Learned Report and directed changes to FEMA and DHS' organizational structure and included the realigning of several functions into FEMA. These changes became effective April 1, 2007.

- Major Preparedness functions and programs to include the Office of Grants and Training, the United States Fire Administration, National Capital Region Coordination, Chemical Stockpile Emergency Preparedness and the Radiological Emergency Preparedness Program transferred to FEMA.
- The FEMA Director, R. David Paulison, became the FEMA Administrator, a new title provided under the Act. He reports directly to the Secretary of Homeland Security and can be called upon by the President to serve as a member of the Cabinet in the event of natural disasters, acts of terrorism or other man-made disasters.
- The Act also includes provisions relating to FEMA's regional structure and provides a renewed focus on the Regions as the backbone for FEMA's relationship with state and local partners-an essential element for successful emergency management. FEMA's 10 Regional Directors become Regional Administrators.
- Also, a new, permanent position is being added to FEMA's senior leadership team -- Law Enforcement Advisor to the Administrator. This person will play a critical role, participating in planning meetings and being on-hand during times of crisis. The office will ensure that law enforcement has a seat at the table and FEMA gains additional perspective on the issues of prevention and protection when making and executing plans." (**FEMA**, *Fact Sheet: FEMA/Preparedness Transition*, April 2, 2007.

FEMA Director of Management and Chief Acquisition Officer: "…responsibilities include the direct oversight and management of four of FEMA's lines of business: the Offices of Human Resources, Information Technology, Chief Procurement Officer and Facilities Management and Services." (FEMA, *Deidre Lee, Director of Management and Chief Acquisition Officer*, 1Apr07)

FEMA Director's Intent (2007): "Federal efforts will alleviate human suffering, ensure the continuity of critical government functions and services, minimize severe property damage, mitigate the impact of the incident, and create an operational environment conducive to long-term community recovery and future hazard mitigation." (**FEMA**, *DHS/FEMA Federal Interagency Hurricane Contingency Plan,* October 31, 2007 Draft (V.13), p. 2)

FEMA Disability Coordinator: "The Disability Coordinator, who reports directly to the Administrator, is charged with assessing the coordination of emergency management policies and practices with the needs of individuals with disabilities, including training, accessibility of entry, transportation, media outreach, and general coordination and dissemination of model best practices, including evacuation planning. The Disability Coordinator will work closely with the

DHS Office of Civil Rights and Civil Liberties." (**FEMA**, *Statement of R. David Paulison, FEMA/DHS, House Cmt. on Oversight & Gov. Reform,* July 31 2007, p. 4)

FEMA Disaster Assistance Directorate (DAD): "Disaster Assistance Directorate (DAD), formerly the Recovery Program, works to ensure that individuals and communities affected by disasters of all sizes, including catastrophic and terrorist events, are able to return to normal with minimal suffering and disruption of services. Program activities focus on improving efficiency and expediting delivery of disaster assistance to eligible individuals, to state, local, and tribal governments, and to eligible private nonprofit organizations, through a commitment to streamline procedures to improve program policy, to minimize error, and to modernize service delivery technology. Key programs include, but are not limited to: the Individual and Households Program, the Public Assistance Program, Other Needs Assistance, the Crisis Counseling Assistance and Training Program, Disaster Unemployment Assistance, Disaster Legal Services, Emergency Housing, and voluntary agency coordination. DAD is FEMA's agent in the implementation of provisions of the National Disaster Recovery Strategy and the elements of the National Disaster Housing Strategy." (**DHS**, *FEMA OMA FY09*, 2008, 5; see also, 24-25)

FEMA Disaster Assistance Directorate (DAD) Program Elements:

- Individuals and Households Program (IAP)
- Public Assistance Program (PA)
- Fire Management Assistance Grant Program (FMAGP) (**DHS**, *FEMA OMA FY09*, 25)

FEMA Disaster Operations: "FEMA's ability to marshal an effective response to disasters must be based on a professional, national network of emergency managers skilled in incident management, operational planning, and emergency communications. At all levels of government, emergency management personnel must be trained and certified experts who operate well together across the full spectrum of emergency management planning and operations. FEMA must be more than a facilitator and standard bearer for the profession of emergency management. FEMA must be a leader and model of effective implementation of disaster operations." (**DHS**, *FEMA OMA FY 2009 Budget Justification*, 2008, 61)

FEMA Disaster Operations Directorate: "Disaster Operations Directorate provides core federal response capabilities to save lives and to protect property in communities throughout the Nation that have been overwhelmed by the impact of a major disaster or an emergency, regardless of cause. The Disaster Operations Directorate executes its mission through three primary program areas: Operational Direction, Command, and Control; Operational Teams; and Operational Planning. Disaster Operations houses several activities that were formerly part of FEMA's Response Program, such as sustained situational awareness; a command, communication and coordination system comprised of a national and regional command and coordination centers; national and regional rapid support and response teams; and a collection of competency-based and technically-oriented operational teams. Disaster Operations is also home to the Incident Management Assistance Teams mandated by PKEMRA." (**DHS**, *FEMA OMA*, Jan 2008, pp. 4-5)

FEMA Disaster Operations Program: "FEMA's Disaster Operations Program provides core federal operational capabilities needed to save lives, minimize suffering, and protect property in

a timely and effective manner in communities overwhelmed by acts of terrorism, natural disaster, or other emergencies. Disaster Operations (formerly FEMA's Response Program, absent the Logistics element) encompasses the following program activities and elements.

- Operational Direction, Command, and Control
  - Operations Centers
    - National Response Coordination Center (NRCC)
    - Regional Response Coordination Centers (RRCC)
    - FEMA Operations Center (FOC)
    - Disaster Workforce Management
    - Disaster Emergency Communications
- Operational Teams
  - Incident Management Assist Teams (IMAT)
  - Urban Search and Rescue (USAR) Task Forces
  - Incident Support Teams (IST)
  - Mobile Emergency Response System (MERS)
  - Hurricane Liaison Team
  - National Emergency Response Teams (ERT-N)
  - Emergency Response Teams-Advance (ERT-A)
- Specialized Federal Teams
  - The Nuclear Incident Response Teams (NIRT)
  - The Domestic Emergency Support Team (DEST)
- Operational Planning
  - Provide national and regional operational planning guidance and coordination.
  - Coordinate at the operational level the execution of all hazard contingency plans.
  - Provide forecasting and analysis of potential events.
  - Assist FEMA Regions in operational planning at the regional level.
  - Lead the development of DHS and FEMA hazard-specific contingency plans.
- Catastrophic Disaster Response Planning
- Special Events Operations
- Exercise Support (**DHS**, *FEMA OMA FY 2009 OMB Budget Justification*, 2008, 18-22)

FEMA Doctrine (1985) – Build Local Capabilities:

"Saving lives and protecting property – that's what our business is all about.

"Every year, untold lives are lost and millions of dollars in property are damaged as a result of floods, hazardous materials incidents, tornadoes, and the like.

"We need to do a better job at all levels of government to limit the impact of these potential occurrences. There are many mitigation, preparedness, and planning activities that could be undertaken but so few resources available. A key question becomes – Where to start?

"The Federal Emergency Management Agency (FEMA) has developed the Hazard Identification, Capability Assessment, and Multi-Year Development Plan as a tool for sorting out where we are today and where we should be going tomorrow and beyond – What significant

hazards should we be worrying about? What are our capabilities? Where should we be focusing our energies to get the biggest return on the dollar?

"This common-sense approach to taking stock of the situation will provide grassroots information for identifying real needs and preparing FEMA budget requests more responsive to these needs.

If we are to reduce the number of lives lost and the amount of property damaged, we must all make some hard decisions concerning the most effective use of limited resources. While national priorities will remain an important factor at the Federal level, these decisions must reflect local problems, needs, and plans for the future." (**FEMA**, *Hazard Identification, Capability Assessment, and Multi-Year Development Plan*, Foreword, 1985)

FEMA Emergency Management Higher Education Program: A program created in 1994 and managed out of FEMA's Emergency Management Institute in Emmitsburg, MD to encourage and support the dissemination of hazard, disaster, and emergency management-related information in colleges and universities across the United States. (**FEMA**, 2008)

FEMA Emergency Management Higher Education Program Vision (Short Version):

National disaster loss reduction led by highly educated and professional emergency managers.

FEMA Emergency Management Higher Education Program Vision (Long Version):

We foresee a future wherein more and more emergency managers in government as well as in business and industry will come to the job with college education that includes a degree in emergency management.

We believe that an emergency management educational experience and foundation will not only lead to a more highly educated emergency management cadre but a cadre which will be more

- Knowledge and theory-based
- Executive-level
- Strategic-thinking
- Highly skilled
- Technologically sophisticated
- Customer-service directed
- Diverse.

We believe that a better understanding of the hazards, disasters and emergency management body of knowledge, implicit in an emergency management higher education experience, will also provide the philosophical foundation upon which future technical training and professional development, as well as the lessons of real-world experience, will better take root so that the emergency managers of the future can better achieve their tasks and missions – for the betterment of their customers, the American people.

We envision a future wherein this development will significantly contribute to

- Transformational and sustained professional capability and competence
- Disaster loss reduction led by emergency managers who work to develop cultures of disaster reduction, mitigation, prevention and preparedness – out of an awareness that the best operational disaster response capability in the world does little to address the escalating trend of future disaster losses.
- The development of more disaster resistant and resilient communities through leadership provided by the emergency management professional and higher education communities.
- Creation of a more professional, capable, networked, customer-service-driven national emergency management system.
- Putting to an end the doubling-to-tripling of disaster losses per decade which has been the recent past, the current condition, and, without successful intervention, the certain future of the United States.

FEMA Emergency Management Higher Education Program Mission:

- Serve as the Nation's leading focal-point for emergency management higher education.

FEMA Emergency Management Higher Education Program Customers:

- Collegiate faculty, administrators, and students (traditional and practitioner).
- All levels of public and private sector "emergency management" & related practitioners.
- Emergency management and related professional organizations.

FEMA Emergency Management Higher Education Program Goals:

- Provide federal-level leadership for progressive growth of the EM Hi-Ed community.
- Support FEMA Vision, Mission, New FEMA Transformation, and Policy Goals.
- Development of future cadre of emergency management and related professionals grounded in emergency management, social and natural science knowledge, administrative and managerial skills and technical and personal competencies.
- Contribute to growth/refinement of the academic discipline of emergency management
- Service the needs of the emergency management higher education community.
- Support the development and refinement of a Theory of Emergency Management.
- Advance the state of knowledge of emergency management and the full range of hazards which confront communities and the nation, whether natural, technological, or intentional
- Grow and expand knowledge of the emergency management body of knowledge, with specific emphasis on the basic principles and concepts of emergency management.
- Support translation of emergency management doctrine into educational materials.
- Actively engage with the emergency management academic and practitioner communities to better define and build the curriculums at the Associate, Bachelors, Masters and Doctoral levels which will lay the foundation for successful entry into the emergency management community as well as the professional development of practitioners.

FEMA Emergency Management Higher Education Program Objectives:

- Encourage and support the increase in the number of EM collegiate programs in the US.

- Support the continued growth of existing emergency management collegiate programs.
- Nurture the sense of an Emergency Management Higher Education Community.
- Support the continuing transformational professionalization of emergency management through formal education, training material access, and experiential learning within the formal education environment.
- Strengthen core emergency management capabilities, competencies, and capacities through emergency management higher education.
- Facilitate a national public-private effort to promulgate best practices and methodologies that promote emergency management professionalism and refinement of the academic discipline of emergency management.
- Provide a full-service emergency management higher education focal point for the wide range of collegiate emergency management higher education community
    - Doctoral programs
    - Masters programs
    - Bachelors programs
    - Associate programs (community, technical and junior colleges)
- Within this range we particularly support programs which stress
    - The philosophical orientation of disaster reduction, mitigation and prevention as holding pride-of-place in the emergency management disaster cycle – recognizing that within emergency management an ounce of prevention is worth more than a pound of cure (response operations).
    - Development of executive-level leadership skills
    - Development of analytical, theoretical, and strategic thinking
    - Development of problem solving, networking and communication skills
    - Use of solid academic social science hazards, disasters and emergency management research literature
    - Literacy in research methodologies, techniques and literature
    - Mastery of Concepts and Principles of Emergency Management
    - Risk-Based emergency management (Risk Assessment and Risk Management)
    - Methodologies to identify community and social hazards vulnerabilities and the design and implementation of vulnerability reduction and resilience enhancement programs.
    - A multi-disciplinary perspective (academic and practitioner disciplines)
    - Experiential learning opportunities and applied emergency management combined with a rigorous and challenging academic curriculum.
    - Distinctions between customer service and public service.
    - Distinctions between the pre-doctrinal nature of higher education versus the doctrinal nature of training – the role of higher education is not to indoctrinate but to educate, while the role of training of more properly the province of indoctrination into missions, tasks and objectives – doctrine.

FEMA Emergency Management Higher Education Program Tasks:

- Develop, acquire and make freely-available educational college-level courses, books and other materials in support of the emergency management higher education and professional communities.
- Assist in the development and refinement of emergency management collegiate curricula.

- Grow the clearinghouse list-serve communications channel to the EM Hi-Ed Community.
    - Share research and survey results
    - Share educational resources
    - Share best practices in collegiate emergency management program growth
    - Share best practices in collegiate emergency management experiential learning
    - Share governmental emergency management and related materials
    - Support the EMI goal of enhancing mission success by adopting results orientated business approach through the use of GovDelivery. GovDelivery operates in conjunction with EMI internet website and supports the dissemination of EM Hi-Ed Reports to all subscribers.
- Maintain the Guide to Emergency Management Terms, Definitions, and Programs.
- Maintain the Bibliography of Emergency Management and Related References.
- Host a unique annual Emergency Management Higher Education Conference which serves the needs of the emergency management higher education and emergency management professional communities.
- Support, collect, publicize and work toward a more consensual sense of the composition of the Emergency Management Body of Knowledge.
- Maintain a body of knowledge depository of emergency management materials.
- Maintain The College List of all U.S. institutions of higher education with EM programs.
- Support efforts to regularize distinctions between emergency management curricula at the Associate, Bachelors, and graduate Masters and Doctoral levels.
- Solicit and maintain case studies of Experiential Learning in Emergency Management.
- Serve as a clearinghouse for the transfer of Emergency Management Institute vocational-level training courses to the EM Hi-Ed Community.
- Support the collection of and publicize data on the status of EM Higher Education.
- Support the Emergency Management Roundtable
- Sponsor production of annual reports on the state of the Emer. Mgmt. Hi-Ed community.
- Facilitate a national public-private effort to promulgate best practices and methodologies that promote emergency management professionalism and refinement of the academic discipline of emergency management through such tools as the collection of best practices through maintenance and expansion of such tools as the "Practitioners Corner," the "Syllabi Compilation," the "Growing Your EM Program," and the "Articles, Papers and Presentations," on the FEWMA EM-Hi-Ed Program Website.

FEMA Emergency Management Institute (EMI), Emmitsburg MD: "EMI…provides training to federal, state, local, tribal, public and private sector officials to strengthen emergency management core competencies, including incident management, operational planning, disaster logistics, emergency communications, disaster assistance, continuity programs, public disaster communications, integrated preparedness, and hazard mitigation. EMI directly supports the implementation of NIMS, the NRF, and the National Preparedness Guidelines (NPG) by conveying necessary knowledge and skills to practitioners. EMI uses a diverse training delivery system that includes residential onsite training; offsite delivery in partnership with emergency management training systems, colleges, and universities; and technology-based mediums to conduct individual training courses for emergency response personnel across the Nation." (**DHS**, *FEMA OMA FY 2009*, 2008, 10)

FEMA Emergency Management Institute Goals: "Improve the abilities of FEMA and other DHS employees. Improve the abilities of U.S. state, local, and tribal officials by:
Directly training state, local, and tribal employees in selected subjects; Enabling state, local, and tribal officials to develop and deliver training for their own constituents; Enhance the preparedness of U.S. individuals, families, and special audiences through training." (**FEMA**, *Emergency Management Institute Performance Measures* October 3, 2007, slide 7)

FEMA Emergency Management Institute Mission: "To support FEMA and the Department of Homeland Security's goals by improving the skills of U.S. officials at all levels of government to prevent, prepare for, respond to, recover from, and mitigate the potential effects of all types of disasters and emergencies." (FEMA, *Emergency Management Institute Performance Measures* October 3, 2007, slide 6)

FEMA Environmental Planning and Historic Preservation (EHP) Program: "*EHP Policy*:
It is FEMA's policy to act with care to ensure that its disaster response and recovery, mitigation and preparedness responsibilities are carried out in a manner that is consistent with all Federal environmental and historic preservation policies and laws. FEMA uses all practical means and measures to protect, restore and enhance the quality of the environment, to avoid or minimize adverse impacts to the environment, and to attain the objectives of:

- Achieving use of the environment without degradation or undesirable and unintended consequences;
- Preserving historic, cultural and natural aspects of national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice;
- Achieving a balance between resource use and development within the sustained carrying capacity of the ecosystem involved; and
- Enhancing the quality of renewable resources and working toward the maximum attainable recycling of depletable resources.

EHP Program:
The Environmental Planning and Historic Preservation (EHP) program integrates the protection and enhancement of environmental, historic, and cultural resources into FEMA's mission, programs and activities; ensures that FEMA's activities and programs related to disaster response and recovery, hazard mitigation, and emergency preparedness comply with federal environmental and historic preservation laws and executive orders; and provides environmental and historic preservation technical assistance to FEMA staff, local, State and Federal partners, and grantees and subgrantees." (**FEMA**, *FEMA EHP*, January 31, 2008 modification)

FEMA Executive Management System EMS): In FY 2007 FEMA "Developed the requirements for, and implemented, an Executive Management System to improve how FEMA manages information, saving significant staff time in searching, organizing and formatting information." In FY 2008 the EMS will "manage a concurrence clearance process, collecting feedback in a central location for thousands of documents. EMS will also become a data repository for FEMA documents and information, with built-in search functions and the ability to report on the status of documents." (**DHS**, *FEMA OMA FY2009 Budget Justification*, 2008, 33)
[Note: EMS management resides within the Office of Policy and Programs Analysis.]

FEMA Fire Management Assistance Grant Program: "Fire Management Assistance is available to States, local and tribal governments, for the mitigation, management, and control of fires on publicly or privately owned forests or grasslands, which threaten such destruction as would constitute a major disaster. The Fire Management Assistance declaration process is initiated when a State submits a request for assistance to the FEMA Regional Director at the time a "threat of major disaster" exists. The entire process is accomplished on an expedited basis and a FEMA decision is rendered in a matter of hours. "The Fire Management Assistance Grant Program (FMAGP) provides a 75 percent Federal cost share and the State pays the remaining 25 percent for actual costs. Before a grant can be awarded, a State must demonstrate that total eligible costs for the declared fire meet or exceed either the individual fire cost threshold - which is applies to single fires, or the cumulative fire cost threshold, which recognizes numerous smaller fires burning throughout a State. Eligible firefighting costs may include expenses for field camps; equipment use, repair and replacement; tools, materials and supplies; and mobilization and demobilization activities." (**FEMA,** *FMAGP*, December 2006)

FEMA Gap Analysis Program: "FEMA is organizing to work with our partners to determine what your needs are and how we can best support you. Sometimes the answer is not money, it is knowledge. Our new Gap Analysis program is a prime example. This year…we initiated vulnerability assessments in the coastal States most prone to hurricanes….The result: FEMA and the states knew which Federal resources would be most necessary to support any given State during a hurricane. With this initial analysis in place, we put plans in place on a state-by-state basis… it was a good start, and we intend to refine and extend the process next year…. The GAP analysis reveals how we are planning for our future. When we know what is needed, we can develop and implement improved mitigation activities, plan our disaster operations and logistical needs, and be ready with the right type and amount of resources to assist in the recovery following an event. (**FEMA**, *David Paulison IAEM Presentation, Reno, NV*, 12 Nov 2007. p. 5)

FEMA Goal (2007): "It is FEMA's goal to reduce the loss of life and property and protect the United States from all hazards by leading and supporting the country in a risk-based, comprehensive emergency management system of protection, response, recovery, mitigation, and now, more than ever, preparedness." (**FEMA** *"Looking Toward the NFIP's Future,"* 2007**)**

FEMA Goals (2002: (**FEMA**, *A Nation Prepared (Strategic Plan)*, 2002**,** p. iii.)

1. Reduce loss of life and property.
2. Minimize suffering and disruption caused by disasters.
3. Prepare the Nation to address the consequences of terrorism.
4. Serve as the Nation's portal for emergency management information and expertise.
5. Create a motivating and challenging work environment for employees.
6. Make FEMA a world-class enterprise.

FEMA Goals (2006): (**FEMA**, *Vision for New FEMA*, December 12, **2**006**,** p.3)

- "**Strengthen core capabilities, competencies and capacities.** Fostering a national emergency management system and implementing a cohesive national preparedness system must begin by strengthening the foundational building blocks of a weakened but venerable agency. The Nation needs a strong FEMA; but that cannot be achieved without purposeful new investments.

- **Build strong Regions.** The Region is the essential field echelon of FEMA that engages most directly with State partners and disaster victims to deliver frontline services. It is the Region that can build and nurture State and local capabilities across the spectrum of preparedness, response, recovery and mitigation. And it is the Region that will lead the Federal response to incidents across the spectrum of all-hazards events. A strong FEMA will rely on strong Regions to regain the trust and confidence of Governors, mayors, leaders in the private sector and the citizens of our homeland.
- **Strengthen our partnership with States.** Response to disasters and emergencies is primarily a State and local effort. To build and support an effective National system of emergency management, FEMA must have effective partnerships with State and local governments.
- **Professionalize the national emergency management system.** The Nation's ability to marshal an effective response to disasters requires the right people with the right skills. We will work with our partners to build a nationwide system of trained and certified experts skilled in all hazards emergency management – starting right here in FEMA."

FEMA Goals (2007): (**FEMA** *Strategic Plan* (Catastrophe Planning Initiative Dft), 10Oct07, 1): "The catastrophic planning initiative supports the overall goals of FEMA to:

- Save and sustain lives
- Protect and minimize damage to property
- Stabilize critical infrastructures and key resources
- Create an environment conducive to reentry, repopulation, long-term community recovery, and future hazard mitigation."

FEMA Goals (2008):
Goal 1: Lead an integrated approach that strengthens the Nation's ability to address disasters, emergencies and terrorist events…. (p. 8)
Goal 2: Deliver easily accessible and coordinated assistance for all programs…. (p. 18)
Goal 3: Provide reliable information at the right time for all users…. (p. 22)
Goal 4: FEMA invests in people and people invest in FEMA to ensure mission success….
Goal 5: Build public trust and confidence through performance and stewardship…." (**FEMA**, *FEMA Strategic Plan, Fiscal Years 2008*-2013, January 2008)

FEMA Grant Programs Directorate (GPD): "Established in FY 2007, GPD houses a centralized suite of grant management functions including: full-life cycle grants management operations; compliance monitoring; audit resolution; and data analysis. GPD serves as the executive agent for development of grant guidance for the annual Homeland Security grant programs; provides programmatic oversight and technical assistance for grant administration, monitoring, and reporting; and is a principal liaison for interagency programmatic collaboration and coordination." (**DHS**, *FEMA OMA FY 2009 OMB Budget Justification*, 2008, 4)

FEMA Gulf Coast Recovery Office Good Stewardship Council: Formed in Fall of 2007 "to provide effective oversight of resources while achieving the recovery mission." The Good Stewardship Council will monitor resources for the Gulf Coast Recovery Office and for FEMA's Transitional Recovery Offices in the Gulf Coast states of Alabama, Louisiana, Mississippi and Texas. The council will oversee budgeting and the continued implementation of internal controls

for the recovery process. Simply put, internal control means things that should happen "do" and things that should not happen "don't." (**FEMA**, *Good Stewardship Council formed for Gulf Coast Recovery*, 20 Sep 2007)

FEMA Incident Management Systems (IMS) Division, National Integration Center (NIC): "IMS is the Executive Agent for the National Response Framework (NRF). IMS coordinates and brokers agency and interagency planning initiatives in support of operational response and recovery objectives for the NRF and the National Incident Management System (NIMS). The IMS plays a critical role in coordinating the various components of the NRF to ensure that the NRF remains linked to and based upon the NIMS." (**DHS**, *FEMA OMA FY 2009,* 2008, 10)

FEMA Individuals and Households Program (IHP): "IHP includes several program elements offering various types of support for families and individual disaster victims. These include assistance for housing needs, other non-housing needs, crisis counseling and training, unemployment assistance, and legal services." (**DHS**, *FEMA OMA FY 2009,* 2008, 25)

FEMA Joint Housing Solutions Group (JHSG): "…a dedicated unit to research and document alternatives to traditional temporary housing." (**FEMA**, *Statement of Paulison*, 31 July 2007, 17)

FEMA Key Building Blocks to Achieve FEMA Mission (2008)

- Strengthening core competencies
- Building strong regions
- Enhancing current partnerships and creating new ones
- Investing in its people
- Developing a business approach to achieving desired results
- Professionalizing the national emergency management system. (**FEMA**, *Strategic Plan, Fiscal Years 2008-2013*, January 2008, p. iii)

FEMA Law Enforcement Advisor: A position within the FEMA Administrator's Office created in 2007 pursuant to the Post-Katrina Emergency Reform Act of 2006. The Law Enforcement Advisor "will provide FEMA with a law enforcement perspective on agency plans and policies….[and] will also be the senior advisor to FEMA on law enforcement programs and will support FEMA's growing interaction with law enforcement associations, fusion centers and terrorism task forces and will provide expert support to preparedness, protection, response, and recovery programs." (**FEMA**, *Dinse Appointed As FEMA's Law Enforcement Advisor*, 18Oct07)

FEMA Logistics Centers: "FEMA Logistics Centers - permanent facilities that receive, store, ship, and recover disaster commodities and equipment

- 4 CONUS (Continental United States) containing general commodities
- 3 OCONUS containing general commodities
- 2 CONUS containing special products; computers, office electronic equipment, medical and pharmaceutical caches" (**FEMA**, *Logistics Supply Chain*, June 19, 2006)

FEMA Logistics Distribution Management: "…consists of warehouse facilities and systems used to store, maintain, transport, and track supplies, services, material and equipment in emergencies and disasters. FEMA will also develop a plan that outlines a national logistics

strategy that streamlines duplicative disaster response assets, warehouses, operating procedures, and associated management structures." (**DHS**, FEMA OMA FY 2009, 2008, 17)

FEMA Logistics Management Directorate (LMD): "In April 2007, as part of the Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA) reorganization, Logistics was elevated from a branch to a directorate. The Logistics Management Directorate (LMD) is the agency's major program office responsible for policy, guidance, standards, execution and governance of logistics support, services and operations. The mission is to effectively plan, manage and sustain the national logistics response and recovery operations in support of domestic emergencies and special events - to act as the National Logistics Coordinator." (**FEMA**, *Logistics Management Directorate*, 31 January 2008 modification)

FEMA Logistics Management Directorate (LMD): "LMD is organized around four core competencies:

- Logistics Operations;
- Logistics Plans and Exercises;
- Distribution Management; and
- Property Management.

(DHS, *Statement for the Record, Matt Jadacki, Deputy Inspector General, DHS, Before House Subcommittee on Appropriations,* March 13, 2008, p. 5)

FEMA Logistics Management Directorate: "Logistics Management Directorate provides the structure to manage and execute Disaster Logistics and moves the agency beyond simply providing commodities (i.e. ice, water, tarps, and MREs) toward a holistic management approach. FEMA's Logistics Management capabilities are based on the Department of Defense's well-recognized logistics (J4) system and organization, including management of the all-source range of assets, teams, equipment, and supplies that may be needed in response to an all-hazards event. The Logistics Management program involves coordination across all federal departments and agencies, state partners, and those in the private sector who plan for and respond to all-hazard disaster events."

FEMA Management & Administration Activities: "Management and Administration Activities incorporates the Office of the Administrator and the Administrative Management Staff who coordinate between Headquarters and Regional Offices all policy and strategic planning, managerial, resource, and administrative actions; maintains programs to address public information issues; and builds partnerships with and among state and local governments, nongovernmental organizations, business, and industry. Management and Administration Activities also provide the corporate infrastructure (IT, finance, HR, procurement, facilities) which is essential in FEMA's pursuit of an enhanced business approach to achieving results and providing support capabilities designed and scaled to enhance FEMA's mission success. FEMA will continue to integrate management and administration missions that transferred to FEMA in FY 2008 and aligned all activities with the "Vision for a New FEMA." The following FEMA offices define Management and Administration:

- Office of the Administrator, which includes:

    - Law Enforcement Advisor
    - Disability Coordinator
- Office of Policy and Program Analysis
- Office of the Executive Secretariat
- Office of the Associate Deputy Administrator, which includes:
    - Regional Offices
    - Office of Regional Operations
- Office of the Chief Financial Officer
- Office of Management, which includes:
    - Information Technology
    - Human Capital
    - Acquisition
    - Facilities Management
    - Security
- Office of External Affairs, which includes:
    - Legislative Affairs
    - Public Affairs
    - International Affairs
- Office of Equal Rights
- Office of Chief Counsel" (**DHS**, *FEMA OMA FY 2009 OMB Budget.…*, 2008, 5)

FEMA Mission (1997, June): "Reduce the loss of life and property and protect our institutions from all hazards by leading and supporting the Nation in a comprehensive, risk-based emergency management program of mitigation, preparedness, response, and recovery." (**FEMA**, *Strategic Plan, FY 1998-2002*, p. 9)

"FEMA has three mission-related strategies to accomplish the strategic goals and objectives – mitigation, preparedness are response/recovery. In addition, two implementation strategies are employed in the pursuit of the mission-related strategies – customer service and cost-efficiency." (**FEMA**, *Strategic Plan, FY 1998-2002*, p. 20)

FEMA Mission (1997, October): "To provide leadership and support to reduce the loss of life and property and protect our nation's institutions from all types of hazards through a comprehensive, risk-based, all-hazards emergency management program of mitigation, preparedness, response and recovery." (**FEMA**, *FEMA's Mission*, October 1997).

FEMA Mission (1999): "FEMA's mission is 'to reduce the loss of life and property and protect our institutions from all hazards by leading and supporting the nation in a comprehensive risk-based emergency management program of mitigation, preparedness, response and recovery.' To successfully fulfill this mission, the business community must become a full partner in our nation's emergency management system." (**Witt**, "Building A Public/Private Partnership in EM," 1999)

FEMA Mission (2000): "Recovery from natural disasters (FEMA's primary mission)…" (**FEMA**, *Rebuilding For A More Sustainable Future.…*, November 2000, p. 1-4)

FEMA Mission (2001): "The Federal Emergency Management Agency (FEMA) is an independent agency, its mission "to reduce loss of life and property and protect our nation's critical infrastructure from all types of hazards through a comprehensive, risk-based, emergency management program of mitigation, preparedness, response and recovery." (**CRS**, *FEMA's Mission: Policy Directives for the Federal Emergency Management Agency*, March 13, 2002, p. 4; CRS sites FEMA website, "About FEMA, Helping People Before, During, & After Disasters," visited Jan. 8, 2001.)

FEMA Mission (2002): "Lead America to prepare for, prevent, respond to, and recover from disasters." (**FEMA**, *A Nation Prepared – FEMA Strategic Plan – FY 2003-2008*, 2002, p. iii.)

FEMA Mission (2003): "The primary mission of the Federal Emergency Management Agency is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation." (**FEMA**, *About FEMA*, March 2003)

FEMA Mission (2004): "FEMA's Mission Statement: Lead America to prepare for, prevent, respond to, and recover from disasters." (**FEMA**, *Coordinating Environmental and Historic Preservation Compliance* IS-253, Module 2, Lesson 1, National Environmental Policy Act, January 2004, p. 1)

FEMA Mission (2004): "FEMA's mission continues to be the reduction of the loss of life and of damage to property and to protect our residents from all hazards, natural and man-made. We accomplish this mission by providing the Nation with comprehensive, risk-based emergency management programs, including mitigation, preparedness, response, and recovery. Our integration into the new Department of Homeland Security has increased our opportunities to perform this mission. We continue to work closely with many other Federal Departments and agencies, and with States, Tribal Nations, local governments, volunteer organizations, and private industry." (**FEMA**, "Testimony of Craig Conklin…" April 1, 2004.)

FEMA Mission (2005): "Our panels today separate witnesses from a federal agency, FEMA, from those of its parent organization, DHS. The separation is deliberate. It reflects in part the differing perspectives on Katrina that we have heard consistently from officials of the two entities. It also reflects tension between the two that pre-dates the storm, tension over resources, roles, and responsibilities within the Department. This tension is clear in Mr. Brown's [FEMA Director Michael Brown] response when Committee investigators asked him why FEMA was not prepared for Katrina. Mr. Brown responded, "Its mission had been marginalized; its response capability had been diminished. . . . There's the whole clash of cultures between DHS' mission to prevent terrorism and FEMA's mission to respond to and to prepare for responding to disasters of whatever nature." (**Collins**, "Opening Statement…'Hurricane Katrina: The Roles of DHS and FEMA Leadership'," February 10, 2006)

FEMA Mission (2006, October 4)[50]: "The primary mission of the Agency [FEMA] is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation…

SPECIFIC ACTIVITIES— In support of the primary mission of the Agency, the Administrator shall—
(A) lead the Nation's efforts to prepare for, protect against, respond to, recover from, and mitigate against the risk of natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents;
(B) partner with State, local, and tribal governments and emergency response providers, with other Federal agencies, with the private sector, and with nongovernmental organizations to build a national system of emergency management that can effectively and efficiently utilize the full measure of the Nation's resources to respond to natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents;
(C) develop a Federal response capability that, when necessary and appropriate, can act effectively and rapidly to deliver assistance essential to saving lives or protecting or preserving property or public health and safety in a natural disaster, act of terrorism, or other man-made disaster;
(D) integrate the Agency's emergency preparedness, protection, response, recovery, and mitigation responsibilities to confront effectively the challenges of a natural disaster, act of terrorism, or other man-made disaster;
(E) develop and maintain robust Regional Offices that will work with State, local, and tribal governments, emergency response providers, and other appropriate entities to identify and address regional priorities;
(F) under the leadership of the Secretary, coordinate with the Commandant of the Coast Guard, the Director of Customs and Border Protection, the Director of Immigration and Customs Enforcement, the National Operations Center, and other agencies and offices in the Department to take full advantage of the substantial range of resources in the Department;
(G) provide funding, training, exercises, technical assistance, planning, and other assistance to build tribal, local, State, regional, and national capabilities (including communications capabilities), necessary to respond to a natural disaster, act of terrorism, or other man-made disaster; and
(H) develop and coordinate the implementation of a risk-based, all-hazards strategy for preparedness that builds those common capabilities necessary to respond to natural disasters, acts of terrorism, and other man-made disasters while also building the unique capabilities necessary to respond to specific types of incidents that pose the greatest risk to our Nation." (FEMA 592, June 2007, pp. 94-95; passage from Title V (National Emergency Management) Sec. 503. Federal Emergency Management Agency (6 U.S.C. 313), **Department of Homeland Security Appropriations Act, 2007** (Pub. L. No. 109-295) amending the Homeland Security Act of 2002; pp. 1396-1397 of DHS Appropriations Act.)

[50] President Bush signed the "DHS Appropriations Act, 2007" on October 4, 2006; See **White House**, "President Bush Signs…)

FEMA Mission (2006): "…the mission of the Agency to reduce the loss of life and property and protect the Nation from all hazards by leading and supporting the Nation in a risk-based, comprehensive emergency management system of (A) mitigation, by taking sustained actions to reduce or eliminate long-term risks to people and property from hazards and their effects; (B) preparedness, by planning, training, and building the emergency management profession to prepare effectively for, mitigate against, respond to, and recover from any hazard; (C) response, by conducting emergency operations to save lives and property through positioning emergency equipment, personnel, and supplies, through evacuating potential victims, through providing food, water, shelter, and medical care to those in need, and through restoring critical public services; and (D) recovery, by rebuilding communities so individuals, businesses, and governments can function on their own, return to normal life, and protect against future hazards…" (**Post-Katrina Emergency Management Reform Act of 2006**, Title VI-National Emergency Management (Sec. 503., Federal Emergency Management Agency, para. (c) Administrator, (9) carrying out …), pp. 1398-1399 of DHS Appropriations Act, 2007)

FEMA Mission (2007, June): Prepare for and lead the Federal Government's response to emergencies and major disasters, natural and man–made, including acts of terrorism — "all-hazards." (**FEMA**, *California Statewide Emergency Planning Committee*, June 6, 2007, p. 4)

FEMA Mission (2007, October): "The mission of the Federal Emergency Management Agency (FEMA) is to provide leadership to prepare, protect, respond, recover, and mitigate the effects of emergencies and major disasters, both natural and man-made. Emergencies include acts of terrorism, hurricanes and severe storms." (**FEMA**, *Strategic Plan* (Catastrophe Initiative), October 10, 2007, p.1)

FEMA Mission/Mandate (2007, November): "The Post-Katrina Emergency Management Reform Act, passed by Congress and signed by the President in October 2006, sets forth a new expanded mission for FEMA. Our mandate is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation. Our challenge -- and commitment -- is to achieve our vision and fully execute this mission to create a safer and more secure America." (**FEMA**, *Strategic Plan*, November 2007, p. 5)

FEMA Mission (2008): "The Federal Emergency Management Agency's (FEMA) mission is to reduce the loss of life and property and protect our institutions from natural and technological hazards by leading and supporting the Nation in comprehensive, risk-based emergency and consequence management programs of mitigation, preparedness, response and recovery." (**FEMA**, *FEMA Region III Annual Report FY 2007*, 2008, p. 5)

FEMA Mission (2008): "Reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation." (**FEMA**, *FEMA Strategic Plan, Fiscal Years 2008-2013* (FEMA P-422), January 2008, p. iii)

FEMA Mitigation Directorate: "The mission of the Mitigation Directorate is to protect lives and prevent property loss from natural hazard events. Activities are designed to further sound risk management decisions by individuals, private and public sector entities, state, local and tribal governments, and federal agencies. The Mitigation Directorate's objectives are accomplished through three categories of core activities: risk identification and assessment, risk reduction, and insurance against flood risk." Among the Mitigation programs…are:

- Mitigation Disaster Operations and Management
  - Maintain operational disaster response capability
  - Act as coordination point for Mitigation disaster operations and activities
  - Develop and integrate disaster operations policies, procedures, training…
  - Manage the Mitigation Disaster Workforce
  - Develop training and job aides to promote workforce capability to use disaster recovery as an opportunity to build communities stronger and safer.
- Environmental and Historic Preservation
- National Dam Safety
- National Earthquake Hazards Reduction
- National Hurricane Program. (**DHS**, *FEMA OMA FY 2009 OMB Budget,* 2008, 5, 27-28)

FEMA Mobile Registration Intake Centers (MRICs) Pilot: "Recognizing many disaster victims may be stranded or located in congregate shelters without communications, and unable to register for assistance, FEMA has established a new registration pilot program that pushes registration capabilities directly into the field. For the 2007 hurricane season, FEMA will have the ability to deploy Mobile Registrations Intake Centers immediately to congregate shelters and provide an on-site capability to quickly register for FEMA assistance." (**FEMA**, *Statement of Paulison*, July 31, 2007, p. 18)

FEMA National Advisory Council: "The National Advisory Council (NAC) shall advise the Administrator of the Federal Emergency Management Agency (FEMA) on all aspects of emergency management. The National Advisory Council shall incorporate State, local and tribal government and private sector input in the development and revision of the national preparedness goal, the national preparedness system, the National Incident Management System, the National Response Plan and other related plans and strategies." (FEMA, *National Advisory Council*. October 12, 2007)

FEMA National Advisory Council Membership: "Thirty individuals have been selected for appointment to the National Advisory Council (NAC) from a geographic and substantive cross-section of officials, emergency managers and emergency response providers from Tribal, State and local governments, the private sector and nongovernmental organizations. These members will represent influential, high-level senior leaders of their organizations, stakeholder groups and the private sector or members of the public." (**FEMA**, "NAC Members Named," July 18, 2007)

FEMA National Advisory Council Mission: "The mission of the National Advisory Council is to ensure effective and ongoing coordination of national Preparedness, protection, response, recovery and mitigation for natural disasters, acts of terrorism and other man-made disasters by: Incorporation input from Tribal, State and local governments, and the public and private sectors;

Providing an avenue for feedback, suggestions and constructive criticisms from the diverse government, private sector and nonprofit partners involved in any disaster activities; and Providing a venue for input during the development and revision of the National Preparedness Goal; national preparedness system, National Incident Management System (NIMS), National Response Plan (NRP) and other related plans and strategies." (**FEMA**, "National Advisory Council Members Named." July 18, 2007 News Release)

FEMA National Advisory Council Mission: "…mission—'to ensure effective and ongoing coordination of national preparedness, protection, response, recovery, and mitigation for natural disasters, acts of terrorism, and other man-made disasters.'" (**FEMA**, *Homeland Security* Today, October 29, 2007) "Specifically, the Council will focus attention on the development and revision of the national preparedness goal, the national preparedness system, the National Incident Management System, the National Response Plan, and other related plans and strategies…. The development of the National Advisory Council was set into motion by the Post-Katrina Emergency Management Reform Act of 2006. The Federal Register notice posted on February 7, 2007, establishes the Council and requests applications for membership." (**FEMA**, "FEMA Seeks Applicants For the National Advisory Council," February 14, 2007)

FEMA National Continuity Programs Directorate (NCP): "National Continuity Programs provides Executive leadership for Federal Government Continuity and National Contingency Programs that support enduring Constitutional government. National Continuity administers several activities to ensure and improve emergency communications with the public, including development and implementation of the Integrated Public Alert Warning System." (**DHS**, *FEMA OMA*, 2008, 5)

FEMA National Continuity Programs Directorate (NCP) Mission: "The mission of FEMA's National Continuity Programs Directorate (NCP) is to serve the public by protecting our Nation's constitutional form of government." (**FEMA**, *NCPD*, February 1, 2008)

FEMA National Continuity Programs Directorate: The National Continuity Programs directorate formulates guidance and establishes common standards for agencies to use in developing viable, executable COOP and COG plans; facilitates interagency coordination; and oversees and assesses the status of COOP and COG capabilities of federal executive branch agencies." (**FEMA**, *Martha Rainville, Assistant Administrator, NCP*, October 31, 2007)

FEMA National Earthquake Hazard Reduction Program Mission-Area: "FEMA translates research and lessons learned from earthquakes into guidance, training, support for states and multi-state consortia, and other program implementation activities. FEMA works with national model codes and standards groups; promotes better building code practices; assists states in developing mitigation, preparedness, and response plans; aids in the development of multi-state groups; and supports comprehensive earthquake education and awareness. FEMA also develops and disseminates earthquake-resistant design guidance for new and existing buildings and lifelines and aids in the development of performance-based design guidelines and methods. FEMA applies earthquake hazards reduction measures, where applicable, to other natural and man-made hazards; provides preparedness, response, and mitigation recommendations to communities; and establishes demonstration projects on earthquake hazard mitigation to link

earthquake research and mitigation with emergency management programs." (**NEHRP**. *Strategic Plan for the National Earthquake Hazards Reduction Program Fiscal Years 2008-2012* (Draft), April 2008, p. 3, citing FEMA, *Expanding and Using Knowledge to Reduce Earthquake Losses--NEHRP, Strategic Plan 2001–2005*, FEMA 383, 2003)

FEMA National Preparedness Directorate (NPD):

- Dennis Schrader, Deputy Administrator
- Corey Gruber, Assistant Deputy Administrator
- Rob Schweitzer, Executive Officer (**FEMA**, *NPD*, 2008, slide 1 of 22)

FEMA National Preparedness Directorate (NPD): "The National Preparedness Directorate works to ensure that the Nation is prepared for disasters of all kinds. The organization's activities reflect FEMA's expanded role in preparedness established by PKEMRA (2006). NPD houses management and administrative support functions associated with training and national exercise programs funded through the State and Local Programs account. It also implements Homeland Security Presidential Directive #8 (HSPD-8) by establishing policies that strengthen national preparedness for terrorist attacks, major disasters, and other emergencies. NPD coordinates and brokers agency and interagency planning initiatives in support of operational response and recovery objectives for the National Response Framework (NRF) and for the National Incident Management System (NIMS). The organization includes the National Integration Center, which is the Executive Agent for the NRF. Planning and systems aspects of NPD are complemented by its Emergency Management Institute, which provides direct training to federal, state, local, tribal, public and private sector officials to strengthen core emergency management competencies." (**DHS**, *FEMA OMA FY 2009 OMB Budget Justification*, 2008, 4)

FEMA National Preparedness Directorate (NPD): "The National Preparedness Directorate (NPD) was established on April 1, 2007, as a result of the Post-Katrina Emergency Management Reform Act of 2006 to oversee coordination and development strategies necessary to prepare for all-hazards. As part of this mission, NPD provides policy and planning guidance that builds prevention, protection, response, and recovery capabilities. NPD programs leverage training courses, policy development, exercises, and technical assistance to build emergency capabilities. Additionally, NPD is developing methods to assess levels of emergency preparedness within individual jurisdictions and throughout the nation." (**FEMA**, *National Preparedness Directorate Draft Fact Sheet*. Washington, DC: FEMA, 1 Feb 2008)

FEMA National Preparedness Directorate (NPD): "The Deputy Administrator for National Preparedness will head a new directorate within FEMA, consolidating FEMA strategic preparedness assets. It will include both existing FEMA programs and certain legacy Preparedness Directorate programs. It will incorporate functions related to preparedness doctrine, policy and contingency planning. It will further contain the Department's exercise coordination and evaluation program, emergency management training, along with the Chemical Stockpile Emergency Preparedness Program and the Radiological Emergency Preparedness program. The Deputy Administrator for National Preparedness will oversee two major functional responsibilities: (1) Readiness, Prevention and Planning; and (2) the National Integration Center." (**FEMA**, *Statement for the Record R. David Paulison*, February 28, 2007, p. 3)

FEMA National Preparedness Directorate (NPD) Community Preparedness Division (NPD-CPD) Key Programs and Functions, Brock Bierman, Director:

- Citizen Corps Program
- Non-Governmental Organizations Integration and Coordination
- CERT Program Management
- National Citizen Corps Council and Affiliates
- Special Needs Coordination
- VOAD Support/Coordination (**FEMA**, *NPD*, 2008, slide 1 of 22)

FEMA National Preparedness Directorate (NPD) Major Components:

- National Integration Center
- Emergency Management Institute
- Center for Domestic Preparedness
- Training and Exercise Integration
- Incident Management Systems Integration
- National Exercise Division
- Technical Hazards Division
- Community Preparedness Division (**FEMA**, *NPD Draft Fact Sheet*, February 1, 2008)

FEMA National Preparedness Directorate (NPD) Mission: "NPD seeks to build a Nation prepared through an integrated and adaptable approach to the development of critical capabilities to prevent, protect against, respond to, and recover from all manner and magnitude of threats and hazards." (**FEMA**, *NPD*, 2008, slide 1)

FEMA National Preparedness Directorate (NPD) National Integration Center (NIC): "Homeland Security Presidential Directive-5 (HSPD-5) required the Secretary of Homeland Security to establish a mechanism for ensuring the ongoing management and maintenance of NIMS including regular consultation with other Federal departments and agencies, State, tribal, and local stakeholders, and with the private sector and NGOs. The NIC provides strategic direction, oversight, and coordination of NIMS and supports both routine maintenance and the continuous refinement of NIMS and its components. The NIC oversees and coordinates all aspects of NIMS, including the development of compliance criteria and implementation activities at Federal, State, tribal, and local levels. It provides guidance and support to jurisdictions and emergency management/response personnel and their affiliated organizations as they adopt or, consistent with their status, are encouraged to adopt the system. The NIC also oversees and coordinates the publication of NIMS and its related products. This oversight includes the review and certification of training courses and exercise information." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p. 8)

FEMA National Preparedness Directorate (NPD) National Integration Center (NIC) Key Programs and Fnctions:

- NRF
- NIMS
- Training & Exercise Guidance
- Training Development

- Training & Exercise Policy Development
- Lessons Learned
- Exercise Coordination
- Corrective Action Program/RAMP
- Course Evaluation
- Instructor Certification (**FEMA**, *NPD*, 2008, slide 1 of 22)

FEMA National Preparedness Directorate (NPD) Office of Prepredness Planning and Analysis: "The Office of Preparedness Policy, Planning, and Analysis (PPPA) strengthens national preparedness by leading special initiatives, directing preparedness policy planning efforts, and analyzing policy and program results within the scope of the National Preparedness Directorate (NPD)'s mission." (**FEMA**, *The Office of PPPA*, June 26, 2008)

FEMA National Preparedness Directorate (NPD) Office of Prepredness Planning and Analysis Key Programs and Functions:

- Establish and support the entire life-cycle of policy-making within NPD
- TCL and NPG
- Prevention policy development and monitoring
- Development of national planning system
- Support to FEMA Planning Council
- Technical Assistance program management
- Capability assessments
- Preparedness research, and analysis, and reporting
- Performance management and contract oversight
- Analysis of policy and program results (**FEMA**, *NPD*, 2008, slide 1 of 22)

FEMA National Preparedness Directorate (NPD) Office of Prepredness Planning and Analysis Key Programs and Functions (PPPA): "PPPA carries out its mission and responsibilities through the three following branches:

- **Policy** is responsible for establishing and supporting the entire life-cycle of NPD policymaking and creating an NPD strategic plan. The Policy Branch:
    - Establishes a maintenance process for the Target Capabilities List and National Preparedness Guidelines
    - Supports grant policy and programs
    - Conducts Net Assessments
    - Supports and maintains National Planning Scenarios and Universal Adversary Program
    - Develops and monitors prevention policy
    - Conducts prevention preparedness programs, activities, and services

- **Planning** establishes and supports national planning system and supports FEMA Planning Council, as well as other entities' planning efforts that may impact NPD's mission. Planning additionally:
    - Manages Technical Assistance Program
    - Supports Federal Preparedness Coordinators and regional preparedness mission

- Supports development of grant policy, priorities, and programs for planning
- Manages Urban Area Security Initiative Catastrophic Planning Initiative and other related Technical Assistance programs
- Manages and develops Technical Assistance programs in support of fusion centers and processes

- **Assessment** develops methodologies to comprehensively analyze preparedness data, as well as methodologies and measures to assess capabilities. Assessment additionally:
  - Develops and tests a nationally integrated capability assessment system
  - Conducts analysis for annual preparedness reports
  - Develops capability based financial models
  - Prepares Federal and State Preparedness Reports
  - Informs preparedness and grant program development
  - Collects relevant preparedness data
  - Implements a nationally integrated capability assessment process
  - Manages and updates the Target Capabilities List
  - Develops cooperative agreements to integrate Target Capabilities List implementation policy between FEMA Regional Offices and stakeholders." (**FEMA, NPD**, *The Office of PPPA*, June 26, 2008)

FEMA National Preparedness Directorate (NPD) Organization:
- Preparedness Policy, Planning & Analysis (NPD-PPPA), Jim Mullikin, Acting Director
- Technological Hazards Division (NPD-THD), Jim Kish, Director
- National Integration Center (NPD-NIC), John Bridges, Assistant Administrator
- Community Preparedness Divison (NPD-CPD), Borck Bierman, Director
- Preparedness Coordination Division (NPD-PCD), Andy Mitchell, Director (**FEMA**, *NPD*, 2008, Slide 1 of 22)

FEMA National Preparedness Directorate (NPD) Preparedness Coordination Division (PCD), Key Programs and Functions, (Andy Mitchell, Director):
- Provides State and local Council Support
- Regional Preparedness Coordination
- Strategic Consulting (**FEMA**, *NPD*, 2008, Slide 1 of 22)

FEMA National Preparedness Directorate (NPD) Technological Hazards Division (NPD-THD), Key Programs and Functions (Jim Kish, Director**):**
- Radiological Emergency Preparedness Program (REP)
- Chemical Stockpile Emergency Preparedness Program (CSEPP)
- Alert Notification and Warning Coordination
- Protective Action Guides for RDD/IND
- HAZMAT Response
- CERCLA/ Superfund (**FEMA**, *NPD*, 2008, Slide 1 of 22)

FEMA National Radio System (FNARS): "…provides the President and other federal officials with resilient and assured voice + data networks with connectivity to FEMA Regions, State

Emergency Operations Centers (EOCs), key IPAWS facilities, and other locations to help meet information sharing requirements at any time, across the full threat spectrum." (**DHS**, *FEMA OMA FY 2009*, 2008, 15)

FEMA – New FEMA Initiative (2007): "Last fall, Congress passed and the President signed into law the FY 2007 Homeland Security Appropriations Act (P.L. 109-295), which included PKEMRA. The legislation reorganizes DHS and reconfigures FEMA to include consolidated emergency management functions, including national preparedness functions. Significantly, and consistent with the lessons learned, the new FEMA has not simply tacked on new programs and responsibilities to an existing structure. Rather, we conducted a thorough assessment of the internal FEMA structure, including new and existing competencies and responsibilities within FEMA. On April 1 of this year, this new and expanded FEMA was formally established. This new organization reflects the expanded scope of FEMA's responsibilities—and the core competencies that we are seeking to establish and enhance. It supports a more nimble, flexible use of resources. It strengthens coordination among FEMA elements and with other DHS components. It enables FEMA to better coordinate with agencies and departments outside of DHS. It also delivers enhanced capabilities to our partners at the State, local and tribal governments and emergency management and preparedness organizations at all levels, and engages the capabilities and strengths that reside in the private sector." (**FEMA**, Statement of R. David Paulison, FEMA/DHS, House Cmt. on Oversight & Gov. Reform, July 31 2007)

FEMA NIMS Integration Center: "The NIMS Integration Center is charged with administering and implementing a consistent nationwide model to enable federal, state, local and tribal governments and private-sector and nongovernmental organizations to work together to prepare for, prevent, respond to and recover from domestic disaster incidents." (**FEMA**, *Albert H. Fluman, Director – NIMS Integration Center Training*, December 27, 2006)

FEMA Office of Chief Counsel (OCC): "The Office of Chief Counsel (OCC) provides professional legal services to the Administrator, FEMA senior leadership, and the DHS General Counsel on all legal and policy matters before the agency and its organizational elements to support and facilitate the mission and reducing obstacles to the achievement of DHS and FEMA goals. The OCC provides legal assistance to the agency's diverse mission elements, including services related to acquisition, grants, and property management; alternative dispute resolution; budgetary and fiscal law; ethics and contractor integrity; human capital management, labor relations, and equal opportunity; information, intellectual property and privacy matters; legislation and regulations; litigation and claims; and policy coordination. OCC also provides legal assistance through Field Attorneys, who are located across the United States." (**DHS**, *FEMA FY09 OMA*, 2008, 42)

FEMA Office of Equal Rights: "The Office of Equal Rights (OER) serves the agency and the Nation by promoting affirmative employment, and a discrimination-free workplace, and equal access to FEMA programs and benefits. OER encompasses the following activities and elements:

- Civil Rights Program
- Equal Employment Opportunity (EEO) Program." (**DHS**, *FEMA FY09 OMA*, 2008, 41)

FEMA Office of External Affairs: "The Office of External Affairs provides operational services and leadership oversight to FEMA's mission for Legislative Affairs, Public Affairs, Intergovernmental Affairs and International Affairs." (**DHS**, *FEMA FY 2009 OMA*, 2008, 40)

FEMA Office of Management: "The Office of Management (OM) provides operational services and leadership oversight to FEMA's mission for Human Capital Planning, Acquisition Management, Records and Document Management, Facilities Management, Security Services and Information Technology Services." (**DHS**, *FEMA FY 2009 OMA Budget*, 2008, 36)

FEMA Office of Policy and Program Analysis: "Formed in October 2006, the Office of Policy and Program Analysis is responsible for providing leadership, analysis, coordination and decision-making support on agency policies, plans, programs and key initiatives. Office of Policy and Program Analysis encompasses the following activities and elements:
• *Defense Production Act (DPA) Program* provides guidance and coordination for the use of DPA authorities by Federal and State governments and the private sector on the use of DPA authorities to expedite the procurement of critical supplies for national defense and homeland security purposes.
• *Policy* provides guidance and coordination for the agency's policy system and represents the agency on department-level policy matters.
• *Program Analysis & Evaluation* (PA&E) provides the agency's leadership with objective, comprehensive analyses of current and proposed FEMA programs and provides recommendations concerning program operations and alignment of objectives and resources with strategic priorities.
• *Strategic Planning* provides guidance and coordination in order to help the agency make innovative and informed decisions about FEMA's long term direction, and to facilitate integrated strategic planning and decision-making.
• *Transformation Management* provides centralized organizational change management across the agency by providing the expertise and structure to execute agency-level projects and the continuity to ensure that change efforts lead to cumulative agency improvements that make FEMA better, stronger, and faster." (**DHS**, *FEMA OMA FY2009 Budget Justification*, 2008, 32)

During FY 2008 the Office of Policy and Program Analysis will:
• "Employ a business approach to the way we do business by establishing program analysis that provides a basis for institutionalizing a results oriented, return-on-investment management culture. This will help improve FEMA's ability to connect program budgets to strategy and policy, providing the FEMA Administrator with sound program analyses to help determine priorities among FEMA's many competing resource needs.
• Establish a standardized policy system that helps identify potential conflicts across policies and that allows quick and easy retrieval of FEMA policies for all users, internal and external.
• Fully implement the Executive Management System (EMS) to manage a concurrence clearance process, collecting feedback in a central location for thousands of documents. EMS will also become a data repository for FEMA documents and information, with built-in search functions and the ability to report on the status of documents." (**DHS**, *FEMA OMA FY2009 Budget Justification*, 2008, 33)

FEMA Office of Strategy and Innovation: "In 2006, FEMA created an Office of Strategy and Innovation to assist the Agency in guiding the process of long-term change and transformation of FEMA, and appointed Ms.[Patricia] Stahlschmidt as Director. The office leads FEMA's strategic analysis and planning efforts, and provides project management support to achieve the Agency's strategic objectives." (FEMA, *Pat. Stahlschmidt, Director of Strategy and Innovation*, 1Apr07)

FEMA Office of the Executive Secretariat (OES): "…serves as the primary point of contact for FEMA and the Office of the Administrator for coordinating and providing information on departmental taskings, briefing materials and official correspondence to and from FEMA." (FEMA, *Elizabeth Edge, Executive Secretary, Office of the Executive Secretariat*, 2007)

FEMA Operational Core Competencies: (**FEMA**, *Vision for New FEMA*, Dec. 12, 2006, p. 4)

- Incident Management
- Operational Planning
- Disaster Logistics
- Emergency Communications
- Service to Disaster Victims
- Continuity Programs
- Public Disaster Communications
- Integrated Preparedness
- Hazard Mitigation (See, as well, "FEMA Core Competencies," 2007)

FEMA Operational Guidance Levels (2000): "FEMA has developed four levels of operational guidance for use by emergency teams and other personnel involved in conducting or supporting disaster operations….

- Level 1, Overview: A brief concept summary of a disaster-related function, team, or capability.
- Level 2, SOP or Operations Manual: A complete reference document, detailing the
- procedures for performing a single function (Standard Operating Procedure), or a number of interdependent functions (Ops Manual).
- Level 3, Field Operations Guide (FOG) or Handbook: A durable pocket or desk guide, containing essential nuts-and-bolts information needed to perform specific assignments or functions.
- Level 4 Job, Aid: A checklist or other aid for job performance or job training." (**FEMA**, *Urban Search and Rescue (US&R) Incident Support Team (IST) In Federal Disaster Operations* (Draft Operations Manual, 9356.2-PR), January 2000, 2 of 242)

FEMA Operational Planning Unit: "In depth operational planning, led by Disaster Operation's [Directorate] current Operational Planning Unit, is a core competency of the agency. This planning includes detailed and critical disaster response operational analyses, preparation of operational plans, and crisis action planning to ensure that the agency can lead and improve national all-hazard disaster responses. More specifically, the Operational Planning Unit will:

o Provide national and regional operational planning guidance and coordination.
o Coordinate at the operational level the execution of all hazard contingency plans.

- o Provide forecasting and analysis of potential events.
- o Assist FEMA Regions in operational planning at the regional level.
- o Lead the development of DHS and FEMA hazard-specific contingency plans.

"Operational response planning efforts are closely coordinated with FEMA's National Preparedness Program, Disaster Assistance Directorate, Mitigation Directorate, and DHS components, including the DHS Incident Management Planning Team (IMPT). FEMA will lead the coordinated planning for the Federal Government consistent with the intent of PKEMRA." (**DHS**, *FEMA OMA FY 09 Budget Justification*, 2008, 21)

FEMA Operations Center (FOC), Mt Weather, VA: "The function that serves as the official notification point of an impending or actual disaster or emergency. This facility maintains a 24-hour capability to monitor all sources of warning/disaster information." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 52)

FEMA Operations Center (FOC), Mt Weather, VA: "The FEMA Operations Center (FOC) supports the NRCC with a 24-hour watch. The FOC implements notifications to the Departments and Agencies that support the NRCC as well as activating emergency management staff. The FOC receives, analyzes, and disseminates all-hazards information within FEMA and DHS and to Departments, Agencies, and disaster response team members. The FOC, in coordination with the NOC, facilitates distribution of warnings, alerts, and bulletins to the emergency management community using a variety of communications systems such the National Alert and Warning System, the Washington Area Warning System, and the National-level Emergency Alert System." (**FEMA**, *Statement (Prepared) of Glenn Cannon*, November 15, 2007, p. 6)

FEMA Operations Center (FOC), Mt. Weather, VA: "A continuously operating entity of the Department of Homeland Security responsible for monitoring emergency operations and promulgating notification of changes to the COGCON status." (**HSC**, *NCPIP*, August 2007, p. 62; **DHS**, *FCD 1*, Nov 2007, P-5)

FEMA Operations, Management and Administration (OMA) Account Mission Statement: "The FEMA Operations, Management and Administration (OMA) appropriation provides core mission funding for the development and maintenance of an integrated, nationwide capability to prepare for, mitigate against, respond to, and recover from the consequences of major disasters and emergencies, regardless of cause, in partnership with other federal agencies, state, local and tribal governments, volunteer organizations, and the private sector. The account supports core operations for all FEMA organizations, providing resources for mission activities and administrative support. OMA resources are directed to both regional and headquarters operations." (**DHS**, *FEMA OMA FY 2009 OMB Budget Justification*, Jan 2008, 3)

FEMA Public Assistance Program (PA): "The PA Grant Program provides assistance to states, local governments, and certain nonprofit organizations to alleviate suffering and hardship resulting from major disasters or emergencies declared by the President. It provides supplemental federal disaster grant assistance for the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private non-profit organizations." (**DHS**, *FEMA OMA FY 2009 OMB Budget Justification*, Jan 2008, 25)

FEMA Readiness, Prevention and Planning Division: "…within the FEMA National Preparedness Directorate, the Readiness, Prevention and Planning division will be the central division within FEMA responsible for preparedness policy and planning functions. This expanded division will likely include FEMA's catastrophic planning activities and the following offices: (1) Exercise & Evaluation; (2) Contingency Preparedness; (3) Preparedness Doctrine & Policy; (4) Citizen Corps; and (5) the Chemical Stockpile Emergency Preparedness Program and the Radiological Emergency Preparedness program. The Readiness, Prevention and Planning division will be responsible, among other functions, for coordinating HSPD-8 (National Preparedness) implementation, the National Assessment and Reporting System, Nationwide Plan Review, the Federal Preparedness Coordinator program, and coordinating with the approximately 2,100 Citizen Corps Councils in all of the States and territories and the numerous governmental and non-governmental Citizen Corps partners." (**FEMA**, *Statement for the Record R. David* Paulison, February 28, 2007, p. 4)

FEMA Re-Engineering: "Speaking on the side of the federal government, one of the first things we have to do is to re-engineer FEMA so that this agency can maximize its role supporting response and recovery efforts and providing the necessary assistance to state and local communities when those communities call on FEMA for support. Well, what does that re-engineering mean? It means developing a more effective distribution and delivery system for supplies, more efficient business processing and disaster registration systems, and enhanced communication capabilities.

"The reality is that FEMA is a 20th century organization and we are now in the 21st century. And there are processes and tools that we do see working around us in the private sector and in other areas of the government that we must adapt and apply to FEMA.

"The fact of the matter is, we want to have FEMA's distribution and logistics system -- the ability to move people and goods in support of emergency responders -- emulate the best of private sector models so that we can get vital supplies and assistance to communities in a reasonable amount of time and replenish our stocks in a timely manner. But I also have to say something else. This is, after all, a shared responsibility, and that means state and local government also has to do some significant preparedness planning to make sure, particularly in those immediate hours and first few days in the aftermath of a catastrophe, particularly an unexpected catastrophe, there are available on the state and local scene those supplies that are necessary to deal with the immediate crisis after an emergency. This has to be a joint effort. It cannot be an effort that the federal government carries by itself, nor it is an effort that the states would want the federal government to carry by itself, because I think you rightly regard yourselves as leaders of state and local communities as wanting to have a major say in the way we respond to crises in your own communities. So that's why partnership is so very, very important here." (DHS, *Remarks by Homeland Security Secretary Michael Chertoff at the American Legislative Exchange Council's 2005 States and National Policy Summit*, Dec 9, 2005)

FEMA Regional Investment Officers: Prior to 2008, "Preparedness Officers." In 2008 renamed RIOs who were to "assume increased responsibilities for grant-related consulting, monitoring preparedness investments, assessing improvements in capabilities, and ensuring

project compliance with national, State, and local strategies for grant management functions, [while] Headquarters retains responsibility for the management of grant programs that have not yet migrated to the field." (**FEMA**, *Regional-National Preparedness CONOPS*, 8Feb2008, 6)

FEMA Regional Offices. "FEMA has ten regional offices, each headed by a Regional Administrator. The regional field structures are FEMA's permanent presence for communities and States across America. The staff at these offices support development of all-hazards operational plans and generally help States and communities achieve higher levels of readiness. These regional offices mobilize FEMA assets and evaluation teams to the site of emergencies or disasters." (**DHS**, *NRF Comment Draft*, September 2007, 58) The locations are:

FEMA Region I:	Boston
FEMA Region II:	New York City
FEMA Region III:	Philadelphia
FEMA Region IV:	Atlanta
FEMA Region V:	Chicago
FEMA Region VI:	Denton, TX
FEMA Region VII:	Kansas City
FEMA Region VIII:	Denver
FEMA Region IX:	Oakland
FEMA Region X:	Seattle

FEMA Regional Preparedness and Analysis and Planning Officers: "…serve as the critical link between the operational planning and administrative activities at the Regional Office with the preparedness initiatives at the National Preparedness Directorate." (**FEMA**, *Regional-National Preparedness CONOPS*, 8Feb2008, 15)

FEMA Response & Recovery Grant Programs: "The second major category of grants [Prevention & Protection being the 1st] is the Response & Recovery Programs which includes two additional grant programs which provide resources to support preparedness projects that build state and local capabilities to support the Response and Recovery mission area as outlined in the National Preparedness Guidelines, the Target Capabilities List, and National Strategy for Homeland Security of 2007. In FY 2009, FEMA requests $215 million for Homeland Security Response and Recovery Programs, which includes Emergency Management Performance Grants (EMPG) [received $300m FY 2008], and the Citizen Corps Program (CCP). The EMPG Program provides funds to support emergency management initiatives at the state and local level, and improve mitigation, preparedness, response, and recovery capabilities for all hazards. The Citizen Corps Grant Program (CCP) is the Department's grass-roots initiative to actively involve all citizens in hometown preparedness through personal readiness, training, and volunteer service." (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*, March 11, 2008)

FEMA Responsibilities: "FEMA manages and coordinates the federal response to and recovery from major domestic disasters and emergencies of all types in accordance with the *Robert T. Stafford Disaster Relief and Emergency Assistance Act*. It ensures the effectiveness of

emergency response providers at all levels of government in responding to terrorist attacks, major disasters, and other emergencies. Through the Disaster Relief Fund, FEMA provides individual and public assistance to help families and communities impacted by disasters rebuild and recover. FEMA also administers hazard mitigation programs to prevent or to reduce the risk to life and property from floods and other hazards. In addition to administering the National Incident Management System (NIMS), in FY 2007, FEMA's role as the lead federal agency for incident management, preparedness, and response was expanded to include the administration of the Department of Homeland Security's grant programs and the United States Fire Administration. The inclusion of these programs within FEMA reinforces the Department's focus to provide the Nation with unified, coordinated, and robust all-hazards preparedness and response capability at all levels of government including federal, state, tribal, and local government personnel, agencies, and regional authorities." (**DHS**, *Budget-in-Brief Fiscal Year 2008*, 2007. pp. 61-62)

FEMA Retooling (2005): "As we complete our after action reports[Hurricane Katrina], in the short term, there are several immediate steps we can take to begin strengthening the system. I'd like to briefly mention a few here. First, we must re-tool FEMA and enhance this vital agency's capabilities so that it can fulfill its historic and critical mission supporting response and recovery.

"What does that re-tooling mean? It means a more effective distribution and delivery system for supplies, more efficient business processing and disaster registration systems, and enhanced communications capabilities….

"Another step we are taking to combat the lack of dependable information coming from the ground is to develop emergency reconnaissance teams that can go into a disaster area and feed back reliable, real-time information to be used at all levels of government. These teams will consist of not only FEMA disaster assistance specialists, but also Coast Guard personnel, CBP, Secret Service, and other DHS law enforcement officers and assets.

"Finally, we must move forward with the creation of a preparedness directorate as outlined under the Second Stage Review plan we released in July. Many of you are familiar with this piece of the equation as you were instrumental with advice and recommendations throughout the 2SR process. To ensure that our preparedness efforts have focused direction, we intend to integrate the Department's existing preparedness efforts -- including planning, training, exercising, and funding -- into a single directorate for Preparedness. A process that is already moving forward. The FY 06 budget contains $4 billion for this initiative, and recently, the President nominated George Foresman to be Under Secretary for Preparedness and oversee this new directorate.

"Of course, preparedness is not just about response and recovery – rather it must draw on the full spectrum – from prevention through protection to response. Our preparedness directorate will rely on the expertise of FEMA, but it will also integrate the experience and capabilities of our other operational assets including the U.S. Fire Administration, Coast Guard, ICE, Secret Service, as well as our training assets such as the Emergency Management Institute and the National Fire Academy.

"Going forward, FEMA will become a direct report to the Secretary, allowing it to focus on response and recovery while partnering with the new preparedness directorate to increase our overall capabilities in both of these important areas.

"In light of Hurricane Katrina and at the direction of the President, we are also working with federal, state and local officials to review the emergency operations plans of every major American urban area and ensure that those plans are clear, detailed, and up-to-date. This includes specifically a hard, realistic look at evacuation planning ranging from earthquakes to subway bombings. These steps are just the beginning and in the weeks and months ahead, we will move forward to build our preparedness capability and ensure that the United States is ready to meet any type of threat or disaster with which we are faced." (DHS, *Remarks by Secretary Michael Chertoff, U.S. Department of Homeland Security at the International Association of Fire Chiefs Leadership Summit*, November 4, 2005)

FEMA Small State and Rural Advocate: "…ensures that the needs of rural communities are addressed in the disaster declaration process and assists small population states in preparing their requests for disaster declarations." (**FEMA**, *Small State and Rural Advocate*, Sep 11, 2007)

FEMA Special Events Operations Division: "This division [Disaster Operations Directorate] supports the readiness capabilities and planning for designated National Special Security Events to ensure an effective response to possible emergencies, to ensure public health and safety, and to protect property against threats or acts of terrorism. Support generally consists of activating operations centers and liaisons and is dependent upon the needs identified for each event." (**DHS**, *FEMA OMA FY 2009 OMB Budget Justification*, 2008, 22)

FEMA/State Agreement: "A formal legal document stating the understandings, commitments, and binding conditions for assistance applicable as a result of a major disaster or emergency declared by the President. The agreement imposes binding obligations on FEMA, States, their local governments and private non-profit organizations within States in the form of conditions for assistance, which are legally enforceable. No DFA will be authorized until the FEMA/State Agreement has been signed, except where it is deemed necessary to begin the provision of essential emergency services or temporary housing." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 52)

FEMA Strategic Goals (1997): "FEMA has adopted two mission-related goals and one organizational goal to guide its internal management and its leadership role in the national emergency management partnership. These goals are:

1. Protect lives and prevent the loss of property from all hazards.
2. Reduce human suffering and enhance the recovery of communities after disaster strikes.
3. Ensure that FEMA serves the public in a timely and cost-efficient manner." (**FEMA**, *Strategic Plan, FY 1998-2002*, 1997, p. 12)

FEMA Strategic Goals (2008):

- Strategic Goal 1: Extend and Enhance FEMA Operational Capability (p. 1)

- Strategic Goal 2: Build Capability and Readiness for Catastrophic Disasters (p. 15)
- Strategic Goal 3: Optimize Insurance and Mitigation Programs (p. 23)
- Strategic Goal 4: Transform FEMA's Culture to Maximize Mission Performance (p. 27) (**FEMA**, *FEMA Region III Annual Report FY 2007*, Feb. 2008)

FEMA Strategic Plan (2002): "Over the past many months, we conducted an in-depth analysis within the Agency and met with our partners and stakeholders from around the Nation to develop the Strategic Plan. Wherever we met, several themes emerged that helped inform our work:

- leadership;
- partnership;
- building capability at all levels;
- setting standards for performance; and
- bringing emergency managers and first responders together to train and exercise to those standards." (**FEMA**, *Strategic Plan*, 2002, Message from Director Joe M. Allbaugh, p. ii)

FEMA Strategic Plan (2007): "FEMA's Strategic Plan builds on the vision and a comprehensive and integrated mission statement to provide the agency with a defined and clear pathway for the future. This Plan differs from previous FEMA Strategic Plans in that it moves away from the focus on individual component missions to a much broader and integrated goal structure. This is intended to break down the organizational "stove-pipes" inherent in the former goal structure and send a message that FEMA components must combine their efforts and efficiently use resources toward a common strategic direction and integrated outcomes under the New FEMA. The overarching themes apply to each goal and objective within the Plan. These themes are key to FEMA's future success and highlight what the agency values, both from an individual and organizational standpoint in building *The Nation's Preeminent Emergency Management and Preparedness Agency*." (**FEMA**, *Strategic Plan*, 2007, p. 10)

FEMA Strategic Plan Goals (2007):

1. An integrated approach that strengthens the Nation's ability to address disasters, emergencies, and terrorist events
2. Easily accessible and coordinated assistance for all programs
3. Reliable information at the right time for all users
4. FEMA investment in people and people's investment in FEMA to ensure mission success
5. A business culture that rewards performance and stewardship and builds public trust and confidence (**FEMA**, *Strategic Plan*, 2007, p. 2)

FEMA Strategic Plan Goals (2008):

1. Lead an integrated approach that strengthens the Nation's ability to address disasters, emergencies, and terrorist events
2. Deliver easily accessible and coordinated assistance for all programs
3. Provide reliable information at the right time for all users
4. FEMA invests in people and people invest in FEMA to ensure mission success
5. Build public trust and confidence through performance and stewardship

(**FEMA**, *FEMA Strategic Plan, Fiscal Years 2008-2013* (FEMA P-422), January 2008, p. iii)

FEMA Strategic Plan Goals (2007/2008) – Goal #1: An integrated approach that strengthens the Nation's ability to address disasters, emergencies, and terrorist events:

"FEMA will actively engage all partners, public and private, in building a national emergency management system that strengthens the Nation's ability to protect its citizens and prepare for, mitigate against, respond to, and recover from disasters, emergencies, and terrorist events. Key to this effort is working with these partners to develop relationships, programs, processes, and agreements that build and better leverage existing resources in preparing the public and local entities to care for themselves. This will result in a Nation that is comprehensively prepared to reduce the loss of life and property that often results from natural disasters and man-made incidents." (**FEMA** *Strategic Plan*, 2007, p.12; (**FEMA** *Strategic Plan, FY 2008-2013*, 2008, iii)

FEMA Strategic Plan Objectives -- Goal 1 Sub-Objectives (2008):

- **Objective 1.1** Build a culture of preparedness across the Nation for all hazards.
- **Objective 1.2** Conduct, promote, and communicate the identification and analysis of risk and capabilities as the basis for action.
- **Objective 1.3** Promote physical and economic loss reduction measures.
- **Objective 1.4** Engage stakeholders in developing and communicating clear national doctrine and policy, both internally and externally.
- **Objective 1.5** Ensure the Nation's jurisdictions have adequate plans and programs to effectively address all hazards and minimize loss of life and property.
- **Objective 1.6** Professionalize the national emergency management system and the training that supports it.
- **Objective 1.7** Strengthen and validate national capabilities through education, exercises, training, and evaluation.
- **Objective 1.8** Maintain a high level of FEMA readiness to respond to disasters and emergencies. (**FEMA** *Strategic Plan, FY 2008-2013*, 2008, pp. 9-17)

FEMA Strategic Plan Objectives -- Goal # 2 Deliver easily accessible and coordinated assistance for all programs.

"When disasters do strike, FEMA will work closely with its public and private sector partners to improve the delivery of timely and appropriate assistance for all FEMA programs. The agency will examine and implement simple and effective delivery mechanisms, establish clear and measurable results, focus on improving customer service, and minimize opportunities for waste, fraud, and abuse."

FEMA Strategic Plan Objectives -- Goal 2 Sub-Objectives (2008):

- **Objective 2.1** Formulate and administer financial assistance programs that are aligned with strategic objectives and delivered through a simple and coordinated process.
- **Objective 2.2** Improve the delivery of disaster assistance while minimizing opportunities for waste, fraud, and abuse.

- **Objective 2.3** Effectively lay the foundation to meet the immediate needs of disaster victims and begin community recovery. (**FEMA** *Strategic Plan, FY 2008-2013*, 2008, 19-21)

FEMA Strategic Plan Objectives -- Goal # 3 Provide reliable information at the right time for all users.

"FEMA will serve as a primary source of the Nation's emergency management information before, during, and after disasters and emergencies, ensuring that the federal government speaks to the public with a single, coordinated voice both during non-disaster periods and during national emergencies." (**FEMA** *Strategic Plan, FY 2008-2013*, 2008, 22)

FEMA Strategic Plan Objectives -- Goal 3 Sub-Objectives (2008):

- Objective 3.1 Collect and share information on FEMA's policies, programs, and activities with employees, partners, and stakeholders on a consistent basis.
- Objective 3.2 Build a robust disaster communications program that provides "real time" reliable information before and during events.

(**FEMA** *Strategic Plan, FY 2008-2013*, 2008, PP. 23-)

FEMA Strategic Plan Overarching Themes (2007/2008):

- Clear and well communicated doctrine
- Customer-focused, field-based, and results-oriented mission delivery
- Compassionate program and service delivery to all populations
- Strong leadership, teamwork, and accountability at all levels
- Professional workforce of motivated employees that are empowered and equipped to act
- Strong partnerships that leverage capabilities and capitalize on public-private efficiencies
- Business approach to achieving desired results with a strong foundation in technology.

(**FEMA**, *Strategic Plan*, 2007, pp. 2, 8-10; **FEMA** *Strategic Plan, FYs 2008*-13, Jan 2008, 4-6)

FEMA Values: See "FEMA Core Values."

FEMA Vision (1987): "The vision for FEMA is expressed in the title of the Agency's strategic plan: *Partnership For A Safer Future*…. The vision of an effective 'Partnership for a Safer Future' for America is:

- An informed public protecting their families, homes, workplaces, communities, and livelihoods from the impacts of disasters;

- Communities built to withstand the natural hazards which threaten them;

- Governmental and private organizations with plans, necessary resources, and rigorous training and exercising for disaster response, and

- Community plans, prepared in advance, for recovery and reconstruction after a disaster." (**FEMA**, *Strategic Plan FY 1998 – FY 2002*, 1987, p. 10)

FEMA Vision (2007): "The Nation's Preeminent Emergency Management and Preparedness Agency." (**FEMA**, *Strategic Plan*, 2007, p. 2)

FEMA Vision (2007/2008): "FEMA's vision is to transform the agency into *The Nation's preeminent Emergency Management and Preparedness Agency* – the New FEMA." (**FEMA**, *Strategic Plan*, 2007, p. 2; **FEMA**, *Strategic Plan, Fiscal Years 2008-2013*, January 2008, p. iii)

FEMA Vision (2008): "To regain the trust and confidence of the American people, we will transform FEMA into the Nation's Preeminent Emergency Management Agency. To do this, we must…
Strengthen core capabilities, competencies and capacities -- Fostering a national emergency management system and implementing a cohesive national preparedness system must begin by strengthening the foundational building blocks of a weakened but venerable agency. The nation needs a strong FEMA; but that cannot be achieved without purposeful new investments.
Build Strong Regions....
Strengthen our partnerships with States….
Professionalize the national emergency management system....
Marshall an effective national response….
Deliver service of value to the public....
Reduce vulnerability to life and property….
Instill public confidence -- FEMA will demonstrate mission effectiveness and efficiency, in proper balance, to regain the trust, faith and confidence of the American public.
Organizationally, no asset should be more prized, or more dear when lost, than the confidence of the public we serve. We will work with our many partners to build an Agency the nation can once again look to with pride." (**FEMA**, *FEMA Region III Annual Report FY 2007*, 2008, 6-7)

FEMA Vision Building Blocks (2007): "In October 2006, Congress passed the Post-Katrina Emergency Management Reform Act, which included a more robust preparedness mission for FEMA. It was clear that a new strategic plan would be needed to help develop the core competencies required to address the all-hazard threats of the future and the expanded mission. Thus, in late 2006 and again in the summer of 2007, our leadership team met to craft the implementation of a new vision for the agency that would forge an innovative and dynamic FEMA – a New FEMA – that would regain the trust and confidence of the American people. Discussions with our partners and stakeholders led us to identify solid building blocks to achieve this vision:

- strengthening the agency's core competencies,
- building strong regions,
- enhancing current and creating new partnerships,
- investing in FEMA employees,
- developing a business approach to achieving desired results, and
- professionalizing the national emergency management system." (**FEMA**, *Strategic Plan*, 2007, p. 1 (Message from the Administrator, R. David Paulison); see, also p. 5)

FEMA Vision Initiatives (2007): "An increase of $100 million is requested [FY 08] for FEMA's **Vision Initiatives** that will enable the agency to intensify and speed the development of

core competencies that are central to achieving its disaster readiness, response and recovery mission. A combination of staffing increases, new technologies, and targeted investment in equipment and supplies, will increase FEMA's mission capacity in the areas of Incident Management, Operational Planning, Continuity Programs, Public Disaster Communications, Hazard Mitigation, Disaster Logistics, and Service to Disaster Victims." (**DHS**, *Goal 4: Build a Nimble*, 8 Feb 2007)

FEMA Vision Initiatives (2007/2008): "The budget requested [FY 08] reflects the first year of a three-year phased approach that will improve the core competencies necessary to meet FEMA's commitment to serve the public and be the Nation's Preeminent Emergency Management Agency. Included in the request is a $100 million increase for FEMA's Vision Initiatives, including staffing increases at Headquarters and in the Regions, new technologies, and targeted investment in equipment, supplies and the professional training and development of our people that will support emergency management efforts across preparedness, protection, mitigation, response, and recovery." (**FEMA Director David Paulison,** Feb 8, 2007 email to employees on FY 2008 Budget Request)

FEMA Vision Initiatives (2008): "Activities reflect the continuing implementation of FEMA Vision initiatives launched in FY 2007 and FY 2008, including a focus on developing core competencies and the integration of expanded preparedness functions….activities will continue to build on FY 2007 successes in the areas of:

- Creating "engaged partnerships" with state and local governments.
- Facilitating and supplying an effective unified command across all levels of government.
- Engaging hurricane-prone states to gain a better understanding of their vulnerabilities.
- Improving logistics and communications capabilities to improve response.
- Enhancing disaster assistance capabilities for recovery efforts." (**DHS**, *FEMA OMA FY 2009*, 2008, 9)

FERN: Food Emergency Response Network. (*NRF-Biological Incident Annex*, 2008, 4)

FF-90-129: Mission Assignment Form. (**FEMA**, *Mission Assignment SOPs…Draft*, 2007, 19)

FFIEC: Federal Financial Institutions Examination Council. (**FEMA**, *Call for…*, 2000, xxiii)

FFRDC: Federally Funded Research and Development Center.

FGC: Fire Ground Command System. (**FEMA**, *NIMS and ICS*, 2004)

FHCF: Florida Hurricane Catastrophe Fund.

FHWA: Federal Highway Administration, U.S. Department of Transportation.

Field Assessment Team (FAsT): "A Federal Team developed to perform rapid initial (field) assessment. This team is intended to be employed within the first hours after a disaster. These teams are small and self-sufficient. They will focus on time sensitive and emergency need

requirements." (**USACE**, *Response Planning Guide*, 1995, p. B-2; see also **FEMA**, *SLG 101*, 1996, p. 7-4))

Field Intelligence Support Teams (FIST), U.S. Coast Guard: "The U.S. Coast Guard operates Field Intelligence Support Teams (FIST) at each of its operating units, which collect and disseminate information through day-to-day patrol observations and outreach to port operators, harbor masters, fishing and commercial vessel operators, Federal and State fishery and environmental enforcement officers, and maritime industry representatives. These reports provide a constant flow of information updating local commanders of changing trends in maritime operations in the Nation's ports, waterways, and coastal and offshore waters. FIST members perform this responsibility as one part of their overall patrol responsibilities and not as specialized "intelligence" officers. Sensitive information can be classified and disseminated through designated intelligence channels for analysis by the Coast Guard's intelligence officers. More frequently, however, the information is unclassified and used to build greater situational awareness of all patrolling boat, cutter, and air crews to help them understand their operating environment and be better prepared to detect anomalies indicative of illicit activity. It is also shared with other Federal and State agencies to improve their understanding of regional maritime activity…" (**DHS**, *Capstone Doctrine Pub 1 Version 2.1 Draft*, Ch. 8, Info. Ops., 2008, p. 8-3)

Field Operations Guide (FOG): "A pocket-sized manual of instructions on the application of the Incident Command System (ICS)." (**FEMA**, *Mission Assignment SOPs Draft*, July 2007, 52)

Final Planning Conference (FPC), HSEEP: "The FPC is the final forum for the *exercise planning team* to review the process and procedures for exercise conduct, final drafts of all exercise materials, and all logistical requirements. There should be no major changes made to either the design or the *scope* of the exercise, nor to any supporting documentation, at the FPC. The FPC ensures all logistical requirements have been arranged, all outstanding issues have been identified and resolved, and all exercise products are ready for printing." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Finance/Administration Section (ICS): "The section that provides accounting, procurement, administrative and cost analysis services. Monitors costs associated with the incident. (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 53)

Financial Services Sector Coordinating Council for Critical Infrastructure Protection and Homeland Security (FSSCC): "…a group of more than 30 private-sector firms and financial trade associations that works to help reinforce the financial services sector's resilience against terrorist attacks and other threats to the nation's financial infrastructure. Formed in 2002, FSSCC works with the Department of Treasury, which has direct responsibility for infrastructure protection and homeland security efforts for the financial services sector, while also serving under the overall guidance of the Department for Homeland Security." (**FSSCC**, Jan 2008)

FIPNC: Federal Insurance Producers National Committee. (**FEMA**, *Call for Issues*, 2000, xxiii)

FIRA: Flood Insurance Reform Act of 2005. (**FEMA**, *Region III Annual Report FY 2007*, 26)

Fire: "Each year, more than 4,000 Americans die and more than 25,000 are injured in fires, many of which could be prevented. Direct property loss due to fires is estimated at $8.6 billion annually. Fire spreads quickly; there is no time to gather valuables or make a phone call. In just two minutes, a fire can become life-threatening; in five minutes, a residence can be engulfed in flames." (**FEMA**, "Fact Sheet – Fires," February 2007, p. 1)

Fire Corp: "…launched last December [2004] with 13 local fire departments – today, there are more than 370 departments actively involved in 45 states and Guam…. Last December, you [IAFC] partnered with us to launch the Fire Corps initiative – a component of Citizen Corps designed to serve two strategic purposes. One by tapping citizens to provide administrative support, firefighters are free to focus on the specialized training and duties of your life-saving work. And two it engages citizens in the work of emergency preparedness, motivating them to address the safety of their homes and communities and spreading the message of shared responsibility to neighbors and friends." (**DHS**, *Remarks by Secretary Michael Chertoff, U.S. Department of Homeland Security at the International Association of Fire Chiefs Leadership Summit*, November 4, 2005)

Fire Ground Command System (FGC): "In the early 1970s, the Phoenix Fire Department developed the Fire Ground Command System (FGC). The concepts of FGC were similar to FIRESCOPE ICS but there were differences in terminology and in organizational structure. The FGC system was developed for structural firefighting and was designed for operations of 25 or fewer companies." (**FEMA**, *NIMS and ICS*, 2004)

Fire Management Assistance Grant Program (FMAGP): "Fire Management Assistance is available to States, local and tribal governments, for the mitigation, management, and control of fires on publicly or privately owned forests or grasslands, which threaten such destruction as would constitute a major disaster. The Fire Management Assistance declaration process is initiated when a State submits a request for assistance to the FEMA Regional Director at the time a "threat of major disaster" exists. The entire process is accomplished on an expedited basis and a FEMA decision is rendered in a matter of hours. The…FMAGP provides a 75 percent Federal cost share and the State pays the remaining 25 percent for actual costs. Before a grant can be awarded, a State must demonstrate that total eligible costs for the declared fire meet or exceed either the individual fire cost threshold - which is applies to single fires, or the cumulative fire cost threshold, which recognizes numerous smaller fires burning throughout a State. Eligible firefighting costs may include expenses for field camps; equipment use, repair and replacement; tools, materials and supplies; and mobilization and demobilization activities." (**FEMA**, *FMAGP*)

Fire Management Assistance Grants: "Fire Management Assistance Grants…provide support to States experiencing severe wildfires – are performed by Federal departments or agencies under their own authorities and do not require Presidential approval." (**DHS**, *NRF*, 2008, 42)

Firefighters and Organizations: "America's 1.1 million firefighters are spread across 30,300 fire departments…" (**DHS,** Chapter 2, *Capstone Doctrine Pub Draft*, Feb 2008, p. 2)

Fire Service (FS): "Individuals who, on a full-time, part-time, or voluntary basis, provide life-safety services, including fire suppression, rescue, arson investigation, public education, and prevention." (**FEMA**, *TIE/TO Course Catalog*, 2008, p. 2)

FIRESAT/IHIS: FIRESAT (previously called the Integrated Hazard Information System) was transferred from the National Oceanic and Atmospheric Administration (NOAA) to DHS, and its name was changed to 'FIRESAT' [in 2002]. IHIS, originally named the "Hazards Support System (HSS), was a classified information system developed by the Department of Defense (DOD) in 1997 to compile data obtained from various satellites and sensors, such as those used to detect ballistic missiles and others which continuously monitor weather conditions in the United States. The Raytheon Company built HSS at a cost of nearly $27 million. In late 2000, after DOD tested the system, HSS was turned over to the U.S. Geological Survey (USGS) in the Department of the Interior and renamed IHIS, where it would be used to detect wildfires and volcanic eruptions around the world. However, Congress directed USGS to cease expenditures on IHIS, apparently because of concerns about unauthorized reprogramming of those funds. Since then, no funding has been authorized for IHIS. The agreement by Congress and the Administration to move IHIS to DHS included "the transfer of workstations, software, documentation, and its communications component." (**CRS**, *EPR Directorate of DHS*, 20034)

FIRESCOPE: *Fi*refighting *Res*ources of *C*alifornia *O*rganized for *P*otential *E*mergencies. (See ICS History)

Firewall: "Walls which are intended to be fire barriers." (**UNDHA**, *DM Glossary*, 1992, 38)

FIRM: Flood Insurance Rate Map. (**FEMA**, *Base Flood*, 2007)

FIRST: Federal Incident Response Support Team.

First Aid: "The immediate but temporary care given on site to the victims of an accident or sudden illness in order to avert complications, lessen suffering, and sustain life until competent services or a physician can be obtained." (**UNDHA**, *DM Glossary*, 1992, 38)

First Receivers: "Healthcare workers at a hospital receiving contaminated victims for treatment may be termed *first receivers*[51] (Koenig, 2003). This group is a subset of *first responders* (e.g., firefighters, law enforcement, HAZMAT teams, and ambulance service personnel). However, most first responders typically act at the site of an incident (i.e., the location at which the primary release occurred). In contrast, inherent to the definition of *first receivers*, is an assumption that the hospital is not itself the primary incident site, but rather is remote from the location where the hazardous substance release occurred. Thus, the possible exposure of first receivers is limited to the quantity of substance arriving at the hospital as a contaminant on victims and their clothing or personal effects (Horton et al., 2003). First receivers typically include personnel in the following roles: clinicians and other hospital staff who have a role in receiving and treating contaminated victims (e.g., triage, decontamination, medical treatment, and security) and those

[51] Referenced is Koenig K. 2003. Strip and shower: the duck and cover for the 21st Century. Annals of Emergency Medicine. 42(3): 391-394. September.

whose roles support these functions (e.g., set up and patient tracking)." (**OSHA**, *OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents…,* 2005)

First Responder: "In 95% of all emergencies, bystanders or victims themselves are the first to provide emergency assistance or to perform a rescue." (**Citizen Corps**. *Citizen Corps Uniting Communities, Preparing the Nation*, DHS, slide presentation, slide 3; cites LA Fire Department)

First Responder: "Definition: designation for a person who, in the course of their professional duties of responding to emergencies, and in the early stages of an incident, is responsible for the protection and preservation of life, property, evidence, the environment, and for meeting basic human needs. Extended definition: may be a member of a Federal, State or local emergency public safety, emergency response, emergency medical, law enforcement, fire and rescue, military, or other recognized agency and authority, including a volunteer or private organization, as well as other skilled support personnel (such as equipment operators, administrators, security personnel, etc.) who provide immediate support services during, response and protection operations." (**DHS**, *Lexicon: Terms and Definitions*, October 23, 2007, pp. 10-11)

First Responder: "A first responder is any emergency personnel who first arrives on the scene of an incident and takes action to save lives, protect property, and meet basic human needs. In most incidents, these responders are local police, fire, and emergency medical personnel." (**DHS,** *LLIS.gov Glossary*)

First Responder: "Local and non-governmental police, fire, and emergency personnel who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) who provide immediate support services during prevention, response, and recovery operations. First responders may include personnel from Federal, State, local, tribal, or nongovernmental organizations. (**DHS**, *NPG*, December 2005 Draft, p. A-1; cites **DHS**, *NRP*, December 2004)

First Responder: "Local police, fire, and emergency medical personnel who first arrive on the scene of an incident and take action to save lives, protect property, and meet basic human needs. First responders may include Federal, State, or local responders." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, P. 75 (glossary)) [Note: See 2001 USG definition below.]

First Responder: "Those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 11), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations." (**DHS**, *UTL 2.1*, 2005, p. B-1)

First Responder: "The term "first responder" refers to those individuals who, in the early stages of an incident, are responsible for the protection and preservation of life, property,

evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) who provide immediate support services during prevention, response, and recovery operations." (**FEMA**, *TEI/TO Course Catalog*, 2008, 2)

First Responder: "Refers to individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in Section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101). It includes emergency management, public health, clinical care, public works, and other skilled support personnel (e.g., equipment operators) that provide immediate support services during prevention, response, and recovery operations." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-4, Glossary)

First Responder: "The term 'first responder' shall have the same meaning as the term 'emergency response provider'." (**US Congress**, *Implementing the 9/11 Commission Recommendations Act of 2007*, August 7, 2007, p. 9)

First Responder: "Local police, fire, and emergency medical personnel who first arrive on the scene of an incident and take action to save lives, protect property, and meet basic human needs." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, Appendix B: Definitions)

First Responder: "The term "first responder" refers to those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations." (**White House**, *HSPD 8 National Preparedness*, December 17, 2003)

First Responder Partnership Initiative (FRPI): "The First Responder Partnership Initiative (FRPI) is designed as a model…to enhance cooperation and efficiency between state and local first responders and their federal counterparts…. The architecture of the card, which uses the FIPS 201 and 14443 contact list standards, will identify first responders and their qualification(s) at the site of an incident, so they may move rapidly into, out of, and within an area in a trusted and secure manner. The card will be recognized across all NCR [National Capital Region] federal, state, and local multi-jurisdictions. The smart card technology is standards-based and can serve as a platform for:

- physical access into buildings
- logical access to networks
- human resource asset accountability
- incident command and control
- property/firearms accountability
- National Incident Management System (NIMS) integration." (**DHS**, *New Smart Card System to Coordinate First Responders in the NCR*, August 25, 2005)

First Responders: "Federal, State, and local emergency public safety, law enforcement, emergency response, emergency medical (including hospital emergency facilities), and related personnel, agencies, and authorities." (**Homeland Security Act of 2002**, Public Law No. 107-296, section 2, 116.)

First Responders: "…our first responder community…law enforcement; the fire service; the emergency medical service; public officials responsible for emergency planning and response; the public health sector; transit authorities including rail and ports; and non-governmental organizations." (**Mayer** 2005, 8)

First Responders: "Emergency services organizations are often referred to as "first responders." They are responsible for detection, assessment, alerting and dispatch of specialized life support and life safety assets. All first responders have specialized training from one or more of the five aforementioned disciplines [fire, hazardous material (HazMat), search and rescue (SAR), emergency medical services (EMS), law enforcement (LE), public health, public works]."

First Responders: "…individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations." (**White House**, *HSPD 8*, 2003**)**

FIS: Flood Insurance Study/Studies (**FEMA**, 1993)

FISA: Foreign Intelligence Surveillance Act. (**FEMA**, *IIFOG Ver 3 Draft*, 2008, p. 35)

FISCAM: Federal Information System Controls Audit Manual.

FIST: Field Intelligence Support Teams, U.S. Coast Guard.

Five-Hundred Year Floodplain (or 0.2 percent chance floodplain): That area which includes the base floodplain which is subject to inundation from a flood having a 0.2 percent chance of being equaled or exceeded in any given year.

Fixed Nuclear Facility Incident Planning: "On January 24, 1973, the Office of Emergency Preparedness issued a notice in the Federal Register assigning Federal agency responsibility for fixed nuclear facility incident planning. The U.S. Atomic Energy Commission was made the leading operating agency, and DCPA was made responsible for:

(1) Assistance to State and local authorities in planning the general emergency preparedness actions required in response to nuclear accidents, consistent with AEC guidance.
(2) Recommendations and guidance on the use of the civil defense radiological monitoring system." (**DCPA**, *Foresight, DCPA Annual Report FY73*, 1974, p. 11)

Flash Burn: "A burn caused by excessive exposure (of bare skin) to thermal radiation." (**Glasstone**, *The Effects of Nuclear Weapons*, 1977, Glossary, p. 633)

Flash Flood: A flood that crests in a short period of time and is often characterized by high velocity flow—often the result of heavy rainfall in a localized area.

Flash Flood: "Flood of short duration with a relatively high peak discharge. Causes inundation, and because of its nature is difficult to forecast." (**UNDHA**, *DM Glossary*, 1992, 39)

FLCP: Florida Catastrophic Disaster Planning. (**FEMA**, *Catastrophic Disaster Planning IAEM Presentation,* Nov.12, 2007, slide 7)

FLETC: Federal Law Enforcement Training Center, DHS.

Flexibility: "A principle of the NIMS that provides a consistent, flexible, and adjustable national framework within which government and private entities at all levels can work together to manage domestic incidents, regardless of their cause, size, location, or complexity. This flexibility applies across all phases of incident management: prevention, preparedness, response, recovery, and mitigation." (**DHS**, *National Incident Management System*, March 2004, p. 2.)

Flexible (Core Principle of Emergency Management): "Flexible: emergency managers use creative and innovative approaches in solving disaster challenges." (**EM Roundtable**, 2007, p.4)

FLHUG: Florida HAZUS User Group. "…formally organized in January 2006, when the group met to elect officers, create committees, and adopt a charter…. Membership in the FLHUG allows first responders, emergency managers, and decision makers from public and private organizations to build and strengthen a cohesive, informed emergency management community that can continually create stronger and more accurate mitigation plans. People interested in disaster mitigation have learned that, as members of FLHUG, they benefit not only from the scenarios generated by HAZUS-MH, but also by the lasting working relationships they develop with colleagues in different fields. Spanning public and private domains, GIS professionals, emergency managers, researchers, medical personnel, legislative contacts, local planners, technical experts, American Red Cross workers, facility managers, and government officials can all use the FLHUG to communicate with and learn from each other—sharing resources and supporting each other's work to mitigate the risks of natural disasters. In addition to user networks, strong support from the Florida Division of Emergency Management (DEM) and FEMA Region IV has been critical to the success of Florida's coordinated statewide program." (FEMA, The Florida HAZUS User Group (FLHUG), January 1, 2008)

Flood: "An unusual accumulation of water above the ground caused by high tide, heavy rain, melting snow or rapid runoff from paved areas." (**EEA**, *EEA Environmental Glossary*, 2007)

Flood Alarm Level: "Water level which is considered to be dangerous and at which warnings should commence." (**UNDHA**, *DM Glossary*, 1992, 39)

Flood-Bypass Channel, also **Floodway:** "Channel built to divert flood flows from a point upstream of a region to a point downstream." (**UNDHA**, *DM Glossary*, 1992, 39)

Flood Control: "The management of water resources through construction of dams, reservoirs, embankments, etc. to avoid floods." (**UNDHA**, *DM Glossary*, 1992, 39; **EEA**, *EEA Environmental Glossary*, 2007)

Flood Control and Coastal Emergencies Act (33 U.S.C. § 701n (2005), commonly referred to as Public Law 84-99): The Flood Control Act "authorizes an emergency fund for preparation for emergency response to, among other things, natural disasters, flood fighting and rescue operations, repair or restoration of flood control and hurricane protection structures, temporary restoration of essential public facilities and services, and provision of emergency supplies of water." (**DHS**, *National Response Framework List of Authorities and References* (Draft), September 10, 2007, p. 4)

Flood Control Project and Plan, Federal: "The Federal flood control project is comprised of two obvious elements: the physical aspects of improvement recommended and the associated requirements of local cooperation. The intended flood control plan (i.e., the outputs from the Federal project) may, however, be dependent upon other elements as well. The assumptions made about how the Federal project improvements will function may depend upon other assumptions about the continued effectiveness of already existing non-Federal developments that shape or control flows (whether specifically intended for flood control, or not). They may reflect the assumed existence of other non-Federal developments planned but not yet in place. It is critical that the non-Federal sponsor, responsible for operation and maintenance (O&M) of the Federal project, understand the importance of all the elements that go together to make the plan function. A complete description of a plan includes all structural, nonstructural, legal, and institutional features, both proposed and existing, that contribute to the intended flood control outputs. The outputs of the plan, and of individual elements if they have separable outputs, should be quantified in understandable physical, economic and environmental terms. The operating requirements should be developed for each element requiring operation (e.g., statement of the trigger that will say it is time to close a gate and the amount of time it will take to close it). Finally, there should be explication of the overall resources required to operate and maintain the plan, i.e., manpower, equipment, cost. The requirement for definition of the plan in these terms begins in the preauthorization feasibility phase and ends with preparation of the O&M manual furnished to the non-Federal sponsor when the project is turned over…" (**USACE**, *Water Resources Policies and Authorities - Digest of Water* Resources..., 1999, 13-5)

Flood Forecasting: "Procedure for estimation of stage, its discharge values, time of occurrence, and duration of a flood, especially of its peak discharge." (**UNDHA**, *DM Glossary*, 1992, 40)

Flood Fringe: Areas outside the regulatory floodway but still inundated by the designated one percent annual chance flood (often referred to as the floodway fringe).

Flood Hazards of Special Concern, NFIP/FEMA: "The mapping and regulatory standards of the NFIP are general standards and do not address every flood problem in the United States. Certain floodplains and flood-related hazards are less common, more destructive and harder to map than riverine, coastal, alluvial fan, and shallow flooding. Special hazards include coastal

erosion, tsunamis, closed basin lakes, uncertain flow paths, dam breaks, ice jams, and mudflows." (**FEMA**, *Flood Hazards of Special Concern*, 2007)

Flood Insurance: "A report was prepared during the fiscal year by the Natural Disaster Office for use by FCDA Administer Val Peterson in support of proposed Federal legislation to provide flood insurance. The 84th Congress later enacted Public Law 1016, known as the Federal Flood Insurance Act of 1956. Besides providing from flood loss, the law requires a study and report on insurance needs against other natural disaster perils." (**FCDA**, *1956 Annual Report*, 1957, pp. 55, 57)

Flood Insurance Rate Maps (FIRMs): "As part of its administration of the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) publishes flood hazard maps, called Flood Insurance Rate Maps, or FIRMs. The purpose of a FIRM is to show the areas in a community that are subject to flooding and the risk associated with these flood hazards." (**FEMA**, "Letter of Map Amendment (LOMA)…," October 17, 2007)

Flood Insurance Reform Act of 2004 (FIRA): "On June 30, 2004, President George W. Bush signed into law the Flood Insurance Reform Act of 2004 (FIRA). The FIRA has two main purposes: 1) to reauthorize the National Flood Insurance Program (NFIP or Program) through September 30, 2008; and 2) to establish a pilot program aimed at mitigating the damage and costs associated with repairing properties with severe repetitive flood losses…. the FIRA requires the Director of FEMA to develop minimum education requirements for agents and brokers who write flood insurance policies, as well as forms, handbooks, rules and regulations governing the information given to policyholders regarding flood insurance, and processing claims… The FIRA developed a new, five-year pilot program to assist with mitigating damage and loss to severe repetitive loss properties. Residential one to four unit severe repetitive loss properties are ones that: 1) have been the subject of four or more separate claims valued at more than $5,000 each and collectively valued at more than $20,000; or 2) properties with two or more claims the total value of which exceeds the value of the property. Multifamily properties with five or more units also are covered by the mitigation program and will be designated according to a definition of "severe repetitive loss" for multifamily property established by FEMA through regulations. The pilot program provides money to state and local governments to fund mitigation activities. The mitigation offers may include elevation, relocation, demolition, rebuilding, flood-proofing and purchasing the property. The FIRA establishes a formula for distribution of federal mitigation funds to state and local governments, provided that state or local governments match 25% of the federal funding granted. The state and local government matching funds requirement can be reduced to 10% at the discretion of FEMA if the state has an approved mitigation plan and the Director of FEMA determines that the state has taken action to reduce the number of severe repetitive loss properties.

"The FIRA provides that if the property owner of a severe repetitive loss property refuses a reasonable offer of mitigation, the property owner's flood insurance premium will be increased to 150% of the chargeable rate for the property at the time the offer of mitigation was made. In addition, if the property suffers a flood loss greater than $1,500 following a refusal of an offer of mitigation, the premium will again increase to 150% of the chargeable rate for the property at the time of the flood loss. The chargeable premium rate cannot be increased to "an amount

exceeding the applicable estimated risk premium rate for the area." (**Independent Insurance Agents & Brokers of America, Inc**., *Impact of Flood Insurance Reform Act of* 200, 2004, 1-4)

Flood Level of Protection: "Level of Protection represents the ability of a structure or a system to contain a flood of a given size with a high degree of assurance. It can be defined by three different methods:

- As the average return period in years (e.g. 100-year, 500- year, etc.) of the largest flood that can be expected to occur at that average frequency;
- As the maximum derived discharge expected from a flood developed from a set of specific hydrological conditions (e.g. as the Standard Project Flood); or
- As the discharge of a significant historical event." (**Galloway**, *A CA Challenge*, 2007, 14)

Flood Map: "At a minimum, flood maps show flood risk zones and their boundaries, and may also show floodways and Base Flood Elevations (BFEs)." (**FEMA**, *Flood Map: NFIP Policy Index*, 2007)

Flood Mitigation Assistance (FMA) Program: "The FMA program was created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 (42 U.S.C. 4101) with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP). FEMA provides FMA funds to assist States and communities implement measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program…. Three types of FMA grants are available to States and communities:

- **Planning Grants** to prepare Flood Mitigation Plans. Only NFIP-participating communities with approved Flood Mitigation Plans can apply for FMA Project grants
- **Project Grants** to implement measures to reduce flood losses, such as elevation, acquisition, or relocation of NFIP-insured structures. States are encouraged to prioritize FMA funds for applications that include repetitive loss properties; these include structures with 2 or more losses each with a claim of at least $1,000 within any ten-year period since 1978.
- **Technical Assistance Grants** for the State to help administer the FMA program and activities. Up to ten percent (10%) of Project grants may be awarded to States for Technical Assistance Grants." (**FEMA**, *Flood Mitigation Assistance (FMA) Program*, 12 Sep, 2007)

Flood of Record: The highest flood historically recorded in a given location. [The U.S. Army Corps of Engineers typically uses the flood of record to determine risk when constructing dams, dikes and levees, etc.]

Flood Protection: "Precautionary measures, equipment or structures implemented to guard or defend people, property and lands from an unusual accumulation of water above the ground." (**European Environmental Agency**, *EEA Environmental Glossary*, 2007)

Flood Return Periods: "Return periods are based on statistical analysis of information gathered about previous floods in the region. Most experts agree that for a flood record length of 100 years, the flood estimates extrapolated from the data should not exceed 200 years. The confidence in the accuracy of a larger-than-200-year flood elevation that is based on a short 100-

year record of weather and storm data is lower than it is for estimates of 200-year or less. It should be noted that the period of record is often less than 100 years in the U.S." (**Galloway**, *A California Challenge*…, 2007, 14)

Flood Risk Management: "Generally, there are three basic approaches to flood risk management:
1. Avoid using the floodplain for activities other than those compatible with periodic flooding.
2. Minimize damages from floods to the maximum feasible extent by building and maintaining levees, flood walls, dikes, reservoirs, channelization of streams, bypasses, and the like; instituting floodplain development requirements such as land-use controls which minimize new unsafe development in high-risk areas and by retrofitting existing structures; and having robust and effective evacuation plans and warning systems to get the people out of harm's way should the need arise.
3. Mitigate losses to those who are subject to flooding through self-help, by providing indemnification through government payments (direct or as a result of litigation), or through forms of public and private insurance." (**Galloway**, *A California Challenge*, 2007, 13)

Flood Warning: "Flooding is already occurring or will occur soon. Take precautions at once. Be prepared to go to higher ground. If advised, evacuate immediately." (**FEMA**, *EM Guide for Business and Industry*, 1993, p. 55)

Flood Watch: "Flooding is possible. Stay tuned to NOAA radio. Be prepared to evacuate. Tune to local radio and television stations for additional information." (**FEMA**, *EM Guide for Business and Industry*, 1993, p. 55)

Flood Wave: "Rise in stream flow to a crest to such a magnitude that it causes flooding, and its subsequent recession." (**UNDHA**, *Disaster Management Glossary*, p. 41)

Flood Zones, FEMA/NFIP: "Flood hazard areas identified on the Flood Insurance Rate Map are identified as a Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. Moderate flood hazard areas, labeled Zone B or Zone X (shaded) are also shown on the FIRM, and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded)." (**FEMA**, *Flood Zones*, 2007)

Flooding: "A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland and/or tidal waters, and/or the unusual and rapid accumulation or runoff of surface waters from any source. A great flow along a watercourse or a flow causing inundation of lands not normally covered by water." (**EEA**, *Environmental Glossary*, 2007)

Flooding: "Flooding is the most costly natural hazard in the nation…between 1994 and 2005, annual losses had grown to approximately $6 billion."[52] (**Galloway**, *A CA Challenge*, 2007, 20)

Floodplain: Low lands adjoining the channel of a river, stream, or watercourse, or ocean, lake or other body of water, which have been or may be inundated by floodwater, and those other areas subject to flooding.

Floodplain: "Any normally dry land area that is susceptible to being inundated by water from any natural source. This area is usually low land adjacent to a stream or lake." (**EEA**, *Environmental Glossary*, 2007)

Floodplain: "Floodplain is used in a general sense to mean the area most prone to flooding, mapped or not. The floodplain for a localized flood problem may not be mapped as Special Flood Hazard Area on the Flood Insurance Rate Map." (**FEMA**, *Reducing Damage from Localized Flooding – A Guide for Communities*, 2005, viii)

Floodplain: "An area adjacent to a river, formed by the repeated overflow of the natural channel bed." (**UNDHA**, *DM Glossary*, 1992, 40; cites OFDA)

Floodplain, Deep: "The Panel defines deep floodplains as floodplains where the level of flooding is three feet or higher. In deep floodplains, the ability to evacuate is limited or non-existent, creating significant life-safety threats and the damage to property is extensive." (**Galloway**, *A California Challenge*, 2007, iv)

Floodplain Management: The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations. (**CFR** 2004)

Floodplain Management: "Floodplain management is the operation of a community program of corrective and preventative measures for reducing flood damage. These measures take a variety of forms and generally include requirements for zoning, subdivision or building, and special-purpose floodplain ordinances." (**FEMA**, *The National Flood Insurance Program*, 2007)

Floodplain Management (FPM): "Flood plain management (FPM) is a continuing process, involving both Federal and non-Federal action, that seeks a balance between use and environmental quality in the management of the inland and coastal flood plains as components of the larger human communities. The flood damage reduction aspects of flood plain management involve modifying floods and modifying the susceptibility of property to flood damages. The former embraces the physical measures commonly called "flood control;" the latter includes regulatory and other measures intended to reduce damages by means other than modifying flood waters. By guiding flood plain land use and development, flood plain regulations seek to reduce future susceptibility to flood hazards and damages consistent with the risk involved and serve in many cases to preserve and protect natural flood plain values." (USACE, *Water Resources Policies and Authorities - Digest of Water Resources Policies and Authorities*, 1999, 13-1)

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[52] Cited: Interagency Floodplain Management Review Committee, *Sharing the Challenge: Floodplain Management into the 21st Century,* U.S. Government Printing Office, Washington, DC, 1994.

Floodplain Zoning: "A plan that defines the main zones of a potential flood area, usually accompanied by housing restrictions or other recommendations to prevent flood damages." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 40)

Floodproofing: "Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and…contents." (**FEMA**, *Floodproofing*, 2007)

Floods: "Flood effects can be local, impacting a neighborhood or community, or very large, affecting entire river basins and multiple states. Some floods develop slowly, sometimes over a period of days. Flash floods can develop quickly, sometimes in just a few minutes or without any visible signs of rain. According to the National Hurricane Center, inland flooding has been responsible for more than half the deaths associated with tropical cyclones in the United States in the last 30 years. Be aware of flood hazards no matter where you live, but especially if you live in a low-lying area, near water or downstream from a dam. Every state is at risk from this hazard." (**FEMA**, "Fact Sheet – Floods," February 2007, p. 1)

Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without causing any cumulative increase in the water surface elevation. The floodway is intended to carry the dangerous and fast-moving water.

Floodway: "A 'Regulatory Floodway' means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Communities must regulate development in these floodways to ensure that there are no increases in upstream flood elevations. For streams and other watercourses where FEMA has provided Base Flood Elevations (BFEs), but no floodway has been designated, the community must review floodplain development on a case-by-case basis to ensure that increases in water surface elevations do not occur, or identify the need to adopt a floodway if adequate information is available." (**FEMA**, *Floodway*, 2007)

Florida Citizens Property Insurance Corporation: "Florida Citizens is a nonprofit tax-exempt entity that provides residential and commercial property insurance coverage when private insurance is not available. Florida Citizens was established in 2002 after two separate insurance pools—the Florida Windstorm Underwriting Association (FWUA) and the Florida Residential Property and Casualty Joint Underwriting Association (JUA)—were combined." (**GAO**, *Natural Disasters: Public Policy Options*…, Nov 2007, 18; pp. 60-63)

Florida Hurricane Catastrophe Fund (FHCF): "…the Florida Hurricane Catastrophe Fund (FHCF) provides an alternative to traditional hurricane reinsurance, reducing the cost of coverage significantly below that of private reinsurance and lowering the cost of insurance to homeowners. The FHCF was established in 1993 in response to Hurricane Andrew, which resulted in a severe shortage of catastrophe property reinsurance capacity, stricter policy terms and conditions, and sharp increases in property catastrophe reinsurance rates in the year following the storm." (**GAO**, *Natural Disasters: Public Policy*…, Nov 2007, 19; also 74-78)

FM: Field Manual. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-3)

FMA: Flood Mitigation Assistance.

FMAGP: Fire Management Assistance Grant Program, FEMA. (**FEMA** *FMAGP*, Dec 2006)

FMC: Federal Mobilization Center.

FMD: Foreign Animal Disease.

FMEA: Failure Modes and Effects Analysis. (**UN DAP**, *Techniques Used in Risk Assess.*, 2008)

FMI: Field Manual-Interim. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-3)

FMM: Flood Map Modernization. FEMA, National Flood Insurance Program.

FMS: Federal Medical Shelter. (**Senate HSGA**, *A Nation Still Unprepared*, 2006, p. 632)

FMS: Federal Medical Station. (CA EMSA, *Hosp. Incident Cmd. System Guide*, 2006, 102)

FMS: Fixed Monitoring Station. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B-9)

FNARS: FEMA National Radio System. (**DHS**, *FEMA OMA FY 2009*, 2008, 15)

FNS: Food and Nutrition Service. (**FEMA**, *Mission Assignment SOPs Draft*, July 2007, 52)

FOC: FEMA Operations Center, Mt. Weather, VA. (**HSC**, *NCPIP*, August 2007, p. 62)

FOC: Full Operational Capability. (**DHS**, *Testimony of Dr. Kimothy Smith, NBIC,* 4 Oct 2007)

Focal Depth: "Vertical distance from the earth's surface to the place of origin (hypocenter, focus) of an earthquake." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 41)

Focus (Earthquake): "The point beneath the earth's surface where an earthquake rupture starts and from which waves radiate." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 41)

FOG: Field Operations Guide. (**FEMA**, *Mission Assignment SOPs Draft*, 2007, pp. 43, 52)

Food and Agriculture Safety and Defense Capability Definition: "Food and Agriculture Safety and Defense is the capability to prevent, protect against, respond to, and recover from chemical, biological and radiological contaminants, and other hazards that affect the safety of food and agricultural products. This includes the timely eradication of outbreaks of crop diseases/pests, assessments of the integrity of the food producing industry, the removal and disposal of potentially compromised materials from the U.S. food supply, and decontamination of affected food manufacturing facilities or retail points of purchase or service. This also

includes appropriate laboratory surveillance to detect human foodborne illness or food product contamination. It is accomplished concurrent to protecting public health and maintaining domestic and international confidence in the U.S. commercial food supply. Additionally, the public is provided with accurate and timely notification and instructions related to an event and appropriate steps to follow with regard to disposal of affected food or agricultural products and appropriate decontamination procedures." (**DHS**, *TCL*, 2007, p. 141)

Food and Nutrition Service (FNS) Disaster Task Force: "The Food Security Act of 1985 (Public Law 99-198) requires the Secretary of Agriculture to establish a Disaster Task Force to assist States in implementing and operating various disaster food programs. The FNS Disaster Task Force coordinates the overall FNS response to disasters and emergencies. It operates under the general direction of the Administrator of FNS." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, 52)

Food Emergency Response Network (FERN): "The Food Emergency Response Network (FERN) integrates the nation's food-testing laboratories at the local, state, and federal levels into a network that is able to respond to emergencies involving biological, chemical, or radiological contamination of food. The FERN structure is organized to ensure federal and state inter-agency participation and cooperation in the formation, development, and operation of the network. The FERN plays a number of critical roles related to food security and food defense. These include:

1. Prevention. FERN provides a national surveillance program that will offer early means of detecting threat agents in the American food supply;
2. Preparedness. FERN prepares the nation's laboratories to be able to respond to food-related emergencies;
3. Response. FERN offers significant surge capacity that will strengthen the nation's response towards widespread complex emergencies, intentional or inadvertent related to agents in food; and
4. Recovery. The FERN network of laboratories enhances the ability of the country to restore confidence in the food supply following a threat or an actual emergency targeting the nation's food supply." (**FERN** Website, 2008)

Food Unit (ICS): "The unit within the Service Branch of the Logistics Section responsible for providing meals for incident personnel." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 54)

For Official Use Only (FOUO): "FOUO is the term used within DHS to identify unclassified information of a sensitive nature, not otherwise categorized by statute or regulation, the unauthorized disclosure of which could adversely impact a person's privacy or welfare, the conduct of Federal programs, or other programs or operations essential to the national interest. Information impacting the National Security of the United States and classified Confidential, Secret, or Top Secret under Executive Order 12958, "Classified National Security Information," as amended, or its predecessor or successor orders, is not to be considered FOUO. FOUO is not to be considered classified information." (**FEMA**, *HSEEP Glossary*, 2008)

Force Protection: "Protecting responders from security hazards involving one or more persons, devices, objects, animals, conditions or situations (e.g., hostile person; sniper; hostage taker; barricaded person; fugitive; emotionally disturbed person; non-hostile unauthorized person; explosive device or substance; CBRNE/HazMat source, dissemination device or release; person conducting intelligence collection, surveillance or reconnaissance activities/operations; firearm; aggressive animal; dangerous device, weapon or object)." (**FEMA**, *IIFOG Ver 3 Dft*, 2008, 35)

Forecast: Statement or statistical estimate of the occurrence of a future event. This term is used with different meanings in different disciplines, as well as "prediction". (**UNDHA,** *DM Glossary* 1992, 41)

Forensics: "The use of science and technology to investigate and establish facts in criminal or civil courts of law." (**FEMA**, *IIFOG Version 3 Draft*, February 2008, p. 35)

Foreshock: "An earthquake that precedes the largest quake ("mainshock") of an earthquake sequence. Foreshocks may occur seconds to weeks before the mainshock." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Forest/Grassland Fire: "Fires in forest or brush grasslands that cover extensive areas and usually do extensive damage. They may start by natural causes such as volcanic eruptions or lighting, or they may be caused by arsonists or careless smokers, by those burning wood or by clearing a forest area." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 42)

FORSCOM: U.S. Army Forces Command. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-3)

Forward Challenge 04: "Forward Challenge 04, a Federal government-wide Continuity of Government exercise…. '"This is the first time that the Federal government has conducted a government wide test of its continuity of operations plans. This exercise provides a unique opportunity for the federal government to evaluate and refine its operational readiness to ensure that officials in federal departments and agencies can function away from their normal headquarters and make response decisions in the event of an emergency incident' [DHS Secretary Tom Ridge]. The exercise tested organization plans and procedures to alert senior management and to deploy quickly to alternate operating locations outside of the National Capital Region. Also tested were interagency communications, the ability of Departments and agencies to respond to requests for assistance and information from these alternate locations, and explore issues of Delegations of Authority and Orders of Succession." (**NWS**, *NWS Participates in Government-Wide Emergency Drill*, 2004)

Forward Challenge 06: "Over the course of FY 2006, FEMA's Office of National Security Coordination (ONSC) conducted "Forward Challenge 06," the largest full-scale interagency COOP exercise in history, which involved over 50 departments and agencies deploying to alternate sites for a 30-hour period." (**DHS**, *Budget-in-Brief, Fiscal Year 2008*, 2007, p. 63) Was conducted in conjunction with TOPOFF4 Command Post Exercise. (**DHS**, *US DHS Announces Completion of TOPOFF 4 CPE to Address Counterterrorism*…, June 22, 2006/

Forward Coordinating Team (FCT): "The FCT is a full-time DHS team immediately deployable to an incident or potential incident (particularly for a response to a catastrophic event). The FCT supports State and local operations by integrating with the Incident Command Post on scene and facilitating resource issues. Team members are trained and prepared to assess the situation, identify critical and unmet needs, provide recommendations for protective actions, establish incident support facilities and identify, direct and coordinate acquisition and delivery of required assets and/or resources." (**DHS**, *National Response Plan* (Draft #1), Feb25, 2004, 36)

FOS: Federal Operations Support. (**FEMA**, *Mission Assignment SOPs Draft*, July 2007, p. 43)

FOSA: Federal Operational Staging Area. (**FEMA**, *Logistics Supply Chain*, 2006)

FOSC: Federal On-Scene Coordinator. (**SONS Website**, *SONS FAQs*, 2007; also FEMA *Mission Assignment SOPs*, July 2007, p. 52)

FOUO: For Official Use Only. (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, Acronym List, 33)

Foundation (HSEEP): "Foundation is the first stage in the exercise process, preceding *Design and Development*. The Foundation stage focuses on developing a project management timeline, establishing milestones, identifying an *exercise planning team*, and scheduling planning conferences." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Four Critical Elements, National Preparedness Guidelines: "The *National Preparedness Guidelines* package…is comprised of four critical elements:

> • The ***National Preparedness Vision***, which provides a concise statement of the core preparedness goal for the nation.
>
> • The ***15 National Planning Scenarios***, which collectively depict a diverse set of high-consequence threat scenarios regarding both potential terrorist attacks and natural disasters. Collectively, these scenarios are designed to focus contingency planning for homeland security preparedness work at all levels of government and with the private sector. The 15 scenarios form the basis for coordinated Federal planning, training and exercises.
>
> • The ***Universal Task List***, which is a menu of some 1,600 unique tasks that can facilitate efforts to prevent, protect against, respond to and recover from the major events that are represented by the National Planning Scenarios. It presents a common vocabulary and identifies key tasks that support development of essential capabilities among organizations at all levels. Of course, no entity will perform every task. Instead, this task list was used to assist in creating the Target Capabilities List. It is included in the *Guidelines* package as a reference for interested jurisdictions.
>
> • The ***Target Capabilities List***, which defines 37 specific capabilities that communities, the private sector and all levels of government should possess in order to respond effectively to disasters." (**DHS**, *NRF Comment Draft*, 2007, p. 68)

Four Mission Areas, Framework for National Preparedness: "The Goal [NPG] provides a common framework for a systems-based approach to build, sustain and improve national preparedness for a broad range of threats and hazards. The Goal and other source documents define the mission areas of this framework as follows:

> **Prevent:** Actions to avoid an incident or to intervene or stop an incident from occurring. Prevention involves actions taken to protect lives and property. It involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice (Source—NIMS, March 2004).
>
> **Protect:** Actions to reduce the vulnerability of critical infrastructure or key resources in order to deter, mitigate, or neutralize terrorist attacks, major disasters, and other emergencies (Source—HSPD 7, December 2003). It requires coordinated action on the part of federal, state, and local governments; the private sector; and concerned citizens across the country. Protection also includes: continuity of government and operations planning; awareness elevation and understanding of threats and vulnerabilities to their critical facilities, systems, and functions; identification and promotion of effective sector-specific protection practices and methodologies; and expansion of voluntary security-related information sharing among private entities within the sector, as well as between government and private entities. (Source – The National Strategy For The Physical Protection of Critical Infrastructures and Key Assets, February 2003)
>
> **Respond:** Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice (Source—NIMS, March 2004).
>
> **Recover:** Activities that include the development, coordination, and execution of service- and site-restoration plans; the reconstitution of government operations and services; individual, private- sector, nongovernmental, and public-assistance

programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental, and economic restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents (Source—NIMS, March 2004)." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidelines on Aligning Strategies with the NPG*, 2005, pp. 3-4)

Four Phases of Emergency Management – See, also, "Phases of Emergency Management."

Four Phases of Emergency Management (1993):

- Preparedness
- Mitigation
- Response
- Recovery. (**FEMA**, *Survivable Crisis Mgmt.: Plan Development Guide*, April 1993)

Four Phases of Emergency Management (1978):

- Mitigation
- Preparedness
- Response
- Recovery. (**NGA**, *CEM*, 1978)

Four Phases of School Emergency Management (2007)

- Prevention-Mitigation
- Preparedness
- Response
- Recovery (**DoEd**, "Families as Partners in School Emergency Management." *Helpful Hints*, Vol. 2, Issue 7, 2007, p. 1)

FPC: Federal Preparedness Circular.

FPC: Federal Preparedness Coordinator. (**FEMA**, *Regional-National Prep, CONOPS*, 8Feb08)

FPC: Final Planning Conference, HSEEP. (**FEMA**, *About HSEEP*, 2008)

FPCON: Force Protection Condition. (**DA**, *WMD CST Operations*, 2007, pp. 2-1, 2-2)

FPCs: Federal Preparedness Coordinators. (**FEMA**, *Vision for New FEMA:* Dec. 2006, p. 24)

FPF: Federal Policy Fee. (**FEMA/NFIP**, *Call For Issues Status Report*, 2000, xxiii)

FPIS: Federal Information Processing Standard (FIPS) 201**.** (**FEMA**, *Statement of Marko* Bourne, 15Nov07, p. 2)

FPM: Floodplain Management. (**USACE**, *Water Resources Policies and* Authorities..., 1999)

FPR: Federal Preparedness Report. (**FEMA**, *90 Day Update to Congress on National Preparedness*, Dennis Schrader, Deputy Administrator NPD, Apr 2008, slide 12)

FRAGOs: Fragmentary Orders. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, 4-5)

Framework: "A conceptual structure that supports or contains set of systems and/or practices." (**DHS**, *National Incident Management System*, March 2004, p. 4)

FRC: Federal Resource Coordinator. (**DHS**, *NRF*, 2008, 81)

FRC: Federal Regional Center. (**OCD**, *Abbreviations and Definitions*, 1971, p. 2)

Freeboard: "…an additional amount of height above the base flood elevation used as a factor of
safety (e.g., 2 feet above the base flood) in determining the level at which a structure's lowest floor must be elevated or floodproofed." (ASFPM, *National Flood Programs and Polices in Review—2007*, p. 89)

Freely Associated States: "U.S. possessions and insular areas, as well as the Federated States of Micronesia and the Republic of the Marshall Islands. The U.S. Government does not provide disaster assistance to the Republic of Palau, in accordance with the Compact of Free Association. Insular areas include Guam, the Commonwealth of the Northern Mariana Islands, American Samoa, and the U.S. Virgin Islands." (**DHS**, *NRF*, Jan 2008, p. 6, footnote 5.) "Stafford Act assistance is available to States and to Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, which are included in the definition of "State" in the Stafford Act." (Ibid, 6)

Friendly Force: "In prevention exercises, all State and local law enforcement, and other non-*red-team* designated organizations and agencies (e.g., security forces assigned to key targets) are considered *friendly forces* or *blue team*." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

FRMAC: Federal Radiological Monitoring and Assessment Center.

FRP: Facility Response Plan. (**GAO**, *Maritime Security*, December 2007, p. 57)

FRP: Federal Response Plan. [Defunct]

FRPI: First Responder Partnership Initiative, National Capital Region. FEMA.

Front (Atmospheric): "1.The interface or transition zone between air masses of different physical properties (temperature, humidity).
2. Line of intersection of the surface separating two air masses usually with the ground." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 42)

FS: Fire Service. (**FEMA**, *TEI/TO Course Catalog*, 2008, p. 3)

FSE: Full-Scale Exercise. (**DHS**, *FCD 1*, Nov. 2007, p. K-2)

FSR: Financial Services Roundtable.

FSSCC: Financial Services Sector Coordinating Council for Critical Infrastructure Protection and Homeland Security. (**Financial Services Roundtable**, *Nation Unprepared*, May 2007)

FTA: Fault-Tree Analysis. (**UN DAP**, *Techniques Used in Risk Assessment*, 2008)

FTX: Field-Training Exercise. (**Dept. of the Army**, *WMD-CST Operations*, Dec 2007, p. 9-3)

Fujita-Pearson Scale (FPP Scale): A 3-digit scale for tornadoes devised by Fujita (F scale) and Pearson (PP scale) to indicate the tornado intensity (0-5), path length (0-5), and path width (0-7) (**UNDHA**, *Disaster Management Glossary*, 1992, p. 43; **WMO** 1992)

Fujita Tornado Scale: A scale for expressing the relative intensity of tornadoes, consisting of six levels corresponding to increasing levels of damage - light, moderate, considerable, severe, devastating, incredible. (**Notification Manual**)

Full Scale Exercise (FSE): "Full-scale emergency operations simulation exercises requiring full staff participation involving local government, industry, and private sector interaction and cooperation." (**DCPA**, *Foresight*, 1974, p. 13) [See "Exercise Types"]

Full-Scale Exercise (FSE): "An FSE is a multi-agency, multi-jurisdictional activity involving actual deployment of resources in a coordinated response as if a real incident had occurred. An FSE tests many components of one or more capabilities within emergency response and recovery, and is typically used to assess plans and procedures under crisis conditions, and assess coordinated response under crisis conditions. Characteristics of a FSE include mobilized units, personnel, and equipment; stressful, a realistic environment, and scripted exercise scenarios." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Full-Scale Exercise (FSE): "A full-scale exercise is a multi-agency, multi-jurisdictional, multi-discipline exercise involving functional (e.g., joint field office, emergency operation centers) and "boots on the ground" response (e.g., continuity staff relocating to their alternate sites to conduct scenario driven essential functions)." (**DHS**, *Federal Continuity Directive 1*, Nov 2007, P-5)

Full Scale Exercise (FSE): "A multi-agency, multi-jurisdictional, multi-organizational activity that tests many facets of preparedness. They focus on implementing and analyzing the plans, policies, procedures, and cooperative agreements developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. In FSEs, the reality of operations in multiple functional areas presents complex and realistic problems that require critical thinking, rapid problem solving, and effective responses by trained personnel. During FSEs, events are projected through a scripted exercise scenario with built-in flexibility to allow updates to drive activity. FSEs are conducted in a real-time, stressful environment that closely mirrors real events.

(**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For FY 2007), Oct.23, 2006, pp. 3-4) [See "Exercise Types"]

Full Spectrum Integrated Vulnerability Assessment Program (FSIVA): The "Department of Defense (DoD) program developed to ensure the consistent, comprehensive assessment of the vulnerabilities of DoD-identified critical assets." (**DoD**, *DCIP, FSIVA*, 2004, p. ES-1)

Function: "In the Incident Command System, refers to the five major activities (i.e., Command, Operations, Plans/Information, Logistics, and Finance/Administration). The term function is also used when describing the activity involved (e.g., the planning function)." (**HHS**, *Medical Surge Capacity and Capability* Handbook, August 2004, p. D-6, Glossary)

Function: "An operation performed by multiple professional skill sets to accomplish a common objective." (**Homeland Security Institute**, *HS Strategic Planning MAA*, March 28, 2007, p. 63)

Functional Approach (Planning): "While the causes of emergencies vary greatly, the potential effects of emergencies do not. This means that jurisdictions can plan to deal with effects common to several hazards, rather than develop separate plans for each hazard. For example, earthquakes, floods, and hurricanes all can force people from their homes. The jurisdiction can develop a plan and an organization around the task, or *function*, of finding shelter and food for the displaced--with minor adjustments for the probable rapidity, duration, location, and intensity of different hazards if desired. It can do the same for other common tasks… In fact, a critical aspect of planning for the response to emergency situations is to identify all of these common tasks, or *functions*, that must be performed, assign responsibility for accomplishing each function, and ensure that tasked organizations have prepared SOPs that detail how they will carry out critical tasks associated with the larger function. However, the plans for performing each function should not be created in isolation. Since the jurisdiction's goal is a coordinated response, task-based plans should follow from a Basic Plan that outlines the jurisdiction's overall emergency organization and its policies…" (**FEMA**, *Guide for All-Hazard Planning*, 1996, 3-1)

"The following list of functional annexes addresses core functions that warrant attention and may require that specific actions be taken during emergency response operations:

Direction and Control
Communications
Warning
Emergency Public Information
Evacuation
Mass Care
Health and Medical Services
Resource Management" (**FEMA**, *Guide for All-Hazard Planning*, 1996, 5-1)

Functional Approach (Planning): "A functional planning approach identifies a list of common tasks an organization must perform during an incident, an emergency, a specific event/activity or a directed requirement. They are created at all operational levels and formatted in accordance with the standards of the parent organization. They may be developed in response to HSPD/NSPD requirements, at the organization's senior leadership initiative, or in response to

either national policy or a guidance document requirement." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, p. 2-11)

Functional Exercise (FE): "A functional exercise examines and/or validates the coordination, command, and control between various multi-agency coordination centers (e.g., emergency operation center, joint field office). A functional exercise does not involve any "boots on the ground" (i.e., first responders or emergency officials responding to an incident in real time)." (**DHS**, *Federal Continuity Directive 1*, Nov 2007, P-5)

Functional Exercise (FE): "A *functional exercise* is a *fully simulated interactive exercise that tests the capability of an organization to respond to a simulated event*. The exercise tests multiple functions of the organization's operational plan. It is a coordinated response to a situation in a time-pressured, realistic simulation." (**FEMA**, *Exercise Design* (IS 139), March 2003, p. 2-12)

Functional Exercise (FE): "An FE is a single or multi-agency activity designed to evaluate capabilities and multiple functions using a simulated response. An FE is typically used to: evaluate the management of Emergency Operations Centers (EOCs), command posts, and headquarters; and assess the adequacy of response plans and resources. Characteristics of an FE include simulated deployment of resources and personnel, rapid problem solving, and a highly stressful environment." (**FEMA**, *Homeland Security Exercise & Eval. Pgm. Glossary*, 2008)

Functional Exercise (FE): "An activity designed to test and evaluate individual capabilities, multiple functions, activities within a function, or interdependent groups of functions. Events are projected through an exercise scenario with event updates that drive activity at the management level. An FE simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For FY 2007), Oct.23, 2006, pp. 3-4) [See "Exercise Types"]

Functional Exercise (FE) Characteristics: This is an *interactive* exercise—similar to a full-scale exercise without the equipment. It simulates an incident in the most *realistic* manner possible short of moving resources to an actual site. A functional exercise is:

- *Geared for policy, coordination, and operations personnel*—the "players" in the exercise—who practice responding in a realistic way to carefully planned and sequenced messages given to them by "simulators." The messages reflect ongoing events and problems that might actually occur in a real emergency.

- A *stressful* exercise because players respond in real time, with on-the-spot decisions and actions. All of the participants' decisions and actions generate real responses and consequences from other players.

- *Complex*—Messages must be carefully scripted to cause participants to make decisions and act on them. This complexity makes the functional exercise difficult to design." (**FEMA**, *Exercise Design* (IS 139), March 2003, p. 2-13)

Fusion Center: "The value proposition for fusion centers is that by integrating various streams of information and intelligence, including that flowing from the federal government, state, local, and tribal governments, as well as the private sector, a more accurate picture of risks to people, economic infrastructure, and communities can be developed and translated into protective action. The ultimate goal of fusion is to prevent manmade (terrorist) attacks and to respond to natural disasters and manmade threats quickly and efficiently should they occur. As recipients of federal government-provided national intelligence, another goal of fusion centers is to model how events inimical to U.S. interests overseas may be manifested in their communities, and align protective resources accordingly. There are several risks to the fusion center concept — including potential privacy and civil liberties violations, and the possible inability of fusion centers to demonstrate utility in the absence of future terrorist attacks, particularly during periods of relative state fiscal austerity." (**CRS**, *Fusion Centers: Issues and Options for Congress*, January 18, 2008, page 2)

Fusion Center: "Definition: a physical or logical facility, encompassing all necessary infrastructure required to facilitate nationwide information-sharing between one or more Federal, State, and/or local law enforcement entities, dedicated to the integration of multiple diverse data sources within a defined functional domain. Extended definition: a collaborative effort of two or more agencies or program offices who provide resources, expertise, and/or information to the center with the goal of maximizing the ability to detect, prevent, apprehend, and respond to criminal and terrorism related activity by applying the concepts of fusion, and to provide a means of intelligence dissemination. Annotation: A fusion center is also a conduit staffed with analyst, special agents, intelligence research specialist, etc., for sharing information and results of analysis in accordance with the National Criminal Intelligence Sharing Plan (NCISP). (USDOJ, "Fusion Center Guidelines," Global Justice Information Sharing Initiative, Aug 2006)." (**DHS**, *Lexicon: Terms and Definitions*, October 23, **2007**, p. 11)

Fusion Center: "Fusion Centers: provide critical sources of unique law enforcement and threat information; facilitate sharing information across jurisdictions and function; provide a conduit between men and women on the ground protecting their local communities and state and federal agencies." (**DHS**, *State and Local Fusion Centers*, September 14, **2006**.

Fusion Center: "Fusion Center – an organized structure to coalesce data and information for the purpose of analyzing, linking and disseminating intelligence. A model process is likely to include:

- Extract unstructured data
- Extract structured data
- Fuse structured data

Fused data are then analyzed to generate intelligence products and summaries for tactical, operational, and strategic commanders. Types of analysis typically conducted in a fusion center include:

- Association Charting
- Temporal Charting
- Spatial Charting
- Link Analysis
- Financial Analysis

- Content Analysis
- Correlation Analysis (**DHS**, *The ODP Guidelines*…, 2003, Glossary, p. 2 (29).

Fusion Center: "State and major urban area fusion centers are vital assets critical to sharing information related to terrorism. They will serve as the primary focal points within the State and local environment for the receipt and sharing of terrorism-related information." (**White House**, *National Strategy for Information Sharing*, October 2007, p. 20)

Future Years Homeland Security Program (FYHSP): "The official DHS document summarizing DHS programs and associated resources (investments, construction, human capital, IT, and other support and operating expenses) for the budget year plus four years in support of strategic goals, objectives, and planning priorities. The Secretary of Homeland Security approves the FYHSP. (**DHS** Management Directives System MD Number: 1330; Issue Date: 02/14/2005; Planning, Programming, Budgeting, and Execution)

FWUA: Florida Windstorm Underwriting Association.

FY: Fiscal Year.

FYHSP: Future Years Homeland Security Program. (**DHS**, *Performance Budget Overview, Fiscal Year 2008 Congressional Budget Justification*, March 2007, p. 2)

FZD: Flood Zone Determination (company). (**FEMA,** *Call For Issues Report*, 2000, xxiii)

GA: Governmental Administrative. (**FEMA**, *TEI/TO Course Catalog*, 2008, p. 3)

GA: Tabun. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, Glossary-3)

GAINS: Global Avian Influenza Network for Surveillance (**GAINS**, *About GAINS*)

Gale: Wind with a speed between 34 and 40 knots. (**UNDHA,** *DM Glossary*, 1992, p. 43))

Gale Warning: "A warning of 1-minute sustained surface winds in the range 34 kt (39 mph or 63 km/hr) to 47 kt (54 mph or 87 km/hr) inclusive, either predicted or occurring and not directly associated with tropical cyclones." (**NHC**, *Glossary of NHC Terms*, 2007)

Game (HSEEP): "A game is a simulation of operations using rules, data, and procedures designed to depict an actual or assumed real-life situation. A game is typically used to: explore the processes and consequences of decision-making; conduct "what-if" analyses of existing plans; and develop new plans. In general, games use rules, data, and procedures; are designed to depict an actual or assumed real-life situation; often involve two or more teams usually in a competitive environment; and increasingly include models and simulations. Games do not involve the use of actual resources. Games are *discussion-based* exercises." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Games. "A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedure designed to depict an actual or assumed real-life situation." (**FEMA**, *About HSEEP*, 2008)

GAO: Government Accountability Office.

GAP: Generally Accepted Practices. (**DRC & DRII**, *GAP for BC Practitioners*, 2007)

Gap Analysis: "A survey whose aim is to identify the differences between BCM/Crisis Management requirements (what the business says it needs at time of an event and what is in place and/or available." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 56)

Gap Analysis: "An analysis which identifies the differences between what an organization has previously identified as its needs or requirements during an emergency or incident, and what will actually be available." (**Risky Thinking**, *A Glossary of Risk Related Terms*, 2007)

GAR: Governor's Authorized Representative.

Garden Plot: U.S. Department of Army, Department of Defense Civil Disturbance Plan (Garden Plot), ann. C, app. 1 (15 February 1991). (**Center For Law and Military Operations and HQ Marine Corps**, *ROE v. RUF*, 2006)

GB: Sarin. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, Glossary-3)

GCC: Government Coordinating Council. (**DHS**, *NIPP*, 2006, p. 4)

GCOA: Gross Consequences of Attack. (**DHS**, *Progress in Developing NAB*, 2006, p. i)

GCRO: Gulf Coast Recovery Office.

GCSC: Government Cross-Sector Council. (**DHS**, *NIPP*, 2006, p. 5)

GD: Soman. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, Glossary-3)

GENADMIN: General Administrative (message). (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-3)

General Services Administration (GSA): "GSA serves as the primary support agency to DHS/FEMA for resource support during disaster relief and CM operations. GSA provides emergency supplies, space, office equipment, office supplies, telecommunications, contracting services, transportation services, and security services." (**JCS/DoD**, *Homeland Security*, 2005, II-21)

General Staff: Under the Incident Command System, "The General Staff normally consists of an Operations Section Chief, Planning Section Chief, Logistics Section Chief and Finance/ Administration Section Chief. An Intelligence/ Investigations section may be established, if required, to meet incident response needs." (**DHS**, *NRF Comment Draft*, Sep. 2007, p. 48)

Generic ICS: "Refers to the description of ICS that is generally applicable to any kind of incident or event." (**CA OES**, *SEMS Guidelines*, 2006, Glossary, p. 10)

Geographic Information System (GIS): A computerized database for the capture, storage, analysis and display of locationally defined information. Commonly, a GIS portrays a portion of the earth's surface in the form of a map on which this information is overlaid. (**EM Australia** 1995)

Geographic Information System (GIS): "A GIS is an electronic information system, which provides a geo-referenced database to support management decision-making." (**USGS**, *IM Handbook*, 2006, Glossary 25-9)

Geographic Information System (GIS) Mapping: "The use of a geographic information system, a computer-based tool, for risk or hazard mapping. GIS technology integrates database operations with the geographic analysis benefits offered by maps. The benefits of the technique are the increase in productivity of hazard-mapping technicians, it can give higher quality results than can be obtained manually and it can facilitate decision-making and improve coordination among agencies when efficiency is at a premium. The limitations of the technique include the lack of trained personnel; difficulties in exchanging data between different systems; difficulties in including social, economic and environmental variables; variability in access to computers and the quality and detail of the data required by GIS analysis." (**UN DAP**, *Techniques Used*, 2008)

Georgia Underwriting Association: "The Georgia Underwriting Association (GUA) was created by insurance companies licensed to write property insurance in Georgia to administer the state FAIR Plan. The plan insures homeowners throughout the state who have not been able to find certain types of insurance coverage in the voluntary market, and also coverage against windstorm and hail damage in coastal counties and off-shore islands." (GAO, Natural Disasters: Public Policy Options…, Nov 2007, p. 71)

Geospatial Analysis: "Analysis of risk information by distance, area, volume or any other spatial characteristic within geographic boundaries through GIS and hazard mapping techniques. The benefits of the technique are the identification of hazards and dangerous locations at varying scales from local (less than 100,000 km2), through regional (100,000 to 10 million km2) to continental (10 to 100 million km2) and a view of risk not only from a singular hazard point of view, but also from an orientation to the relative levels of exposure. The limitations of the technique are the same as those for GIS techniques with the added requirement for well-defined geographic boundaries (e.g., counties, municipalities, and health districts)." (**UN DAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Geo-Targeted Alerting System (GTAS): "The GTAS pilot is a joint public alert and warning project with the National Oceanic and Atmospheric Administration (NOAA). This pilot is testing new technologies to give emergency managers the ability to predict hazard zones in near-real-time, to collaborate on which areas to alert and what the message should be, and then to deliver these alerts and warnings to residents in a specific geographic area based on risks and recommended protective measures." (**FEMA**, *IPAWS Systems Enhancements*, Sep 12, 2007)

GETS: Government Emergency Telecommunications Service.

GFIP: Group Flood Insurance Policy. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

GFL: Global Fiducials Library. (**USGS**, *National Civil Applications Program*, 2002)

GHSAC: Governors Homeland Security Advisors Council. (**NGA Center for Best Practices**, *GHSAC*, 2006)

GI: Geospatial Information. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-3)

GI & S: Geospatial Information and Services. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-3)

GIG: Global Information Grid. (**DSB**, *Protecting the Homeland 2000 Summer Study* Vol. II, p. ES-1)

GIS: Geographic Information System. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-3)

Global Avian Influenza Network for Surveillance (GAINS): "The aim of the Wild Bird Global Avian Influenza Network for Surveillance (GAINS) program is to expand operational field capabilities, improve the understanding of viral strains and transmission of influenza viruses in wild birds, and to disseminate information to all levels of governments, international organizations, the private sector and the general public. GAINS is a global surveillance network of wild birds for avian influenza. Our strategies are: improving the collection, coordination, and laboratory evaluation of samples from wild birds in order to identify locations of avian influenza viral strains; identifying genetic changes in virus isolates; enhancing links with wild bird distribution and migration information, and providing an early warning system for global spread of highly pathogenic avian influenza (HPAI) that threatens domestic poultry and human health as well as biodiversity (particularly avian)." (**Global Avian Influenza Network for Surveillance**, *About GAINS*. Accessed March 20, 2008 at: http://www.gains.org/

Global Emerging Infections Surveillance and Response System (DoD-GEIS): "The DoD Global Emerging Infections Surveillance and Response System (DoD-GEIS) is designed to strengthen the prevention of, surveillance of and response to infectious diseases that:

- Are a threat to military personnel and families
- Reduce medical readiness or
- Present a risk to U.S. national security.

The DOD-GEIS is to:

- Increase DoD's emphasis on prevention of infectious diseases
- Strengthen and coordinate its surveillance and response efforts, and
- Create a centralized coordination and communication hub to help organize DoD resources and link with U.S. and international efforts.

The DoD-GEIS was established in response to Presidential Decision Directive NSTC-7, June 1996. The President stated that the mission of the DoD will be expanded to include support of global surveillance, training, research, and response to emerging infectious disease threats. He

called on DoD to strengthen its global disease reduction efforts through: centralized coordination; improved preventive health programs and epidemiological capabilities; and enhanced involvement with military treatment facilities and United States and overseas laboratories.

Organization and Management: DOD-GEIS has been established by the Assistant Secretary of Defense (Health Affairs) in coordination with the Military Departments and is overseen by a flag level Board of Directors made up of representatives of Health Affairs, the Military Services, the Joint Staff, the CINCs, and the Director of Defense Research and Engineering. The organization of DOD-GEIS follows the model of the Armed Force Institute of Pathology. The Executive Agent function is carried out by the Department of the Army. DOD-GEIS is headed by a Director who directs the Tri-Service staff of the central hub which a) helps coordinate prevention, surveillance and response efforts of DoD internally and externally, b) encourages and assists education, training and research efforts in DoD, and c) facilitates communication and information flow across DoD.

DoD-GEIS Partners: The DoD-GEIS central hub leverages the surveillance and response assets of a network of DoD service hubs and overseas medical research units. In addition to these facilities, the DoD-GEIS consortium in the US includes the US Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Maryland; the US Army Medical Research Institute of Infectious Diseases, Fort Detrick, Maryland; and the Naval Environmental Health Center, Norfolk, Virginia. DoD-GEIS has established strong working relationships with the US CDC and international health agencies." (**DoD**, *Welcome to the DoD-GEIS Central Hub*)

Global Fiducials Library (GFL): "A long-term archive of classified remotely sensed data for more than 500 environmentally sensitive sites worldwide to support global change research (**USGS**, *National Civil Applications Program*, 2002)

Global Nuclear Detection Architecture: "NSPD-43/HSPD-14 requires DNDO [Domestic Nuclear Detection Office, DHS] to develop an "enhanced global nuclear detection architecture." The Global Nuclear Detection Architecture is a multilayered system of detection technologies, programs, and guidelines designed to enhance the nation's ability to detect and prevent a radiological or nuclear attack. DNDO is the primary office within the federal government responsible for furthering the development of the Global Nuclear Detection Architecture…. The Global Nuclear Detection Architecture is intended to integrate federal, state, and local governments' nuclear detection and notification systems. DNDO is responsible for implementing the domestic portion of the Global Nuclear Detection Architecture, and works with other federal agencies to integrate their detection programs into the architecture." (**DHS/OIG**, *DNDO Progress*…, Dec 2007, p. 5)

Global Nuclear Detection Architecture Multi-Layered International System:

- Border Protection
- Coast Guard Inspection
- At-Sea Interdiction

- Second Line of Defense
- Materials Protection, Control & Accountability
- Port of Departure Screening (**DHS/DNDO**, *DNDO Overview*, April 20, 2006, slide 10)

Global Observing System (GOS): "The coordinated system of methods, techniques and facilities for making observations on a world-wide scale within the framework of the World Weather Watch." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 43)

Global Outbreak Alert and Response Network (GOARN): "The Global Outbreak Alert and Response Network (GOARN) is a technical collaboration of existing institutions and networks who pool human and technical resources for the rapid identification, confirmation and response to outbreaks of international importance. The Network provides an operational framework to link this expertise and skill to keep the international community constantly alert to the threat of outbreaks and ready to respond…. Since April 2000, the Global Outbreak Alert and Response Network has been bringing agreed standards to international epidemic response through the development of Guiding Principles for International Outbreak Alert and Response and operational protocols to standardize epidemiological, laboratory, clinical management, research, communications, logistics support, security, evacuation and communications systems…. The Global Outbreak Alert and Response Network contributes towards global health security by:

- combating the international spread of outbreaks
- ensuring that appropriate technical assistance reaches affected states rapidly
- contributing to long-term epidemic preparedness and capacity building." (**UN WHO**, *Epidemic Pandemic and Response*, 2007)

Global Risk Identification Programme (GRIP): "The goal of GRIP is reduced natural hazard-related losses in high risk areas to promote sustainable development." (**GRIP**, *About GRIP*, 2007)

Global Terrorism: "Definition: terrorism activities conducted in, or encompassing international communities. Extended definition: A. involves violent acts or acts dangerous to human life that are a violation of the criminal laws of the United States or of any State, or that would be a criminal violation if committed within the jurisdiction of the United States or any State; B. appears to be intended—

a. to intimidate or coerce a civilian population
b. to influence the policy or a government by intimidation or coercions; or
c. to affect the conduct of a government by mass destruction, assassination, or kidnapping; and

C. occurs primarily outside the territorial jurisdiction of the United States, or transcend national boundaries in terms of the means by which they are accomplished, the persons they appear intended to intimidate or coerce, or the locale in which their perpetrators operate or seek asylum." (**DHS**, *Lexicon: Terms and Definitions*, October 23, 2007, p. 11)

Global Warming: "Changes in the surface-air temperature, referred to as the global temperature, brought about by the greenhouse effect which is induced by emission of greenhouse gases into the air." (**EEA**, *EEA Environmental Glossary*; cites **ETC/CDS**, *General Environmental Multilingual Thesaurus*, 2000)

GMS: Grants Management Specialists. (**FEMA**, *Regional-National Prep. CONOPS*, 2008, 17)

GMS: Grants Management System. (**DHS**, *FY 2005 Homeland Security Grant Program: Introduction to Program Guidance*, 8 Dec 2004, slide 4)

GMT: Grants Management System. (**OIG/DHS**, *IT Management Letter FY 2005*, p. 13)

GMT: Greenwich Mean Time. (**OCD**, *Abbreviations and Definitions*, 1971, p. 2)

Goals: "Goals are general guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term, and represent global visions, such as:

- The economic vitality of the community will not be threatened by future flood events.
- Minimize wildfire losses in the urban wildfire interface area.
- The continuity of local government operations will not be significantly disrupted by disasters." (**FEMA**, *Developing the Mitigation Plan* (FEMA 386-3), 2003, p. 1-1)

GOALS: Government On-line Accounting Link System. (**FEMA**, *Mis. Assign. SOPs, 2007*, 52)

GOARN: Global Outbreak Alert and Response Network. (**UNWHO**, *Epidemic Pandemic* 2007)

Golden Guardian: "California's Golden Guardian program is the State's primary training and exercise program for large-scale emergencies.79 The training exercise is funded and managed through the [CA] Office of Homeland Security. During Golden Guardian 2005, OHS deputy director for training and exercises…told the Commission that many agencies complain that they are not benefiting from Golden Guardian. He commented that agencies must invest their staff and time for training and exercises to be relevant. But several departments told the Commission that OHS has consistently denied their requests to expand the exercise away from terrorist attacks toward more probable events – including earthquakes.

"In planning Golden Guardian 2005, it was suggested that state operated shelters be opened to test the shelter and care plan. OHS reportedly turned down the proposal. And local officials reported that Golden Guardian requires them to unfurl their fire hoses and turn out their police and sheriff's forces, but does little to provide realistic and challenging tests of their personnel and equipment. And as the State prepares for Golden Guardian 2006 in November, state and local officials have sought support for an exercise that tests California's ability to respond to a large-scale earthquake in the Bay Area. Experts predict a massive seismic event will hit the region in the next 30 years. But OHS has reportedly insisted that the Golden Guardian exercise must concentrate on response to a terrorist attack." (**Little Hoover Com**., *Safeguarding the Golden State*, 2006, 20)

Good Samaritan Laws: "These statutes…enacted by many state legislatures…. generally hold that when a passer-by renders emergency aid to a person in distress, the helper is immune from suit for any reasonable actions s/he takes in good faith that might have inadvertently resulted in further harm to the victim." (**Burton**, "The Constitutional Roots of All-Hazards Policy, Management, and Law," 2008, p. 11)

GOS: Global Observing System. (**UNDHA**, *Disaster Management Glossary*, 1992, p. 43)

Government Coordinating Council: "The government counterpart to the SCC for each sector established to enable interagency coordination. The GCC is comprised of representatives across various levels of government (Federal, State, Territorial, local, and tribal) as appropriate to the security and operational landscape of each individual sector." (**DHS**, *NIPP*, 2006, p. 103)

Government Functions: "`Government Functions' means the collective functions of the heads of executive departments and agencies as defined by statute, regulation, presidential direction, or other legal authority, and the functions of the legislative and judicial branches." (**HSPD-20; DHS,** *FCD 1*, Nov 2007, P-5)

Government Functions: "Government Functions…are the collective functions of agencies, as defined by the Constitution, statute, regulation, presidential direction or other legal authorities, and the functions of the legislative and judicial branches." (**DHS**, *FCD 2*, Nov. 2007, p. A-4)

Government Functions Criticality Scale:

- 10-Critically High Exceptionally grave impact preventing mission performance and the ability to implement corrective actions
- 9-Extremely High Grave impact requiring corrective action and negative effect results in delays to mission for an extended period of time
- 8-Very High Serious impact requiring corrective action and negative effect results in delays to mission for a limited period of time
- 7-High Serious impact requiring corrective action, where the negative effect will result in minor mission delays
- 6-Medium High Moderate to serious impact requiring corrective action, where the negative effect will result in slight mission delays
- 5-Medium Moderate impact requiring corrective action, where the negative effect will not impact mission completion
- 4-Medium Low Minimal impact requiring corrective action, where negative effect will not impact mission completion
- 3-Low Minimal impact or consequence without long term negative effects
- 2-Very Low Negligible consequences or impact with minimal long term negative effect
- 1-Extremely Low Negligible consequences or impact with no long term negative effect. (**DHS**, *FCD 2*, Nov. 2007, p. A-8)

Governmental Administrative (GA): "Elected and appointed officials responsible for public administration of community health and welfare during an incident." (**FEMA**, *TEI/TO Course Catalog*, 2008, p. 3)

Governmental Jurisdictions in the US: "Our structure of overlapping federal, state, and local governance…has more than 87,000 different jurisdictions." (**White House**, *National Strategy For Homeland Security*, 2002, p. vii.)

Governmental Responsibilities for "Emergency Management": ""The purpose of this title is to provide a system of emergency preparedness for the protection of life and property in the United States from hazards and to vest responsibility for emergency preparedness *jointly* in the Federal Government and the States and their political subdivisions. (**Robert T. Stafford Act**, Title VI -- Emergency Preparedness Sec. 601. Declaration of policy (42 U.S.C. 5195)) [Emphasis added. Prior to an amendment to the Civil Defense Act of 1950, "civil defense" was by Congressional intent, *primarily* the responsibility of State and local governments.]

Governments (and Districts) Within the United States (About 40,000):

- 19,429 municipalities
- 16,504 towns or townships
- 3,142 counties
- 50 State governments
- 6 territorial governments
- 1 Federal government
- Total of more than 39,000 jurisdictions (**DHS**, *Target Capabilities List*, 2007, p. 219)

In addition to the above there are many types of regional, State and local organizations and **districts** such as:

- 13, 506 School districts
- 35,052 special districts

(**GAO**. *State and Local Governments: Growing Fiscal Challenges Will Emerge…*, Jan 2008, 6)

Governor's Authorized Representative. "As the complexity of the response dictates, the *Framework* [National Response Framework] contemplates that the Governor may empower a Governor's Authorized Representative to:

> Execute all necessary documents for disaster assistance on behalf of the State, including certification of applications for public assistance.
>
> Represent the Governor of the impacted State in the Unified Coordination Group, when required.
>
> Coordinate and supervise the State disaster assistance program to include serving as its grant administrator.
>
> Identify, in coordination with the SCO, the State's critical information needs for incorporation into a list of Essential Elements of Information (critical items of specific information required to plan and execute an operation and to support timely, logical decisions)." (**DHS,** *National Response Framework Comment Draft*, Sep. 2007, p. 50)

Governor's Authorized Representative (GAR): "The GAR is the State equivalent to the Disaster Recovery Manager (DRM). The GAR is the State person authorized to approve financial commitments on behalf of the State. The SCO [State Coordinating Officer] and GAR may be the same person." (**FEMA**, *Mission Assignment SOPs Draft*, July 2007, pp. 5, 53)

Governors Homeland Security Advisors Council: "The National Governors Association Center for Best Practices formed the Governors Homeland Security Advisors Council in June 2006 to provide an organizational structure in which the homeland security directors from each state and territory can discuss homeland security issues, share information and expertise, and keep governors informed of the issues affecting implementation of homeland security policies in the states.

"*Mission*: The Council brings together the top state homeland security officials from each state and territory to: 1) inform the work of the NGA Center for Best Practices (NGA Center) by sharing ideas and best practices, identifying emerging issues, and reviewing and analyzing the impacts of Federal homeland security activities on the states; and 2) inform the governors of the impacts of Federal homeland security legislation, regulations, and policies on the states.

"*Objectives***:** Using the Council as a forum, the state homeland security directors share information and expertise and discuss priority setting and action planning to combat domestic threats at all levels of government. Their objectives include:

- Improving interstate and regional communication.
- Facilitating communication between state and federal agencies.
- Developing a unified state and territorial voice to inform governors of the impacts of federal homeland security legislation, regulations and policies on the states.
- Identifying and setting priorities. (**NGA**, *Governors HS Advisors Council*, June 1, 2006)

Governors Homeland Security Advisors Council 2007 Survey Top Five Priorities: "For the 2007 survey, the NGA Center polled the 56 state and territorial homeland security advisors who, collectively, comprise the Governors Homeland Security Advisors Council. The survey results reflect the participation of roughly 80 percent of those officials…This year's survey shows that the top five priorities for states in 2007 were, in order:

• Developing interoperable communications;
• Coordinating state and local efforts;
• Protecting critical infrastructure;
• Developing state fusion centers; and
• Strengthening citizen preparedness." (**NGA**, *Issue Brief: 2007 State Homeland Security Directors* Survey, December 18, 2007)

GPD: Grant Programs Directorate, FEMA Headquarters.

GPD: Grant Programs Division, FEMA Regional Offices. (**FEMA**, *CONOPS* 8Feb08, p. 5)

GraDER: Graduated Rad/Nuc Detector Evaluation and Reporting program.

Grand Strategy: "…the capacity of the nation's leaders to bring together all of the elements, both military and nonmilitary, for the preservation and enhancement of the nation's long term (that is, in wartime and peacetime) best interests." (**Kennedy**, *Grand Strategy*…, 1991)

Grandfather Rules, Flood Insurance, FEMA/FIMA: The Federal Insurance and Mitigation Administration recognizes policyholders who have maintained continuous coverage or have built in compliance with the Flood Insurance Rate Maps (FIRMs) - or who have done both - with grandfather rules that lower flood insurance rates. It works like this:

"If a policy was obtained prior to the effective date of a community's initial FIRM or before a flood map change, the policy holder is eligible to have a flood insurance policy rated using the prior zone and base flood elevation, as long as continuous coverage is maintained. Proof of coverage must be submitted to the insurance company. The flood insurance policy can be assigned to a new owner at the option of the policyholder when the structure is sold.

"If a building was constructed in compliance with a specific FIRM, the owner is always eligible to obtain a policy using the zone and base flood elevation from that FIRM, provided that proof is submitted to the insurance company. Proof of compliance includes documentation that the lowest floor level hasn't changed since it was built, and the building hasn't been substantially improved." (**FEMA**, *Grandfather Rules*, Jan 23, 2008)

Grant Assistance: "When the President authorizes 100% Federal funding for emergency work under sections 403 and 407 of the Stafford Act for a limited period in the initial days of the disaster, the Federal share for Grant Assistance will be as follows:

- **Debris Clearance and/or Removal:** FEMA will reimburse applicants 100% of the costs for the debris removal work accomplished during the designated period. This includes all clearance, pick up, hauling, processing and disposal activities, but only during the designated period. For work accomplished after the end of the designated period, assistance will be provided at the prevailing Federal cost share rate for the particular disaster.

- **Food, Water, Ice, and Other Consumable Commodities:** FEMA will reimburse applicants 100% of the costs of eligible work for reasonable purchase orders approved and finalized pursuant to state and local law during the designated period, regardless of the work or project completion date. This includes expenses to *distribute* commodities, but does not include installation or set-up. For purchase orders approved and placed after the end of the designated period, assistance will be provided at the prevailing Federal cost share rate for the particular disaster.

- **Other Emergency Protective Measures:** FEMA will reimburse applicants 100% of the costs of eligible work accomplished during the designated period. Examples of these measures include: installation of generators, installation of large plastic sheet roofing, and shoring or demolition of unsafe structures. For work accomplished after the designated period, assistance will be provided at the prevailing Federal cost share rate for the particular disaster." (**FEMA**, *100% Funding for Direct Federal Assistance and Grant Assistance, Recovery Policy 9523.0*, June 9, 2006)

Great Natural Catastophe: "…a natural catastrophe being defined by Munich Re as 'great' if the ability of the region to help itself is distinctly overtaxed, making interregional or international

assistance necessary." (**WWF**, *Natural Security*, 2008, 16; cites Munich Re (2003); *topics: Annual Review: Natural Catastrophes 2002*, Germany)

Green Book: *Emergency Management: Principles and Practice for Local Government*, ICMA.

Greenhouse Effect: "Warming of the atmosphere due to the reduction in outgoing solar radiation resulting from concentrations of gases such as carbon dioxide." (**EEA**, *EEA Environmental Glossary*; cites **Ireland Environmental Protection Agency**, *Ireland's Environment*, 2000)

GRIP: Global Risk Identification Programme. (**UN**, *DRR Global Review* 2007, p. vii)

Gross Consequences of Attack Tool: **"**This tool is an automated process for evaluating large numbers of targets and attack modes to estimate, at a high level, the consequences of terrorist attacks." (**DHS**, *Progress in Developing the National Asset Database*, June 2006, p. 20)

Ground Motion: "Seismic vibration of the ground at a particular point, recorded by accelerograph or seismograph in order to determine the vibrational characteristics of an earthquake or explosion." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 43)

Ground Observer Corps: "The Federal Civil Defense Administration has participated in the Joint Public Education Program on Air Defense since the summer on 1952. This program, designed to build and maintain an awareness of the need for a strong air defense and assist State civil defense organizations with their ground oberver corps recruiting, moved into a completely new phase in 1955…. In July 1955 the Air Force announced the expansion of the GOC to include the entire United States. Previously, its activities had been confined to 36 States, Alaska, and the District of Columbia. Whereas earlier requiremens listed a need for 19,500 observatin posts and 49 filter centers, the expanded corps requires over 28,000 observation posts and 73 filter centers." (**FCDA**, *1955 Annual Report*, 1956, p. 61)

Ground Truth: "The Ground Truth, in general terms, is comprised of the detailed elements of a prevention exercise scenario that must remain consistent during exercise development and conduct to ensure that realism is maintained and objectives are met in the unscripted move-countermove exercise environment. The Ground Truth includes the scenario timeline, the local threat environment, and the UA [Universal Adversary] threat group, and individual adversary profiles and relationships. Once composed, the Ground Truth is used as the basis for MSEL development and Red Team operations planning, if applicable." (**DH**S, HSSEP *Volume V: Prevention Exercises* (Draft), Dec. 2005)

Ground Truth Advisor: "In *prevention* exercises, the ground truth advisor tracks how the moves and countermoves of the adversary (notional and *red team*) and players (e.g., law enforcement, intelligence analysts, private industry) change the fabric of the exercise environment, potentially creating additional elements of the Ground Truth, but never detracting from it." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Group (NIMS): "Established to divide the incident management structure into functional areas of operation. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic division. Groups, when activated, are located between branches and resources in the Operations Section." (**DHS**, *NIMS*, 2004, p. 130)

Group Flood Insurance Policy (GFIP): "A Group Flood Insurance Policy (GFIP) is a policy covering all individuals named by a State as recipients under Sec. 411 of the Stafford Act (42 U.S.C. 5178) of an Individual and Family Grant (IFG) program award for flood damage as a result of a major disaster declaration by the President.
(b) The premium for the GFIP, initially, is a flat fee of $200 per policyholder. Thereafter, the premium may be adjusted to reflect NFIP loss experience and any adjustment of benefits under the IFG program.
(c) The amount of coverage will equal the maximum grant amount established under Sec. 411 of the Stafford Act (42 U.S.C. 5178).
(d) The term of the GFIP will be 37 months and will begin 60 days from the date of the disaster declaration.
(e) Coverage for individual grantees begins on the thirtieth day after the NFIP receives the required data for individual grantees and their premium payments.
(f) A Certificate of Flood Insurance will be sent to each individual insured under the GFIP
(g) The GFIP is the Standard Flood Insurance Policy Dwelling Form (a copy of which is included in Appendix A(1) of this part), except that:
(1) The GFIP provides coverage for losses caused by land subsidence, sewer backup, or seepage of water without regard to the requirement in paragraph B.3. of Article 3 that the structure be insured to 80 percent of its replacement cost or the maximum amount of insurance available under the NFIP." (**FEMA**, *Group Flood Insurance Policy-Final Rule*, March 24, 2006)

GRT: Grants Reporting Tool, DHS Office of Grants and Training, 2006

GSA: General Services Administration.

GSE: Government Sponsored Enterprise. (**FSR**, *Nation Unprepared* 2007, 7)

GSN: Global Seismographic Network.

GTAS: Geo-Targeted Alerting System. (**FEMA**, *IPAWS Systems Enhancements*, Sep 12, 2007)

Gulf Coast Evacuation Plan: Evacuation, transportation and hosting planning effort of the States of Louisiana, Mississippi, and Alabama, with assistance from FEMA. (**FEMA**, *Statement of Paulison*, July 31, 2007, p. 10)

GWOT: Global War on Terrorism. (**White House**, *Progress Report GWOT*, 2003)

GZ: Ground Zero. (**OCD**, *Abbreviations and Definitions*, 1971, p. 2)

H: Mustard Gas. (**DA**, *WMD-CST Ops*, Dec 2007, Glossary-3)

HA: Hazard Analysis. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. A-4)

HA: Housing Assistance. (**GAO**, *Natural Disasters: Public Policy Options*, Nov 2007, ii)

HAN: Health Alert Network.

Hart-Rudman Commission (United States Commission on National Security/21st Century (Hart-Rudman Commission). In February 2001 recommended that the federal create a single department responsible for planning, coordinating, and integrating various government activities involved in homeland security – the National Homeland Security Agency. See, *Road Map for National Security: Imperative for Change (The Phase III Report of the U.S. Commission on National Security/21st Century)* 15 Feb 2001.

Hazard: "A Hazard is a natural, technological or social phenomenon that poses a threat to people and their surroundings (in terms of both the natural and the built environment)." (**Alexander**, not dated, 1)

Hazard: Some, including not just a few emergency managers, view hazards such as earthquakes as "technical problems suitable for a combination of engineering, planning, and specialized managerial solutions, and people, if they are mentioned at all, are seen largely as impediments to carrying out the technocratic solutions, because they fail to see the risks they face (e.g. Mileti and Fitzpatrick 1993)….However, by concentrating on the physical risks, projected extreme events, and worst case scenarios, much is ignored" (**Bolin with Stanford** 1998, 20).

Hazard: "…natural and social systems interact to produce a hazard…" (**Burton** et al. 1993, 24).

> "Hazards always result from interaction of physical and human systems. To treat them as though they were wholly climatic or geologic or political or economic is to risk omission of components that must be taken into account if sound solutions for them are to be found" (**Burton** et al. 1993, 188).
>
> "…nature is neutral, and…the environment event becomes hazardous only when it intersects with man. The event leads to disaster when (1) it is extreme in magnitude, (2) the population is very great, or (3) the human-use system is particularly vulnerable" (**Burton** et al. 1993, 232).

Hazard: "is a source of risk and refers to a substance or action that can cause harm."(**Cohrssen & Covello** 1989)

Hazard: A broad concept "that incorporates the probability of the event happening, but also includes the impact or magnitude of the event on society and the environment, as well as the sociopolitical contexts within which these take place. Hazards are the threats to people and the things they value, whereas risks are measures of the threat of the hazards…" (**Cutter** 1993, 2).

Hazard: "A *hazard*, in the broadest term, is a threat to people and the things they value. Hazards have a potentiality to them (they could happen), but they also include the actual impact of an event

on people or places. Hazards arise from the interaction between social, technological, and natural systems." (**Cutter** 2001, 2)

Hazard: "Hazard refers to an extreme natural event that poses risks to human settlements" (**Deyle, French, Olshansky, and Paterson** 1998, 121).

Hazard: Dangerous natural or man made phenomenon that expose a vulnerable location to disastrous events. Vulnerability reduction aims at neutralizing the dangers posed by the hazard. (**D&E Reference Center** 1998)

Hazard: "Something that is potentially dangerous or harmful, often the root cause of an unwanted outcome." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 75 (Glossary); **DHS**, *NIPP*, 2006, p. 103)

Hazard: "A condition with the potential to cause injury, illness, or death of personnel; damage to or loss of equipment or property; or mission degradation." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Hazard: A condition with the potential for harm to the community or environment. Many use the terms "hazard" and "disaster agent" interchangeably. Hence, they will refer to "the hurricane hazard" or even more broadly to "natural hazards" which includes hurricanes, tornadoes, earthquakes and other natural phenomena that have the potential for harm. The hazard is the ***potential***, the disaster is the actual event. (**Drabek** 1997)

Hazard: "A potential event or situation that presents a threat to life and property." (**FEMA**, *Hazards Analysis for Emergency Management (Interim Guidance)*, September **1983**, p. 5)

Hazard: "Hazard means an event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, damage to the environment, interruption of business, or other types of harm or loss" (**FEMA**, *Multi Hazard Identification and Risk* Assessment, **1997**, p. xxi).

Hazard: "Relevant to emergency preparedness, a hazard is an emergency or disaster resulting from a natural disaster, or an accidental or man-caused event." (**FEMA**, *Disaster Dictionary*, **2001**, 58, citing Robert T. Stafford Act, 602)

Hazard: "The probability of the occurrence of a disaster caused by a natural phenomenon (earthquake, cyclone), by failure of manmade sources of energy (nuclear reactor, industrial explosion), or uncontrolled human activity (overgrazing, heavy traffic, conflicts) – UNDRO. Some authors use the term in a broader sense, including vulnerability, elements at risk, and the consequence of risk." (**Gunn** 1990, 374)

Hazard: Hazards "are threats to humans and what they value: life, well-being, material goods, and environment." (**Harriss** et al, 1978)

Hazard: "A force or agent with the ability to cause adverse human physical or psychological effects (injury, death) and/or significant economic damage." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-6, Glossary)

Hazard: "…a potential source of harm." (**International Standards Organization** 1990)

Hazard: "Possible source of danger, or conditions physical or operational, that have a capacity to produce a particular type of adverse effects." (**ISO**, *Societal Security*…, 2007, p. 3)

Hazard: Hazard is the probability that in a given period in a given area, an extreme potentially damaging natural phenomena occurs that induces air, earth or water movements, which affect a given zone. The magnitude of the phenomenon, the probability of its occurrence and the extent of its magnitude can vary and, in some cases, be determined. (**Maskrey** 1989, 1)

Hazard: "A dangerous event or circumstance that has the potential to lead to an emergency or disaster. Any physical phenomenon that has the potential to produce harm or other undesirable consequences to some person or thing." (**May,** p. 5)

Hazard: "Hazard…reflects a potential threat to humans as well as the impact of an event on society and the environment….hazards are…in part socially constructed by people's perceptions and their experiences. Moreover, people contribute to, exacerbate, and modify hazards. Thus, hazards can vary by culture, gender, race, socioeconomic status, and political structure as well" (**Mitchell and Cutter** 1997, 9-10).

Hazard: "A natural or human-caused threat that may result in disaster occurring in a populated, commercial, or industrial area." **(National Science and Technology Council** 2005, 17)

Hazard/Hazardous: "Capable of posing an unreasonable risk to health, safety, or the environment; capable of causing harm." (**NFPA 471**, 1997, p. 9)

Hazard: "Hazards to be evaluated shall include the following: (1) Natural hazards (geological, meteorological, and biological) (2) Human-caused events (accidental and intentional) (3) Technological-caused events." (**NFPA 1600**, 2007. p. 8)

Hazard: "A hazard can be defined as: 'some aspect of the physical environment that threatens the well-being on individuals and their society.'" (**Nigg** 1996, 4

Hazard: "…we describe *hazard* as the forces, conditions, technologies that carry a potential for social, infrastructural, or environmental damage. A hazard can be a hurricane, earthquake, or avalanche; it can also be a nuclear facility or a socioeconomic practice, such as using pesticides. The issue of hazard further incorporates the way a society perceives the danger or dangers, either environmental and/or technological, that it faces and the ways it allows the danger to enter its calculation of risk." (**Oliver-Smith and Hoffman** 2002, 4)

Hazard: "In disaster management, a hazard refers to the potential for a disaster." (**Pearce** 2000, Chapter 2, 12)

Hazard: A rare or extreme event in the natural or man-made environment that adversely affects human life, property or activity to the extent of causing disaster. A hazard is a natural or man-made phenomenon which may cause physical damage, economic losses, or threaten human life and well-being if it occurs in an area of human settlement, agricultural, or industrial activity. Note, however, that in engineering, the term is used in a more specific, mathematical sense to mean the probability of the occurrence, within a specified period of time and a given area, of a particular, potentially damaging phenomenon of a given severity/intensity. (**Simeon Institute** 1998)

Hazard: *Hazard* is best viewed as a naturally occurring or human-induced process or event with the potential to create loss, i.e. a general source of danger. *Risk* is the actual exposure of something of human value to a hazard and is often regarded as the combination of probability and loss. Thus, we may define hazard (or cause) as 'a potential threat to humans and their welfare' and risk (or consequence) as 'the probability of a specific hazard occurrence'. The distinction was illustrated by Okrent (1980)[53] who considered two people crossing an ocean, one in a liner and the other in a rowing boat. The main hazard (deep water and large waves) is the same in both cases but the risk (probability of drowning) is very much greater for the person in the rowing boat. Thus while an earthquake hazard can exist in an uninhabited region, an earthquake risk can occur only in an area where people and their possessions exist. People, and what they value, are the essential point of reference for all risk assessment and for all disasters" (**Smith** 1996, 5).

Hazard: "For purposes of this title only: (1) Hazard - The term "hazard" means an emergency or disaster resulting from–(A) a natural disaster; or (B) an accidental or man-caused event." (**Stafford Act,** Title VI, Sec. 602. Definitions (42 U.S.C. 5195a), June 2007 (FEMA 592), p. 54)

Hazard: A threatening event, or the probability of occurrence of a potentially damaging phenomenon within a given time period and area. (**UNDHA**, *Internationally Agreed Glossary of Basic Terms Related to Disaster Management*, 1992, p. 4)

Hazard: "A potentially damaging physical event, phenomenon or human activity, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation." (**UN/ISDR**, *Living With Risk*, 2002, p. 24)

Hazard: "A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. *Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydrometeorological and biological) or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterised by its location, intensity, frequency and probability*." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Hazard (Environmental): "…the threat potential posed to man or nature by events originating in, or transmitted by, the natural or built environment" (**Kates** 1978, 14).

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[53] D. Okrent. "Comment on Societal Risk." *Science*, Vol. 208, 1980, pp. 372-375.

Keith Smith's (1997, 14-15) commentary on this definition:

> "This definition can include both long-term environmental deterioration (acidification of soils, build-up of atmospheric carbon dioxide) and all the social hazards, both involuntary and communal (crime, terrorism, warfare), as well as voluntary and personal hazards (drug abuse, mountain climbing). These hazards have such different origins and impacts that a more focused definition is required."

Hazard (Environmental): "events which directly threaten human life and property by means of acute physical or chemical trauma…Any manageable definition of environmental hazards will be both arbitrary and contentious. But, despite their diverse sources, most disasters have a number of common features:

1. The origin of the damaging process or event is clear and produces characteristic threats to human life or well-being, e.g. a flood causes death by drowning.
2. The warning time is normally short, i.e. the hazards are often known as rapid-onset events. This means that they can be unexpected even though they occur within a known hazard zone, such as the floodplain of a small river basin.
3. Most of the direct losses, whether to life or property, are suffered fairly shortly after the event, i.e., within days or weeks.
4. The exposure to hazard, or assumed risk, is largely involuntary, normally due to the location of people in a hazardous area, e.g. the unplanned expansion of some Third World cities onto unstable hillslopes.
5. The resulting disaster occurs with an intensity that justifies an emergency response, i.e. the provision of specialist aid to the victims. The scale of response can vary from local to international" (**Smith** 1996, 15-16).

Hazard (Environmental): "…extreme geophysical events, biological processes and major technological accidents, characterized by concentrated releases of energy or materials, which pose a largely unexpected threat to human life and can cause significant damage to goods and the environment" (**Smith** 1996, 16).

Hazard (Global): "…changes to regional ecosystems which in turn effect global systems, are termed 'global hazards'. Climate change, soil degradation, and deforestation are examples of global hazards that are directly and indirectly related to the manipulation of technology. Global hazards can be distinguished from the more traditional ones because of their diffused or dispersed effects at the planetary scale—they threaten the long-term survival of t he planet….They are not rare, discrete events but develop over a long period of time. Global hazards are cumulative in nature and are the end result of centuries or decades of human manipulation of technology to control nature and exploit its resources" (**Cutter** 1993, 5).

Hazard (Hazardous Materials): "HAZARD is the inherent characteristic of a material, condition, or activity that has the potential to cause harm to people, property, or the environment." (**DOT**, *Risk Management Definitions*, OHMS, 2005)

Hazard (Intentional): "Human actions with intent to cause harm to other humans and what they value are termed intentional hazards. Today, terrorism is the source of most of the intentional hazards." (**Dymon**, Ute. "Session 1, Introduction to and Evolution of Hazard Mapping and Modeling." *Hazard Mapping and Modeling* (Draft FEMA Emergency Management Higher Education Project College Course). Emmitsburg, MD: Emergency Management Institute, FEMA/DHS, 2004.)

Hazard (Natural): "…a naturally occurring or man-made geologic condition of phenomenon that presents a risk or is a potential danger to life or property" (**American Geological Institute** 1984). (Quoted in Tobin and Montz 1997, 9).

Hazard (Natural): "The concept of natural hazards is somewhat paradoxical; the elements of a natural geophysical event (e.g., wind and storm surge of a hurricane) are hazardous only when they prove detrimental to human activity systems" (**Baker** 1976, 1).

Hazard (Natural): "While some hazards, such as earthquakes and volcanoes, are the product of natural processes unmodified by human interventions, other ostensibly natural hazards are less and less 'natural'. The impacts of human activities on global climatic systems, with attendant changes in rainfall patters, storm frequency, and storm severity suggest that meteorological hazards themselves could be influenced by (unintended) human factors (e.g. Southwick 1996[54]; Flavin 1997[55]). Flavin (1997) cites evidence that both the frequency and severity of meteorological hazards may be increasing as a result of human-induced climatic change. Similarly human modifications of riverine systems, from deforesting and paving watersheds to elaborate levee systems, have taken the 'natural' out of many flood hazards (e.g. Smith 1996)" (**Bolin with Stanford** 1998, 25 fn. 3).

Hazard (Natural): "In reality, the environment is neither benign nor hostile. In is 'neutral' and it is only human location, actions and perceptions which identify resources and hazards within the range of natural events (**Burton** et al. 1993)" (Smith 1996, 12).

Hazard (Natural): "…those elements of the physical environment harmful to man and caused by forces extraneous to him" (Smith 1996, 9: quoting I. **Burton and R.W. Kates**. "The Perception of Natural Hazards in Resource Management." *Natural Resources Journal*, Vol.3, 1964, pp. 412-441).

Hazard (Natural): "Natural hazards exist with or without the presence of human populations and development" (**Schwab,** et al. 1998, 12).

Hazard (Natural): "A natural hazard represents the potential interaction between humans and extreme natural events…It represents the potential or likelihood of an event (it is not the event itself)" (**Tobin & Montz** 1997, 5).

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[54] C. Southwick. *Global Ecology in Human Perspective*. NY: Oxford University Press, 1996.

[55] C. Flavin. "Climate Change and Storm Damage: The Insurance Costs Keep Rising." *World Watch*, Vol. 10, No. 1, 1997, pp. 10-11.

> "Natural hazards constitute a complex web of physical and environmental factors interacting with the social, economic, and political realities of society" (**Tobin and Montz** 1997, 11).

Hazard (Natural): Naturally caused events such as hurricanes, tornadoes, earthquakes, floods, volcanoes and forest fires. (**Unknown source**)

Hazard (Natural): "First, the misunderstanding of 'natural hazards' as events unrelated to or separate from human activity and human choice is no longer credible. The fundamental involvement of human organizations, cultural and institutional context, and political-economic structures cannot be overlooked or wished away. The creation, distribution, and mitigation of vulnerability to hazards of all kinds is a social interaction with either other social processes or geophysical processes or both. There is no purely 'natural' hazard in the full sense of a risk or danger for which affected persons have no defence or remedy." (**Weiner** 2001, 1)

Hazard (Technological): Typically man-related hazards such as nuclear power plant accidents, industrial plant explosions, aircraft crashes, dam breaks, mine cave-ins, pipeline explosions and hazardous material accidents. (Unknown source)

Hazard (Technological): "…the interaction between technology, society, and the environment" (**Cutter** 1993, 2).

> "Technological hazards arise from our individual and collective use of technology" (**Cutter** 1993, 1).
>
> "The elements of complexity, surprise, and interdependence are governing characteristics of technological hazards" (**Cutter** 1993, 2).

Hazard (Technological): "A Technological hazard arises from the potential of negative consequences resulting from the human use of technology." (**Dymon**, Ute. "Session 1, Introduction to and Evolution of Hazard Mapping and Modeling." *Hazard Mapping and Modeling* (Draft FEMA Emergency Management Higher Education Project College Course). Emmitsburg, MD: Emergency Management Institute, FEMA/DHS, 2004.

Hazard (Technological): A range of hazards emanating from the manufacture, transportation, and use of such substances as radioactive materials, chemicals, explosives, flammables, agricultural pesticides, herbicides, and disease agents; oil spills on land, coastal waters, or inland water systems; and debris from space. (**FEMA**, *FRP Appendix B*, 1992)

Hazard (Technological): Technological hazards are best seen as accidental failures of design or management affecting large-scale structures, transport systems or industrial activities which present life-threatening risks to the local community….the failure "trigger" which provokes a technological disaster is likely to arise for one of the following reasons: (1) defective design; (2) inadequate management; (3) sabotage or terrorism (**Smith** 1996, 316).

Hazard Amnesia: Complacency which can set in "just because it's been a while since the last emergency." (**FEMA**, *FEMA Warns*…, 2002; quote is from then FEMA Director Joe Allbaugh)

Hazard Analysis: *Hazard analysis* is the basis for development of the Emergency management Program. It evaluates what could happen, the likelihood of this event occurring and the magnitude of problems created because of a given event. By identifying potential events that could occur, efforts can be directed towards mitigation activities and developing needed response plans. Although this is not a complex task it does require a comprehensive review of the natural and technological (man-made) hazards of the region. Consideration must be given to the possibility of damage or failure of facilities, loss of basic utilities, and multiple casualty events, to name a few. The organization must also consider the effect of a loss of trust from the community as well as legal ramifications, if it fails to respond properly. Consulting with local emergency planners, public health, fire, police, public works, and utility company officials is essential to this process in identifying current hazards and historical events that have occurred in the region. Examples of this would be obtaining information on the region's 100-year flood plain record, hurricane or severe storm experience, earthquake potential, utility outage records and hazardous materials concerns in the area.

Hazard Analysis: "The starting point for local emergency planning (or for updating existing plans) is an analysis of specific hazards deemed likely to confront the jurisdiction….The hazards analysis thus specifies the threats for which the local plan will outline the who, what, where, and how of coordinated emergency operations. Accordingly, hazards should be described as specifically as possible. For example, the analysis for a coastal jurisdiction should specify the area that could be flooded by a storm surge caused by a hurricane, and the number of people who should therefore be evacuated during the warning period." (**DCPA**, *Standards For Local Civil Preparedness,* 1978, p. 15)

Hazard Analysis: "**HAZARD ANALYSIS** is the identification of material properties, system elements or events that lead to harm or loss. The term hazard analysis may also include evaluation of consequences from an event or incident. (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

Hazard Analysis: NRT-1 [National Response Team, Hazardous Materials Emergency Planning Guide, 1987] defines "hazards analysis" as a three step process: hazards identification, vulnerability analysis, and risk analysis…" (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, p. i)

Hazard Analysis: "Hazards analysis is a process for determining the emergency management needs of a community. One aspect involves knowledge of the kinds of hazards to which the community is subject. This knowledge includes the probability of the event occurring at varying levels of intensity at varying locations throughout the community. Determinations of probability, intensity and location can be made on the basis of historical evidence, empirical research or community perception….

Another aspect of the hazard analysis is knowledge of the community. This involves an inventory of the areas and resources of the community susceptible to damage and an assessment of the loss that would result from the occurrence of an event at a given intensity or location. This knowledge of the community includes such things as the number of people and the value of

property that would be affected by an event, as well as the communications, transportation, food supply or other systems of society exposed to interruption or collapse.

When knowledge of hazards is combined with knowledge of their potential impacts on the community. Adequate information about the hazards will enable a community to know how frequently damage from an event could occur, s\what the extent of the damage would be, and which portions of the community would be damaged. When the data for each hazard are combined, a community can determine its relative vulnerability to each hazard. This will allow assignment of priorities for emergency management needs." (**FEMA**, *Hazards Analysis for Emergency Management (Interim Guidance),* September **1983,** pp. 1-2)

Hazard Analysis: "A review of the vulnerability of life, property, the environment, and social and economic activity to the actual or potential impact of hazards." (**FEMA**, *Hazards Analysis for Emergency Management (Interim Guidance),* September **1983,** p. 5)

Hazard Analysis: "Knowing what could happen, the likelihood of it happening, and having some idea of the magnitude of the problems that could arise, are essential ingredients for emergency planning. The first step, then, is for the jurisdiction to identify the potential hazards and to determine the probable impact each of those hazards could have on people and property. This task need not be complicated or highly sophisticated to provide useful results. What is important is that all hazards that pose a potential threat to the jurisdiction are identified and addressed in the jurisdiction's emergency response planning and mitigation efforts." (**FEMA**, *IEMS Process Overview*, **1983**, p. 7)

Hazard Analysis: Involves identifying all of the hazards that potentially threaten a jurisdiction and analyzing them in the context of the jurisdiction to determine the degree of threat that is posed by each. (**FEMA**, *Emergency Planning Workshop Instructor Guide*, **1997**)

Hazard Analysis: "Hazard analysis is the process by which hazards that threaten the community are identified, researched, and ranked according to the risks they pose and the areas and infrastructure that are vulnerable to damage from an event involving the hazards. The outcome of this step is a written hazard analysis that quantifies the overall risk to the community from each hazard." (**FEMA**, *Emergency Planning* IS-235, May 24, **2007** update)

Hazard Analysis: "A hazards analysis consists of two parts. The first involves knowledge of the kinds of hazards that might threaten the community. This knowledge includes the probability of the event occurring at varying levels of intensity and at varying locations throughout the community. Determinations of probability, intensity, and location can be made on the basis of historical evidence, empirical research, or community perception." (**McLoughlin** 1985, 168)

Hazard Analysis: "The identification and evaluation of all hazards that potentially threaten a jurisdiction to determine the degree of threat that is posed by each." (**Michigan DEM** 1998, 6)

Hazard Analysis: That part of the overall planning process which identifies and describes hazards and their effects upon the community. (**National Disasters Organization** 1992)

Hazard Analysis: "Hazard analysis involves identifying and investigating both the hazard location and its geographical extent. It further examines the identified hazard's strength (scale, magnitude, intensity) and probability of occurrence. The many methods and instruments available for hazard analysis operate on the basis of available scientific data." (**ProVention Consortium**, *CRA Toolkit: Glossary of Terms*, 2006)

Hazard Analysis: "Identification, studies and monitoring of any hazard to determine its potential, origin, characteristics and behaviour." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Hazard Analysis, Preliminary:

1. "Prepare Form HA-1 [Hazard Analysis-1] using all available information concerning History of the various types of disaster emergencies in the jurisdiction analyzed….
2. Make a list of the potential disaster situations in order of severity, starting with the worst in terms of frequency of occurrence, amount of damage to persons and property, complexity of problems, etc…
3. ….Consider each hazard on the basis of the functions which would probably be necessary to meet the situation. Determine the resources now available to perform each function, and the agency which has primary responsibility to respond. List contact personnel, with appropriate information.
4. Make a list of disaster functions for which no adequate capability exists at this time. Assign priorities for remedial action or planning…
5. Report the results of your Hazard Analysis to your local government, the local emergency council, and other groups which have interest in adequate disaster operations planning.
6. Make plans for necessary action steps to find resources which will eliminate the uncovered parts of your Disaster Plan." (**DCPA**, *On-Site Assistance Appendices* (MP 63-1), 1974, p. A-2)

Hazard Analysis Problem Areas: "One of the most significant national efforts at multihazard vulnerability analysis occurred under the Disaster Relief Act of 1974 (P.L. 93-288). Through a development grant, States were able to prepare comprehensive emergency plans. A specified aspect of the plans was the preparation of a hazards analysis to identify specific major risks and probable consequences that might require special contingency plans. Although guidance for the preparation of a hazards analysis was issued in the form of criteria and checklists, the guidance was not prescriptive. Virtually no work at a national level has been done in developing guidance for communities to use in doing a comprehensive hazards analysis. Experiences learned by FEMA, which have since been confirmed by the NGA bulletin entitled *Hazards Analysis—Where Do We Go From Here?*, include the following:

- the majority of hazards analyses take one of two forms: indepth analysis of one type of hazard, or multihazard compilations that focus on individual hazard descriptions using historical accounts;
- only a few establish a method to rank or evaluate hazards;
- almost none suggest guidelines for settling priorities for organized emergency management activities;….

- often details are provided only for events which resulted in a Presidential declaration;
- in many cases the analysis is more fit for public information than for planning needs or for priority setting;
- many analyses are based on prevalent natural disaster hazards, and fail to include potential but unexperienced events;
- most agencies do not systematically research hazard agents or conditions; only ad hoc data are gathered for specific need;
- hazard data are scattered throughout various public and private agencies and vary greatly with regard to quality, utility and format;….
- no analysis or comparison is done of major events or hazard agents in order to pinpoint commonalities." (**FEMA**, *Hazards Analysis for Emergency Management*, 1983, p. 3)

Hazard Analysis Rating and Scoring System: "The rating and scoring system [for hazard analysis] is based on the use of four criteria:

- History
- Vulnerability
- Maximum Threat
- Probability" (**FEMA**, *Hazards Analysis for Emergency Management*, 1983, p. 11)

Hazard Analysis Steps: "A basis hazards analysis has several steps:

- Identification of hazards;
- Collection of information;
- Analysis of information; and
- The development and preparation of reports." (**FEMA**, *Hazards Analysis for Emergency*, 1983, p. 6)

Hazard and Vulnerability Analysis (HVA): "A study that identifies possible hazards and the susceptibility of an organization to the hazard impact. The HVA provides guidance for mitigation and preparedness plans in an emergency management program." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-5, Glossary)

Hazard Assessment: Identification of hazards in given location. (**D&E Ref. Center** 1998)

Hazard Assessment: (Sometimes Hazard Analysis/Evaluation) The process of estimating, for defined areas, the probabilities of the occurrence of potentially-damaging phenomenon of given magnitudes within a specified period of time. Hazard assessment involves analysis of formal and informal historical records, and skilled interpretation of existing topographical graphical, geological geomorphological, hydrological, and land-use maps. (**Simeon Institute** 1998)

Hazard Assessment: "Process designed to determine factors contributing to the possible adverse effects of a substance to which a human population or an environmental compartment could be exposed. The process includes three steps: hazard identification, hazard characterisation, and hazard evaluation." (**European Environment Agency**, *EEA Environmental Glossary*, 2007; cites **International Union of Pure and Applied Chemistry**, "Risk Assessment Terminology," **Chemistry International**, Vol. 23, No. 2, March 2001, John H. Duffus)

Hazard Categories: See "Hazard Typologies."

Hazard Characterization: "The second step in the process of hazard assessment, consisting in the qualitative and, wherever possible, quantitative description of the nature of the hazard associated with a biological, chemical, or physical agent, based on one or more elements, such as mechanisms of action involved, biological extrapolation, dose-response and dose-effect relationships, and their respective attendant uncertainties." (**EEA**, *Environmental Glossary*; cites: **International Union of Pure and Applied Chemistry**, "Risk Assessment Terminology," **Chemistry International**, Vol. 23, No. 2, March 2001, John H. Duffus)

Hazard Evaluation: "The third step in the process of hazard assessment aiming at the determination of the qualitative and quantitative relationship between exposure to a hazard under certain conditions, including attendant uncertainties and the resultant adverse effect." (**EEA**, *Environmental Glossary*; cites: **International Union of Pure and Applied Chemistry**, "Risk Assessment Terminology," **Chemistry International**, Vol. 23, No. 2, March 2001, J. H. Duffus)

Hazard Identification: A structured approach for identifying those hazards judged by local officials to pose a significant threat to their jurisdiction.

Hazard Identification: …defines the magnitudes (intensities) and associated probabilities (likelihoods) of natural hazard that may pose threats to human interests in specific geographic areas. (**Deyle, French, Olshansky and Patterson** 1998, 121).

Hazard Identification: "The first stage in hazard assessment, consisting of the determination of substances of concern, the adverse effects they may have inherently on target systems under certain conditions of exposure, taking into account toxicity data." ." (**EEA**, *Environmental Glossary*; cites: **International Union of Pure and Applied Chemistry**, "Risk Assessment Terminology," **Chemistry International**, Vol. 23, No. 2, March 2001, John H. Duffus)

Hazard Identification: "The determination of possible hazards, their probability and intensity, and the impact area." (**FEMA**, *Hazards Analysis for Emergency Management*, 1983, p. 5)

Hazard Identification: "…a list of all hazards known to have occurred, or with a potential for occurrence, and the impacts of their occurrence." (**FEMA**, *Hazards Analysis for EM*, 1983, p. 6)

Hazard Identification: "…the process of defining and describing a hazard, including its physical characteristics, magnitude and severity, probability and frequency, causative factors, and locations/areas affected" (**FEMA**, *Multi Hazard Identification and Risk Assessment*, **1997**, p. xxi).

Hazard Identification: Hazard Identification locates hazardous areas, often estimates the probability of hazardous events of various magnitudes, and sometimes assesses the separate characteristics of the hazards (e.g., for hurricanes: wind, high water, and wave action). (**Godschalk, Kaiser, and Berke**, 1998, 98)

Hazard Identification: "…the identification of potential sources of harm." (**ISO** 1990)

Hazard Identification: The process of recognizing that a hazard exists and defining its characteristics (**Standards Australia/New Zealand**1995).

Hazard Identification and Risk Assessment (HIRA): "State, tribal, and local governments have responsibility to develop detailed, robust all-hazards plans and hazard- or incident-specific annexes with supporting procedures and protocols to address their locally identified hazards and risks. They use hazard identification and risk assessment (HIRA) to identify hazards and associated risk to persons, property, and structures and to improve protection from natural- and human-caused hazards. HIRA serves as a foundation for planning, resource management, capability development, public education, and training and exercises." (**DHS**, *NRF*, 2008, 74; also **NRF**, *Glossary and Acronyms*, 2008, 7)

Hazard Identification and Risk Assessment: "…Hazard Identification and Risk Assessment (HIRA) activities involve the identification of hazards and assessment of risks to persons, public and private property, and structures." (**Idaho Bureau of Disaster Services**, *Local Capability Assessment for Readiness (CAR) Version 2*. January 2000, p. 4)

Hazard Identification, Capability Assessment, and Multi-Year Development Plan (HICA/MYDP) Purpose: FEMA "has developed Hazard Identification, Capability Assessment, and Multi-Year Development Plan (HICA/MYDP) guidance to establish a nationwide data base for determining the status of emergency preparedness and the impact of FEMA funds on State and local emergency management operations. This guidance has also been designed for State and local benefit. As a planning tool, it can guide local jurisdictions through a logical sequence for identifying hazards, assessing capability, setting priorities, and scheduling activities to improve capability over time." (**FEMA**, *HICA/MYDP* (CPG 1-34), 1985, p. 1-1)

Hazard Management: "…utilizes individual and collective strategies to reduce and mitigate the impacts of hazards on people and places" (**Cutter** 1993, 2).

Hazard Management: "This subgroup of risk management deals with either of the elements of risk (probability or consequences) due to human or natural hazards. While the options for reducing the probability of a hazard are quite limited there are a wide variety of strategies for reducing the consequences of any hazardous event." (**Manitoba Emergency Measures Organization**, *Business Resumption Planning*, 1996, p. 8)

Hazard Mapping: "The process of mapping hazard information within a study area of varying scale, coverage, and detail. Mapping can be of a single hazard such as fault maps and flood plain maps or several hazard maps can be combined in a single map to give a composite picture of natural hazards. The benefit of the individual mapping technique is a visual form of information for decision makers and planners, which is easily understood. Multiple hazard maps provide the possibility of common mitigation technique recommendations; sub-areas requiring more information, additional assessments, or specific hazard-reduction techniques can be identified; and land-use decisions can be based on all hazard considerations simultaneously. The limitations of the technique are that the volume of information needed for natural hazards management, particularly in the context of integrated development planning, often exceeds the capacity of

manual methods and thus drives the use of computer assisted techniques." (**UN Disaster Assessment Portal**, *Techniques Used in Disaster Risk Assessment*, 2008)

Hazard Mitigation: Any measure that will reduce the potential for damage from a disaster event.

Hazard Mitigation: "Floods, earthquakes, hurricanes, wildfires, tornadoes, and technological disasters cause billions of dollars of damage annually throughout the United States. The loss of lives, injuries, and damages to homes, businesses, or workplaces cause incalculable hardship and emotional suffering, and tear at the very fabric of our lives and our communities. While we will never be able to completely prevent disasters from occurring, we know how to reduce their impacts. Hazard mitigation is the most proactive and successful method for reducing the physical, financial, and emotional losses caused by disasters. Utilizing mitigation activities such as land use planning, site design, engineering, and retrofitting of homes, structures, schools, public buildings and businesses, we are able to reduce future disaster losses. "Hazard mitigation" means actions that reduce or eliminate the long-term risk to people and property from the effects of hazards. FEMA's hazard mitigation efforts consist of three objectives: risk analysis, risk reduction and flood insurance. These objectives work in tandem in enabling the Nation's at-risk population to reap the rewards of good hazard mitigation practices:

- Creation of safer communities by reducing loss of life and property;
- Recovering more rapidly from floods and other disasters; and
- Reducing the financial impact on States, local and tribal communities, and the national treasury." (**FEMA**, *Vision for New FEMA*, December 12, 2006, p. 27)

Hazard Mitigation: Measures taken in advance of a disaster aimed at decreasing or eliminating its impact on society and environment (**UN** 1992, 41).

Hazard Mitigation: "The ability to control, collect, and contain a hazard; lesson its effects; and conduct environmental monitoring – mitigation efforts may be implemented before, during, or after an incident." (**Homeland Security Council**, *National Planning Scenarios*, 2006, p. vi)

Hazard Mitigation Grant Program (HMPG): "The Hazard Mitigation Grant Program (HMGP) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act." (**FEMA**. *Hazard Mitigation Grant Program*. September 12, 2007 update)

Hazard Mitigation Plan: "…the documentation of a state or local government's evaluation of natural hazards and the strategy to mitigate such hazards." (**FEMA**; cited by Tetra Tech EM, 2007)

Hazard Mitigation Plan: "The plan should include:

- Discussion of the planning process and partners involved;
- Discussion of the hazards and associated potential losses;
- Goals aimed at reducing or avoiding losses from the identified hazards;

- Mitigation actions that will help accomplish the established goals;
- Strategies that detail how the mitigation actions will be implemented and administered; and
- Description of how and when the plan will be updated." (**FEMA**, *Developing the Mitigation Plan* (FEMA 386-3), 2003, p. viii)

Hazard Mitigation Planning: "Hazard Mitigation Planning is the coordination of actions taken to reduce injuries, deaths, property damage, economic losses, and degradation of natural resources due to natural or human-caused hazard events. Hazard mitigation actions have long-term and cumulative benefits over time. An effective mitigation plan provides documentation of valuable local knowledge on the most efficient and effective ways to reduce losses from hazard events. The benefits of preparing a mitigation plan include:

- More direct access to a wide range of technical and financial resources for mitigation projects and initiatives. Not only will your jurisdiction have the benefit of a well-thought-out blueprint for executing projects efficiently, but several federal and state emergency management programs require hazard mitigation plans as prerequisites to awarding funds.
- The mitigation planning process promotes the development of an informed citizenry who are knowledgeable about their vulnerability to hazards and the options for reducing their losses–creating an advocacy group that will support plan implementation.
- Integration of mitigation strategies with other community needs and goals—the mitigation planning process encourages the mitigation strategy to be developed in light of economic, social, and political realities.
- Improved ability to recover after a disaster. Having a hazard mitigation plan in place when a disaster strikes will greatly improve the response and recovery process and ensure that long-term mitigation issues are addressed." (**FEMA**, *Developing the Mitigation Plan* FEMA 386-3), 2003, p. vii)

Hazard Mitigation Planning Process:

- Organize Resources
- Assess Risks
- Develop a Mitigation Plan
- Implement the Plan and Monitor Progress (**FEMA** 386-3, Developing…, 2003, Foreword)

Hazard Mitigation Planning Responsibilities, State, Tribal and Local: "To implement a comprehensive approach to mitigation planning, states, tribes, and communities must coordinate their policies and activities. States should play a lead role and establish guidelines, goals, and priorities that communities adhere to when preparing plans. To facilitate communities meeting these requirements, states should provide technical assistance, funding, and information that may not be readily available at the local level. This can include demographic, economic, and vulnerability assessment and loss estimation modeling data, as well as benefit-cost analysis guidance, depending on the needs of the community. Meanwhile, local government mitigation planning should be consistent with established state goals and policies. Plans should identify local priorities and projects to be considered when states set priorities and allocate limited

resources. Communities are required to have FEMA-approved mitigation plans to be eligible to receive federal grants from programs such as the post-disaster HMGP, Flood Mitigation Assistance (FMA) Program, and Pre-Disaster Mitigation Program. States must also have FEMA-approved plans to be eligible for HMGP funding, Fire Management Assistance Grants, and non-emergency Stafford Act assistance." (**FEMA**, *Developing the Mitigation Plan*, 2003, p. x)

Hazard Prediction and Assessment Capability (HPAC): "HPAC software predicts the effects of hazardous material releases into the atmosphere and its collateral effects on civilian and military populations. This counterproliferation/counterforce tool assists warfighters in destroying targets containing weapons of mass destruction and responding to hazardous agent releases. It employs integrated source terms, high resolution weather forecasts and particulate transport algorithms to rapidly model hazard areas and human collateral effects." (**DTRA/DOD**, *Assessment of Catastrophic Events Center Public Page*)

Hazard Probability: The estimated likelihood that a hazard will occur in a particular area.

Hazard Risk: The probability of experiencing disaster damage.

Hazard Taxonomies: See "Hazard Typologies."

Hazard Typologies (Categories or Taxonomies): (1950s/1960's Cold War Civil Defense Era)
- Attack
- Natural

Hazard Typologies (Categories or Taxonomies): (1970s)
- Attack
- Natural
- Technological

Hazard Typologies (Categories or Taxonomies): (1980s and 1990s)
- Natural
- Techonological
- Man/Human-Made (or Civil, Civil Emergency, Willful, Intentional, Deliberate, Purposeful)

Hazard Typologies (Categories or Taxonomies):
- Natural
- Accidental
- Intentional
    - Criminal (e.g., arson, illegal hazardous waste dumping)
    - Political (terrorist acts) (**Burton**, "The Constitutional Roots of All-Hazards Policy, Management, and Law." *Journal of HLS and EM*, V.5, Is.1, Art.35, 2008)

Hazard Typologies (Categories or Taxonomies):
- Weather
- Man-Made

- Transport and Communication
- Medical
- Major Disturbance
- Energy (**Carroll**, in Farazmand, *Handbook of Crisis and EM*, 2001, 466)

Hazard Typologies (Categories or Taxonomies):
- Natural
- Accidental
- Purposeful (**Duke Environmental Leadership Forum**, Nicholas School of the Environment and Earth Sciences, Duke University, North Carolina, November 20-21,2000. Conference on "Dealing With Disasters: Prediction, Prevention and Response.")

Hazard Typologies (Categories or Taxonomies):
- Natural
- Technological
- Civil
- Environmental (**Hoetmer**, "Introduction", 1991)

Hazard Typologies (Categories or Taxonomies):
- Natural
- Man-Made
- Hybrid (natural and man-made). (Keller, 1990)

Hazard Typologies (Categories or Taxonomies):
- Natural
- Environmenal
- Biological
- Technological
- Human-Induced/Civil (**McEntire**, *Disaster Response Operations and Mgmt*., 2005)

Hazard Typologies (Categories or Taxonomies):
- **Natural**
- **Technological**
- **Man-Made** (**Miller and Folkes**, "In Defense of 'Man-Made' Disaster." *Natural Hazards Observer*, Vol. 9, 1984, p. 11.

Hazard Typologies (Categories or Taxonomies): "The hazard identification should include the following types of potential hazards. This list is not all-inclusive but reflects the general categories that should be assessed in the hazard identification.

(1) Naturally occurring hazards that can occur without the influence of people and have potential direct or indirect impact on the entity (people, property, the environment), such as the following:

(a) Geological hazards (does not include asteroids, comets, meteors)

i. Earthquake

ii. Tsunami
iii. Volcano
iv. Landslide, mudslide, subsidence
v. Glacier, iceberg

(b) Meteorological hazards
i. Flood, flash flood, seiche, tidal surge
ii. Drought
iii. Fire (forest, range, urban, wildland, urban interface)
iv. Snow, ice, hail, sleet, avalanche
v. Windstorm, tropical cyclone, hurricane, tornado, water spout, dust/sand storm
vi. Extreme temperatures (heat, cold)
vii. Lightning strikes
viii. Famine
ix. Geomagnetic storm

(c) Biological hazards
i. Emerging diseases that impact humans or animals [plague, smallpox, anthrax, West Nile virus,
foot and mouth disease, SARS, pandemic disease, BSE (Mad Cow Disease)]
ii. Animal or insect infestation or damage

(2) Human-caused events such as the following:

(a) Accidental
i. Hazardous material (explosive, flammable liquid, flammable gas, flammable solid, oxidizer,
poison, radiological, corrosive) spill or release
ii. Explosion/fire
iii. Transportation accident
iv. Building/structure collapse
v. Energy/power/utility failure
vi. Fuel/resource shortage
vii. Air/water pollution, contamination
viii. Water control structure/dam/levee failure
ix. Financial issues, economic depression, inflation, financial system collapse
x. Communications systems interruptions
xi. Misinformation

(b) Intentional
i. Terrorism (explosive, chemical, biological, radiological, nuclear, cyber)
ii. Sabotage
iii. Civil disturbance, public unrest, mass hysteria, riot
iv. Enemy attack, war
v. Insurrection
vi. Strike or labor dispute
vii. Disinformation
viii. Criminal activity (vandalism, arson, theft, fraud, embezzlement, data theft)
ix. Electromagnetic pulse
x. Physical or information security breach
xi. Workplace violence

xii. Product defect or contamination
xiii. Harassment
xiv. Discrimination

(3) Technological-caused events that can be unrelated to natural or human-caused events, such as the following:

(a) Central computer, mainframe, software, or application (internal/external)
(b) Ancillary support equipment
(c) Telecommunications
(d) Energy/power/utility" (**NFPA 1600**, 2007, p. 14)

Hazard Typologies (Categories or Taxonomies):

- Natural
- Diseases, epidemics, and infestation
- Person-induced (**Pierce**, *An Integrated Approach For Community Hazard, Impact, Risk and Vulnerabilty Analysis: HIRV,* 2000)

Hazard Typologies (Categories or Taxonomies):

- Natural
- Technological (**Quarantelli**, *Organizational Behavior in Disasters and Implications for Disaster Planning*. 1984, 1)

Hazard Typologies (Categories or Taxonomies): ("Emergency" Taxonomy in the UK)

- Accidents
- Natural events (collectively knows as hazards)
- Malicioius Attacks (**UK Cabinet Office**, *Risk Registry*, 2008, 3)

Hazard Typologies (Categories or Taxonomies):

- Natural
- Technological
- Environmental Degradation (**UN ISDR**, 2004, 44)

Hazard Vulnerability: The susceptibility of life, property, or the environment to damage if a hazard occurs.

Hazard Vulnerability Analysis (HVA): "A hazard vulnerability analysis identifies the disasters most likely to strike an organization or facility, and estimates the potential impact of the disaster on the surrounding community. The goal of the analysis is to prioritize potential disasters that could affect a facility based on likelihood of occurrence and impact. The analysis can then be used as a starting point for emergency plans, enabling communities to use their resources most effectively." (**DHS**, *LLIS.gov Glossary*)

Hazard Vulnerability Analysis (HVA): "The JCAHO defines hazard vulnerability analysis as the identification of hazards and the direct and indirect effect these hazards may have on the hospital. The hazards that have occurred or could occur must be balanced against the population

that is at risk to determine the vulnerability to the given hazard." (**McLaughlin**, *Hazard Vulnerability Analysis*, February 2001, p. 5)

Hazard Vulnerability Analysis (HVA): "An HVA identifies potential threats, risks, and emergencies and the potential impact these emergencies may have on the community. It is a formal assessment of the risks that could potentially affect the community or an agency within the community and move it to implement its emergency management plan." (**The Joint Commission**, *Standing Together*, 2005, p. 15)

Hazardous Material: "Any substance or material in a quantity or form which may be harmful to humans, animals, crops, water systems, or other elements of the environment if accidentally released. Hazardous materials include: explosives, gases (compressed, liquefied, or dissolved), flammable and combustible liquids, flammable solids or substances, oxidizing substances, poisonous and infectious substances, radioactive materials, and corrosives." (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, p. A-5)

Hazardous Material: "…this chapter will use the term "hazardous materials" in a broad sense to include: Explosive, flammable, combustible, corrosive, oxidizing, toxic, infectious, or radioactive materials that, when involved in an accident and released in sufficient quantities, put some portion of the general public in immediate danger from exposure, contact, inhalation, or ingestion." **FEMA**, *Guide For All-Hazard Emergency Operations Planning*, 1996, p. 6-C-1)

Hazardous Material (HAZMAT): Any material which is explosive, flammable, poisonous, corrosive, reactive, or radioactive (or any combination), and requires special care in handling because of the hazards posed to public health, safety, and/or the environment. (**Firescope** 1994)

Hazardous Material: "A substance (gas, liquid, or solid) capable of creating harm to people, the environment, and property." (**NFPA 471,**1997, p. 9)

Hazardous Material: "A substance or material which has been determined by an appropriate authority to be capable of posing an unreasonable risk to health, safety and property." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 44)

Hazardous Material: "For the purposes of ESF #1, hazardous material is a substance or material, including a hazardous substance, that has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated (see 49 CFR 171.8). For the purposes of ESF #10 and the Oil and Hazardous Materials Incident Annex, the term is intended to mean hazardous substances, pollutants, and contaminants as defined by the NCP." (**USCG**, *IM Handbook*, 2006, Glossary 25-10)

Hazardous Materials Incident (Stationary): "Any occurrence resulting in the uncontrolled release of materials from a fixed site capable of posing a risk to health, safety, and property as determined in EPA Resource Conservation and Recovery Act regulations. Generally, such materials are classed as explosives and blasting agents, flammable and noncombustible gases, combustible liquids, flammable liquids and solids, oxidizers, poisons, etiological agents,

radioactive materials, corrosive materials, and other materials including hazardous wastes." (**FEMA**, *Hazard Identification*… (CPG 1-34), 1985, p. A-3)

Hazardous Materials Personnel (HZ): "Individuals, who, on a full-time, part-time, or voluntary basis, identify, characterize, provide risk assessment, and mitigate/control the release of a hazardous substance or potentially hazardous substance." (**FEMA**, *TIE/TO Course Catalog*, 2008, p. 2)

Hazardous Materials Transportation Incident: "Any occurrence resulting in the uncontrolled release of materials during transport that are capable of posing a risk to health, safety, as determined in Department of Transportation Material Transport regulations. Generally such materials are classed as explosives and blasting agents, flammable and noncombustible gases, combustible liquids, flammable liquids and solids, oxidizers, poisons, etiological agents, radioactive materials, corrosive materials, and other materials including hazardous wastes. Over 18,000 materials are covered under the DOT regulations. The population likely to be seriously affected would be within the most densely-populated 5 mile circle around a major transportation route (i.e., highway, rail lines, pipeline, port, or river) along which hazardous materials move." (**FEMA**, *Hazard Identification*… (CPG 1-34), 1985, p. A-3)

Hazardous Substance: "Hazardous substance means substances or group of substances that are toxic, persistent and liable to bio-accumulate, and other substances or groups of substances which give rise to an equivalent level of concern." (**European Environment Agency**, *EEA Environmental Glossary*; cites: **Directive 2000/60/EC** establishing a framework for Community action in the field of water policy.)

Hazardous Substance: "As defined by the NCP, any substance designated pursuant to section 311(b)(2)(A) of the Clean Water Act; any element, compound, mixture, solution, or substance designated pursuant to section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 U.S.C. § 6901 et seq.) has been suspended by act of Congress); any toxic pollutant listed under section 307(a) of the Clean Water Act; any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. § 7521 et seq.); and any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act (15 U.S.C. § 2601 et seq.)." (**USCG**, *IM Handbook*, 2006, Glossary 25-10)

Hazardous Waste: "A term applied to those wastes that because of their chemical reactivity, toxic, explosive, corrosive, radioactive or other characteristics, cause danger, or are likely to cause danger, to health or the environment." (**EEA**, *EEA Environmental Glossary*; cites: **European Commission**, *Integrating Environment Concerns Into Development and Economic Cooperation* (Draft version 1.0), 1999, Brussels)

Hazards: "Any circumstances, natural or manmade, that may adversely affect or attack the community's businesses or residences. (**Jones**, *Critical Incident* Protocol, 2000, 37)

Hazards Analysis: See "Hazard Analysis."

HAZMAT: Hazardous Material.

HAZMATCAD: Hazardous Materials Chemical Agent Detector.

HAZUS: Hazards US.

HAZUS MH (Hazards US Multi Hazard): "HAZUS-MH is a powerful risk assessment software program for analyzing potential losses from floods, hurricane winds and earthquakes. In HAZUS-MH, current scientific and engineering knowledge is coupled with the latest geographic information systems (GIS) technology to produce estimates of hazard-related damage before, or after a disaster occurs." (**FEMA**, *HAZUS – FEMA's Software Program for Estimating Potential Losses From Disaster*, September 10, 2007 update)

HAZWOPER: Hazardous Waste Operations and Emergency Response Standard. (**OSHA**, *FAQ*, 2007)

HBCU: Historically Black Colleges and Universities.

HC: Health Care. (**FEMA**, *TIE/TO Course Catalog*, 2008, p. 3)

HCC: Hospital Command Center. (**CA EMSA**, *Hospital ICS Guidebook*, 2006, p. 102)

HCFs: Healthcare Facilities.

HCP: Health Care Professional.

HD: A Sulfur Mustard Gas Blister Agent. (**DA**, *WMD-CST Operations*, Dec. 2007, Glossary-3)

HD: Homeland Defense.

HDER: Homeland Defense Equipment Reuse (DHS).

HE: High-Explosives. (**JCS/DOD**, *CBRNE Consequence Management* (JP 3-41), 2006, I-10)

Health Alert Network (HAN): "The HAN is a nationwide program that establishes the communications, information, distance learning, and organizational infrastructure for a new level of defense against health threats. The HAN will link local health departments to one another and to other organizations critical for preparedness and response. The Centers for Disease Control and Prevention (CDC) is leading HAN development, working in partnership with other health organizations. Currently, HAN is providing health information and the infrastructure to support the dissemination of that information at the State and local levels." (**AHRQ/HHS**, *Mass Medical Care…*, 2007, p. 83)

Health Alert Network (HAN): "This Project is intended to: Ensure that each community has rapid and timely access to emergent health information; a cadre of highly-trained professional personnel; and evidence-based practices and procedures for effective public health preparedness, response, and service on a 24/7 basis." (**CDC**, *Health Alert Network*, January 18, 2002)

Health Resources and Services Administration (HHS): "The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is the primary Federal agency for improving access to health care services for people who are uninsured, isolated or medically vulnerable." Goal 6 of HRSA's 7 goals is to: 'Enhance the Ability of the Health Care System to Respond to Public Health Emergencies'." (**HRSA**, *About HRSA*, accessed November 1, 2007)

Healthcare (HC): "Individuals who provide clinical, forensic, and administrative skills in hospitals, physician offices, clinics, and other facilities that offer medical care, including surveillance (passive and active), diagnosis, laboratory evaluation, treatment, mental health support, epidemiology investigation, and evidence collection, along with fatality management for humans and animals." (**FEMA**, *TIE/TO Course Catalog*, 2008, p. 3)

Heat Death: "The Cook County Medical Examiner's Office certifies a death as heat related if there was no history of trauma or evidence of fatal injury and the case met at least one of several criteria. First, the measured body temperture had to be 105 [degrees] F…or higher before or immediately after death. Second, there had to be evidence of high environmental temperature at the scene of death, usualy greater than 100 [degrees] F… Finally, the body had to be decomposed, and investigation had to disclose that the person was last seen alive during the heat wave period and that the environmental temperture at the time would have been high." (Whitman, et al., 1997)

Heat Wave: Marked warming of the air, or the invasion of very warm air, over a large area; it usually lasts from a few days to a few weeks. (**WMO** 1992, 294)

HEICS: Hospital Emergency Incident Command System. (**CA EMSA**, *Hospital Incident Command System Guidebook*, 2006, p. 102)

Heritage Emergency National Task Force: "…a partnership of 41 national service organizations and federal agencies created to protect cultural heritage from the damaging effects of natural disasters and other emergencies. The Task Force was founded in 1995 and is co-sponsored by Heritage Preservation and the Federal Emergency Management Agency. Its primary goals are to:

- Help cultural heritage institutions and sites be better prepared for emergencies and obtain needed resources when disaster strikes.
- Encourage the incorporation of cultural and historic assets into disaster planning and mitigation efforts at all levels of government.
- Facilitate a more effective and coordinated response to all kinds of emergencies, including catastrophic events.
- Assist the public in recovering treasured heirlooms damaged by disasters." (**Heritage Preservation**, *About the Task Force*, August 2007)

HES: Hurricane Evacuation Studies. (**NEMA Preparedness Com**. Position Paper Oct. 1, 2007)

HEU: Highly Enriched Uranium.

HF: High Frequency.

HFA: Hyogo Framework for Action.

HFPS: Home Fallout Protection Survey. (**OCD**, *Abbreviations and Definitions*, 1971, 2) [Defunct]

HF/SSB: High Frequency Single Side Band radios. (**USACE**, *Response Planning Guide*, 1995)

HHS: United States Department of Health and Human Services.

HICA/MYDP: Hazard Identification, Capability Assessment, and Multi-Year Development Plan. (**FEMA**, *HICA/MYDP* (CPG 1-34), 1985, p. 1-1)

HICS: Hospital Incident Command System**.** (CA EMSA, *Hospital ICS Guidebook*, 2006, p. 102)

High Explosives (HE): "Explosives is categorized as high-explosives (HE) or low-order explosives (LE). HE produces a defining supersonic overpressurization shock wave. Examples of HE include Trinitrotoluene, nitroglycerin, dynamite, and ammonium nitrate fuel oil. LE create a subsonic explosion and lack HE's overpressurization wave…. Manufactured (military) explosive weapons are exclusively HE-based. Terrorists will use whatever is available – illegally obtained manufactured weapons or improvised explosive devices (also known as "IEDs") that may be composed of HE, LE, or both. Manufactured and improvised bombs cause markedly different injuries… Conventional explosives can generate casualties in several ways depending on the type of explosion, secondary effects of the explosion (e.g., building collapse, fire), and the surrounding environment of the explosion (e.g., confined spaces, availability of debris or materials to generate an expanding area of potential injuries). TICs may also be used as a source of highyield explosives (e.g., ammonium nitrate when mixed with diesel fuel)." (**JCS/DOD**, *CBRNE CM*, 2006, I-10)

High Reliability Organizations (HRO): "…HROs can be defined as organizations which have fewer than normal accidents. This decrease in accidents occurs through change in culture. Technology has some influence but not in isolation, nor without a change in the organization's culture." (**High Reliability Organizations**)

High-Risk Area (Nuclear Attack): "The Federal Emergency Management Agency (FEMA) has analyzed the potential targets during a nuclear attack and has defined high-risk areas as those considered relatively more likely to experience direct weapons effect (blast, heat and immediate nuclear radiation). (FEMA Pub. TR-82.)" ((**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-2)

HIIB. Homeland Security Intelligence Integration Board. (**DHS**, *Statement of Allen*, 14Feb2008)

HIPAA: Health Insurance Portability and Accountability Act of 1996.

HIRA: Hazard Identification and Risk Assessment. (**DHS**, *NRF*, 2008, 74)

Historical Analysis: "The analysis of historical information to determine levels of risk based on past experiences. The benefits of this technique are the identification of dynamic aspects involved in vulnerability and providing the criteria to assign relative weights to different dimensions of vulnerability in risk assessment exercises. The limitations to the approach are the reliance on historical disaster databases and the requirement for refinement, maintenance and systematic feeding of disaster data sets. In addition, statistics on previous disasters' impact can be unreliable and rarely cover socio-economic aspects of the disaster; data on vulnerability is likely to be restricted to physical vulnerability, and reliance on historical assessment alone can create a false expectation of preparedness if hazards, which may not have previously occurred in the area of analysis have not been considered." (**UNDAP**, *Techniques Used in Risk Asmt*., 2008)

HITRAC: Homeland Infrastructure Threat and Risk Analysis Center. (**DHS,** *NIPP*, 2006, p. 101)

HL: Mustard Gas. (**DA**, *WMD-CST Operations*, December 2007, Glossary-3)

HLD: Homeland Defense. (**Robinson**, *Proceedings.…*, Dec 2007, 1)

HLS: Homeland Security. (**Robinson**, *Proceedings.…*, Dec 2007, 1)

HLT: Hurricane Liaison Team. (**NEMA**, *NEMA Committee Reports 2007 Annual Conf*., p. 7)

HMEP: Hazardous Materials Emergency Preparedness. (**FEMA**, *Guidelines for HazMat/WMD, Response, Planning and Prevention Training*, 2003)

HMPG: Hazard Mitigation Grant Program. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

HMRU: Hazardous Materials Response Unit. (**FBI**, *USG Interag. Dom. Ter. CONPLAN*, 2001)

HMTA: Hazardous Materials Transportation Act.

HMTUSA: Hazardous Materials Uniform Safety Act (1990).

HN: Nitrogen Mustard. (**Dept. of the Army**, *WMD-CST Operations*, Dec 2007, Glossary-3)

Home Warning Devices (1955): "Several studies have indicated the need to supplement the outdoor siren system with some internal warning device to reach a maximum number of people. There are three methods by which this might be accomplished. The first would make use of sending a signal over a powerline either by a momentary change of voltage or by superimposing a signal over a telephone line and the third would make use of the CONELRAD system to transmit the signal by radio. In each instance the transmitted signal would trigger an alarm device within the home would be attached either to the powerline, telephone, or radio. Several

contracts have been let to initialing research and development work to produce a feasible and economical home warning device." (**FCDA**, *1955 Annual Report*, 1956, p. 19)

Homefront Preparedness: "Homefront Preparedness" is a term used by the Federal Civil Defense Administration to refer to the civil defense program of the early 1950s. See, for example, **FCDA**, *Annual Report for 1952*, pp. 3-4, 7, 115)

Homeland: "Definition: the physical region that includes the continental United States, Alaska, Hawaii, United States territories and possessions, and surrounding territorial waters and airspace." (**DHS**, *Lexicon: Terms and Definitions*, October 23, 2007, p. 11)

Homeland: "'American homeland' or 'homeland' means the United States, in a geographic sense." (**Homeland Security Act of 2002**, p. 3)

Homeland: "Fatherland: the country where you were born."[56] wordnet.princeton.edu/perl/webwn

Homeland, Earliest Reference This Writer Has Seen: Question to FCDA Director Val Peterson at ICAF presentation on "Civil Defense Today," on February 25, 1957: "We have studied in our course here requirements for mobilization, particularly support the the military. One of the big un-knowns has been what materials would be required to rehabilitate the homeland, the homefront. Could you tell us where we stand on the estimates of materials for tha purpose?" (**ICAF** Pub. L57-118, p. 21)

Homeland Defense: "Definition: the protection of United States sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression or other threats as directed by the President of the United States. Extended definition: the Department of Defense is the lead Federal agency for homeland defense, including maritime interception, air patrols over U.S. airspace, land-based defense of critical infrastructure and key assets, and use of military forces to protect from attack when directed by the President or Secretary of Defense." (**DHS**, *Lexicon: Terms and Definitions*, October 23, 2007, p. 12)

Homeland Defense: "Homeland defense is the protection of US sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression, or other threats as directed by the President. The Department of Defense is responsible for homeland defense." (**DOD**, *Strategy for Homeland Defense and Civil Support*. June 2005, p. 5; **DOD**, *Homeland Defense*, 2007, p. GL-8 (177))

Homeland Defense: "Protecting the territory of the United States and its citizens from "all enemies both foreign and domestic" is the principal task of government. The primary reason for the increased emphasis on homeland defense is the change, both in type and degree, in the threats to the United States. Besides the enduring need to deter a strategic nuclear attack, the United States must defend against terrorism, information warfare, weapons of mass destruction, ballistic

[56] As an aside, the earliest usage of the word "homeland" that this chronicler has found in relation to "emergency management" and related terms is in the 1965 report *Federal Civil Defense Organization: The Rationale of Its Development*, at p. 34: "Civil defense is simply viewed as an aspect of the common defense of the homeland."

and cruise missiles, and other transnational threats to the sovereign territory of the nation. In many of these mission areas, the military will necessarily play the leading role; however, many other threats exist which will require Defense to support local law enforcement agencies, as well as a host of other federal, state, and local entities." (National Defense Panel, DOD, *Transforming Defense: National Security in the 21st Century*, Dec 1997, p. 25)

[Note: This is the earliest usage of the term "Homeland Defense" we are aware of. It is probable that there are earlier usages.]

Homeland Defense: "**For HD missions, DOD is in the lead with other federal agencies in support."** (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. vii) [Bold emphasis in original.]

Homeland Infrastructure Threat and Risk Analysis Center (HITRAC), DHS: See DHS Organization section.

Homeland Security and Defense Education Consortium (HSDEC): "HSDEC is co-sponsored by North American Aerospace Defense Command, U.S. Northern Command (NORAD-USNORTHCOM (NNC)),and the Office of the Assistant Secretary of Defense for Homeland Defense for the purpose of facilitating the development of Homeland Security (HLS) and Homeland Defense (HLD) education in America's colleges and universities, and facilitating liaison between government and academia on government interests in the areas of HLS and HLD. The HSDEC program is administered under contract by the National Security Division of the Battelle Memorial Institute, Columbus, Ohio." (**Robinson**, *Proceedings…*, Nov. 7, 2006, 1)

Homeland Defense Current Trends Security Environment Strategic Guidance: "While no one can predict exactly how the future will unfold, current trends indicate a security environment with the following characteristics that are of particular interest to NORAD and USNORTHCOM:

- Some states will continue to pose challenges with increasingly capable traditional capabilities including aircraft, kinetic weapons, ballistic and cruise missiles
- Terrorism will remain a focus because it will continue to be unpredictable, yet credible, well organized, and well financed
- Current asymmetric threats will be accomplished by new asymmetric threats such as information attacks or kinetic and non-kinetic attacks on space systems
- Globalization will continue, creating opportunities for economic growth and providing an impetus for political freedoms, but also accelerating the spread of disease, weapons of mass destruction, extremist ideologies, and terrorism." (**Keating**, *CDRNORAD-CDRUSNORTHCOM Strategic Guidance*, November 1, 2006, p. 2)

Homeland Defense Operational Planning System (HOPS): "HOPS provides detailed vulnerability and engineering assessments of critical infrastructures and facilities associated with industry, agriculture, transportation, government/military installations, and important public structures." (**LLNL**, *Global Threats and Security*, 2006, p. 22)

Homeland Defense (HD) Purpose and Operational Framework: "The purpose of HD is to protect against and mitigate the impact of incursions or attacks on sovereign territory, the domestic population, and defense critical infrastructure (DCI). In order to accomplish this, DOD

HD objectives are to (1) identify the threat; (2) dissuade adversaries from undertaking programs or conducting actions that could pose a threat to the US homeland; (3) ensure defense of the homeland and deny an adversary's access to the nation's sovereign airspace, territory, and territorial seas; (4) ensure access to space and information; (5) protect DCI; (6) deter aggression and coercion by conducting global operations; (7) decisively defeat any adversary if deterrence fails; and (8) recover from any attack or incident." (**JCS**/**DOD**, *Homeland Defense*, 2007, p. I-6)

Homeland Defense Strategic Threat Environment:

- Diminished protection afforded by geographic distances
- Traditional threats remain
- Greater risk of a weapon of mass destruction attack
- Increased potential for miscalculation and surprise
- Increased potential for terrorist attacks
- Increased challenges from weak and failing states and non-state actors
- Increasing diversity in sources and unpredictability of the locations of conflict
- Threats to US vital interests overseas
- Increasing transnational threat challenging both the Department of Defense and law enforcement. (**JCS/DoD**, *Homeland Defense*, 2007, p. I-4)

Homeland Infrastructure Threat and Risk Analysis Center (HITRAC). See Department of Homeland Security, HITRAC.

Homeland Security: "A concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur. The Department of Homeland Security is the lead Federal agency for homeland security." (**DOD**, OASD for Homeland Defense, *FAQ's: Homeland Defense*, 2006)

Homeland Security: "Homeland Security is a concerted national effort to prevent and disrupt terrorist attacks, protect against man-made and natural hazards, and respond to and recover from incidents that do occur." (**DHS**, *NRF Comment Draft*, September 2007, p. 6)

Homeland Security: "…homeland security is about the integration of a nation. It's about the integration of our national efforts, not one department or one organization, but everyone tasked with our nation's protection." (**DHS**, *Remarks by Secretary of Homeland Security Tom Ridge Before the House Select Committee on Homeland Security*, 14 Sep 2004)

Homeland Security: "The more than 170,000 future employees of the Department of Homeland Security will be doing the same job in the new Department that they are doing today: protecting our country from terrorist attack." (DHS, *The Nomination of The Honorable Tom Ridge to be Secretary of the Department of Homeland Security*, January 19, 2003)

Homeland Security: "Homeland security (HS) is the Nation's first priority, and it requires a national effort. The Department of Defense (DOD) has a key role in that effort. The National Strategy for Homeland Security (NSHS) complements the National Security Strategy of the United States by providing a comprehensive framework for organizing the efforts of federal, state, local, and private organizations whose primary functions are often unrelated to national

security. Critical to understanding the overall relationship is an understanding of the distinction between the role that DOD plays with respect to securing the Nation and HS, and the policy in the NSHS, which has the Department of Homeland Security (DHS) as the lead. **HS at the national level has a specific focus on terrorist threats. The DOD focus in supporting HS is broader."** (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. v) [Emphasis in the original.]

"DOD contributes to HS through HD [Homeland Defense] **and CS** [Civil Support]**."** (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. I-8) [Emphasis in the original.]

"…it is imperative to understand that DOD's role extends beyond the NSHS paradigm. Specific roles that are essential to DOD's efforts to secure the homeland include:

a. Ongoing missions abroad to reduce the threat of attacks against the US.
b. Protecting the sovereignty, territory, domestic population, and critical defense infrastructure of the United States.
c. Supporting civilian authorities for law enforcement, response to domestic emergencies, protection of NCI&KA [National Critical Infrastructure & Key Assets] , and other activities as directed.
d. Ensuring that EP [Emergency Preparedness] resources and procedures are in place in order to support other agencies that may require assistance." (**JCS/DoD**, *Homeland Security*, 2005, I-10)

Homeland Security: "Homeland security encompasses five distinct missions: domestic preparedness and civil support in case of attacks on civilians, continuity of government, continuity of military operations, border and coastal defense, and national missile defense. This report extensively details four of those mission areas (national missile defense having been covered in great detail elsewhere)." (**Larson & Peters**, 2000)

Homeland Security: "Homeland security is a coordinated national effort to ensure the domestic security of the United States against attack or natural disaster, to reduce national vulnerability to such events, and to minimize damage and speed recovery should they occur." (**McIntyre**, working definition for homeland security education programs, 2007)

Homeland Security: "Any area of inquiry whose improved understanding could make U.S. peoples safer from extreme, unanticipated threats." (**National Research Council**, 2005, p. 3)

Homeland Security: "Homeland security consists of all military activities aimed at preparing for, protecting against or managing the consequences of attacks on American soil, including the CONUS and US territories and possessions. It includes all actions to safeguard the populace and its property, critical infrastructure, the government and the military, its installations and deploying forces." (**Peters/RAND Corp.,** 2000, 1)

Homeland Security: "The U.S. government defines homeland security as the domestic effort (as opposed to the overseas war on terrorism) to defend America from terrorists. In practice, homeland security efforts have also come to comprise general preparedness under the all-hazards doctrine, which focuses on common efforts that help prepare for both terrorist attacks and other

natural or human-made catastrophes, such as hurricanes and accidental chemical spills." (**Sauter and Carafano** 2005, xiv)

Homeland Security: "Homeland security should not be viewed as exclusively or even primarily a military task. Securing the "domestic battlespace"-- a highly complex environment--requires Federal departments and agencies, state and local governments, the private sector, and individual citizens to perform many strategic, operational, and tactical level tasks in an integrated fashion. These actions must be synchronized with others that are being taken on the international front to prosecute the war against global terrorism." (**Tomisek** 2002, 1)

Homeland Security: "Homeland security is a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur." (**White House**, *National Strategy For Homeland Security*, Office of Homeland Security, July 2002, p. 2; and p.3, section 1, *National Strategy For Homeland Security*, **White House** Homeland Security Council, October 2007)

[2007 additional language relating to other than terrorism disasters: "This *Strategy*… recognizes that effective preparation for catastrophic natural disasters and man-made disasters, while not homeland security *per se*, can nevertheless increase the security of the Homeland." (**White House**, *National Strategy For Homeland Security*, 2007, p. 1:3)]

Homeland Security: "Homeland security or Homeland defense is a neologism referring to domestic governmental actions justified, or allegedly justified, by potential guerrilla attacks or terrorism. The term became prominent in the United States following the September 11, 2001 Terrorist Attack, although it was used less frequently before that incident." **Wikipedia**

Homeland Security Act of 2002: "Public Law 107-296, 6 U.S.C. 101 *et seq*., November 25, 2003, established the Department of Homeland Security (DHS) with the mandate and legal authority to protect the American people from the continuing threat of terrorism.

"In the Act, Congress assigned DHS the primary missions to:

- Prevent terrorist attacks within the United States,
- Reduce the vulnerability of the United States to terrorism at home,
- Minimize the damage and assist in the recovery from any attacks that may occur, and
- Act as the focal point regarding natural and manmade crises and emergency planning.

"The Homeland Security Act gives the Secretary of Homeland Security full authority and control over the Department and the duties and activities performed by its personnel, and it vests him with the broad authority necessary to fulfill the Department's statutory mission to protect the American homeland. This statutory authority, combined with the President's direction in Homeland Security Presidential Directive 5, supports the NRP's unified, effective approach to domestic prevention, preparedness, response, and recovery activities." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 66)

"Title V of the act transferred the functions, personnel, resources, and authorities of six existing

entities, the largest of which was FEMA, into EPR. Section 507 of the act specifically charged FEMA with "carrying out its mission to reduce the loss of life and property and protect the Nation from all hazards by leading and supporting the Nation in a comprehensive, risk-based emergency management program." Although all of FEMA was transferred into the new department, it was not defined as an autonomous or distinct entity within its parent organization. The act explicitly gave the President and Secretary significant discretion in reorganizing the department, including FEMA.

"FEMA functions were transferred to DHS on March 1, 2003.[57] The following January, Secretary Tom Ridge used his reorganization authority to consolidate organizational units and reallocate functions within DHS. Among other changes, "select grant award functions [then] exercised by the Under Secretary for Emergency Preparedness and Response," under Sections 502 and 503 of the Homeland Security Act, were consolidated within the Office of State and Local Government Coordination and Preparedness, an office that would report directly to the Secretary.[58] (**CRS**, *Federal Emer. Mgmt. and [HLS] Organization: Historical Developments…,* 1Jun06, p. 20)

Homeland Security Advanced Research Projects Agency (HSARPA): "…the mission of HSARPA is to engage the private sector in R&D in order to satisfy DHS operational requirements, conduct rapid prototyping and commercial adaptation, and conduct research and development of revolutionary options." (**DHS**, *HSSTAC Minutes*, February 23-24, 2005, Statement of Dr. Jane Alexander, HSARPA Deputy Director)

Homeland Security Advisory Council (HSAC): HSAC provides advice to the President through the Assistant to the President for Homeland Security. The Council is advised by four Senior Advisory Committees for Homeland Security. The advisory committees include members from state and local government, academia, policy research organizations, the private sector, emergency services, law enforcement, and the public health community. The Council provides advice on:
(1) The development, coordination and implementation of the national strategy to secure the US from terrorist threats or attacks.
(2) Recommendations to improve coordination, cooperation, and communications among federal, state, and local officials.
(3) The feasibility of implementing specific measures to detect, prepare for, prevent, protect against, respond to, and recover from terrorist threats or attacks.
(4) The effectiveness of the implementation of specific strategies to detect, prepare for, prevent, protect against, respond to, and recover from terrorist threats or attacks." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. II-17 & 18)

Homeland Security Advisory System (HSAS): "A series of tools used by DHS that provide the public with guidance on the status of the Nation's homeland security. The system combines

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[57] U.S. White House Office, "Department of Homeland Security Reorganization Plan," (Washington: Nov. 25, 2002), Washington, DC, available at [http://www.whitehouse.gov/news/releases/2002/11/reorganization_plan.pdf], accessed Feb. 23, 2006.
[58] Letter from Secretary of Homeland Security Tom Ridge to Sen. Joseph I. Lieberman, Jan. 26, 2004.

threat information with vulnerability assessments, and communicates this information to public safety officials and the public. The system includes [HS] Threat Advisories, Homeland Security Information bulletins, and the Threat Level System." (**DHS**, *FCD 1*, 2007, P-5)

Homeland Security Advisory System (HSAS): "The advisory system provides measures to remain vigilant, prepared, and ready to deter terrorist attacks. The following Threat Conditions each represent an increasing risk of terrorist attacks. Beneath each Threat Condition are suggested protective measures, recognizing that the heads of Federal departments and agencies are responsible for developing and implementing appropriate agency-specific protective measures:

> **Homeland Security Advisory System: Low Condition (Green)**. This condition is declared when there is a low risk of terrorist attacks. Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures they develop and implement: refining and exercising as appropriate preplanned Protective Measures; ensuring personnel receive proper training on the Homeland Security Advisory System and specific preplanned department or agency Protective Measures; and institutionalizing a process to assure that all facilities and regulated sectors are regularly assessed for vulnerabilities to terrorist attacks, and all reasonable measures are taken to mitigate these vulnerabilities.
>
> **Homeland Security Advisory System: Guarded Condition (Blue)**. This condition is declared when there is a general risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Condition, Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: checking communications with designated emergency response or command locations; reviewing and updating emergency response procedures; and providing the public with any information that would strengthen its ability to act appropriately.
>
> **Homeland Security Advisory System: Elevated Condition (Yellow)**. An Elevated Condition is declared when there is a significant risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Conditions, Federal departments and agencies should consider the following general measures in addition to the Protective Measures that they will develop and implement: increasing surveillance of critical locations; coordinating emergency plans as appropriate with nearby jurisdictions; assessing whether the precise characteristics of the threat require the further refinement of preplanned Protective Measures; and implementing, as appropriate, contingency and emergency response plans.
>
> **Homeland Security Advisory System: High Condition (Orange)**. A High Condition is declared when there is a high risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Conditions, Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: coordinating necessary

security efforts with Federal, State, and local law enforcement agencies or any National Guard or other appropriate armed forces organizations; taking additional precautions at public events and possibly considering alternative venues or even cancellation; preparing to execute contingency procedures, such as moving to an alternate site or dispersing their workforce; and restricting threatened facility access to essential personnel only.

Homeland Security Advisory System: Severe Condition (Red). A Severe Condition reflects a severe risk of terrorist attacks. Under most circumstances, the Protective Measures for a Severe Condition are not intended to be sustained for substantial periods of time. In addition to the Protective Measures in the previous Threat Conditions, Federal departments and agencies also should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: increasing or redirecting personnel to address critical emergency needs; signing emergency response personnel and pre-positioning and mobilizing specially trained teams or resources; monitoring, redirecting, or constraining transportation systems; and closing public and government facilities." (**USArmy TRADOC**, 2007, 149)

Homeland Security and Defense Education Consortium (HSDEC): "The Homeland Security and Defense Education Consortium, or HSDEC, is a network of teaching and research institutions focused on promoting education, research, and cooperation related to and supporting the homeland security / defense mission. The consortium is committed to building and maintaining a community of higher education institutions supporting this mission and the overall homeland security effort through the sharing and advancement of knowledge.

HSDEC Tenets:

- Ensure the Department of Defense (NORAD and USNORTHCOM) role in, and perspective on, homeland security is adequately and accurately reflected in educational initiatives.
- Promote and facilitate homeland security related education program development.
- Focus and facilitate homeland security related research and development.
- Encourage cooperation between consortium institutions. (**NORTHCOM**, *HSDEC*)

Homeland Security and Emergency Management:

"Since becoming Secretary, I have set five major goals to focus our Department's efforts on a core set of objectives. These goals are as follows: 1) keeping dangerous people from entering our country; 2) keeping dangerous cargo out of our country; 3) protecting critical infrastructure; 4) boosting emergency preparedness and response; and 5) strengthening DHS integration and management. Because the focus of this hearing is threats to our homeland, my testimony will highlight only the first three goals: preventing dangerous people and dangerous cargo from entering our country, and protecting critical infrastructure. I will also discuss our efforts to share information and intelligence necessary to achieve these goals."

(DHS, *Testimony of Secretary Chertoff Before the Senate Committee on Homeland Security* [Hearing on] "*Confronting the Terrorist Threat to the Homeland: Six Years After 9/11).*": September 10, 2007)

Homeland Security Approaches, Top-Down versus Bottom-Up: "As a former Governor, I am keenly aware of the shared responsibility that exists between the federal, state, and local governments for homeland security. In fact, over the past year I have often said that "when our hometowns are secure, our homeland will be secure." That is not merely rhetoric, but a fundamental principle of the nation's homeland security effort." (DHS, *The Nomination of The Honorable Tom Ridge to be Secretary of the Department of Homeland Security*, 19 Jan 2003)

Homeland Security Center for Risk and Economic Analysis of Terrorism Events (CREATE): "…led by the University of Southern California, evaluates the risks, costs, and consequences of terrorism, and guides economically viable investments in countermeasures that will make our Nation safer and more secure." (**DHS**, *HLS Centers of Excellence*, 20March2007)

Homeland Security Center of Excellence for Behavioral and Social Research on Terrorism and Counter-Terrorism: "The research and development focus of this new Homeland Security Center of Excellence will span both international and domestic issues. Areas of work will include the sources of and responses to terrorism, the psychological impact of terrorism on society, and increasing the American public's preparedness, response, and resilience in the face of threats. Academic and policy experts will examine the motivation and intent of terrorists in order to develop strategies and tools to improve counteractions, such as understanding and forecasting the magnitude of the terrorist threat and formulating effective response strategies. The Center will also consider the impact of terrorism on the public, and will develop risk communications techniques and relevant educational programs…. The University of Maryland has assembled a team of experts from across the country and around the world. The major partners include the University of California at Los Angeles, the University of Colorado, Monterey Institute of International Studies, the University of Pennsylvania, and the University of South Carolina. Scholars and researchers from Israel, Italy, Kazakhstan, and other countries will also be involved in the research efforts." (**DHS**, *DHS Selects UMD to Lead*…, 1 Jan 2005)

Homeland Security Common Attributes: "Since the attacks of September 11, all levels of American government, as well as the private sector, have taken steps to join together and focus efforts toward achieving the homeland security imperative. This effort must be unified and united by a common set of attributes, which include:

- ***Vigilance*** in staying aware of the threat and committing the resources and the effort needed to address vulnerabilities and secure the Nation and its citizenry, environment, and infrastructure;
- ***The ability to rapidly mobilize*** the necessary components of the American government, the private sector and the non-profit community to respond to incidents, pursue those who would commit acts of terror and their sponsors, and organize to protect the homeland;
- ***The resilience*** to absorb and bounce back from the consequences of an incident and to allow for the continuity of the Nation's way of life and economy.

These attributes were crucial in the early days after September 11th, and they remain crucial as the Nation continues to engage in a global conflict with radical Islamic jihadists that embrace the use of terrorist techniques to threaten the security of the Nation. Those attributes are equally relevant in meeting the challenges presented by other potential terrorists as well as natural disasters, and manmade accidents (including pandemics) that threaten homeland security." (**DHS**, "The Homeland Security Challenge," Chapter 1, *DHS Pub 1*, Feb 2008 Draft, pp. 1-2)

Homeland Security Council (HSC): "The Homeland Security Council (HSC), the successor to the Office of Homeland Security, was created by Homeland Security Presidential Directive 1 (HSPD-1) on October 29, 2001. The HSC has a mission to 'ensure coordination of all homeland security-related activities among executive departments and agencies and promote the effective development and implementation of all homeland security policies' and is led by the Assistant to the President for Homeland Security and Counterterrorism. As with the National Security Council, the Homeland Security Council has a full-time staff and is made up of the Cabinet Secretaries and White House senior officials with homeland security responsibilities. Because of its policy coordination and advisory responsibilities, the HSC interacts frequently with the Department of Homeland Security. When it established the HSC, the White House also created a new homeland security branch within the Office of Management and Budget (OMB)." (**NAPA**, *Addressing the 2009 Presidential Transition at the…DHS*, May 2008 Agency Review Draft, p. 17)

Homeland Security Council (HSC): Established by Executive Order 13228, Establishing Office of Homeland Security and the Homeland Security Council, Section 5, October 8, 2001. "The Council shall serve as the mechanism for ensuring coordination of homeland security-related activities of executive departments and agencies and effective development and implementation of homeland security policies." (**White House**, *EO 13228*, October 8, 2001)

Homeland Security Council (HSC): "Securing Americans from terrorist threats or attacks is a critical national security function. It requires extensive coordination across a broad spectrum of Federal, State, and local agencies to reduce the potential for terrorist attacks and to mitigate damage should such an attack occur. The Homeland Security Council (HSC) shall ensure coordination of all homeland security-related activities among executive departments and agencies and promote the effective development and implementation of all homeland security policies." (**White House**, *HSPD-1***,** October 29, 2001)

Homeland Security Council (HSC) Deputies Committee (HSC/DC): "The HSC Deputies Committee (HSC/DC) shall serve as the senior sub-Cabinet interagency forum for consideration of policy issues affecting homeland security. The HSC/DC can task and review the work of the HSC interagency groups discussed below. The HSC/DC shall help ensure that issues brought before the HSC/PC or the HSC have been properly analyzed and prepared for action. The HSC/DC shall have the following as its regular members: the Deputy Secretary of the Treasury; the Deputy Secretary of Defense; the Deputy Attorney General; the Deputy Secretary of Health and Human Services; the Deputy Secretary of Transportation; the Deputy Director of the Office of Homeland Security (who serves as Chairman); the Deputy Director of Central Intelligence; the Deputy Director of the Federal Bureau of Investigation; the Deputy Director of the Federal Emergency Management Agency; the Deputy Director of the Office of Management and Budget;

and the Assistant to the President and Chief of Staff to the Vice President. The Assistant to the President and Deputy National Security Advisor shall be invited to attend all meetings of the HSC/DC. The following people shall be invited to attend when issues pertaining to their responsibilities and expertise are to be discussed: the Deputy Secretary of State; the Deputy Secretary of the Interior; the Deputy Secretary of Agriculture; the Deputy Secretary of Commerce; the Deputy Secretary of Labor; the Deputy Secretary of Energy; the Deputy Secretary of Veterans Affairs; the Deputy Administrator of the Environmental Protection Agency; the Deputy National Security Advisor for Combating Terrorism; and the Special Advisor to the President for Cyberspace Security. The Executive Secretary of the Office of Homeland Security shall serve as Executive Secretary of the HSC/DC. Other senior officials shall be invited, when appropriate." (**White House**, *HSPD-1***)**

Homeland Security Council (HSC) Policy Coordination Committees (HSC/PCCs): "HSC Policy Coordination Committees (HSC/PCCs) shall coordinate the development and implementation of homeland security policies by multiple departments and agencies throughout the Federal government, and shall coordinate those policies with State and local government. The HSC/PCCs shall be the main day-to-day fora for interagency coordination of homeland security policy. They shall provide policy analysis for consideration by the more senior committees of the HSC system and ensure timely responses to decisions made by the President. Each HSC/PCC shall include representatives from the executive departments, offices, and agencies represented in the HSC/DC. Eleven HSC/PCCs are hereby established for the following functional areas, each to be chaired by the designated Senior Director from the Office of Homeland Security:

1. Detection, Surveillance, and Intelligence (by the Senior Director, Intelligence and Detection);
2. Plans, Training, Exercises, and Evaluation (by the Senior Director, Policy and Plans);
3. Law Enforcement and Investigation (by the Senior Director, Intelligence and Detection);
4. Weapons of Mass Destruction (WMD) Consequence Management (by the Senior Director, Response and Recovery);
5. Key Asset, Border, Territorial Waters, and Airspace Security (by the Senior Director, Protection and Prevention);
6. Domestic Transportation Security (by the Senior Director, Protection and Prevention);
7. Research and Development (by the Senior Director, Research and Development);
8. Medical and Public Health Preparedness (by the Senior Director, Protection and Prevention);
9. Domestic Threat Response and Incident Management (by the Senior Director, Response and Recovery);
10. Economic Consequences (by the Senior Director, Response and Recovery); and
11. Public Affairs (by the Senior Director, Communications). (**White House,** *HSPD-1*, 2001)

Homeland Security Council (HSC) Principals Committee (HSC/PC): "The HSC Principals Committee (HSC/PC) shall be the senior interagency forum under the HSC for homeland security issues. The HSC/PC is composed of the following members: the Secretary of the Treasury; the Secretary of Defense; the Attorney General; the Secretary of Health and Human Services; the Secretary of Transportation; the Director of the Office of Management and Budget; the Assistant to the President for Homeland Security (who serves as Chairman); the Assistant to the President and Chief of Staff; the Director of Central Intelligence; the Director of the Federal

Bureau of Investigation; the Director of the Federal Emergency Management Agency; and the Assistant to the President and Chief of Staff to the Vice President. The Assistant to the President for National Security Affairs shall be invited to attend all meetings of the HSC/PC. The following people shall be invited to HSC/PC meetings when issues pertaining to their responsibilities and expertise are discussed: the Secretary of State; the Secretary of the Interior; the Secretary of Agriculture; the Secretary of Commerce; the Secretary of Labor; the Secretary of Energy; the Secretary of Veterans Affairs; the Administrator of the Environmental Protection Agency; and the Deputy National Security Advisor for Combating Terrorism. The Counsel to the President shall be consulted regarding the agenda of HSC/PC meetings and shall attend any meeting when, in consultation with the Assistant to the President for Homeland Security, the Counsel deems it appropriate. The Deputy Director of the Office of Homeland Security shall serve as Executive Secretary of the HSC/PC. Other heads of departments and agencies and senior officials shall be invited, when appropriate." (**White House,** *HSPD-1*, Oct 30, 2001)

Homeland Security Data Network (HSDN): "A communications system and IT infrastructure used by the Department of Homeland Security to streamline and merge classified networks into a single, integrated network which is being designed to become a major secure information thoroughfare joining together intelligence agencies, law enforcement, disaster management, and front-line disaster response organizations." (**HSC,** *NCPIP*, August 2007, p. 63)

Homeland Security Digital Library (HSDL): "The HSDL is an authoritative gateway to a wide range of resources on the subject of Homeland Security.

- One central repository of record
- Relevant, qualified information
- Categorization of results
- Instruction & research support
- One stop shop.
- Sponsored by DHS Office for Domestic Preparedness
- July 2002 – Investigation and Testing began
- Sept 2003 – HSDL Prototype completed ….
- Initial Audience – the Naval Postgraduate School (CHDS masters program and NPS research
- Target Audience: DHS; federal, state, and local government; academic community." (**Woodbury**, *Securing the Homeland through the Power of Information*, 2004, slides 2-3)

Homeland Security Doctrine: "Doctrine describes the fundamental principles and concepts that shape the Nation's homeland security effort. It broadly tells us what planning is supposed to achieve, how it is structured and resourced, and how it is executed. Doctrine describes the systems, processes, intellectual underpinnings, and terminology that are the bedrock of homeland security planning. The doctrinal concepts and principles laid out here are consistent with planning systems already in place, or being considered for adoption. Specifically, this doctrine underpins and supports:

- Homeland Security Presidential Directive-5 (HSPD-5)
- Homeland Security Presidential Directive–8 (HSPD-8), Annex I
- National Response Framework (NRF)

- National Incident Management System (NIMS)
- National Preparedness Guidelines (NPG)
- National Strategy for Homeland Security (NSHS)

(**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-1)

Homeland Security Domain Working Group: "The "Homeland Security Domain" includes those government agencies and activities involved in the prevention and mitigation of, preparation for, response to, and recovery from natural or man-made disasters, including terrorism, and other threats to the homeland. This domain can encompass the many operational and administrative components of DHS, as well as other federal, state, local, and tribal elements who partner with the department. Its work will complement the Civil Applications Working Group in areas like natural disaster response." (**DHS**, *Fact Sheet: NAO*, August 15, 2007)

Homeland Security Education: "In order to ensure the success of the Homeland Security Management System, our Nation must further develop a community of homeland security professionals. This requires establishing multidisciplinary education in homeland and relevant national security policies and strategies; the planning process; execution of operations and exercises; and overall assessment and evaluation. Furthermore, this should include an understanding and appreciation of appropriate regions, religions, cultures, legal systems, and languages." (**White House**, *National Strategy for Homeland Security*, October 2007, p. 45)

[Note: "Homeland Security," as defined in this 2007 Strategy, as well as in the 2002 Strategy, is exclusively within the province of terrorism.]

Homeland Security Exercise and Evaluation Program (HSEEP):
"A capabilities-based and performance-based program that furnishes standardized policies, doctrines, and terminologies for the design, development, performance, and evaluation of homeland security exercises. The National Exercise Program (NEP) uses the HSEEP as a common methodology for exercises. The HSEEP also provides tools and resources to facilitate the management of self-sustaining homeland security exercise programs." (**DHS**, *FCD 1*, Nov 2007, P-6)

Homeland Security Exercise and Evaluation Program (HSEEP):
"HSEEP is a *capabilities*- and performance-based exercise program that provides standardized policy, doctrine, and terminology for the *design, development*, conduct, and *evaluation* of homeland security exercises. HSEEP also provides tools and resources to facilitate the management of self-sustaining homeland security exercise programs." (**FEMA**, *HSEEP*, 2008)

Homeland Security Exercise and Evaluation Program (HSEEP):
"The HSEEP is the policy and guidance component of the NEP, and serves to standardize exercise design, development, conduct, and evaluation for all (National-level, Federal, State, and local) exercises by establishing common language and concepts to be adopted and used by various agencies and organizations. HSEEP aims to synchronize all exercises in the Nation in addition to providing tools and resources for States and local jurisdictions to establish self-sustaining exercise programs." (**FEMA**, *Statement of Dennis Schrader*, October 3, 2007, p. 5)

Homeland Security Exercise and Evaluation Program (HSEEP):
"The NEP [National Exercise Program] utilizes the HSEEP as the common methodology for exercises. HSEEP is a capabilities- and performance based exercise program that provides standardized policy, doctrine, and terminology for the design, development, conduct, and evaluation of homeland security exercises. HSEEP also provides tools and resources to facilitate the management of self-sustaining homeland security exercise programs." (**HSC**, *National Continuity Policy Implementation Plan*, Aug. 2007, p. 63; and **FEMA**, *Homeland Security Exercise and Evaluation Program* (HSEEP).)

Homeland Security Exercise and Evaluation Program (HSEEP) After-Action Reporting:
"AAR/IPs created for exercises must conform to the templates provided in HSEEP Volume III: Exercise Evaluation and Improvement Planning.
Following each exercise, a draft AAR/IP must be developed based on information gathered through use of Exercise Evaluation Guides (EEGs).
Following every exercise, an After-Action Conference (AAC) must be conducted, in which:

- Key personnel and the exercise planning team are presented with findings and recommendations from the draft AAR/IP.
- Corrective actions addressing a draft AAR/IP's recommendations are developed and assigned to responsible parties with due dates for completion.

A final AAR/IP with recommendations and corrective actions derived from discussion at the AAC must be completed within 60 days after the completion of each exercise." (**FEMA**, *About HSEEP*, 2008)

Homeland Security Exercise and Evaluation Program (HSEEP) Blended Approach:
"In addition to providing a standardized policy, methodology, and language for project management, HSEEP facilitates the creation of self-sustaining, capabilities-based exercise programs by providing program management resources such as policy and guidance, training, technology, and direct support. The elements of this blended approach include the following:

- Policy and Doctrine. HSEEP promulgates policy and doctrine for all exercises through HSEEP Volumes I-V, which provide exercise planners with common processes, consistent terminology, and tested policies that are practical and flexible enough to be applied regardless of the nature of the exercising entity. The HSEEP Volumes integrate language and concepts from the NRP, NIMS, the National Preparedness Goal, UTL, TCL, and existing exercise programs.

- Training. Training opportunities are provided to familiarize exercise planners, evaluators, facilitators, controllers, and participants in HSEEP policy and doctrine. *Independent Study (IS) – 120, An Introduction to Exercises* is an online, beginner-level HSEEP course that provides basic instruction in exercise design and terminology. The HSEEP Mobile Training Course is an intermediate-level training course that incorporates exercise guidance and best practices from the HSEEP Volumes to educate participants about exercise program management, design and development, conduct, evaluation, and improvement planning.

- Technology. The HSEEP Toolkit is a web-based system of tools which provides a seamless collaborative environment for exercise planners. The Toolkit provides integrated tools for the five phases of exercise project management, such as an exercise planning tutorial, templates for exercise documentation, and a tracking system for action items identified during exercise evaluation. The Toolkit also includes an exercise program management tool to assist with short, medium, and long-term program management.

- Direct Support. The Preparedness Directorate provides direct exercise support, in the form of vendor assistance, to help States and local jurisdictions with the design, development, conduct, and evaluation of exercises in accordance with HSEEP. Direct support is also available to help States and local jurisdictions conduct the HSEEP Mobile Training Course and Training and Exercise Plan Workshops (T&EPWs)." (**FEMA**, *About HSEEP*, 2008)

Homeland Security Exercise and Evaluation Program (HSEEP) Compliance:
"…HSEEP Compliance is defined as adherence to specific HSEEP-mandated practices for exercise program management, design, development, conduct, evaluation, and improvement planning. In order for an entity to be considered HSEEP compliant it must satisfy four distinct performance requirements:

- Conducting an annual Training and Exercise Plan Workshop and developing and maintaining a Multi-year Training and Exercise Plan.
- Planning and conducting exercises in accordance with the guidelines set forth in HSEEP Volumes I-III.
- Developing and submitting a properly formatted After-Action Report/Improvement Plan (AAR/IP). The format for the AAR/IP is found in HSEEP Volume III.
- Tracking and implementing corrective actions identified in the AAR/IP." (**FEMA**, *About HSEEP*, 2008)

Homeland Security Exercise and Evaluation Program (HSEEP) Coordination:
"DHS has sought both Intra- and Inter-Agency HSEEP buy-in through and National Exercise Program (NEP) Charter and Implementation Plan:

- Addresses Katrina Report recommendations
- Distributed HSEEP Volumes for Intra- and Inter-Agency Review
- Provides framework for Federal Inter-Agency exercise coordination
- Establishes Five Year Exercise Schedule
- Mandates HSEEP as standardized methodology and policy for all Intra-agency exercises
- Establishes NEP Executive Steering Committee
- Establishes National Exercise Schedule (NEXS) and the Corrective Action Program (CAP)
- The Deputy Secretaries across the Federal Government reviewed and approved the HSEEP Volumes on January 26th [2007]
- President approved the NEP in April [2007]." (**FEMA**, *HSEEP*, and **DHS/FEMA NRF Resource Center**, *National Exercise Program*, 2007)

Homeland Security Exercise and Evaluation Program Design and Development System:
"The Homeland Security Exercise and Evaluation Program (HSEEP) Design and Development System (DDS) is an online comprehensive planning tool designed to assist in the development, conduct, and evaluation of exercises. This interactive application provides suggested project timelines, templates, task and planning team lists, and associated guidance throughout an exercise design and development cycle…. Planners may use the DDS to design discussion-based (seminars, workshops, tabletops and games) and operations-based (drill, functional, full-scale) exercises. Throughout the planning process, the DDS provides users with populatable templates and samples for all key and supporting exercise documentation. It also provides users customized dynamic task list tracking, design and development tips and instructions, HSEEP volume references, and definitions.

"Exercise documentation, created either from the DDS templates or otherwise, can be stored in a unique exercise-specific database on the DDS for all members of the planning team with the appropriate permissions to view and edit. A running status of exercise progress is tracked on both graphical and interactive timelines." (**FEMA**, *HSEEP Toolkit DDS*, Sep 13, 2007)

Homeland Security Exercise and Evaluation Program (HSEEP) Evaluation Process:
"There are eight HSEEP steps in the evaluation process:

Step 1: Plan and organize the evaluation
Step 2: Observe the exercise and collect data
Step 3: Analyze data
Step 4: Develop the draft After Action Report (AAR)
Step 5: Conduct an After Action Conference
Step 6: Identify improvements to be implemented
Step 7: Finalize the AAR and Improvement Plan (IP)
Step 8: Track implementation." (**FEMA**, IS 120.A, *An Intro to Exercises*, Feb 2008, 49)

Homeland Security Exercise and Evaluation Program (HSEEP) Improvement Planning:
"An improvement plan will include broad recommendations from the AAR/IP organized by target capability as defined in the Target Capabilities List (TCL).

- Corrective actions derived from an AAC are associated with the recommendations and must be linked to a capability element as defined in the TCL.
- Corrective actions included in the improvement plan must be measurable.
- Corrective actions included in the improvement plan must designate a projected start date and completion date.
- Corrective actions included in the improvement plan must be assigned to an organization and a point of contact (POC) within that organization.
- Corrective actions must be continually monitored and reviewed as part of an organizational Corrective Action Program. An individual should be responsible for managing a Corrective Action Program to ensure corrective actions resulting from exercises, policy discussions and real-world events are resolved and support the scheduling and development of subsequent training and exercises." (**FEMA,** *About HSEEP,* 2008)

Homeland Security Exercise and Evaluation Program Methodological Background:

"The methodology of HSEEP was based on proven exercise design, development, and evaluation methods from other programs. There are three exercise programs that had a significant influence on HSEEP during its development. These programs include the following:

- Chemical Stockpile Emergency Preparedness Program (CSEPP). The key ties to HSEEP are the recognition of increased hazards associated with critical infrastructure and hazardous materials and contribution of evaluation methodology.

- Radiological Emergency Preparedness (REP) Program. The key ties to HSEEP are that REP was the first major exercise program to involve local first responders in biannual exercise activities and that it helped contribute to the evaluation methodology.

- Nunn-Lugar-Domenici (NLD) Domestic Preparedness Program. The key tie to HSEEP was that NLD was the springboard to the NEP and was the first program to recognize an increased hazard in the Nation's urban centers. It contributed many of the lessons learned and best practices for the design and development methodology." (**FEMA**, *About HSEEP*, 2008)

Homeland Security Exercise and Evaluation Program (HSEEP) Benefits: "HSEEP features consistent terminology that can be used by all exercise planners, regardless of the nature and composition of their sponsoring agency or organization. It reflects lessons learned and best practices of existing exercise programs, and can be adapted to a variety of scenarios and incidents. HSEEP is also consistent and in line with all of the current national initiatives and policies including the National Incident Management System (NIMS), the National Preparedness Goal, the Target Capabilities List (TCL,) and the Universal Task List (UTL)." (**FEMA**, *Homeland Security Exercise and Evaluation Program Frequently Asked Questions*, 2008)

Homeland Security Exercise and Evaluation Program (HSEEP) Mission: "The Homeland Security Exercise and Evaluation Program (HSEEP) constitutes a national standard for all exercises. Through exercises, the National Exercise Program, supports organizations to achieve objective assessments of their capabilities so that strengths, and areas for improvement are identified, corrected and shared as appropriate prior to a real incident." (**FEMA**, *HSEEP Mission*, 2008)

Homeland Security Exercise and Evaluation Program (HSEEP) Planning and After Action Conferences: "The HSEEP methodology defines a variety of planning and after action conferences. The need for each of these conferences varies depending on the type and scope of the exercise. They include:

- Concepts and Objectives Meeting
- Initial Planning Conference (IPC)
- Mid-Term Planning Conference (MPC)
- Master Scenario Events List (MSEL) Conference
- Final Planning Conference (FPC)
- After Action Conference (AAC)" (**FEMA**, *About HSEEP*, 2008)

Homeland Security Exercise and Evaluation Program Policy & Doctrine Documents:
"HSEEP policy and doctrine is organized into several volumes:
• *HSEEP Volume I: HSEEP Overview and Exercise Program Management* provides guidance for building and maintaining an effective exercise program and summarizes the planning and evaluation process described in further detail in Volumes II through V.
• *HSEEP Volume II: Exercise Planning and Conduct* helps planners outline a standardized foundation, design, development, and conduct process adaptable to any type of exercise.
• *HSEEP Volume III: Exercise Evaluation and Improvement Planning* offers proven methodology for evaluating and documenting exercises and implementing an improvement plan.
• *HSEEP Volume IV: Sample Exercise Documents and Formats* provides sample exercise materials referenced in HSEEP Volumes I, II, III, and V.
• *HSEEP Volume V: Prevention Exercises* contains guidance consistent with the HSEEP model to assist jurisdictions in designing and evaluating exercises that test pre-incident capabilities such as intelligence analysis and information sharing." (**DHS**, *TCL* 2007, p. 16)

Homeland Security Exercise and Evaluation Program (HSEEP) Purpose:
"The purpose of HSEEP is to facilitate the creation of self-sustaining, capabilities-based exercise programs by providing tools and resources such as policy, guidance, training, technology, and direct support. This blended approach to HSEEP implementation increases exercise expertise, while advancing a standardized means of assessing and improving preparedness across the Nation." (DHS, *HSEEP Quarterly Newsletter*. March 2007, Issue 6)

Homeland Security Exercise and Evaluation Program (HSEEP) Training and Exercise Plan Workshop (T&EPW): All HSEEP compliant entities conduct a T&EPW each calendar year in which they develop a Multi-year Training and Exercise Plan, which includes:

- The entities' training and exercise priorities (based on an overarching strategy and previous improvement plans).
- The capabilities from the TCL that the entity will train for and exercise against.
- A multi-year training and exercise schedule which:
    - Reflects the training activities which will take place prior to an exercise, allowing exercises to serve as a true validation of previous training.
    - Reflects all exercises in which the entity participates.
    - Employs a "building-block approach" in which training and exercise activities gradually escalate in complexity.
- A new or updated Multi-year Training and Exercise Plan must be finalized and implemented within 60 days of the T&EPW.
- All scheduled exercises must be entered into the National Exercise Schedule (NEXS) System.

The Multi-Year Training and Exercise Plan must be updated on an annual basis (or as necessary) to reflect schedule changes." (**FEMA**, *About HSEEP*, 2008)

Homeland Security Exercise and Evaluation Program (HSEEP) Volumes:

- Volume I: Oversight and Exercise Program Management
- Volume II: Exercise Planning and Conduct
- Volume III: Exercise Evaluation and Improvement Planning
- Volume IV: Sample Exercise Documents and Formats

- Volume V: Prevention Exercises (Draft) (**FEMA**, *HSEEP Slides*, 2008, 7)

Homeland Security Four Foundations: "The *Strategy* [NSHS]…describes four foundations…that cut across all of the mission areas, across all levels of government, and across all sectors of our society. These foundations…

law,
science and technology,
information sharing and systems, and
international cooperation

provide a useful framework for evaluating our homeland security investments across the federal government." (**White House**, *National Strategy for Homeland Security*, July 2002, p. 4)

Homeland Security Grant Program (HSGP): "One of the core missions of the Department of Homeland Security (DHS) is to enhance the ability of state, local, and tribal governments to prevent, protect against, respond to, and recover from terrorist attacks and other disasters. The Homeland Security Grant Program (HSGP) is a primary funding mechanism for building and sustaining national preparedness capabilities. HSGP is comprised of five separate grant programs:

· Urban Areas Security Initiative (UASI)
· State Homeland Security Program (SHSP)
· Law Enforcement Terrorism Prevention Program (LETPP)
· Metropolitan Medical Response System (MMRS)
· Citizen Corps Program (CCP)

Together, these grants fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration costs. HSGP programs support objectives outlined in the National Preparedness Guidelines and related national preparedness doctrine, such as the National Incident Management System, National Response Plan, and the National Infrastructure Protection Plan. Current and prior year funding levels for each of the grants is detailed in the following table." (**DHS**, *Fiscal Year 2007 Homeland Security Grant Program*, July 18, 2007, p. 2)

Homeland Security Grant Program (HSGP) FY 2008 Changes and Priorities:

- The department focuses on three funding priorities for FY 2008:
  - measuring progress against the National Preparedness Guidelines
  - strengthening preparedness planning
  - strengthen IED prevention, protection and recovery
- Law Enforcement Activities will become part of both the State Homeland Security Program (SHSP) and Urban Areas Security Initiative (UASI) programs, with a requirement to spend at least 25 percent of each award on these important prevention and protection activities. This will result in an increase of more than $66 million dollars from FY 2007 on prevention activities alone
- The department is more narrowly focusing the funding priorities this year, with the goal of targeting funding where the largest gaps reside
- As a result of the Post Katrina Emergency Management Reform Act, the 10 FEMA regions will have an enhanced role in grant activities

- The burden on grantees will be reduced as the Enhancement Plan portion of the application has been replaced by the State Preparedness Report
- The department's risk methodology for the grants has been revised to reflect input from the 9/11 Act, including the use of Metropolitan Statistical Areas
- The department's port-wide risk management activities have expanded this year, and include ports in Group 2, instead of only Group 1." (**DHS**, *Fact Sheet FY08 Grants*)

Homeland Security Higher Education: "One concern often noted by university leaders that have, or have considered, establishing a homeland security academic program was defining what the discipline[3] entails. The federal government defines homeland security as "a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur."[59] The National Strategy for Homeland Security lists essential areas of focus that appear to have been considered by many academic programs.[60] However, it is important to note that the current national strategy for homeland security definition was largely developed by the federal government and is void of issues relating to natural disasters. If the federal definition of homeland security is to be the basis of homeland security programs, but lacks recognition of the non-federal entities with homeland security responsibilities and is also shortsighted in recognizing the all-hazards nature of incidents, academia may wish to expand its view of the homeland security environment when establishing relevant curriculum.

As the discipline evolves, issues deemed homeland security-related appear to be expanding outside the current working definition of homeland security. Whether a terrorist incident, natural disaster, or incident of unknown cause, one might argue that the current trend is to deem any activity that may have tangential negative societal security implications as having a nexus to homeland security. If the future of homeland security continues the trend toward a boundless view of the field, school administrators may struggle with determining the courses to be taught in a program that purports to prepare students for this new discipline." (**Rollans and Rowan**, *The Homeland Security Academic Environment: A Review of Current Activities and Issues for Consideration*. September 2007, pp. 8-9)

Homeland Security Higher Education Fundamentals (**HSDEC & TAMU**, *After Action Report, Workshop on National Needs: What Employers Want from Graduate Education in Homeland Security*, May 17-18, 2007, p. 8):

- History and basic principles of homeland security
- History of homeland security and terrorism
- Structures and functions of DHS
- Demonstrated ability to apply national response planning documents
- Deep understanding of threat environment—emerging threats, nature of four main threats, prevention, response, impact

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[59] White House, National Strategy for Homeland Security, July 2002.

[60] Critical Mission Areas: Intelligence and Warning, Border and Transportation Security, Domestic Counterterrorism, Protecting Critical Infrastructure and Key Assets, Defending Against Catastrophic Threats, and Emergency Preparedness and Response. Supportive Foundations of Homeland Security: Law, Science and Technology, Information Sharing and Systems, and International Cooperation.

- Globalization and homeland security
- Federal, state and local issues that impact preparedness, including varying state homeland security structures/systems
- Tools available and their uses
- Training and exercises—participating in or leading mock incidents
- Intelligence warning process
- How constitution and legal framework affect homeland security.

Homeland Security Information: "Experience has shown that there is no single source for information related to terrorism. It is derived by gathering, fusing, analyzing, and evaluating relevant information from a broad array of sources on a continual basis. Important information can come through the efforts of the Intelligence Community, Federal, State, tribal, and local law enforcement and homeland security authorities, other government agencies (e.g., the Department of Transportation, the Department of Health and Human Services), and the private sector (e.g., the transportation, healthcare, financial, and information technology sectors). Commonly referred to as homeland security information, terrorism information, or law enforcement information, this wide-ranging information can be found across all levels of government as well as in the private sector." (**White House**, *National Strategy for Information Sharing*, 2007, p. 2)

Homeland Security Information Bulletins: "Guidance for Federal, State, local, and other governments; private sector organizations; and international partners concerned with our Nation's critical infrastructures that do not meet the timeliness, specificity, or significance thresholds of warning messages. Bulletins often include statistical reports, periodic summaries, incident response or reporting guidelines, common vulnerabilities and patches, and configuration standards or tools." (**HSC**, *National Continuity Policy IP*, 2007, p. 63)

Homeland Security Information Network (HSIN): "A communications system and IT infrastructure used by…[DHS] to transmit sensitive but unclassified information. The HSIN serves as a nationwide information-sharing and collaboration tool and is intended to offer real-time chat and instant messaging capability as well as a document library that contains reports from multiple Federal, State, and local sources. HSIN features suspicious incident information and analysis of terrorist threats, tactics, and weapons. HSIN includes over 35 communities of interest, such as emergency management, law enforcement, counterterrorism, States, and private sector communities. Each community of interest has Web pages that are tailored for the community and contain general and community-specific news articles, links, and contact information. HSIN features include a document library, a discussion thread/bulletin board capability, and a chat tool among others." (**HSC**, *NCPIP*, August 2007, p. 63)

Homeland Security Information Network (HSIN): "HSIN is the primary internet-based technology platform for information sharing between CI/KR businesses, sector leadership and the NICC/DHS." (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p. 69)

Homeland Security Information Network (HSIN) Critical Sectors (CS): "In 2005, DHS launched HSIN-Critical Sectors (CS) to communicate real-time information to critical infrastructure owners and operators. The mission of the HSIN-CS program is to ensure the protection and reliable performance of the nation's CI/KR sectors through the strategic use of

information sharing and communication capabilities. Additionally, HSIN creates an enhanced partnership between the owners and operators of the nation's critical infrastructures, DHS and the Sector-Specific Agencies (SSAs)…. Through HSIN-CS, participating users receive the following functionality: timely broadcast alerts, threats, warnings, and incident reporting; sharing critical documents and analyses; real-time collaboration on key issues or crises; support best practices and protective strategies and the growth of 'communities of interest'." (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p. 69)

Homeland Security Institute (HSI): First announced on April 23, 2004 and operational in June 2004, the HSI was DHS's first federally funded research and development center or "think tank." (**DHS**, *DHS Today*, Vol. 6, Issue No. 14, April 21, 2008; see, also, DHS, *Fact Sheet: Homeland Security Establishes Its First Government "Think Tank" HSI*, April 23, 2004)

Homeland Security Institute (HSI): "The Homeland Security Institute (HSI) is a Studies and Analysis Federally Funded Research and Development Center established pursuant to Section 312 of the Homeland Security Act of 20021. HSI delivers independent and objective analyses and advises in core areas important to its sponsor in support of policy development, decision-making, analysis of alternative approaches, and evaluation of new ideas on issues of significance." (**HSI**, *Welcome to the HSI*, 2007)

Homeland Security Management System: "In order to continue strengthening the foundations of a prepared Nation, we will establish and institutionalize a comprehensive Homeland Security Management System that incorporates all stakeholders. Relevant departments and agencies of the Federal Government must take the lead in implementing this system, and State, local, and Tribal governments are highly encouraged to ultimately adopt fully compatible and complementary processes and practices as part of a full-scale national effort. Our current approach to managing homeland security has focused on doctrine and planning through the National Preparedness Guidelines (NPG)…. This new Homeland Security Management System…will involve a continuous, mutually reinforcing cycle of activity across four phases:

• ***Phase One: Guidance.*** The first phase in our Homeland Security Management System encompasses overarching homeland security guidance. It is the foundation of our system, and it must be grounded in clearly articulated and up-to-date homeland and relevant national security policies, with coordinated supporting strategies, doctrine, and planning guidance flowing from and fully synchronizing with these policies…. [Such as can be found in;

- Applicable Homeland Security Presidential Directives
- Applicable National Security Presidential Directives
- *National Strategy for Homeland Security (2007)*
- *National Implementation Plan for the Global War on Terror*
- *National Infrastructure Protection Plan*
- *National Response Framework*
- *National Incident Management System*]

• ***Phase Two: Planning***. The second phase is a deliberate and dynamic system that translates our policies, strategies, doctrine, and planning guidance into a family of strategic, operational, and tactical plans….

• ***Phase Three: Execution.*** The third phase in the Homeland Security Management System encompasses the execution of operational and tactical-level plans….

• ***Phase Four: Assessment and Evaluation.*** The fourth phase involves the continual assessment and evaluation of both operations and exercises. This phase of the system will produce lessons learned and best practices that must be incorporated back into all phases of the Homeland Security Management System." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, pp. 43-45)

Homeland Security Management System: "For the Homeland Security Management System to be effective and address long-range challenges across multiple disciplines, all homeland security partners should develop a planning capability that may also be employed during times of crisis." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, Oct 2007)

Homeland Security Mission Areas: "The *National Strategy for Homeland Security* aligns and focuses homeland security functions into six critical mission areas:

intelligence and warning,
border and transportation security,
domestic counterterrorism,
protecting critical infrastructure and key assets,
defending against catastrophic terrorism, and
emergency preparedness and response.

The first three mission areas focus primarily on preventing terrorist attacks; the next two on reducing our Nation's vulnerabilities; and the final one on minimizing the damage and recovering from attacks that do occur." (**White House**, *National Strategy for HS*, 2002, p. 4)

Homeland Security National Training Program (HSNTP): "The HSNTP provides funding through cooperative and inter-agency agreements to the National Domestic Preparedness Consortium, Rural Domestic Preparedness Consortium, and Continuing and Emerging training providers for the purposes of the development and delivery of all-hazards training for Federal, State, local, and tribal emergency responders." (**DHS**, *Fact Sheet: FY07 HSNTP*, Sep. 28, 2007)

Homeland Security National Training Program (HSNTP): The HSNTP consists "of more than 70 training partners to include civic organizations, academic insittuions, corporations, among others." (**FEMA**, *90 Day Update to Congress on National Preparedness* (Dennis R. Schrader, Deputy Administrator for National Preparedness), April 2008, slide 56)

"The Homeland Security National Training Origran (under development) will oversee and coordinate homeland security training programs, increase training capacity, and ensure standardization across programs.

"Training is delivered to appropriate State and local personnel in emergency management, public health, clinical care, public works, public safety, the private sector, nonprofits, faith-based, and community organizations.

"During FY2007 over $182M in cooperative and interagency agreements was awarded through the HSNTP to applicants to design, develop, and deliver training content and support for Federal, State, local, and tribal jurisdictions."

"Since FY 2005, more than $521.5 million has been allocated for the concept and design of HSNTP." (Ibid., slide 57)

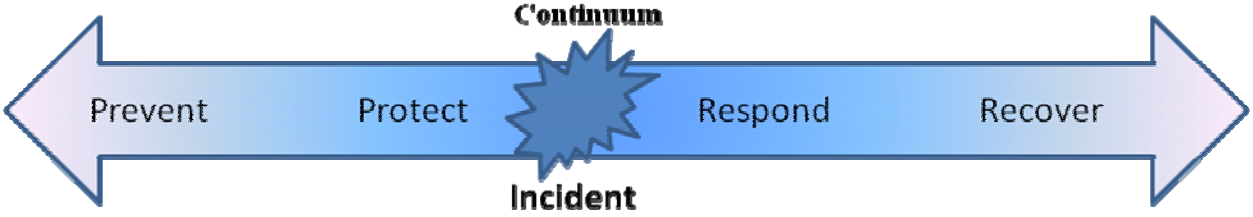
Homeland Security Objectives: "Homeland security is an exceedingly complex mission. It involves efforts both at home and abroad. It demands a range of government and private sector capabilities. And it calls for coordinated and focused effort from many actors who are not otherwise required to work together and for whom security is not always a primary mission. This *Strategy* establishes three objectives based on the definition of homeland security:

• Prevent terrorist attacks within the United States;
• Reduce America's vulnerability to terrorism; and
• Minimize the damage and recover from attacks that do occur.

The order of these objectives deliberately sets priorities for America's efforts to secure the homeland." (**White House**, *National Strategy for Homeland Security*, July 2002, p. 3)

Homeland Security Operational Continuum: "The operational continuum for homeland security consists of prevent, protect, respond, and recover. It represents phases of operations that homeland security officials and stakeholders take to address potential and actual homeland security incidents. Operations commence with prevention and protection efforts to, if possible, stop bad things from happening and minimize consequences. If bad things cannot be prevented, protection efforts continue, while response operations commence. Recovery operations build on response operations and are necessary to mitigate the consequences of incidents." (**DHS**, Chapter 2, *Capstone Doctrine Pub Draft*, 2008, p. 2-5)

Figure 2-1: Homeland Security Operational Continuum



Homeland Security Operations Center (HSOC) DHS: "The HSOC is the primary national-level hub for operational communications, information and resource coordination pertaining to domestic incident management." (**DHS**, *NRP* (Draft #1), Feb. 25, 2004, 22) [Note: Renamed the National Operations Center. (**DHS**, *Notice of Change to the NRP*, May 22, 2006, p. 9)

Homeland Security Planning Levels: "There are three levels of homeland security planning – Strategic, Operational and Tactical.

Strategic. At this level, executive decision makers determine strategic homeland security objectives. From these objectives, they develop overall, high-level guidance for planners. Using this guidance, planners develop their strategic plans designed to apply resources to accomplish these objectives. These are the widest scoped, least detailed plans in the planning hierarchy.

Operational. Strategic plans provide guidance for operational planning. Operational objectives support strategic objectives, sequence events, initiate action and apply resources to begin and sustain activities. It is at this level that operational planning is conducted and sustained across the homeland security operational continuum (e.g., Prevent, Protect, Respond and Recover). Plans written at this level include concept of operations plans (CONPLAN) and organizational operations plans (OPLAN). These plans are more narrowly scoped and more detailed than strategic plans.

Tactical. Tactical plans are more focused and detailed than operational plans. Activities are focused on the arrangement of resources in relation to each other and to the threat or natural disaster. Tactical plans are developed to support the objectives of operational plans. The IPS is not intended to replace NIMS or the Incident Command System (ICS)." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, p. 2-10)

Homeland Security Policy Institute, GWU: "The Homeland Security Policy Institute draws on the expertise of its partners from the academic, nonprofit, policy, and private sectors for a common goal of better preparing the Nation for the threat of terrorism. The Institute frames the debate, discusses policy implications and alternatives, and recommends solutions to issues facing America's homeland security policymakers. By linking academicians and scientists to decisionmakers at all levels of government, the private sector, and the communities we live in, the Institute is working to build a bridge between theory and practice in the homeland security arena." (**DHS OIG**, *Fiscal Year 2008 Annual Performance Plan*, 2007, p. 24)

Homeland Security Preparedness: See Department of Homeland Security HSP.

Homeland Security Presidential Directive (HSPD-1), Organization of the Homeland Security Council: "…established the Homeland Security Council to ensure coordination of all HS-related activities among the executive departments and agencies and promote the effective development and implementation of all HS policies." (**JCS/DOD**, *CBRNE CM*, 2006, A-1)

Homeland Security Presidential Directive (HSPD-3), The Homeland Security Advisory System: "…provides the guidelines for a comprehensive and effective means to disseminate information regarding the risk of terrorist acts to Federal, state and local authorities and the American people. This document establishes the five threat conditions and their respective protective measures." (**JCS/DOD**, *CBRNE Consequence Management*, 2007, p. A-1)

Homeland Security Presidential Directive (HSPD-4/NSPD-17), National Strategy to Combat Weapons of Mass Destruction (December 2002): "HSPD-4 describes three pillars for our national strategy to combat WMD: counterproliferation to combat WMD use, strengthen nonproliferation to combat WMD proliferation, and consequence management to respond to WMD use. Each pillar iterates specific actions to be pursued within the pillar." (**JCS/DoD**, *Homeland Security*, 2005, p. A-1)

Homeland Security Presidential Directive 5 (HSPD-5) Domestic Incident Management: "Homeland Security Presidential Directive – 5, Management of Domestic Incidents, February 28, 2003, is intended to enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system. In HSPD-5 the President designates the Secretary of Homeland Security as the principal federal official for domestic incident management and empowers him to coordinate Federal resources used in response to or recovery from terrorist attacks, major disasters, or other emergencies in specific cases. The directive assigns specific responsibilities to the Attorney General, Secretary of Defense, Secretary of State, and the Assistants to the President for Homeland Security and National Security Affairs, and directs the heads of all Federal departments and agencies to provide their "full and prompt cooperation, resources, and support," as appropriate and consistent with their own responsibilities for protecting national security, to the Secretary of Homeland Security, Attorney General, Secretary of Defense, and Secretary of State in the exercise of leadership responsibilities and missions assigned in HSPD-5. The directive also notes that it does not alter, or impede the ability to carry out, the authorities of Federal departments and agencies to perform their responsibilities under law. (**DHS**, *NRP* (Draft #1), Feb. 25, 2004, 72)

[Note: Annex I, "National Planning," December 2007 struck "prevent, prepare for, respond to, and recover from" in section 3 and inserted "prevent, protect against, respond to, and recover from."]

Homeland Security Presidential Directive 5 (HSPD-5) Domestic Incident Management: "The purpose of this policy is to enhance the capability of all levels of government across the Nation to work together efficiently and effectively using a national approach to domestic incident management. The policy requires an "all hazards approach," which refers to preparedness for domestic terrorist attacks, major disasters, and other emergencies. Toward this end, HSPD-5 mandated DHS create two plans that define the specific requirements to ensure the necessary level of coordination—the National Incident Management System (NIMS) and the National Response Plan (NRP)." (**DOT**, *Catastrophic Hurricane Evacuation Plan Evaluation: Report to Congress*, June 1, 2006, p. 2-3)

Homeland Security Presidential Directive 5 (HSPD-5) Domestic Incident Management: "The NRP was developed as a result of HSPD-5 to integrate the Federal Government current family of Federal domestic prevention, preparedness, response, and recovery plans into a single, all-discipline, all-hazards plan to unify the domestic incident management process. When the NRP is used, national interagency plans such as the National Oil and Hazardous Substances Pollution Contingency Plan, Mass Migration Emergency Plan, National Search and Rescue Plan, National Infrastructure Protection Plan, and National Maritime Transportation Security Plan are incorporated as supporting and/or operational plans. In addition to consolidating Federal plans, other modifications within the NRP that impact DOD are the establishment of a National

Operations Center (NOC), the establishment of an Interagency Advisory Council (IAC), and the creation of a principal Federal official (PFO), who may be appointed to represent the Secretary of Homeland Security at the incident site. A national incident management system (NIMS) to provide a consistent nationwide approach for Federal, state, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents was also a result of HSPD-5." (**JCS/DOD**, *CBRNE CM* (JP 3-41) 2006, p. II-2)

Homeland Security Presidential Directive 5 (HSPD-5), Roles and Responsibilities, DOJ:

"According to HSPD-5, the Attorney General "has lead responsibility for criminal investigation of terrorist acts or terrorist threats by individuals or groups inside the United States [.]" HSPD-5 also states that

> following a terrorist threat or an actual incident that falls within the criminal jurisdiction of the United States, the full capabilities of the United States shall be dedicated, consistent with United States law and with activities of other Federal departments and agencies to protect our national security, to assisting the Attorney General to identify the perpetrators and bring them to justice.

This language, which grants the Attorney General broad authority within the sphere of law enforcement, has fueled intense turf battles over roles and authorities during the subsequent drafting of guidance documents such as the National Response Framework. It suggests that the Secretary of Homeland Security, as the federal coordinator for domestic incident management, may not have the authority to determine during a catastrophic terrorist incident whether other aspects of crisis management and response could be prioritized above law enforcement activities. HSPD-5 appears to leave the resolution of such possibly conflicting priorities to the President of the United States." (**Wormuth**, *Ready or Not*, 2008, 4)

Homeland Security Presidential Directive (HSPD-6), Integration and Use of Screening Information (16 September 2003). "HSPD-6 provides for the development and maintenance of accurate and current information about individuals known or appropriately suspected to be or have been engaged in conduct related to terrorism; and that information, as appropriate and permitted by law, can be used to support screening and protective processes via the Terrorist Screening Center." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. A-2)

Homeland Security Presidential Directive–7 (HSPD–7), Critical Infrastructure Identification, Prioritization, and Protection: "HSPD–7 directed DHS to establish a national policy for Federal departments and agencies to identify and prioritize critical infrastructure and key resources in order to prevent, deter, and mitigate the effects of deliberate efforts to destroy, incapacitate, or exploit them. Federal departments and agencies are to work with State, tribal, and local governments, the private sector, and NGOs to accomplish this objective. This effort includes completion and implementation of the National Infrastructure Protection Plan." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 11)

Homeland Security Presidential Directive 8 (HSPD-8), National Preparedness (December 17, 2003)**:** "HSPD–8 directed DHS to lead a national initiative to develop a National Preparedness System—a common and unified approach to "strengthen the preparedness of the

United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters and other emergencies." The requirements of HSPD–8 led to the National Preparedness Guidelines, which was developed to provide the means for the Nation to answer three fundamental questions:

- How prepared do we need to be?
- How prepared are we?
- How do we prioritize efforts to close the gap?

HSPD–8 also required DHS to develop mechanisms for the improved delivery of Federal preparedness assistance to State, tribal, and local governments and to strengthen the Nation's preparedness capabilities. Fifteen National Planning Scenarios were developed to illustrate the range, scope, magnitude, and complexity of incidents for which the Nation should prepare. Using this wide range of possible scenarios, including terrorism, natural disasters, and health emergencies, helps reduce uncertainty in planning." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 11)

Homeland Security Presidential Directive 8 (HSPD-8), National Preparedness (2003):
"This directive is a companion to HSPD-5, which identifies steps for improved coordination in response to incidents. This directive describes how Federal departments and agencies will prepare for such a response, including prevention activities during the early stages of a terrorism incident. It establishes policies to strengthen the preparedness of the US to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by requiring a national domestic all-hazards preparedness (including CBRNE) goal, establishing mechanisms for improved delivery of Federal preparedness assistance to state and local governments, and outlining actions to strengthen preparedness capabilities of Federal, state, and local entities." (**JCS/DOD**, *CBRNE Consequence Management* (JP 3-41), 2006, p. II-2)

Homeland Security Presidential Directive 8, National Preparedness (2003) Approach:

- Employ a risk-balancing, hedging strategy to reduce strategic risk and compensate for uncertainty.
- Build a task and capability-based common language.
- Measure task-based performance and the adequacy and sufficiency of capabilities against key risk scenarios.
- Achieve objective assurance of national preparedness and a rational methodology to allocate limited resources." (**DHS**, *HSPD-8 "National Preparedness" Status Update*, 7Dec2004, slide 5)

Homeland Security Presidential Directive 8, National Preparedness (2003) Requirements:

- Develop a National Preparedness Goal (SLGCP)
- Develop a National Preparedness Assessment and Reporting System (SLGCP)
- Establish a Single Point of Access for Assistance (SLGCP)
- Review and Approve Comprehensive All-Hazards Statewide Preparedness Strategies (SLGCP)
- Allocate Assistance Based on Population Density, Critical Infrastructure, Other Risk Factors (SLGCP)

- Report Annually on Assistance Programs (SLGCP)
- Develop First Responder Equipment Standards (S&T)
- Plan for Equipment Research and Development (S&T)
- Establish a National Training Program (SLGCP)
- Establish a National Exercise Program (SLGCP)
- Develop a National Lessons Learned System (SLGCP)
- Adopt Federal Performance Measures (All Federal Departments and Agencies)
- Maintain Specialized Federal Assets (EP&R)
- Maintain a Federal Response Capability Inventory (EP&R)
- Encourage Citizen Participation (PA/SLGCP)
- Plan to Provide Preparedness Information (PA/SLGCP) (**DHS**, *HSPD-8 "National Preparedness" Status Update*, December 7, 2004, slide 9)

Homeland Security Presidential Directive 8 (HSPD-8), Annex 1: National Planning:
"This Annex is intended to further enhance the preparedness of the United States by formally establishing a standard and comprehensive approach to national planning. It is meant to provide guidance for conducting planning in accordance with the Homeland Security Management System in the National Strategy for Homeland Security of 2007….

Policy… It is the policy of the United States Government to enhance the preparedness of the Nation by developing and maintaining a standardized approach to national planning to integrate and effect policy and operational objectives to prevent, protect against, respond to, and recover from all hazards, and comprises:
(a) a standardized Federal planning process;
(b) national planning doctrine;
(c) resourced operational and tactical planning capabilities at each Federal department and agency with a role in homeland security;
(d) strategic guidance, strategic plans, concepts of operations, and operations plans and as appropriate, tactical plans; and
(e) a system for integrating plans among all levels of government…
There is established a planning process involving three levels of planning:
(a) strategic;
(b) operational; and
(c) tactical.
The planning process will result in the development of a family of related planning documents to include strategic guidance statements, strategic plans, concepts of operations, operations plans, and as appropriate, tactical plans.
(33) No later than 2 months after the issuance of this Annex, the Secretary of Homeland Security (Secretary) shall submit to the President for approval, through the Assistant to the President for Homeland Security and Counterterrorism, an Integrated Planning System (IPS) that is developed in coordination with the heads of Federal agencies with a role in homeland security and that
(a) provides common processes for developing plans,
(b) serves to implement phase one of the Homeland Security Management System, and
(c) includes the following:
(i) national planning doctrine and planning guidance, instruction, and process to ensure consistent planning across the Federal Government;

(ii) a mechanism that provides for concept development to identify and analyze the mission and potential courses of action;
(iii) a description of the process that allows for plan refinement and proper execution to reflect developments in risk, capabilities, or policies, as well as to incorporate lessons learned from exercises and actual events;
(iv) a description of the process that links regional, State, local, and tribal plans, planning cycles, and processes and allows these plans to inform the development of Federal plans;
(v) a process for fostering vertical and horizontal integration of Federal, State, local, and tribal plans that allows for State, local, and tribal capability assessments to feed into Federal plans; and
(vi) a guide for all-hazards planning, with comprehensive, practical guidance and instruction on fundamental planning principles that can be used at Federal, State, local, and tribal levels to assist the planning process." (**DHS**, *HSPD 8 Annex 1: National Planning*, 10 Jan 2008)

Homeland Security Presidential Directive (HSPD-9), Defense of United States Agriculture and Food: "Purpose: This directive establishes a national policy to defend the agriculture and food system against terrorist attacks, major disasters, and other emergencies. Background: The United States agriculture and food systems are vulnerable to disease, pest, or poisonous agents that occur naturally, are unintentionally introduced, or are intentionally delivered by acts of terrorism. Americas agriculture and food system is an extensive, open, interconnected, diverse, and complex structure providing potential targets for terrorist attacks. We should provide the best protection possible against a successful attack on the United States agriculture and food system, which could have catastrophic health and economic effects." (**White House**, *HSPD-9*, January 30, 2004)

Homeland Security Presidential Directive (HSPD-10), Biodefense for the 21st Century (28 April 2004): "HSPD-10 provides a comprehensive framework for the Nation's biodefense and, among other things, delineates the roles and responsibilities of Federal agencies and departments in continuing their important work in this area." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. A-2)

Homeland Security Presidential Directive (HSPD-11), Comprehensive Terrorist-Related Screening Procedures (27 August 2004): "HSPD-11 establishes procedures to enhance terrorist-related screening through comprehensive, coordinated procedures that detect, identify, track, and interdict people, cargo, conveyances, and other entities and objects that pose a threat to homeland security." (**JCS/DoD**, *Homeland Security* (JP 3-28), 2005, pp. A-2 & 3)

Homeland Security Presidential Directive (HSPD-12), Policy for a Common Identification Standard for Federal Employees and Contractors (27 August 2004): "HSPD-12 establishes a policy of the United States to enhance security, increase Government efficiency, reduce identity fraud, and protect personal privacy by establishing a mandatory, Government-wide standard for secure and reliable forms of identification issued by the Federal Government to its employees and contractors (including contractor employees)." (**JCS/DoD**, *Homeland Security*, 2005, A-3)

Homeland Security Presidential Directive (HSPD-13), Maritime Security Policy (21 December 2004): "HSPD-13 establishes US policy, guidelines, and implementation actions to

enhance US national security and homeland security by protecting US maritime interests." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. A-3)

Homeland Security Presidential Directive (HSPD-21), Public Health and Medical Preparedness. "This directive establishes a National Strategy for Public Health and Medical Preparedness (Strategy), which builds upon principles set forth in *Biodefense for the 21st Century* (April 2004) and will transform our national approach to protecting the health of the American people against all disasters." (**White House**, *HSPD*-21, October 18, 2007)

Homeland Security Professional Development and Education: From the White House Hurricane Katrina Lessons Learned Report: "Lesson Learned: The Department of Homeland Security should develop a comprehensive program for the professional development and education of the Nation's homeland security personnel including Federal, state and local employees as well as emergency management persons within the private sector, non-governmental organizations…This program should foster a "joint" Federal interagency, state, local and civilian team.

"Recommendation #112: Each Federal department and agency assigned specific homeland security roles should establish a homeland security professional development program that encompasses career assignments, education, exercises and training.

"Recommendation #116: DHS should establish a national Homeland Security University (NHSU) for senior officials that serves as a capstone to other educational and training opportunities." (**DHS**, *Establishing a DHS University System*, 28Sep2007, p. 6)

Homeland Security Professionalism: (See "Homeland Security Education")

Homeland Security Science and Technology Advisory Committee (HSSTAC): See Department of Homeland Security, HSSTAC.

Homeland Security Spectrum of Operations: "Homeland security planning will address each of the four mission areas identified in the National Strategy for Homeland Security: to prevent, protect against, respond to, and recover from terrorist attacks or natural disasters.[61] In addition, planners must also consider the range of transnational threats not typically considered within the scope of these four mission areas, yet are no less imperative to our homeland security.[62]

- Prevention. Prevention comprises actions taken and measures put in place to reduce risk of threats and vulnerabilities, to intervene and stop an occurrence, or to mitigate effects of a potential incident, be it naturally occurring or man-made.[63]
    - Prevention planning will identify actions that minimize the possibility of a natural or man-made disaster adversely affecting the safety, security, or continuity of the

[61] HSPD-8/Annex 1, National Planning, Approved 03 December 2007.
[62] National Strategy for Homeland Security, 2007. pgs. 5 & 21.
[63] DHS Lexicon Terms and Definitions, Approved October 23, 2007.

Nation, its critical infrastructures, its inhabitants, and their civil rights and liberties.

- Prevention planning for terrorist attacks will focus on reducing the likelihood or consequence of threatened or actual terrorist attacks.[64] These planning efforts will be aligned with the broader efforts of the National Implementation Plan for the War on Terror to disrupt and prevent terrorist attacks on the homeland, deny terrorist and terrorist weapons entry to the United States and disrupt terrorist ability to operate within the borders of the United States. Prevention planning must ensure the complete exploitation of classified and unclassified information to increase the likelihood of successfully thwarting terrorists' plans.[65]

- Many aspects of prevention planning are sensitive and must be produced in and controlled in a classified or law enforcement sensitive environment.

- Protection. Protection is the ability to protect critical infrastructure and key resources (CI/KR) and is vital to the national security, public health and safety, economic vitality, and way of life of the United States. It preserves life and property during a natural disaster or terrorist attacks. Protection safeguards citizens and their freedoms, critical infrastructure, property and the economy from acts of terrorism, natural disasters, or other emergencies.[66]

  - Protection includes actions to mitigate the overall risk to CI/KR assets, systems, networks, functions, or their interconnecting links resulting from exposure, injury, destruction, incapacitation, or exploitation.[67] It involves actions or measures taken to cover or shield from exposure, injury, or destruction. Protective actions may occur before, during, or after an incident and are designed to prevent, minimize, or contain the impact of an incident.[68]

  - Protection planning will address structures and processes that are adaptable to incorporate lessons learned and best practices and adjust quickly within the time constraints of a fast-moving crisis or threat environment. This planning should manage risk and address known and potential threats and hazards.[69]

- Response. Response embodies the actions taken in the immediate aftermath of an incident to save lives, meet basic human needs, reduce the loss of property, and impact to the environment. Following an incident, either naturally occurring or man-made, response operations are essential to reduce the immediate psychological, social, and economical effects of an incident.[70] Response planning will provide rapid and disciplined incident assessment to ensure response is quickly scalable, adaptable, and

[64] HSPD-8, section 2(i), National Preparedness, December 17, 2003
[65] National Implementation Plan for the War on Terror, National Counterterrorism Center, June 26, 2006.
[66] DHS Lexicon Terms and Definitions, Approved October 23, 2007.
[67] National Infrastructure Protection Plan (NIPP), 2006.
[68] DHS Lexicon Terms and Definitions, Approved October 23, 2007.
[69] National Infrastructure Protection Plan, 2006.
[70] National Strategy for Homeland Security, Homeland Security Council, October 2007.

flexible.[71] It will incorporate the national response doctrine as presented in the National Response Framework, which defines basic roles and responsibilities for incident response across all levels of government and the private sector.[72]

- Recovery. Recovery encompasses both short-term and long-term efforts for the rebuilding and revitalization of affected communities. Response and recovery operations are closely related. Recovery planning must provide for a near-seamless transition from response activities to short-term recovery operations — including restoration of interrupted utility services, reestablishment of transportation routes, and the provision of food and shelter to displaced persons.[73]

    - Recovery planning must ensure a successful transition from short-term recovery to the long-term recovery, including rebuilding and revitalization. These long-term recovery efforts differ from short-term recovery efforts by scope, complexity of efforts required, and the effect on the social fabric of the community. These efforts can take several months to several years to complete, depending on the extent of the catastrophic incident and how extensively CI/KR assets require redevelopment and reconstruction.[74]

    - Long-term recovery plans must be designed to maximize results through the efficient use of finite resources. These plans must coalesce both public and private partnerships and integrate collective recovery efforts.[75]

- Transnational Threats. A significant and enduring threat to U.S. homeland security emanates from a wide range of transnational problems originating both from within our hemisphere and from the larger global commons. Transnational threats[76] include those homeland security challenges not usually associated with terrorism, critical infrastructure protection, or catastrophic incident response, but focused instead on illicit activities (for example, drug trafficking, piracy, illegal immigration, trafficking in persons, and organized crime), impersonal forces (infectious diseases such as pandemic influenza and SARS, natural resource shortages, and environmental disasters), and humanitarian disasters (within our hemisphere and as a precursor to potential mass migration directed at the U.S. homeland). Transnational threats require both contingency and longer-term planning in crafting these homeland security plans; planners consider the integrity of our borders, national institutions and governmental systems and integrate planning across the air, maritime, land, and cyber domains."

(**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, pp. 2-6 through 2-8)

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[71] National Response Framework, January 8, 2008.
[72] National Response Framework, January 8, 2008.
[73] National Strategy for Homeland Security, Homeland Security Council, October 2007.
[74] National Strategy for Homeland Security, Homeland Security Council, October 2007.
[75] National Strategy for Homeland Security, Homeland Security Council, October 2007.
[76] Threats to national security as determined by the President, pursuant to the *National Emergency Act*, *International Economic Powers Act*, *Immigration and Naturalization Act* or any other legal authority.

Homeland Security Strategic Objectives, Proposed: "A comprehensive and balanced strategy to protect the homeland encompasses five strategic objectives:

- prevent terrorist attacks;
- reduce our vulnerability to terrorism;
- prepare to respond and recover from an attack or natural or man-made disasters;
- sustain homeland security consistent with American values; and
- shape the global environment to reduce the threat of terrorism." (**Center for American Progress,** *Safe at Home: A National Security Strategy*…, February 25, 2008, p. 3)

Homeland Security Strategic Planning, Mission Area Analysis:

- Goal
  - Secure the Homeland
- Mission
  - Prevent
    - Objective A: Detect Threats
      - Function 1: Direct Intelligence Activities
    - Objective B: Control Access
      - Function 1: Pre-Screen People *& Materials
    - Objective C: Eliminate Threats
      - Function 1: Investigate Terrorism Suspects
  - Protect
    - Objective A: Assess Critical Infrastructure & Key Assets
      - Function 1: Catalogue Assets & Systems
    - Objective B: Implement Protective Programs for Assets & Systems
      - Function 1: Manage Risk
      - Function 2: Defend CVKR
    - Objective C: Mitigate Risk to Public
      - Function 1: Safeguard Public Health
  - Respond
    - Objective A: Access Incident
      - Function 1: Investigate Incident
    - Objective B: Minimize Impact
      - Function 1: Manage Incidents
    - Objective C: Care for Public
      - Function 1: Provide Medical Care
  - Recover
    - Objective A: Assist Public
      - Mission 1: Provide Long-Term Healthcare
    - Objective B: Restore Environment
      - Mission 1: Conduct Site Cleanup
    - Objective C: Restore Infrastructure
      - Objective 1: Reconstitute Government Services

(**Homeland Security Institute**, *HS Strategic Planning* (for DHS), March 2007, p. 10)

Homeland Security Strategic Threat Environment:

- Diminished protection afforded by geographic distances
- Traditional threats remain
- Greater risk of a weapons of mass destruction attack
- Increased potential for miscalculation and surprise
- Increased potential for terrorist attacks
- Increased challenges from weak and failing states and non-state actors
- Increasing diversity in sources and unpredictability of the locations of conflict
- Threats to US vital interests overseas." (**JCS/DoD**, *Homeland Security*, 2005, p. I-6)

Homeland Security Strategy and Guidance Documents:

- Applicable Homeland Security Presidential Directives
- Applicable National Security Presidential Directives
- *Department of Homeland Security Strategic Plan*
- *National Implementation Plan for the Global War on Terror*
- *National Incident Management System*
- *National Infrastructure Protection Plan*
- *National Planning Scenarios*
- *National Preparedness Guidelines*
- *National Response Framework*
- *National Strategy for Combating Terrorism*
- *National Strategy for Countering Weapons of Mass Destruction*
- *National Strategy for Homeland Security* (2007)
- *Post-Katrina Emergency Management Reform Act*
- *Target Capabilities List*
- *Universal Task List* (Blanchard, 2008)

Homeland Security Threat Advisories: "Guidance provided to Federal, State, local, and other governments; private sector organizations; and international partners with actionable information about an incident involving, or a threat targeting, critical national networks, infrastructures, or key assets. The Threat Advisories includes products formerly named alerts, advisories, and sector notifications." (**HSC**, *National Continuity Policy Implementation Plan*, Aug 2007, p. 63)

Homeland Security Threat Assessment (HSTA): "The HSTA identifies major threats to the homeland, including current strategic threats, emerging or evolving threats, and threats of uncertain probability but potential high consequences." (**DHS**, *IPG FY 2011-2015 Draft*, 2008)

"The 2008 HSTA is a strategic assessment looking out five years. It represents the consensus judgment of the DHS Intelligence Enterprise. It assesses the major threats for which DHS must prepare and to which it may need to respond. To maximize its utility to DHS leaders, components and Federal, State and local officials, the 2008 HSTA organizes these threats into six major categories:

- Demographic and travel security threats
- Threats to the borders
- Chemical, Biological, Radiological and Nuclear (CBRN) threats

- Health security threats
- Threats to critical infrastructure
- Threats posed by homegrown extremism and radicalization." (**DHS**, *IPG FY 2011-2015 Draft*, 2008, p. 7)

Homeland Security Threat Families:

1. Chemical
2. Biological
3. Radiological
4. Nuclear
5. Explosives
6. Cyber,
7. Assault
8. Emerging (**HS Institute**, *HS Strategic Planning for DHS*, March 2007, p. 6)

Homeland Security Threat Level System: "A color-coded system used to communicate with public safety officials and the public at-large through a threat-based, color-coded system so that protective measures can be implemented to reduce the likelihood of impact of an attack. [See "Color Coded Threat Level System," and "Homeland Security Advisory System"]

Hopley Report: October 1948 Report of the War Department Office of Civil Defense Planning, Directed by Russell J. Hopley, to Secretary of Defense James Forrestal, recommending "for adoption a permanent peacetime system of civil defense which will round out our defense structure and which, in the event of an emergency, can be quickly and easily expanded to meet the exigencies of a given situation. Such an organization can also be of great value in support of existing agencies in meeting devastating peacetime disasters such as fires, floods, earthquakes, tornadoes, hurricanes, explosions and similar catastrophies." (**OCDP**, *Civil Defense for National Security*, 1948, p. v)

Hospital Emergency Incident Command System: (See Hospital Incident Command System)

Hospital Incident Command System (HICS): "HICS applies the principles of incident management to health care facilities. The system helps coordinate emergency response between hospitals and other emergency responders with a system based on a predictable chain of management, defined responsibilities, prioritized response checklists, clear reporting channels for documentation and accountability, and a common nomenclature to facilitate communications." (**AHRQ/HHS**, *Mass Medical Care*, 2007, p. 58)

Hospital Preparedness Program (HPP): "The Hospital Preparedness Program (HPP) enhances the ability of hospitals and health care systems to prepare for and respond to bioterrorism and other public health emergencies. Current program priority areas include interoperable communication systems, bed tracking, personnel management, fatality management planning and hospital evacuation planning. During the past five years HPP funds have also improved bed and personnel surge capacity, decontamination capabilities, isolation capacity, pharmaceutical supplies, training, education, drills and exercises.

"Hospitals, outpatient facilities, health centers, poison control centers, EMS and other healthcare partners work with the appropriate state or local health department to acquire funding and develop healthcare system preparedness through this program. Funding is distributed directly to the Health Department of the State or political subdivision of a State (cities and counties are considered political subdivisions of States)." (**HHS,** *The Hospital Preparedness Program*, August 22, 2007 update)

Hot Site: "An alternate facility that already has in place the computer, telecommunications, and environmental infrastructure required to recover critical business functions or information systems." (**DHS**, *Federal Continuity Directive 1*, November 2007, P-6)

Hot Wash: Informal debriefing after an exercise or after an exercise phase or segment. "This hotwash is an opportunity for important evaluative and procedural (i.e., safety-related) issues to be recorded while they are fresh in the participants' minds." (**DHS**, *HSEEP*, Vol. V, p. 63)

Hot Wash: "A hot wash is a *facilitated discussion* held immediately following an exercise among exercise *players* from each functional area. It is designed to capture feedback about any issues, concerns, or proposed improvements players may have about the exercise. The hot wash is an opportunity for players to voice their opinions on the exercise and their own performance. This facilitated meeting allows players to participate in a self-assessment of the exercise play and provides a general assessment of how the jurisdiction performed in the exercise. At this time, evaluators can also seek clarification on certain actions and what prompted players to take them. Evaluators should take notes during the hot wash and include these observations in their analysis. The hot wash should last no more than 30 minutes." (**FEMA**, *HSEEP Glossary*, 2008)

Hot Zone: "Area immediately surrounding a dangerous goods incident which extends far enough to prevent adverse effects from released dangerous goods to personnel outside the zone. This zone is also referred to as exclusion zone, red zone or restricted zone in other documents. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472)." (**DOT**, *Emergency Response Guidebook…Hazardous Materials Incidents*, 2004, p. 361)

Household Pet: "A domesticated animal, such as a dog, cat, bird, rabbit, rodent, or turtle that is traditionally kept in the home for pleasure rather than for commercial purposes, can travel in commercial carriers, and be housed in temporary facilities. Household pets do not include reptiles (except turtles), amphibians, fish, insects/arachnids, farm animals (including horses), and animals kept for racing purposes." (**FEMA**, *Eligible Costs Related to Pet Evacuations*…, 2007)

Household Pet Management Unit (FEMA): "…our Household Pet Management Unit works with United States Department of Agriculture, OFAs, NGOs and others to ensure that household pet needs are coordinated during large mass evacuations or sheltering events." (**FEMA**, *Statement of Paulison, Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath – the Federal Response,"* Washington, DC: June 26, 2008)

Household Pet Rescue: "State and local governments may conduct rescue operations for household pets directly or they may contract with other providers for such services. Eligible costs include, but are not limited to, the following:
1) Overtime for regular full-time employees.
2) Regular-time and overtime for contract labor (including mutual aid agreements) specifically hired to provide additional support required as a result of the disaster.
3) The use of applicant-owned or leased equipment (such as buses or other vehicles) to provide eligible pet transportation to congregate pet shelters may be reimbursed according to 44 CFR § 206.228(1)(a) (does not include operator labor). The cost of leasing equipment for this purpose may also be eligible for reimbursement." (**FEMA**, *Eligible Costs Related to Pet Evacuations, Sheltering*, 2007)

HPA: Hazards and Performance Analysis.

HPAC: Hazard Prediction and Assessment Capability. (**DA**, *WMD-CST Ops*, Dec 2007, C-1)

HPE: Hurricane Preparedness Exercises. (**FEMA**, *Region III Annual Report FY2007*, 2008, 30)

HPP: Hospital Preparedness Program. (**HHS,** *Hospital Preparedness Program*, August 2007)

HPRDS: Human Portable Radiation Detection System. (**DHS**, *Opening Statement, Vayl Oxford*, March 8, 2007, p. 4)

HQ: Headquarters. (**DHS**, *FCD 1*, p. O-1)

HRA: High Risk Account. (**GAO**, *Natural Disasters: Public Policy Options*, Nov 2007, p. ii)

HRDI: Hospital Reserve Disaster Inventory. (**DCPA**, *On-Site Assistance Appendices*, 1974, C-14) Defunct.

HRK: Household Repair Kit. (**FEMA**, *Region III Annual Report FY 2007*, 2008, 30)

HRSA: Health Resources and Services Administration (U.S. Department of HHS).

HS: Homeland Security.

HSA: Homeland Security Act of 2002.

HSA: Homeland Security Advisor. (**Libby**, *Statement of*, July 19, 2007, p. 5)

HSAC: Homeland Security Advisory Council. (**DHS,** *NIPP* 2006, p. 101)

HSARPA: Homeland Security Advanced Research Projects Agency, DHS, S&T.

HSAS: Homeland Security Advisory System. (**DHS,** *NIPP* 2006, p. 101)

HSC: Homeland Security Council, The White House.

HSC/DC: Homeland Security Council Deputies Committee. (**White House,** *HSPD-1*, 2001)

HSC/PC: Homeland Security Council Principals Committee. (**White House,** *HSPD-1*, 2001)

HSC/PCCs: Homeland Security Council Policy Coordination Committees (**WH,** *HSPD-1*)

HSDEC: Homeland Security and Defense Education Consortium.

HSDL: Homeland Security Digital Library, Center for Homeland Defense and Security, NPG.

HSDN: Homeland Security Data Network. (**HSC,** *NCPIP*, August 2007, p. 63)

HSEEP: Homeland Security Exercise and Evaluation Program. (**DHS,** *NIPP* 2006, p. 101)
[See, also, "Homeland Security Exercise and Evaluation Program"]

HSEEP Compliance: "HSEEP compliance involves four steps: development and maintenance of an annual Training and Exercise Plan Workshop (T&EPW) and Multi-year Training and Exercise Plan, to include use of the National Exercise Schedule (NEXS); planning and designing exercises in accordance with HSEEP Volumes I-IV, to include the development of documentation and follow planning timelines; development and submission of an After-Action Report (AAR); and implementation of action items identified in the Improvement Plan. These four steps are cyclical and lead to the successful implementation of a self-sustaining exercise program." (**FEMA**, *Homeland Security Exercise and Evaluation Program Frequently Asked Questions*, 2008)

HSEEP Prevention Exercises: "*HSEEP Prevention Exercises* (formerly known as HSEEP Volume V) provides an overview of prevention exercises, information on the Terrorism Prevention Exercise Program (TPEP), and guidance and instruction on how to plan, conduct, and evaluate a prevention-focused exercise. The TPEP used a series of pilot exercises to develop and validate prevention exercise tools and methodologies. Now that these have been developed and published in *HSEEP Prevention Exercises*, the intent is to push them out for use by the HSEEP community. This document is intended to be used by Federal, State, local, and tribal preparedness officials and exercise planners who are interested in prevention-focused exercises. *HSEEP Prevention Exercises* presumes that standard HSEEP methodology as outlined in HSEEP Volumes I-III will be followed, and therefore focuses only on those areas in which prevention exercise tools and methodologies diverge from or supplement standard HSEEP guidance."

HSEEP Toolkit: The HSEEP Toolkit is an interactive, on-line tool for exercise scheduling, design, development, conduct, evaluation and improvement planning. The HSEEP Toolkit can be accessed from the HSEEP website, and includes the following sub-component systems:

- National Exercise Schedule (NEXS) System - the Nation's online comprehensive tool that facilitates scheduling, deconfliction, and synchronization of all National-Level, Federal, State, and Local exercises.

- Design and Development System (DDS) - a project management tool and comprehensive tutorial for the design, development, conduct, and evaluation of exercises. The DDS provides users with the appropriate templates and guidance for developing timelines, planning teams, and exercise documentation (e.g. Situation Manuals, Exercise Plans, etc.)**.**
- Corrective Action Program (CAP) System - a web-based application that enables Federal, State, and local officials to identify, prioritize, track, and analyze the recommendations and improvement plans developed from exercises and real-world events. Features of the CAP System include IP creation and maintenance, corrective action assignment and tracking, and reporting and analysis. The CAP System is the technological backbone for the improvement planning process described in *HSEEP Volume III: Exercise Evaluation and Improvement Planning*." (**FEMA**, *HSEEP Glossary*, 2008)

HSGAC: U.S. Senate Homeland Security and Governmental Affairs Committee.

HSPG: Homeland Security Grant Program. (**DHS**, *Fact Sheet FY08 Preparedness Grants*, 2008)

HSI: Homeland Security Institute, Arlington, VA.

HSIB: Homeland Security Information Bulletin. (**HSC**, *National Continuity Policy…*, 2007, 63)

HSIN: Homeland Security Information Network. (**DHS,** *NIPP* 2006, p. 101)

HSIN-CS: Homeland Security Information Network for Critical Sectors. (**DHS,** *NIPP* 2006, 101)

HSIP: Homeland Security Intelligence Program, DHS. (**DHS**, *Statement of Allen*, 14Feb2008)

HSMS: Homeland Security Management System. (**Ruff**, *IPS*, January 8, 2008)

HSNTP: Homeland Security National Training Program, DHS. (**DHS**, *FY06 HSNTP*, p. 2)

HSOC: Homeland Security Operations Center. (**DHS**, *NRP* (Draft #1), Feb. 25, 2004, p. 22)

HSPD: Homeland Security Presidential Directive.

HSPD-1: Homeland Security Presidential Directive 1, Subject: *Organization and Operation of the Homeland Security Council.* (**White House**, October 29, 2001)

HSPD-2: Homeland Security Presidential Directive 2, Subject: *Combating Terrorism Through Immigration Policies.* (**White House**, October 29, 2001)

HSPD-3: Homeland Security Presidential Directive 3, *Homeland Security Advisory System*. (**White House**, March 2002)

HSPD-4: Homeland Security Presidential Directive 4, *National Strategy to Combat Weapons of Mass Destruction* (Unclassified version of HSPD-17, same subject, dated September 17, 2002). (**White House**, December 2002)

HSPD-5: Homeland Security Presidential Directive 5, *Management of Domestic Incidents*. (**White House**, February 28, 2003). Created National Incident Management System (NIMS), and combined Incident Management and Consequence Management.

HSPD-6: Homeland Security Presidential Directive 6, Subject: *Integration and Use of Screening Information.* (**White House**, September 16, 2003)

HSPD-7: Homeland Security Presidential Directive 7, *Critical Infrastructure Identification, Prioritization, and Protection.* (**DHS,** NIPP 2006, preface)

HSPD-8: Homeland Security Presidential Directive 8, *National Preparedness*. (**White House**, December 2003)

HSPD-8, Annex 1: National Planning. (DHS, HSPD *8 Annex 1: National Planning*, 10Jan2008)

HSPD-9: Homeland Security Presidential Directive 9, Subject: *Defense of United States Agriculture and Food.* (**White House**, February 3, 2004)

HSPD-10: Homeland Security Presidential Directive 10, *Biodefense for the 21st Century*. (**White House**, April 28, 2004.)

HSPD-11: Homeland Security Presidential Directive 11, Subject: Comprehensive Terrorist-Related Screening Procedures. (**White House**, August 27, 2004)

HSPD-12: Homeland Security Presidential Directive 12, Subject: Policy for a Common Identification Standard for Federal Employees and Contractors. (**White House**, August 27, 2004)

HSPD-13: Homeland Security Presidential Directive 13, Maritime Security Policy. (**White House,** December 21, 2004)

HSPD-14: Homeland Security Presidential Directive 14, Domestic Nuclear Detection. (**White House**, April 15, 2005)

HSPD-15: Homeland Security Presidential Directive 15. Classified. Known as: "War on Terror" Directive to Improve Government Coordination. (**White House**, March 2006.

HSPD-16: Homeland Security Presidential Directive 16, National Strategy for Aviation Security. (**White House**, March 26, 2007)

HSPD-18: Homeland Security Presidential Directive 18, Subject: Medical Countermeasures against Weapons of Mass Destruction. (**White House**, February 7, 2007)

HSPD-19: Homeland Security Presidential Directive 19, Subject: Combating Terrorist Use of Explosives in the United States. (**White House**, February 12, 2007)

HSPD-20: Homeland Security Presidential Directive 20, Subject: National Continuity Policy. (**White House**, May 9, 2007)

HSPD-21: Homeland Security Presidential Directive (HSPD-21), Subject: Public Health and Medical Preparedness, October 18, 2007.

HSPG: Homeland Security Grant Program.

HSPTAP: Homeland Security Preparedness Technical Assistance Program.

HSSTAC: Homeland Security Science and Technology Advisory Committee.

HSTA: Homeland Security Threat Advisory. (**HSC,** *NCPIP*, 2007, p. 63)

HSTA: Homeland Security Threat Assessment. (**DHS**, *IPG FY 2011-2015 draft*, 2008, p. 3)

HSUS: Humane Society of the United States.

HUD: U.S. Department of Housing and Urban Development.

HUG: HAZUS Users Group.

Human Intelligence (HUMINT): "Intelligence information acquired by human sources through covert and overt collection techniques. (**FEMA**, *IIFOG Version 3 Draft*, February 2008, p. 35)

Human-Made Disasters: are disasters or emergency situations where the principal, direct cause(s) are identifiable human actions, deliberate or otherwise. Apart from "technological" and "ecological" disasters, this mainly involves situations in which civilian populations suffer casualties, losses of property, basic services and means of livelihood as a result of war or civil strife, for example: Human-made disasters/emergencies can be of the rapid or slow onset types, and in the case of internal conflict, can lead to "complex emergencies" as well. Human-made disaster acknowledges that all disasters are caused by humans because they have chosen, for whatever reason, to be where natural phenomena occurs that result in adverse impacts of people. This mainly involves situations in which civilian populations suffer casualties, losses of property, basic services and means of livelihood as a result of war, civil strife, or other conflict. (**Simeon Institute**)

HUMINT: Human Intelligence. (**FEMA**, *IIFOG Version 3 Draft*, February 2008, p. 36)

HURREVAC: HURREVAC stands for "HURRicane EVACuation" and is a restricted-use computer program funded by FEMA and USACE for government emergency managers to track hurricanes and assist in evacuation decision-making for their communities. This real-time data analysis tool allows state and local emergency management officials to make prudent and informed decisions based on information developed during the FEMA Hurricane Evacuation

Studies process and realtime forecast data distributed by the National Weather Service (NWS) and the Tropical Prediction Center/National Hurricane Center (NHC). (**FEMA**, *HURREVAC*, 2007)

Hurricane: "Hurricanes are violent storms which bring intense winds, heavy rain, a storm surge, floods, coastal erosion, landslides, and tornadoes. While it is difficult to predict the exact time, place, and force of hurricanes, residents of the Atlantic and Gulf Coast states must be prepared. The season for hurricanes is June through November, with most hurricanes occurring mid-August to late October. Each season, on average, six hurricanes form in the Atlantic Ocean of which two become major hurricanes." (**FEMA**, "Fact Sheet – Hurricane," July 2006, p. 1)

Hurricane / Typhoon: "A tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) is 64 kt (74 mph or 119 km/hr) or more. The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline." (**NHC**, *Glossary of NHC Terms*, 2007)

Hurricane Category 1: The lowest of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 1 hurricane is defined by winds of 74 to 95 MPH, or a storm surge of 4 to 5 feet above normal. This category normally does not cause real damage to permanent structures, although damage to unanchored mobile homes, shrubbery, and trees can be expected. Also some coastal road flooding and minor pier damage. (**NOAA**. *The Saffir/Simpson Hurricane Scale*. August 17, 2007 update)

Hurricane Category 2: The second of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 2 hurricane is defined by winds of 96 to 110 MPH, or a storm surge of 6 to 8 feet above normal. This category normally causes some roofing material, door, and window damage to buildings. Considerable damage to vegetation, mobile homes, and piers can be expected. Coastal and low lying escape routes can be expected to flood 2 to 4 hours before arrival of storm center. Small craft in unprotected anchorages will bread mooring. (**NOAA**. *The Saffir/Simpson Hurricane Scale*. August 17, 2007 update)

Hurricane Category 3: The third of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 3 hurricane is defined by winds of 111 to 130 MPH, or a storm surge of 9 to 12 feet above normal. This category normally does some structural damage to small residences and utility buildings, with a minor amount of curtain wall failures. Mobile homes are destroyed. Flooding near the coast can be expected to destroy smaller structures, with larger structures damaged by floating debris. Terrain continuously lower than 5 feet above sea level may be flooded inland as far as 6 miles. (**NOAA**. *The Saffir/Simpson Hurricane Scale*. August 17, 2007 update)

"Statistics show that the largest loss of life and property occur in locations experiencing the core of a category 3 or stronger hurricane." (Blake, Rappaport, Landsea, *The Deadliest…*, 2007, 3)

Hurricane Category 4: The fourth of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 4 hurricane is defined by winds of 131 to 155 MPH, or a storm surge of 13 to 18 feet above normal. This category normally causes more extensive curtain

wall failures, with some complete roof structure failure on small residences. Major erosion will occur at beach areas. Major damage to lower floors of structures near the shore can be expected. Terrain continuously lower than 10 feet above sea level may be flooded, requiring massive evacuation of residential areas inland as far as 6 miles. (**NOAA**. *The Saffir/Simpson Hurricane Scale*. August 17, 2007 update)

Hurricane Category 5: The severest of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 5 hurricane is defined by winds greater than 155 MPH, or a storm surge greater than 18 feet above normal. This category normally causes complete roof failure on many residential and industrial buildings; some are blown over or away. Major damage to lower floors of all structures located less than 15 feet above sea level and within 500 yards of the shoreline can be expected. Massive evacuation of residential areas on low ground within 5 to 10 miles of the shoreline may be required. (**NOAA**. *The Saffir/Simpson Hurricane Scale*. 17Aug07)

Hurricane Day: "Hurricane Day – (HD) A measure of hurricane activity, one unit of which occurs as four 6-hour periods during which a tropical cyclone is observed or estimated to have hurricane intensity winds." (**Klotzbach and Gray**, *Extended Range Forecast of Atlantic Seasonal Hurricane Activity and U.S. Landfall Strike Probability for 2008*, April 9, 2008, p. 6)

Hurricane, Direct Hit: "Direct Hit - Using "R" as the radius of maximum winds in a hurricane (the distance in miles from the storm's center to the circle of maximum winds around the center), all or parts of coastal counties falling within approximately 2R to the right and R to the left of a storm's track were considered to have received a direct hit. (This assumes an observer at sea looking toward the shore. If there was no landfall, the closest point of approach was used in place of the landfall point). On average, this direct hit zone extended about 50 miles along the coastline (R≈15 miles)." (**Blake, Rappaport, Landsea**, *The Deadliest…*, 2007, 3)

Hurricane Evacuation Studies (HES): "The National Hurricane Program (NHP) conducts Hurricane Evacuation Studies (HES) that guide the decision-making process for protecting the public when a hurricane threatens an area. These studies help State and local communities establish evacuation plans by determining:

- The probable effects of a hurricane
- Predicting public response to the threat and advisories
- Identifying appropriate shelters.

Specifically, NHP conducts hazard and vulnerability analyses for coastal communities considering different types of storm threats. This includes:

- Assessment of storm surge and wind impacts
- Existing road and other transportation systems
- Population (e.g., demographics, behavior analysis)
- Shelters

This information helps officials determine where individuals are most likely to go when evacuating from a storm. The NHP assists coastal communities by developing evacuation zones, which helps determine where and when the public should be ordered to evacuate as a storm approaches. This recommendation is negotiated among decision-makers within each community. Once the evacuation zones are established, the NHP provides each community with corresponding evacuation maps and suggested clearance times for the various types of storm

categories. The communities determine how to utilize these tools and recommendations, in developing their evacuation plans." (**FEMA**, *NHP*, Dec 2007)

Hurricane, Intense: "Intense Hurricane - (IH) A hurricane which reaches a sustained low-level wind of at least 111 mph (96 knots or 50 ms-1) at some point in its lifetime. This constitutes a category 3 or higher on the Saffir/Simpson scale (also termed a "major" hurricane)." (**Klotzbach and Gray**, *Extended Range Forecast of Atlantic Seasonal Hurricane Activity and U.S. Landfall Strike Probability for 2008*, April 9, 2008, p. 6)

Hurricane Liaison Team (HLT). "The HLT is a small team designed to enhance hurricane disaster response by facilitating information exchange between the National Hurricane Center in Miami and other National Oceanic and Atmospheric Administration components and Federal, State and local government officials." The HLT is an initial response and coordination tool deployed by FEMA in conjunction with declared emergencies and disasters." (**DHS**, *National Response Framework Comment Draft*, September 2007, p. 59)

Hurricane Season: "The portion of the year having a relatively high incidence of hurricanes. The hurricane season in the Atlantic, Caribbean, and Gulf of Mexico runs from June 1 to November 30. The hurricane season in the Eastern Pacific basin runs from May 15 to November 30. The hurricane season in the Central Pacific basin runs from June 1 to November 30." (**NHC**, *Glossary of NHC Terms*, 2007)

Hurricane Strike: "During the years 1851-1914 and 1990 to 2006, a hurricane strike is defined as a hurricane that is estimated to have caused sustained hurricane-force winds on the coastline, but does not necessarily make landfall in the area of hurricane-force winds. One example of a hurricane strike is Hurricane Ophelia in 2005, which remained offshore of the North Carolina coast but still brought sustained hurricane-force winds to the coastline…During the years 1915 to 1989, a hurricane strike is defined as a hurricane whose center passes within the direct hit definition area provided above." (**Blake, Rappaport, Landsea**, *The Deadliest*…, 2007, p. 4)

Hurricane Watch: "A hurricane is possible within 24 to 36 hours. Stay tuned for additional advisories. Tune to local radio and television stations for additional information. An evacuation may be necessary." (**FEMA**, *EM Guide for Business and Industry*, 1993, p. 57)

Hurricane Watch: "An announcement for specific coastal areas that hurricane conditions are possible within 36 hours." (**National Hurricane Center**, *Glossary of NHC Terms*, 2007)

Hurricane Warning: "A warning that sustained winds 64 kt (74 mph or 119 km/hr) or higher associated with a hurricane are expected in a specified coastal area in 24 hours or less. A hurricane warning can remain in effect when dangerously high water or a combination of dangerously high water and exceptionally high waves continue, even though winds may be less than hurricane force." (**National Hurricane Center**, *Glossary of NHC Terms*, Sep 10, 2007)

HVA: Hazard and Vulnerability Analysis/Assessment. (CA EMSA, *Hospital Incident Command System Guidebook*, 2006, p. 102)

HVT: High Value Target. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, p. 6-1)

Hydrology: Science that deals with the waters above and below the land surfaces of the Earth, their occurrence, circulation and distribution, both in time and space, their biological, chemical and physical properties, their reaction with their environment, including their relation to living beings. (**WMO** 1992, 306)

Hyogo Framework for Action and the main components of Disaster Risk Reduction: "At the World Conference on Disaster Reduction in Kobe, Japan, in 2005, the international community signed up to a 10-year DRR strategy, the Hyogo Framework for Action (HFA). The HFA sets out three strategic goals and outlines five priorities for action, which cover the main areas of DRR. It also suggests important areas for intervention within each theme." (**Twigg,** *Characteristics of a Disaster-resilient Community A Guidance Note*, August 2007, p. 4)

Hyogo Framework for Action: "In effect an updating of the Yokohama Strategy [1994], the conference culminated in the signing by 168 governments of a plan of action to reduce the impact of natural hazards on populations. Since its adoption the "*Hyogo Framework for Action 2005-2015: Building the resilience of Nations and Communities to Disasters*", has led to many countries revising their policies to put disaster risk reduction at the top of their political and development agendas. The Hyogo Framework includes in section B (Priorities for action), section (4) on reducing underlying risk factors, which states: *(i) Environmental and natural resource management (b) Implement integrated environmental and natural resource management approaches that incorporate disaster risk reduction, including structural and non-structural measures, such as integrated flood management and* ***appropriate management of fragile ecosystems***." (**WWF**, *Natural Security*, 2008, p. 105)

HZ: Hazardous Materials Personnel. (**FEMA**, *TEI/TO Course Catalog*, 2008, p. 3)

IA: Individual Assistance, FEMA.

IAA: Interagency Agreement. (**DHS**, *NRF Logistics Management Support Annex*, 2007, p. 3)

IAB: Interagency Board. (**DHS**, *Federal Continuity Directive 1*, Nov 20-07, P-6)

IAB: InterAgency Board for Equipment Standardization and Interoperability**.** (**GAO**, *Homeland Security: First Responders*, June 27, 2008, p. 2)

IAC: Interagency Advisory Council. (**JCS/DoD**, *CBRNE CM*, 2006, p. vii)

IACP: International Association of Chiefs of Police.

IAP: Incident Action Plan. (**Dept. Army**, *WMD-CST Operations*, December 2007, Glossary-3)

IA-TAC: Individual Assistance Technical Assistance Contract, FEMA.

IBC: International Building Code.

IBHS: Institute for Business and Home Safety.

IBSGP: Intercity Bus Security Grants. (**DHS**, *Fact Sheet FY08 Preparedness Grants*, 1Feb08)

IBSTPI: International Board of Standards for Training Performance and Instructions.

IC: Incident Commander, under Incident Command System (ICS).

ICAF: Industrial College of the Armed Forces.

ICAM: Improved Chemical-Agent Monitor. (**DA**, *WMD-CST Operations*, Dec. 2007, p. B-3)

ICBM: Intercontinental Ballistic Missile. (**OCD**, *Abbreviations and Definitions*, 1971, p. 2)

ICC: Increased Cost of Compliance (NFIP/FEMA). (**FEMA**, *Call for Issues, 2000*, xxiii)

ICC: Interagency Coordinating Committee on Earthquake Hazards Reduction. (**PL 95-124,** 1977)

ICC: International Code Council. (**Financial Services Roundtable**, *Nation Unprepared*, 2007, 35)

ICCOH: Interagency Coordinating Committee on Hurricanes. (**USACE**, *Information on HES*)

Ice Storm: Intense formation of ice on objects by the freezing, on impact, of rain or drizzle. (**WMO** 1992, 314)

ICEP: Incident Communications Emergency Plan. (**FEMA**, *Federal Interim CONPLAN NMSZ*, December 2007, p. B-2)

ICEPP: Incident Communications Emergency Policy & Procedures. (**DHS**, *NRF ESF 15*, 2008)

I-Code: International Code Council Code.

ICP: Incident Command Post. (**Department of the Army**, *WMD-CST Operations*, Dec. 2007, 1-4)

ICP: Information Collection Plan. (**FEMA**, *Federal Interim Contingency Plan – Predecisional Draft: NMSZ Catastrophic Earthquake Response Planning Project*, December 2007, p. 9)

ICP: Interim Contingency Plan. (**Maxwel**l, *Report to NEMA, Dis. Op. Cat. Planning*, Nov 2007)

ICS: Incident Command System.

ICS: Interagency Communications System (ICS). (**OCDM**, *Annual Report 1960*, p. 19)

ICS-100: Introduction to ICS: "Entry level first responders (including firefighters, police officers, emergency medical services providers, public works on-scene personnel, public health on-scene personnel, and other emergency responders) and other emergency personnel that require an introduction to the basic components of the ICS." (**FEMA**, *ICS 100 Introduction to Incident Command System*)

ICT: Information Communication Technology. (**Palen**, "Citizen Communication…," 2007, 727)

ICTAP: Interoperable Communications Technical Assistance Program. (**DHS**, *TCL*, 2007, 38)

ICW: Inspection of Completed Works "Corps of Engineers program that includes periodic inspection of projects." (**USACE**, *Fact Sheet: National Levee Safety Program*. 1 Feb 2007, p.2)

ICWG: Interagency Continuity Working Group. (**Kiell**, *Continuity of Operations* Slide 8, 2005)

IDP: Imagery Derived Product. (**USGS**, *National Civil Applications Program*, 2002)

IDP: Inter-American Development Bank.

IDMP: Incident Decision Making Process. (**DHS**, 2007)

IEM: Integrated Emergency Management. (*UK Resilience* (website). June 23, 2008 Update)

IEMAC: International Emergency Management Compact. (**Libby**, *Statement of*, 19July2007, 4)

IEMC: Integrated Emergency Management Course, FEMA Emergency Management Institute.

IEMS: Integrated Emergency Management System.

IFG: Individual and Family Grant (Program). (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

IFMIS: Integrated Financial Management Information System. (**FEMA**, *Mission Assignment SOPs*, 2007 Operating Draft, p. 21)

IFSP: Integrated Federal Support Plan. (**DHS**, *Interagency Planning Workshop*, Nov. 29, 2007, 26)

IG: Inspector General.

IG: Instructor Guide (FEMA, Emergency Management Institute).

IGO: Intergovernmental Organization.

IGP: Office of Intergovernmental Programs**,** DHS (**DHS**, *Office of IGP*, September 26, 2007)

IHP: Individuals and Households Program, FEMA. (**GAO**, *Natural Disasters*, Nov 2007, ii)

IIFOG: Intelligence/Investigations Field Operations Guide. (**FEMA**, *IIFOG Ver. 3*, Feb 2008)

III: Insurance Information Institute.

IIMG: Interagency Incident Management Group. (**DHS**, *NRP* (Draft #1), Feb. 25, 2004, p. 21) Replaced by the Interagency Advisory Council. (**DHS**, *Notice of Change to the NRP*, 2006, p. 8)

IM: Information Management. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

IM&P: Incident Management and Planning. (**DHS**, *DHS Ops Coord: IM&P: CAP*, 2008)

IMA: Individual Mobilization Augmentee. (**DOD** *Dictionary of Military, Related Terms*, 2007)

IMAAC: Interagency Modeling and Atmospheric Assessment Center, Los Livermore National Laboratory. (GAO, Homeland Security: First Responders, June 27, 2008, p. 3)

Imagery Intelligence (IMINT): "The collection, analysis and interpretation of conventional, analog and digital image information/data." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 36)

IMAT: Incident Management Assistance Teams. (**FEMA,** *JTF State Command. Briefing*, Jan08)

IMAAC: Interagency Modeling and Atmospheric Assessment Center. (**MOU**, *IMAAC DHS*)

IMINT: Imagery Intelligence**.** (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 36)

Immediate Response (DOD): "The DOD policy on immediate response addresses the authority delegated to DOD component or military commanders to provide immediate assistance to civil authorities to save lives, prevent human suffering, or mitigate great property damage in the event of imminently serious conditions resulting from any civil emergency or attack. Immediate response is situation-specific and may or may not be associated with a declared or undeclared disaster. The potentially catastrophic nature of CBRNE incidents would most likely lead to DOD forces conducting CBRNE CM under immediate response authority, but there are no policy exceptions or special authorities for CBRNE CM. A JFC, responding to a SecDef approved DSCA mission and/or execute order (EXORD), is like any other DOD military commander and may find the need to exercise his/her immediate response authority with available forces. This is particularly relevant in the event of a second terrorist attack or TIM release within the JOA, since trained medical and specialized CBRNE assessment/response teams are on the scene and able to rapidly respond to time-sensitive requests from the civil sector. It is important for commanders to understand that the policy is limited, restrictive, and conditional. The situation is a bona fide emergency which overwhelms the ability of civilians to respond and meets the restrictions criteria within DOD and Service directives. As soon as practical, the military commander, or responsible official of a DOD component or agency rendering such assistance, shall report the request, the nature of the response, and any other pertinent information through the chain of command to the National Military Command Center, so that the information is received within a few hours of the local commander's decision to provide immediate response support. Immediate response requests in the event of a CBRNE incident may include, but are not limited to:

1. Rescue, evacuation, and emergency medical treatment of casualties, maintenance or restoration of emergency medical capabilities, and safeguarding the public health.

2. Emergency clearance of debris, rubble, and explosives ordnance from public facilities and other areas to permit rescue or movement of people and restoration of essential services.

3. Detection, assessment, and containment (initial steps taken to facilitate emergency evacuation and public awareness warnings).

4. Roadway movement control and planning.

5. Emergency restoration of essential public services (including fire-fighting, water, communications, transportation, power, and fuel).

For more information on hazard immediate response authority see JP 3-26, Homeland Security*, and JP 3-28,* Civil Support*.*" (**JCS/DOD**, *CBRNE Consequence Management* (JP 3-41), 2006, pp. II-5, II-6 and II-7)

Impact: "The effect, acceptable or unacceptable, of an event on an organization. The types of business impact are usually described as financial and non-financial and are further divided into specific types of impact." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, 57)

Impact: "Evaluated consequence of a particular outcome." (**ISO 22399**, *Societal Security*, 2007, 3)

Impact Analysis: "Process of analyzing all operational functions and the effect that an operational interruption might have upon them." (**ISO 22399**, *Societal Security*…, 2007, p. 3)

Impact Analysis: "Impact Analysis [Business Impact Analysis (BIA)]. A management level analysis that identifies the impacts of losing the entity's resources." (**NFPA 1600**, 2007, p. 7)

"This analysis measures the effect of resource loss and escalating losses over time in order to provide the entity with reliable data upon which to base decisions concerning hazard mitigation, recovery strategies, and continuity planning." (**NFPA 1600**, 2007, p. 11)

"The impact analysis is a broad description and quantification of a potential event that can impact an entity. This analysis should give a clear idea of what hazards are most likely to occur; what entity facilities, functions, or services are affected based on their vulnerability to that hazard; what actions will most effectively protect them; and the potential impact on the entity in quantifiable terms. Within the impact analysis, the entity should consider the impact external to its area of influence that can affect the entity's ability to cope with an emergency. One example is the cascade effects of a hurricane. Direct impacts can include wind and flood damage. Secondary impacts can include communications, power, and transportation disruptions, both inside and outside the direct impact area, and the potential impact on the entity in quantifiable terms.

A.5.3.3(3) In order to maintain continuity of operations, the entity should identify essential or critical functions and processes, their recovery priorities, and internal and external interdependencies, so that recovery time objectives can be set.

A.5.3.3(7) An economic and financial impact analysis allows the quantification of the impacts without considering the cause of the emergency. This analysis is closely related to the process of identifying essential or critical functions or processes and helps decide where to place the emphasis in planning efforts. The analysis examines potential economic or financial loss resulting from disruption of the functions, processes, or services over time. The purpose of an economic and financial impact analysis is to arrive at a general loss expectancy that demonstrates what is at risk and to guide measures to mitigate the effects of an emergency….

An impact analysis could include a cost-benefit analysis. The cost-benefit analysis should not be the overriding factor in establishing a prevention strategy." (**NFPA 1600**, 2007, p. 15)

Impact Analysis: "The practice of identifying and evaluating the negative and positive consequences of disasters on natural and human systems (i.e., environment, economic, financial, and social). Includes methodologies and standards for damage and needs assessments.
The benefits of the technique are the identification of linkages between disaster vulnerability and disaster impact and the ability to then create measures to reduce vulnerabilities to those disasters. The limitations of the technique include a reliance on historical disaster data (limitations as stated in *historical analysis*); the current focus on post-event impact assessment and not promoting its use as part of the planning process, although the results can feed into future planning; and finally the need for social and economic analysis of disaster impacts." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Implementing the 9/11 Commission Recommendations Act of 2007. Signed into law by President George Bush, August 7, 2007, 278 pages. At: http://www.speaker.gov/pdf/HR1.pdf

Improvised Nuclear Devise: "Nuclear weapons that are fabricated by an adversary State or terrorist group from illicit nuclear material and that could produce nuclear explosions." (**Federal Register** (71/4, 3Jan2006), *Protective Action Guides for Radiological Dispersal Device (RDD) and Improvised Nuclear Device (IND) Incidents; Notice*, p. 196)

Improvement Plan: "The portion of an After Action Report that converts lessons learned from the exercise or incident response into concrete, measurable steps that result in improved response capabilities." (**FEMA**, *NIMS Compliance Metrics Terms of Reference*, October 23, 2006, p. 4)

IMPT: Incident Management and Planning Team, DHS, National Operations Center.

IMS: Incident Management System. (**Christen**, *An Overview of IMS*, 2001, 1)

IMSI: Incident Management Systems Integration Division, FEMA, NIC. (**FEMA**, *Welcome to the National Integration Center (NIC) Incident Management Systems* Division 11 Sep 2007)

IMT: Incident Management Team. (**DHS**, *NRF Comment Draft*, September 2007, p. 34)

Incident: An event, accidentally or deliberately caused, which requires a response from one or more of the statutory emergency response agencies. (**Australian Fire Authorities** *Glossary* 1996)

Incident: "An occurrence or event, natural or human-caused, that requires an emergency response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response." (**DHS,** *NIMS***,** 2004, 130; **DHS,** *National Infrastructure Protection Plan*, 2006, p. 103; **FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 53)

Incident: "In this document, incidents include actual or potential emergencies or all-hazard events that range from accidents and natural disasters to actual or potential terrorist attacks. They include modest events wholly contained within a single community to others that are catastrophic in nature and national in their scope or consequences." (**DHS**, *NRF Dft*, Sep07, 45)

Incident: "For the purpose of this document, the term "incident" refers to an actual or potential occurrence or event." (**DHS**, *NRP*, Jan 2008, 27)

Incident: "Any condition that meets the definition of major disaster or emergency which causes damage or hardship that may result in a Presidential declaration of a major disaster or an emergency." (**FEMA** *Disaster Dictionary* 2001, 62-63, citing Title 44 CFR 206.32)

Incident: "Under the ICS concept, an incident is an occurrence, either human-caused or by natural phenomena, that requires action by emergency service personnel to prevent or minimize loss of life or damage to property and/or natural resources." (**FEMA** *Disaster Dictionary* 2001, 62-63, citing National Wildfire Coordinating Group, Incident Command System, National Training Curriculum, *ICS Glossary* (PMS 202, NFES #2432), October 1994)

Incident: "An actual or impending hazard impact, either human caused or by natural phenomena, that requires action by emergency personnel to prevent or minimize loss of life or damage to property and/or natural resources." (**HHS,** *Medical Surge Capacity and Capability* Handbook, August 2004, p. D-5, Glossary)

Incident: "Event that might be, or could lead to, an operational interruption, disruption, loss, emergency or crisis." (**ISO 22399**, *Societal Security*…, 2007, p. 3)

Incident: "An emergency involving the release or potential release of a hazardous material, with or without fire." (**NFPA 471**, 1997, p. 9)

Incident: A minor situation. (**Oxford Canadian Dictionary**, 1998)

Incident: "An occurrence either human-caused or natural phenomenon, that requires action or support by emergency service personnel to prevent or minimize loss of life or damage to property and/or natural resources." (**USCG**, *IM Handbook*, 2006, Glossary 25-10; **DHS**, *Lexicon*, 2007, p. 12)

Incident Action Plan (IAP): "A verbal or written plan that establishes the overall strategic decisions and assigned tactical objectives for the incident." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 54)

Incident Action Plan (IAP): "Incident action plans (IAPs) provide a coherent means of communicating the overall incident objectives in the contexts of both operational and support activities." (**DHS**, *National Incident Management System*, March 2004, p. 10)

"Under UC [Unified Command, ICS/NIMS] the IAP is developed by the Planning Section Chief and is approved by the UC. A single individual, the Operations Section Chief, directs the tactical implementation of the IAP. The Operations Section Chief will normally come from the agency with the greatest jurisdictional involvement. UC participants will agree on the designation of the Operations Section Chief." (**DHS**, *NIMS*, 2004, p. 15)

Incident Action Plan (IAP): "Contains objectives reflecting the overall incident strategy, specific tactical actions and supporting information for the next operational period. The Plan may be oral or written. When written, the Plan may have a number of forms as attachments (e.g., traffic plan, safety plan, communications plan, map, etc.)." (**DHS**, *NRP*, Feb 25, 2004, p. 75)

Incident Action Plan (IAP): "A clear, concise IAP template is essential to guide the initial incident management decision process and the continuing collective planning activities of incident management teams. The planning process should provide the following:

- current information that accurately describes the incident situation and resource status;
- predictions of the probable course of events;
- alternative strategies to attain critical incident objectives; and
- an accurate, realistic IAP for the next operational period.

Five primary phases should be followed in sequence to ensure a comprehensive IAP. These phases are designed to enable the accomplishment of incident objectives within a specified time. The IAP must provide clear strategic direction and include a comprehensive listing of the tactics, resources, reserves, and support required to accomplish each overarching incident objective. The comprehensive IAP will state the sequence of events in a coordinated way for achieving multiple incident objectives. However, the IAP is a living document prepared based on the best available information at the time of the planning meeting. Planning meetings should not be delayed in anticipation of future information…. The five primary phases in the planning process are:

  - to understand the situation;
  - establish incident objectives and strategy;
  - develop the plan;
  - prepare and disseminate the plan; and
  - execute, evaluate, and revise the plan."

(**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 120)

Incident Action Plan (IAP): "A verbal plan, written plan, or combination of both, that is updated throughout the incident and reflects the overall incident strategy, tactics, risk management, and member safety that are developed by the incident commander." (**NFPA 1600**, 2007, pp. 7-8)

Incident Action Plan (IAP): "An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods." (**USCG**, *IM Handbook* 2006 Glossary 25-10)

Incident Advisory Council (IAC): The replacement to the precious IIMG (Interagency Incident Management Group, which was reorganized and renamed to the IAC, while retaining the functions of the IIMG). (**DHS**, *Notice of Change to the NRP*, May 25, 2006, p. 8; and **DHS**, *Cyber Storm Exercise Report*, September 12, 2006, p. 1)

Incident Advisory Council (IAC): "The IAC is a tailored group of senior Federal interagency representatives that adjudicates matters that cannot be resolved by the NOC-NRCC and provides strategic advice to the Secretary of Homeland Security during an actual or potential incident requiring Federal coordination. Activated at the discretion of the Secretary of Homeland Security, or his representative, the core group of the IAC includes representatives from Federal departments and agencies, DHS components, and other organizations as required. Affected States may be represented on the IAC either through the DHS Office of State and Local Government Coordination (OSLGC) or, if needed, through a State liaison to the IAC. For advice concerning affected critical infrastructures, the IAC may draw upon advice from the CIPAC." (**DHS**, *Notice of Change to the NRP*, May 25, 2006, p. 11)

Incident Annexes: "The *Incident Annexes* describe how the Framework [NRF] is applied to various types of incidents and the unique incident-specific aspects of that response. Specifically, the Incident Annexes describe incident-specific policies and procedures for biological, cyber, food and agriculture and nuclear/radiological incidents, for incidents involving mass evacuation, and for terrorism incident law enforcement and investigation, and for catastrophic incidents." (**DHS**, *NRF Comment Draft*, 2007, 71)

Incident Awareness Assessment (IAA): "The Department of Defense has a robust capability for space-based and airborne Incident Awareness Assessment in order to perform our many and varied missions. Some platforms are capable of transmitting full-motion video anywhere in the world, in real-time, using existing DoD communication networks. These assets can also be used to help support US Northern Command's (USNORTHCOM) defense support of civil authorities during times of national crisis. Specific intelligence oversight rules strictly govern these assets when they are gathering visual information of U.S. territory…. Incident Awareness Assessment is the process of gathering information on a geographic area, often as full-motion video in real-time, or infrared imagery in a timely manner, to provide appropriate local, state and federal authorities situational awareness of what is in a given area. In this instance, IAA is being conducted at the request of FEMA to provide state and other firefighters the ability to determine where fires are, so they can direct their efforts where needed." (DoD, *Public Affairs Strategic*

Planning Document-- For media access to Full Motion Video (FMV) and Incident Awareness Assessment (IAA), June 27, 2008, pp. 1 & 4)

Incident Base (ICS): "An Incident Base is the location at which primary support activities are conducted. A single incident base is established to house all equipment and personnel support operations. The Logistics Section, which orders all resources and supplies, is also located at this base. The Incident Base should be designed to be able to support operations at multiple incident sites." (**DHS**, *NIMS*, 2004, ICS Annex, p. 95)

Incident Command: "Responsible for overall management of the incident and consists of the Incident Commander, either single or unified command, and any assigned supporting staff." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p. 152)

Incident Command Post (ICP): Under the Incident Command System, "At the tactical level, on-scene incident command and management organization are located at an Incident Command Post**,** which is typically comprised of local and mutual aid responders. When multiple command authorities are involved, the Incident Command Post may be led by a *unified command comprised of officials who have jurisdictional authority or functional responsibility for the incident under an appropriate law, ordinance or agreement.* The unified command provides direct, on-scene control of tactical operations." (**DHS**, *NRF Comment Draft*, 2007, p. 48)

Incident Command Post (ICP): "The field location at which the primary tactical-level, on-scene incident command functions are performed. The ICP may be collocated with the incident base or other incident facilities." (**USCG**, *IM Handbook*, 2006, Glossary 29-11)

Incident Command System (ICS): The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure with responsibility for management of assigned resources to effectively direct and control the response to an incident. Intended to expand as the situation requires greater resources without requiring new, reorganized, command structures.

Incident Command System (ICS): "The ICS is a management system designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to enable effective and efficient domestic incident management. A basis premise of ICS is that it is widely applicable. It is used to organize both near-term and long-term field-level operations for a broad spectrum of emergencies, from small to complex incidents, both natural or manmade. ICS is used by all levels of government – Federal, State, local, and tribal – as well as by many private-sector and nongovernmental organizations. ICS is also applicable across disciplines. It is normally structured to facilitate activities in five major functional areas: command, operations, planning, logistics, and finance and administration." (**DHS**, *National Incident Management System*, March 2004, p. 7)

According to NIMS (2004), beneficial characteristics of ICS are:

- ICS is Modular and Scalable.

  - Suitable for operations within a single jurisdiction or single agency, a single jurisdiction with multiagency involvement, or multiple jurisdictions with multiagency involvement;
  - Applicable and acceptable to users throughout the country;
  - Readily adaptable to new technology;
  - Adaptable to any emergency or incident to which domestic incident management agencies would be expected to respond; and
  - Have a scalable organizational structure that is based on the size and complexity of the incident.
- ICS Has Interactive Manageme4nt Components
- ICS Establishes Common Terminology, Standards, and Procedures that Enable Diverse Organizations to Work Together Effectively.
- ICS Incorporates Measurable Objectives.
- The Implementation of ICS Should Have the Least Possible Disruption on Existing Systems and Processes.
- ICS Should be User Friendly and be Applicable Across a Wide Spectrum of Emergency Response and Incident Management Disciplines. (**DHS,** *NIMS*, 2004, pp. 8-9)

Incident Command System (ICS): "A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries. The national standard for ICS is provided by NIMS." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 75 (Glossary))

Incident Command System (ICS): "A standardized organizational structure used to command, control, and coordinate the use of resources and personnel that have responded to the scene of an emergency. The concepts and principles for ICS include common terminology, modular organization, integrated communication, unified command structure, consolidated action plan, manageable span of control, designated incident facilities, and comprehensive resource management." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning*, 1996, GLO-7)

Incident Command System (ICS): "A multi-discipline, multi-jurisdictional command system in which the responsibilities and duties of those persons holding key positions within the command structure have been designated by formal agreement and a system which is capable of expanding or shrinking as the situation warrants." **(FEMA** *IEMC Terrorism*, 11-5)

Incident Command System (ICS): "A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), 2007, p. 152)

Incident Command System (ICS): "One of the most important 'best practices' that has been incorporated into the NIMS is the Incident Command System (ICS), a standard, on-scene, all-hazards incident management system already in use by firefighters, hazardous materials teams, rescuers and emergency medical teams. The ICS has been established by the NIMS as the standardized incident organizational structure for the management of all incidents." (**FEMA**, *NIMS and the ICS*, November 23, 2004, p. 1)

Incident Command System (ICS): "…a component of an overall incident management system." (**NFPA 1600**, 2007, p. 11)

Incident Command System (ICS): A standardized on-scene emergency management concept specifically designed to allow it's users to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries." (**NWCG,** 1994)

Incident Command System (ICS): "ICS is a management system…. ICS is a incident management tool to assist in the management of incidents or events, not a skills course to teach individuals how to do a specific job, i.e., to operate a piece of equipment (a skills course)… it teaches the skills essential to incident management. The objective of the ICS National Training Curriculum is not to solve your local political problems. However, adopting ICS may solve some political problems in the long run. ICS is seldom implemented successfully until a clear, definitive decision has been made by the Agency Administrator or Executive." (**NWCG**, *ICS National Training Curriculum: Instructor Curriculum Guide*, 1994, 10)

Incident Command System (ICS): "A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries" (**USCG**, *IM Handbook*, 2006, Glossary 25-11)

Incident Command System (ICS): "Our current system for incident command has five major functional areas: command, operations, planning, logistics, and finance and administration. Although a sixth area – intelligence – is currently applied on an *ad hoc* basis, we must institutionalize this area throughout our new approach in support of prevention and protection activities." (**White House**, *National Strategy for Homeland Security*, October 2007, p. 46)

Incident Command System (ICS) Core Concepts and Principles (for DHS Purposes): "ICS in DHS – Concepts and Principles -- The core concepts and principles of the ICS as taught by DHS and as defined in the NIMS Document and consistent with the National Wildfire Coordinating Group (NWCG) incorporate the following components:

- The overwhelming majority of incidents nationwide are typically handled by a single jurisdiction. Most responses need go no further. In other instances the response may rapidly expand requiring additional resources and operational support. Whether for incidents which additional resources are required or are provided from different organizations within a single jurisdiction or outside the jurisdiction, or for complex incidents with state-level or national-

level implications, the ICS provides a core mechanism for coordinated and collaborative incident management.

- The NIMS requires that field command and management functions be performed in accordance with a standard set of ICS organizations, doctrine, and procedures. However, the incident commanders generally retain the flexibility to modify procedures or organizational structure as necessary to accomplish the mission.

- ICS is modular and scalable and is readily adaptable to any emergency or incident to which domestic incident management agencies would be expected to respond.

- ICS has interactive management components that set the stage for effective and efficient incident management and emergency response.

- ICS establishes common terminology, standards, and procedures that enable diverse organizations to work together effectively.

- ICS incorporates measurable objectives to ensure fulfillment of incident management goals.

- The implementation of ICS should have the least possible disruption on existing systems and processes

- The ICS should be user friendly and be applicable across a wide spectrum of emergency response and incident management disciplines." (**FEMA**, *National Incident Management System National Standard Curriculum Training Development Guidance*, October 2005, p. 7)

Incident Command System (ICS) Effectiveness: "The use of a standardized incident command system for disaster response increases collaboration as well as the consistency and effectiveness of response operations. Ninety-four percent of city, county and tribal jurisdictions participating in this study report using an Incident Command System (ICS) for disaster response. The survey and research findings in this report confirm that the adoption of ICS is broad, leading to greater statewide consistency in disaster response." (**WA State EM Council**, *A Study of Emergency Management at the Local Program Level*, 2004, p. 16)

Incident Command System (ICS) Flexibility: "Though highly bureaucratic, the incident command system seems to serve as the basis for the exceptional organizational flexibility required for reliable performance under highly variable and risk circumstances." (**Bigley**, "The Incident Command System…," 2001, p. 1283)

Incident Command System (ICS) History: "The concept of ICS was developed more than thirty years ago, in the aftermath of a devastating wildfire in California. During 13 days in 1970, 16 lives were lost, 700 structures were destroyed and over one-half million acres burned. The overall cost and loss associated with these fires totaled $18 million per day. Although all of the responding agencies cooperated to the best of their ability, numerous problems with communication and coordination hampered their effectiveness. As a result, the Congress mandated that the U.S. Forest Service design a system that would "make a quantum jump in the

capabilities of Southern California wildland fire protection agencies to effectively coordinate interagency action and to allocate suppression resources in dynamic, multiple-fire situations."

The California Department of Forestry and Fire Protection, the Governor's Office of Emergency Services; the Los Angeles, Ventura and Santa Barbara County Fire Departments; and the Los Angeles City Fire Department joined with the U.S. Forest Service to develop the system. This system became known as FIRESCOPE (FIrefighting RESources of California Organized for Potential Emergencies).

In 1973, the first "FIRESCOPE Technical Team" was established to guide the research and development design. Two major components came out of this work, the ICS and the Multi-Agency Coordination System (MACS). The FIRESCOPE ICS is primarily a command and control system delineating job responsibilities and organizational structure for the purpose of managing day-to-day operations for all types of emergency incidents.

By the mid-seventies, the FIRESCOPE agencies had formally agreed upon on ICS common terminology and procedures and conducted limited field-testing of ICS. By 1980, parts of ICS had been used successfully on several major wildland and urban fire incidents. It was formally adopted by the Los Angeles Fire Department, the California Department of Forestry and Fire Protection (CDF), the Governor's Office of Emergency Services (OES), and endorsed by the State Board of Fire Services.

Also during the 1970s, the National Wildfire Coordinating Group (NWCG) was chartered to coordinate fire management programs of the various participating federal and state agencies. By 1980, FIRESCOPE ICS training was under development. Recognizing that in addition to the local users for which it was designed, the FIRESCOPE training could satisfy the needs of other state and federal agencies, the NWCG conducted an analysis of FIRESCOPE ICS for possible national application.

By 1981, ICS was widely used throughout Southern California by the major fire agencies. In addition, the use of ICS in response to non-fire incidents was increasing. Although FIRESCOPE ICS was originally developed to assist in the response to wildland fires, it was quickly recognized as a system that could help public safety responders provide effective and coordinated incident management for a wide range of situations, including floods, hazardous materials accidents, earthquakes and aircraft crashes. It was flexible enough to manage catastrophic incidents involving thousands of emergency response and management personnel. By introducing relatively minor terminology, organizational and procedural modifications to FIRESCOPE ICS, the NIIMS ICS became adaptable to an all-hazards environment.

While tactically each type of incident may be handled somewhat differently, the overall incident management approach still utilizes the major functions of the Incident Command System. The FIRESCOPE board of directors and the NWCG recommended national application of ICS. In 1982, all FIRESCOPE ICS documentation was revised and adopted as the National Interagency Incident Management System (NIIMS). In the years since FIRESCOPE and the NIIMS were blended, the FIRESCOPE agencies and the NWCG have worked together to update and maintain the Incident Command System Operational System Description (ICS 120-1). This document

would later serve as the basis for the NIMS ICS….

When Homeland Security released the NIMS on March 1, 2004, Secretary Tom Ridge and Under Secretary Brown specifically highlighted compliance with the ICS as being possible fairly quickly. They recognized that in some cities, the fire and police departments have worked together using ICS for years. In other places, only the fire department used ICS. Although law enforcement, public works and public health were aware of the concept, they regarded ICS as a fire service system. The NIMS ends this discrepancy because HSPD-5 requires state and local adoption of NIMS as a condition for receiving federal preparedness funding. While ICS was first pioneered by the fire service, it is, at its core, a management system designed to integrate resources to effectively attack a common problem. This system is not exclusive to one discipline or one set of circumstances; its hallmark is its flexibility to accommodate all circumstances. Some purists may claim that a particular application of ICS is not consistent with the NIMS. Yet, we need not approach ICS with the same mathematical precision used by an engineer. We are changing the culture of organizations and first responders at all levels of government. As long as implementation of ICS is consistent with the basic principles expressed in the NIMS, we will have made significant progress. Further refinements can be achieved over time based on experience with its use." (**FEMA**, *NIMS and ICS*, 2004)

Incident Command System (ICS) Incident Commander Tasks: "The incident commander assesses the situation, identifies contingencies, develops objectives, ascertains resournce needs, and generates an initial actin plan. Then he or she begins to build an organization by assigning roles and tasks to incoming resources." (**Bigley and Roberts**, "The Incident Command System: High-Reliability Organizing for Complex and Volatile Task Environments," 2001, p. 1287)

Incident Command System (ICS) Management Characteristics (14): "ICS is based upon 14 Management Characteristics:

Common Terminology
Modular Organization
Management by Objectives
Incident Action Planning
Manageable Span of Control
Incident Facilities and Location
Comprehensive Resource Management
Integrated Communications
Establishment and Transfer of Command
Chain of Command and Unity of Command
Unified Command
Accountability
Dispatch/Deployment
Information and Intelligence Management" (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, pp. 45-47)

Incident Command System (ICS) Organization:

- Command

- Operations
- Planning
- Logistics
- Finance/Administration (**DHS**, *NIMS*, 2004, p. 13)

Incident Command System (ICS) Structure: "In the abstract, the ICS appears to exhibit many of the hallmarks of bureaucracy identified by Weber (1947). The system is highly formalized, characterized by extensive rules, procedures, policies, and instructions. Jobs within the system are specialized, are based on standeardized routines, and require particularized training. Positions are arranged hierarchically aned related to one another on the basis of formal authority. Basic system objectives and plans are established at or near the top of the hierarchy and used as bases for decisions and behaviors at lower levels." (**Bigley**, "The Incident Command System: High-Reliability Organizing for Complex and Volatile Task Environments," 2001, p. 1282)

Incident Commander (IC): "The **Incident Commander** is the individual responsible for all incident response activities, including the development of strategies and tactics and the ordering and release of resources. The Incident Commander has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site." (**DHS**, *NRF Comment Draft*, September 2007, 48)

Incident Commander (IC): ICS term for the person, usually from the local jurisdiction, who is responsible for overall management of an incident. On most incidents, the command activity is carried out by a single IC. The IC may be assisted by a deputy from the same agency or from an assisting agency. (**FEMA**, *Urban Search and Rescue Response System Field Ops Guide* 1993)

Incident Commander: "Public sector official (usually fire or police) in charge of coordinating resources and developing strategies to resolve the critical incident." (**Jones**, *Critical Incident* Protocol, 2000, 37)

Incident Commander (IC): "The person responsible for all decisions relating to the management of the incident. The incident commander is in charge of the incident site. This term is equivalent to the on-scene incident commander." (**NFPA 471**, 1997, p. 9)

Incident Commander (IC): "The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site. (See also: Unified Command)." (**USCG**, *IM Handbook*, 2006, Glossary 25-10)

Incident Communications Emergency Policy & Procedures (ICEPP): "…provides detailed guidance to Federal incident communicators on activities to be initiated in conjunction with incidents requiring a coordinated Federal response. It is applicable to all Federal departments and agencies responding under the *NRF*. The ICEPP establishes mechanisms to prepare and deliver coordinated and sustained messages regarding these incidents, and provides for prompt Federal acknowledgement of an incident and communication of emergency information to the public

during incident management operations." (**DHS**, *Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework* (Draft), Sep.2007, 53)

Incident Complex: "An Incident Complex refers to two or more individual incidents located in the same general area that are assigned to a single IC or UC. When an Incident Complex is established over several individual incidents, the general guideline is that the previously identified incidents would become Branches within the Operations Section of the IMT." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 60)

Incident Communications Emergency Policy & Procedures (ICEPP): "…detailed guidance to Federal incident communicators on activities to be initiated in conjunction with incidents requiring a coordinated Federal response. It is applicable to all Federal departments and agencies responding under the *NRF*. It establishes mechanisms to prepare and deliver coordinated and sustained messages regarding incidents requiring a coordinated Federal response, and provides for prompt Federal acknowledgement of an incident and communication of emergency information to the public during incident management operations. The ICEPP is comprised of two annexes contained in the *NRF*:

- Public Affairs Support Annex: Describes the interagency policies and procedures for incident communications with the public.

- ESF #15 – External Affairs Annex: Outlines the functions, resources, and capabilities for external affairs." (**DHS**, *NRF Public Affairs Support Annex*, Jan 2008, 1)

Incident Decision Making Process (IDMP): The IDMP is the employment of NPES [National Planning and Execution System] in response to an actual threat or incident. It creates courses of action that achieve objectives for specific incidents. (**DHS**, 2007)

Incident Information: "While timely information is valuable, it also can be overwhelming. We must be able to identify what is required to assist decision makers and then rapidly summarize and prioritize the information we receive from multiple reporting systems. In order to be successful, our new approach to incident management also must have an information management system that integrates key information and defines national information requirements." (**White House**, *National Strategy for Homeland Security*, October 2007, p. 47)

Incident Joint Information Center (JIC): "A virtual JIC is established when a physical co-location is not feasible. It connects PIOs through e-mail, cell/land-line phones, faxes, video teleconferencing, web-based information systems, etc. For a pandemic incident where PIOs at different locations communicate and coordinate public information electronically, it may be appropriate to establish a virtual JIC." (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, 16)

Incident Management: "The organized process of responding to an emergency event (or incident), protecting lives (human and animal) from further harm, and creating a safe environment for restoring order to critical infrastructures." "Good (i.e. effective) IM answers the four big questions of emergency response: (1) Who is in charge? (2) How are we going to respond? (3) What resources are available? And (4) How are we going to pay for the response." (**Biby** 2005, 62)

Incident Management: "The management and coordination of activities in response to an occurrence (natural or man-made) that requires action to prevent or minimize loss of life or damage to property and/or natural resources. Includes the provision of services to rebuild and restore affected communities." (**DHS**, *IPG FY 2011-2015 Draft*, 2008, p. 16)

Incident Management: "Definition: the management and coordination of prevention, protection, and emergency management activities associated with a specific threat, or an actual occurrence." (**DHS**, *Lexicon: Terms and Definitions*, October 23, 2007, p. 13)

Incident Management: "…the three phases of incident management [are]: *prepare, respond* and *recover*." (**DHS**, *NRF Comment Draft*, 2007, p. 25) "Preparedness is discussed in the *National Response Plan* thusly: "the *NRP* focuses on those *activities that are directly related to an evolving incident or potential incident* rather than *steady-state preparedness or readiness activities* conducted in the absence of a specific threat or hazard." (**DHS**, *NRF Comment Draft*, 2007, 26)

Incident Management: "Incident management refers to how incidents are managed across all homeland security activities, including *prevention, protection, and response and recovery*." (**DHS**, *NRF*, Jan 2008, 6; emphasis added)

Incident Management: "The *Framework* [National Response Framework] is intended to strengthen, organize, and coordinate ***response actions*** across all levels," (**DHS**, *NRF*, Jan 2008, 27; emphasis in original.)

Incident Management: "The **Secretary of Homeland Security** is the principal Federal official for domestic incident management. By Presidential directive and statute, the Secretary is responsible for coordination of Federal resources utilized in the prevention of, preparation for, response to, or recovery from terrorist attacks, major disasters, or other emergencies. The role of the Secretary of Homeland Security is to provide the President with an overall architecture for domestic incident management and to coordinate the Federal response, when required, while relying upon the support of other Federal partners. Depending upon the incident, the Secretary also contributes elements of the response consistent with DHS's mission, capabilities, and authorities.

"The **FEMA Administrator**, as the principal advisor to the President, the Secretary, and the Homeland Security Council on all matters regarding emergency management, helps the Secretary in meeting these HSPD-5 responsibilities." (**DHS**, *NRF*, Jan 2008, 25; emphasis in the original)

Incident Management: "The process by which an organization responds to and controls an incident using Emergency Response Procedures." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, 57)

Incident Management: "The broad spectrum of activities and organizations providing effective and efficient operations, coordination, and support applied at all levels of government, utilizing both governmental and nongovernmental resources to plan for, respond to, and recover from an

incident, regardless of cause, size, or complexity." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), 2007, p. 152)

Incident Management: "A national comprehensive approach to preventing, preparing for, responding to, and recovering from terrorist attacks, major disasters, and other emergencies. Incident management includes measures and activities performed at the local, state, and national levels and includes both crisis and consequence management activities." (**JCS/DoD**, Civil *Support* (JP 3-28), 2007, p. GL-9; *DOD Dictionary of Military and Related Terms*, 2007)

Incident Management: "HSPD-5states that the US Government shall establish a single, comprehensive approach to domestic incident management that treats CrM and CM as a single integrated function. Incident management includes measures and activities performed at the national level and includes crisis and consequence management activities. The overarching policy of incident management can be thought of in two overlapping phases, crisis and consequence management." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. IV-7)

Incident Management: "…the response to a major event or emergency…" (**Joint Commission**, *Standing Together*, 2005, p. 4)

Incident Management: "The entity shall develop an incident management system to direct, control, and coordinate response and recovery operations." (**NFPA 1600**, 2007, 10)

Incident Management: "(g) Incident Management. The Assistant to the President for Homeland Security shall be the individual primarily responsible for coordinating the domestic response efforts of all departments and agencies in the event of an imminent terrorist threat and during and in the immediate aftermath of a terrorist attack within the United States and shall be the principal point of contact for and to the President with respect to coordination of such efforts...." (**White House**, *EO 13228*, *Establishing Office of Homeland Security*, Oct. 8, 2001)

Incident Management (Versus Response): "The homeland security community has used the terms "incident management" and "response" in complementary and occasionally interchangeable manners. Within this *Strategy*, "response" refers to actions taken in the immediate aftermath of an incident to save lives, meet basic human needs, and reduce the loss of property. "Incident management," however, is a broader concept that refers to how we manage incidents and mitigate consequences across all homeland security activities, including prevention, protection, and response and recovery. (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 31)

Incident Management Assist Team (IMAT): "In coordination with the RRCC [Regional Response Coordination Center], FEMA may deploy an IMAT. IMATs are interagency teams composed of subject-matter experts and incident management professionals. IMAT personnel may be drawn from national or regional Federal department and agency staff according to pre-established protocols. IMAT teams make preliminary arrangements to set up Federal field facilities and initiate establishment of the JFO." (**DHS**, *NRF Comment Draft*, 2007, pp. 48, 59)

Incident Management Assistance Team (IMAT): "The Post-Katrina Emergency Management Reform Act (PKEMRA) of 2006 required FEMA to "establish 3 or more national emergency

response teams, sufficient regional response teams and any other response teams…and ensure that target capability levels are established for Federal emergency response teams."

- FEMA is establishing 3 National Incident Management Assistance Teams (IMAT) with 26 fulltime staff, and 10 Regional IMATs that will be staffed with 15 fulltime personnel.

- The IMATs will subsume the existing FIRST and ERT missions and capabilities and will represent the highest level of Incident Command System (ICS) expertise in FEMA.

- The primary missions of the IMAT are to rapidly deploy to an incident or incident-threatened venue (within 12 hours), provide leadership in the identification and provision of Federal assistance, improve situational awareness, and coordinate the integrated inter-jurisdictional response in support of the affected State(s) or territories. IMATs will be designed to:
  - Establish command, control, communications and coordination (C4) with a State.
  - Support local governments in all-hazard planning and command and control.
  - Task other federal agencies through unity of effort in emergency response activities.
  - Provide broad-based expertise in all emergency management functional areas of the National Response Framework (NRF).
  - Execute Stafford Act authorities and FEMA missions to direct the support, integration and coordination of federal resources.
  - Be self-sufficient for a minimum of 48 hours so as not to drain local resources." (**FEMA**, *NEMA Initiatives and Issues From the Disaster Operations Directorate*, August, 20, 2007, p. 8)

Incident Management Background and Historical Problem Areas: "The Incident Command System (ICS) was developed in the 1970s following a series of catastrophic fires in California's urban interface. Property damage ran into the millions, and many people died or were injured. Response problems could rarely be attributed to lack of resources or failure of tactics. Surprisingly, studies found that response problems were far more likely to result from inadequate management than from any other single reason.

Weaknesses in incident management were often due to:

- Lack of accountability, including unclear chains of command and supervision.
- Poor communication due to both inefficient uses of available communications systems and conflicting codes and terminology.
- Lack of an orderly, systematic planning process.
- No common, flexible, pre-designed management structure that enabled commanders to delegate responsibilities and manage workloads efficiently.
- No predefined methods to integrate inter agency requirements into the management structure and planning process effectively.

Emergency managers learned that the existing management structures, frequently unique to each agency, did not scale or adjust to dealing with massive mutual aid responses involving dozens of distinct agencies. As a result, the Incident Command System (ICS) was collaboratively developed to provide a consistent, integrated framework for the management of all incidents from small incidents to large, multi-agency emergencies." (**Zuber**, *Type 3 All-hazard Incident Management Teams*, circa 2006-2008)

Incident Management Plan: "Clearly defined and documented plan of action for use at the time of an incident or disruption, typically covering the key personnel, resources, services and actions needed to implement the incident management process." (**ISO 22399**, *Societal Security*…, 2007, p. 3)

Incident Management Planning Team (IMPT), DHS: "DHS, supported by a wide range of interagency resources, has established an interagency Incident Management Planning Team that will be a nucleus around which…interagency planning work will be drafted for wider review and, ultimately, for incorporation into the [NRF] Resource Center." (**DHS**, *NRF Comment Draft,* 2007, p. 76)

Incident Management Planning Team (IMPT), DHS: "In August of 2006, the Secretary [DHS] directed the creation of the Interagency Incident Management Planning Team (IMPT)…The mission of the IMPT is to provide national-level contingency and crisis-action incident management planning through a collaborative, interagency process. The IMPT's planning focus is designed to be at the strategic level, whereas FEMA's planning focus is at the operational level, as laid out in the Post Katrina Emergency Management Reform Act. The IMPT comprises two components: (1) a core group of 15 full-time planning representatives from key DHS elements (e.g., FEMA, TSA, CBP, Coast Guard, I&A, as well as other key interagency members (e.g., DoD, DOJ/FBI, HHS, DOE, EPA, DOT, and the American Red Cross); and (2) an 'on-call' staff of 38 planners that includes other members from both DHS and the interagency community. Each member assigned to the IMPT has undergone a robust training program to prepare each of them for their planning responsibilities.

"The IMPT's initial actions have focused on the development of national, strategic interagency concept plans (CONPLANS) that address each of the 15 National Planning Scenarios. These all-threats and all-hazards scenarios include nuclear, chemical, biological, natural disaster, and cyber incidents….Each plan developed by the IMPT identifies the actions that individual departments and agencies, including DoD, will take in the event a given scenario were to occur. A critical function of the IMPT is to identify the national level commitments of the entire interagency in one comprehensive document. This effort serves two distinct purposes: First, it facilitates the ability of the Secretary to fulfill his coordination responsibilities under HSPD-5 by providing awareness of the individual capabilities that a specific agency plans to deliver; and (2) it identifies existing seams and gaps that exist within the interagency for a particular scenario." (**DHS**, *Statement of VADM Roger Ruff*, July 19, 2007, pp. 2-3)

Incident Management Planning Team (IMPT), DHS: "There are many ways that preparedness directly affects response - though few are as important as planning. The draft NRF states that operational planners from multiple agencies have been assigned to the IMPT - an

interagency group managed by the Department's Director of Operations Coordination - to develop strategic guidance and plans for the 15 National Planning Scenarios. The draft NRF assigns FEMA the responsibility to conduct operational planning to support these strategic plans. This construct raises important issues that the Department must clarify in the final NRF: what is FEMA's role with respect to the strategic guidance and plans being developed by the IMPT, and how does the draft NRF ensure that those strategic plans will be consistent with FEMA's operational plans? Perhaps more importantly, how does this construct ensure that the Department does not repeat the same mistakes it made prior to Hurricane Katrina when it split preparedness from response?" (**Lieberman**, *Letter to DHS Secretary Chertoff*, October 22, 2007)

Incident Management Planning Team (DHS) CONPLAN Development Process:

- Six step process for each Concept Plan (CONPLAN)
    - CONPLAN Development
    - Interagency Action Officer Review
    - Feedback/Adjudication
    - DRG Review
    - Feedback/Adjudication
    - CONPLAN Approval
- Each step conducted using a collective interagency focus
- Two formal reviews
    - Action Officer
    - Domestic Readiness Group (DRG)
- Plan refinement continues after the plan is reviewed." (**DHS**, *IWG*, Nov. 29, 2007, 33)

Incident Management Planning Team (DHS) Mission: "To provide contingency and crisis-action incident management planning in support of the Department of Homeland Security's national level domestic incident management responsibilities articulated in the Homeland Security Act of 2002 and HSPD-5." (**DHS**, *Interagency Planning Workshop*, 29 Nov 2007, 29)

Incident Management Planning Team (DHS) Plans:

National Planning Scenarios (NPS)

- 10 KT Improvised Nuclear Device (IND)
- Radiological Dispersal Device (RDD)
- Pandemic Influenza
- Improvised Explosive Device
- Hurricane/Typhoon

Related Plans and Planning Documents

- National Planning and Execution System
- Pandemic Influenza Border Management Concept Plan (CONPLAN)
- Planning 'Playbooks'
- Planning Checklists
- Planning Decision Support Templates" (**DHS**, *Interagency Planning Workshop*, 29Nov07, slide #32)

Incident Management Planning Team (DHS) Strategic Planning:

- Focus is Federal roles and responsibilities at the *Strategic Level*
- Developed using the NPES (standard planning process and format)
- Identifies the specific Federal roles and responsibilities to coordinate the Federal response to a specific national level domestic incident
- Establishes the framework to facilitate planning at the operational level (e.g., Department/Agency Supporting plans)
- Does not change existing authorities nor grant new authorities." (**DHS**, *Interagency Planning Workshop*, 29Nov07, slide # 31)

Incident Management Principles and Requirements:

Incident Command System
Unified Command
Crisis Action Planning Resources
Situational Awareness
Prioritization of Information
Multi-Agency Coordination Centers
Skilled Leaders and Partners
Training and Exercises

(**White House**, *National Strategy for Homeland Security*, October 2007, p. 46)

Incident Management System: (See "Federal Disaster Assistance and Relief Centers" for note on 1st Federal IMS)

Incident Management System: "IMS is a generic term for the design of ad hoc emergency management teams that coordinate the efforts of more than one agency under a unified command. It is a functionally based organizational template that facilitates information flow, decision-making, and operational coordination. The basic idea is that an incident commander or a unified command team is responsible for the successful resolution of the emergency through a process of authority delegation and coordination among many participating agencies. IMS emphasizes joint problem solving to meet the needs of the emergency situation. What makes the system distinctive is that it creates a clear chain of authority that can quickly orchestrate collaborative operations by diverse organizations that have had little or no previous operational relationships." (**Christen**, *An Overview of IMS*, 2001, p. 1)

Incident Management System: "An organized system of roles, responsibilities, and standard operating procedures used to manage and direct emergency operations. Such systems are sometimes referred to as incident command systems (ICS)." (**NFPA 471**, 1997, p. 9)

Incident Management System: "A system that defines the roles and responsibilities to be assumed by personnel and the operating procedures to be used in the management and direction of emergency incidents and other functions." (**NFPA 1561**, 2002, p. 8)

Incident Management System: "The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents." (**NFPA 1600**, 2007, 8)

"5.9.2 The incident management system shall describe specific organizational roles, titles, and responsibilities for each incident management function.
5.9.3 The entity shall establish applicable procedures and policies for coordinating response, continuity, and recovery activities with stakeholders directly involved in response, continuity, and recovery operations.
5.9.4 The entity shall establish applicable procedures and policies for coordinating response, continuity, and recovery activities with appropriate authorities and resources, including activation and deactivation of plans, while ensuring compliance with applicable statutes or regulations. Emergency operations/response shall be guided by an incident action plan or management by objectives." (**NFPA 1600**, 2007, p.10)

"An incident management system is designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. It is normally structured to facilitate activities in five major functional areas: command, operations, planning, logistics, and finance and administration." (**NFPA 1600**, 2007, 17)

Incident Management System Standard Organization:

Operations Section
Planning Section
Logistics Section
Finance and Administration Section (**DHS**, *NRF Comment Draft*, September 2007, p. 61)

Incident Management Systems Integration (IMSI): "The IMSI oversees response policy by maintaining, revising, and disseminating the NIMS and NRF, and related materials." (**FEMA/NPD/NIC**, slide 5)

Incident Management Systems Integration (IMSI) Division, FEMA, NIC: "The National Integration Center (NIC) Incident Management Systems Integration Division was established by the Secretary of Homeland Security to provide "strategic direction for and oversight of the National Incident Management System (NIMS)... supporting both routine maintenance and the continuous refinement of the system and its components over the long term." The Center oversees all aspects of NIMS including the development of compliance criteria and implementation activities at federal, state and local levels. It provides guidance and support to jurisdictions and incident management and responder organizations as they adopt the system." (**FEMA**, *Welcome to the National Integration Center (NIC) Incident Management Systems Division.* September 11, 2007 update)

Incident Management Tasks: "This level includes resource management and support tasks. Tasks may be prior to the incident, such as preparation and prevention tasks, or after the incident. These tasks are typically performed by a mayor, city manager, a city council, or Emergency Operations Center (EOC). This level includes the support systems that facilitate prevention and

response. These activities include the support of incident management policies, facilitation of logistic support and resource tracking, resource allocation decisions, and coordination of incident-related information." (**DHS**, *Universal Task List 2.0*, December 2005, p. 48)

Incident Management Team (IMT): "An Incident Management Team (IMT) is an incident command organization made up of the Command and General Staff members and other appropriate personnel in an ICS organization and can be deployed or activated, as needed. National, State, and some local IMTs have formal certification and qualification, notification, deployment, and operational procedures in place. In other cases, ad hoc IMTs are formed at an incident or for specific events. The level of training and experience of the IMT members, coupled with the identified formal response requirements and responsibilities of the IMT, are factors in determining the "type," or level, of IMT." (**FEMA**, *NIMS* Draft, August 2007, p. 60)

Incident Management Team (IMT): "The private sector response team at the scene to resolve the critical incident. If a company Crisis Management Team is available, the IMT may request additional private sector resources. May also be known as Emergency Response Team (ERT) (**Jones**, *Critical Incident* Protocol, 2000, 37)

Incident Management Team (IMT): "An IC and the appropriate Command and General Staff personnel assigned to an incident. The level of training and experience of the IMT members, coupled with the identified formal response requirements and responsibilities of the IMT, are factors in determining "type," or level, of IMT."

Incident Management Team (IMT): "The Incident Commander and appropriate Command and General Staff personnel assigned to an incident." (**USCG**, *IM Handbook*, 2006, Glossary 25-11)

Incident Management Team (IMT) Types:

"Type V IMTs are a "pool" of primarily fire officers from several neighboring departments, trained to serve in Command and General Staff positions during the first 6-12 hours from a major or complex incident and possibly transition to a Type IV or Type III IMT." (**DHS**, *TCL*, 2007, p. 206)

"Type IV IMTs are designated teams of fire, EMS, and/or law enforcement officers from a region or single jurisdiction (city or county), activated to manage a major or complex incident during the first 6-12 hours and possibly transition to a Type III IMT. Capable of functioning in an incident management function that may involve resources from multiple agencies from the discovery of and arrival at an incident up to and including a full operational period as defined by the agency or jurisdiction."

"Type III IMTs are standing teams of trained personnel from different departments, organizations, agencies, and jurisdictions within a State or metropolitan region, deployed within a State or region to manage or support incident management at incidents that extend beyond one operational period and possibly transition to a Type II or Type I IMT. Capable of functioning in an incident management function that involves resources from multiples agencies and jurisdictions from local to Federal levels for multiples operational periods."

"Type II IMTs are Federally or State-certified standing team comprised of up to approximately 38 members qualified and certified through the National Wildfire Coordinating Group (NWCG) qualification process. A Type II IMT may be self-contained and is typically deployed to incidents of regional significance. Capable of functioning in an incident management function that involves utilization of significant numbers of State and Federal-level resources."

"Type I Incident Management Teams (IMTs) are Federally or State-certified standing teams comprised of approximately 38 members qualified and certified through the NWCG qualification process. A Type I IMT is the most robust IMT with the most experience; is fully equipped and self-contained and is typically deployed to catastrophic events. Capable of functioning in an incident management function that involves utilization of significant numbers of Federal-level resources." (**DHS**, *TCL*, 2007, p. 205)

Incident Objectives: "Statements of guidance and direction necessary for selecting appropriate strategy(s) and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow strategic and tactical alternatives." (**DHS**, *NIMS*, 2004, pp.130-131)

Incident Objectives: "Statements of guidance and direction necessary for the selection of appropriate strategies, and the tactical direction of resources. Tactical incident objectives address the tactical response issues while management incident objectives address the incident management issues. Tactical incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives." (**USCG**, *IM Handbook*, 2006, Glossary 25-12)

Incident of National Significance: "Based on criteria established in HSPD-5 (paragraph 4), an actual or potential high-impact event that requires a coordinated and effective response by an appropriate combination of Federal, State, local, tribal, non-governmental, and/or private sector entities in order to save lives and minimize damage, and provide the basis for long-term community recovery and mitigation activities. (**DHS**, *NPG*, December 2005 Draft, p. A-1; cites: **DHS**, *NRP*, December 2004)

Incident of National Significance: "The "Incident of National Significance" term utilized in the *NRP* caused significant confusion. Many readers understood that a declaration of an Incident of National Significance by the Secretary of Homeland Security was a requirement for the *NRP* to be invoked or Federal assistance or interagency incident management support to be provided. This was not true, but efforts to clarify the Incident of National Significance term were not completely successful. And since the actual declaration of an Incident of National Significance brought no new authorities to the incident response, the decision was made to eliminate the term. (**DHS**, *NRF FAQs*, Jan 08, 5)

Incident of National Significance: "An actual or potential high-impact event that requires a coordinated and effective response by and appropriate combination of Federal, state, local, tribal, nongovernmental, and/or private-sector entities in order to save lives and minimize damage, and

provide the basis for long-term community recovery and mitigation activities." (**DoD**, DOD *Dictionary of Military and Related Terms*, 2007)

Incident of National Significance: "For the purpose of this plan, incidents that require DHS operational and/or resource coordination are termed **Incidents of National Significance** (also referred to as nationally significant incidents or national incidents in this plan). DHS establishes reporting requirements and conducts ongoing communications with Federal, State, local, tribal, and private sector and non- governmental organizations to maintain situational awareness, analyze threats and assess national implications of potential or actual incidents. Incidents of National Significance requiring DHS action can include the following:

1. Credible threats, indications of terrorism or acts of terrorism within the United States;
2. Major disasters or emergencies as defined under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, to include hurricanes, tornadoes, storms, earthquakes, fires, flood, or explosion regardless of cause; or any other occasion or instance for which the President determines that Federal assistance is needed to supplement State, local and tribal efforts to save lives and to protect property and public health and safety;
3. Catastrophic incidents, which, for the purposes of the NRP, are any natural or manmade incidents, including terrorism that leaves extraordinary levels of mass casualties, damage, and disruption severely affecting the population, infrastructure, environment, economy, and government functions. A catastrophic event results in sustained national impacts over a prolonged period of time; exceeds resources normally available in the local, State, Federal, and private sectors; and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened; or
4. Unique situations that may require involvement of the Secretary of Homeland Security to aid in coordination of incident management efforts."

(**DHS**, *National Response Plan* (Draft #1), February 25, 2004, pp. 4-5)

Incident of National Significance: "An actual or potential high-impact event that requires robust coordination of the Federal response in order to save lives and minimize damage, and provide the basis for long-term community and economic recovery." (**National Search and Rescue Committee**, *National Search and Rescue Plan of the United States*, 2007, p. 1)

Incident of National Significance (INS): "An actual or potential high-impact event that requires a coordinated and effective response by an appropriate combination of Federal, State, local, tribal, nongovernmental, and/or private-sector entities in order to save lives and minimize damage and provide the basis for long-term community recovery and mitigation activities." (**USCG**, *IM Handbook*, 2006, Glossary 25-11/12)

Incident Officer: "When the damage caused by enemy action at a specific location is so extensive that a number of services, such as fire, police, medical, and rescue, may be required, and where there might be confusion unless some one in authority exercises coordination and control, the local Director of Civil Defense would dispatch to the incident a representative designated as Incident Officer. At the scene of the incident he would exercise coordination and control over the separate services to the same extent that the Director would exercise if he were present. He would not direct the technical services but he would coordinate their activities." (**OCDP**, *Hopley Report*, 1948, 248)

Incident Operating Systems (IOS): "IOS provide a mechanism of reviewing preparations or execution of incident response in specific categories to ensure a coordinated Federal response to any Incident of National Significance. Critical to this review is the synchronization and coordination activities within each IOS. The Department's seven IOS include:

- Domestic Counter-Terrorism/Law Enforcement.
- Border, Maritime and Transportation Security.
- Critical Infrastructure Protection.
- Medical/Public Health.
- Emergency Response and Recovery.
- Weapons of Mass Destruction (WMD) Detection/Preparedness.
- Risk Communication and Preparedness." (**DHS**, 2007)

Incident Period: "The time interval during which the disaster-causing incident occurs. No Federal assistance under the Stafford Act shall be approved unless the damage or hardship to be alleviated resulted from the disaster-causing incident that took place during the incident period or was in anticipation of that incident. The incident period is established by FEMA in the FEMA/State agreement, and is published in the Federal Register." (**FEMA**, *Mission Statement SOPs Operating Draft*, July 2007, p. 53)

Incident Phases (See "Phases of Incident Management")

Incident Preparedness: "Activities, programs, and systems developed and implemented prior to an incident that may be used to support and enhance mitigation of, response to, and recovery from disruptions, disasters, or emergencies." (**ISO 22399**, *Societal Security*…, 2007, 3)

Incident Preparedness and Operational (Business) Continuity Management (IPOCM): "IPOCM is a holistic management process that identifies potential impacts that threaten an organization and provides a framework for minimizing their effect." (**ISO 22399**, 2007, p. v)

"IPOCM establishes a strategic and operational framework to implement, proactively, an organization's resilience to disruption, interruption, or loss in supplying its products and services. It should not be a purely reactive measure taken after an incident has occurred." (**ISO 22399**, *Societal Security*…, 2007, p. v)

"Systematic and coordinated activities and practices through which an organization optimally manages its risks, and the associated potential threats and impacts there from." (**ISO 22399**, *Societal Security*…, 2007, p. 3)

Incident Preparedness and Operational (Business) Continuity Management Policy: "Overall intentions and direction of an organization, related to its incident preparedness and operational continuity, as formally expressed by top management." (ISO 22399, Societal Security…, 2007, 3)

Incident Response: "The response of an organization to a disaster or other significant event that may significantly impact the organization, its people, or its ability to function productively. An

incident response may include evacuation of a facility, initiating a disaster recovery plan, performing damage assessment, and any other measures necessary to bring an organization to a more stable status." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, 57)

Incident Scene: "The location where activities related to a specific incident are conducted." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 55)

Incident Support Teams (IST): "The US&R IST was developed to provide a group of highly qualified specialists readily available for rapid assembly and deployment to a disaster area. The mobilization and use of US&R task forces provides a significant capability for disaster response and mitigation. The multi-disciplinary FEMA US&R task forces afford search, rescue, medical, and technical capabilities, and a wide variety of services for catastrophic events. To maximize the speed with which task forces are mobilized and utilized, a FEMA US&R IST was developed.

"The IST must be available on short notice to mobilize within 2 hours of request. IST members must be self sufficient for at least 24 hours and prepared for a response assignment of up to 14 days. An IST equipment cache is organized into functional kits and is available for dispatch with the IST. FEMA maintains these kits to support the IST with communications equipment (including telephones and radios), computers, printers, and administrative office supplies. An inventory of the IST equipment cache is provided in Appendix E to this document. (**FEMA**, *US&R IST In Federal Dis. Ops.* 2000p. 1)

Incident Support Teams (IST): "ISTs are pre-existing elements that make up the management cells for USAR." (**FEMA**, *US&R IST Training Student Manual*, Mod 1, Unit II)

Incident Termination: "The conclusion of emergency service operations at the scene of an incident, usually the departure of the last unit from the scene." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 55)

Incidents of National Significance: "Incidents which require DHS operational coordination and/or resource coordination. Includes:

- Credible threats, indications of or acts of terrorism within the United States
- Major disasters or emergencies (as defined by the Stafford Act)
- Catastrophic incidents
- Unique situations that may require DSHS to aid in coordination of incident management

Unique Situations may include:

- Federal department/agency acting under its own authority has requested the assistance of the Secretary
- President directs the Secretary to assume responsibility for managing the incident
- Events that exceed the purview of other established Federal plans
- Events of regional or national importance involving one or more Federal agencies (at the discretion of the Secretary of DHS)
- National Special Security Events (NSSE)"

(**DHS**, *Office of Operations Coordination Interagency Planning Workshop*, November 29, 2007, slide 23)

Increased Cost of Compliance: "The Standard Flood Insurance Policy has a provision that will pay the policy holder to comply with a State or local floodplain management law or ordinance affecting repair or reconstruction of a structure suffering flood damage. Mitigation activities eligible for payment are: elevation, floodproofing, relocation, or demolition (or any combination of these activities) of the structure. Policyholders may receive up to $20,000 under this coverage. The structure must meet certain eligibility criteria, including a substantial damage or repetitive loss determination by a local official." (**FEMA,** *Increased Cost of Compliance*, May 19, 2007)

Increased Readiness Operations: "Increased Readiness Operations includes overall local plans for operations in periods of heightened risk (e.g., hurricane watch, or international crisis). Where the locality must bring its EOC, public shelters, or other facilities to full operational status during a crisis, or conduct accelerated training, the IR plan shall spell out who/what where. (See Standards Four and Five [Standards for Local Civil Preparedness].) Standard Four describes requirements for crisis shelter marking and stocking plans, as part of overall local Increased-Readiness plans. IR plans for periods of severe international crisis cover general operations to improve readiness, in both high-risk and low-risk jurisdictions, applicable primarily to readiness to protect the population in-place. Should States or localities be advised that operations are contemplated for crisis relocation of population from high-risk areas…, crisis relocation plans would be implemented." (**DCPA,** *Standards for Local Civil Preparedness*, 1978, p. 18)

IND: Improvised Nuclear Device. (**HSC**, *National Planning Scenarios*, 2006 Final, p. 1-1)

INDCP: Improvised Nuclear Devise Contingency Plan, DHS/IMPT. (**DHS**, *Statement of Frank DiFalco, NOC Director,, Office of Operations Coordination*, June 20, 2007 9)

Individual and Family Grant (IFG) Program: A program through which the Federal government makes a grant to a State for the purpose of making grants to individuals and families adversely affected by a major disaster. Individual and family grants are intended to meet disaster-related necessary expenses or serous needs in those cases where such individuals or families are unable to meet their expenses or needs through assistance under other provisions of the Stafford Act or through other means. (**Stafford Act**)

Individual Assistance: Supplementary Federal assistance provided pursuant to a Presidential Declaration of emergency or major disaster under the Stafford Act to individuals and families adversely affected. Such assistance may be provided directly by the Federal Government or through State or local governments or disaster relief organizations.

Individual Assistance: "This includes those services and programs that benefit individuals, households, businesses, and farmers. FEMA's Individual Assistance programs include "Assistance to Individuals and Households" (providing for housing assistance and other needs), crisis counseling, legal services, disaster unemployment assistance, and referrals to other appropriate forms of aid. Other Federal agencies' Individual Assistance programs include: tax refund assistance (Internal Revenue Service), disaster loans (the Small Business Administration

and Farm Service Agency), veterans' assistance (Veterans Affairs), and health and social security recipients' assistance (Health and Human Services)." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. A-6, Glossary)

Individual Mobilization Augmentee: "An individual reservist attending drills who receives training and is preassigned to an Active Component organization, a Selective Service System, or a Federal Emergency Management Agency billet that must be filled on, or shortly after, mobilization. Individual mobilization augmentees train on a part-time basis with these organizations to prepare for mobilization. Inactive duty training for individual mobilization augmentees is decided by component policy and can vary from 0 to 48 drills a year. Also called IMA." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Individual With a Disability: "The term 'individual with a disability' means an individual with a disability as defined in section 3(2) of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102(2))." (**Stafford Act**, June 2007 (FEMA 592), p. 14)

Individuals and Households Program, FEMA: "FEMA's Individuals and Household Program which provides temporary help in the form of alternative housing and financial assistance with other needs.

- Rental assistance for temporary housing for those whose homes are unlivable.
- Grants for home repairs and replacement of essential household items not covered by insurance to make damaged dwellings safe, sanitary and functional.
- Grants to replace personal property and help meet medical, dental, funeral, transportation and other serious disaster-related needs not covered by insurance or other federal, state, and charitable aid programs.
- Unemployment payments for workers who temporarily lost jobs because of the disaster and who do not qualify for regular state unemployment benefits including self-employed individuals.
- Low-interest loans to cover homeowners, renters, and businesses for losses not fully compensated by insurance. (Source: U.S. Small Business Administration)
- Low-interest loans for businesses and non-profits that have suffered disaster-related cash flow problems and need funds for working capital to recover from the disaster's economic impact. (Source: U.S. Small Business Administration)
- Loans for farmers, ranchers and aquaculture operators to cover production and property losses. (Source: Farm Service Agency, U.S. Department of Agriculture.)
- Other relief programs: Crisis counseling for those traumatized by the disaster; income tax assistance for filing casualty losses; advisory assistance for legal issues; veterans benefits; and social security matters." (**FEMA**, *FEMA'S Individuals And Households Program Provides Full Spectrum Of Recovery Assistance*, 2005)

Individuals with Disabilities in Emergency Preparedness (Executive Order #13347): "…signed in July 2004, [EO13347] requires the Federal Government to support safety and security for individuals with disabilities in situations involving disasters, including earthquakes, tornadoes, fires, floods, hurricanes, and acts of terrorism. Consequently, Federal agencies are required to: 1) encourage consideration of the unique needs of employees and individuals with

disabilities served by State, local, and tribal governments and private organizations and individuals in emergency preparedness planning; and 2) facilitate cooperation among Federal, State, local, and tribal governments and private organizations and individuals in the implementation of emergency preparedness plans as they relate to individuals with disabilities." (**DHS/ODP**, *FY 2006 EMPG Program Guidance*, November 2005, p. 18)

Induced Seismicity: "Earthquake activity resulting from man-made activities such as mining, large explosions, or forcing large quantities of liquid deep into the ground, e.g. oil-fields, waste disposal or reservoir filling." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 46)

Inductive Analysis: "The analysis of risk by integrating layers of information (e.g., visualizing disaster information in relation to other socio-economic parameters by geographical features such as administrative units, ecological zones, towns and streets) in GIS techniques. Data can be presented on maps, with the variable of interest divided into classes or categories, and plotted within each geographic unit." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Industrial Security: "This includes precautions which may be taken in plants and other large facilities againist espionage and sabotage, such as the security indoctrination of employees, safe-guarding of classified security information, and protection of vital documfents. With regard to employees, these measures include preemployment screening, finger-printing, and the discharge of security risks. Plant property is protected by the establishment of restricted areas, the limitation of access to these areas by employee and visitor identification and control, the establishment of adequate guard forces, and the use of fencing and other anti-personnel barriers." (**FCDA**, *1954 Annual Report*, p. 135)

Infectious Disease: "The term `infectious disease' means a disease potentially caused by a pathogenic organism (including a bacteria, virus, fungus, or parasite) that is acquired by a person and that reproduces in that person." (*Pandemic and All-Hazards Preparedness Act*, 2006, Sec. 403 (a) (2) (B).)

Infestation: "A pervasive influx and development of insects or parasites affecting humans, animals, crops and materials." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 46)

Inflow Design Flood (IDF): "The IDF for a dam is the flood hydrograph used in the design or evaluation of a dam and its appurtenant works… In some older documents, this may be referred to as the spillway design flood. The upper limit of the IDF is the PMF. (**USACE**, *Water Resources Policies…*, 1999, 13-3)

Information Collection Plan (ICP): An ICP "is designed to serve as a reference document for the National Response Coordination Center, Regional Response Coordination Centers, and Joint Field Offices when conducting…response operations. The Information Collection Plan is not designed to be used "as is" and must be field modified for maximum benefit. The plan is based on 38 Essential Elements of Information and may be expanded or contracted to meet the information needs of the event….An Information Collection Plan with the current information needs must be distributed for every Operational Period (OPeriod). It is preferable to distribute the plan prior to the start of the next Operational Period to allow providing agencies and

elements the time for planning and acquisition. " (**FEMA**, *Federal Interim Contingency Plan – Predecisional Draft: NMSZ*, December 15, 2007, p. 22)

Information Management: "(Army) The provision of relevant information to the right person at the right time in a usable form to facilitate situational understanding and decision making. It uses procedures and information systems to collect, process, store, display, and disseminate information." (**DA**, *WMD-CST Operations*, December 2007, Glossary 12)

Information Management: "The collection, organization, and control over the structure, processing, and delivery of information from one or more sources and distribution to one or more audiences who have a stake in that information." (**FEMA**, *NIMS* Draft, 2007, p. 152)

Information Security: "Refers to the policies, practices and procedures that are applied to information systems to ensure that data and information that is held within or communicated along those systems is not vulnerable to inappropriate or unauthorized discovery, use, access, export or modification and that the networks that are used to store, process or transmit information are kept operational and secure against unauthorized access." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 36)

Information Sharing and Analysis Center (ISAC): (**DHS,** *NIPP* 2006, p. 101)

Information Sharing Environment (ISE): "In December 2004, Congress passed and the President signed the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA). IRTPA calls for, among other things, the creation of the Information Sharing Environment (ISE) – a trusted partnership among all levels of government, the private sector, and our foreign partners to detect, prevent, disrupt, preempt, and mitigate the effects of terrorism against the territory, people, and interests of the United States through the appropriate exchange of terrorism information." (**White House**, *National Strategy for Homeland Security*, October 2007, p. 49)

Information Sharing Environment Analysis (ISEA): "The Information-Sharing Environment Analysis (ISEA) is a process jurisdictions can use to identify and chart their information-sharing environment as it pertains to standard operating procedures (SOPs), policies, and systems. A comprehensive ISEA can be conducted in coordination between DHS's Office of Grants and Training (G&T) Exercise Division and the Prevention Technical Assistance Program (PTAP). The ISEA should be administered at the appropriate level (e.g., State, local, or regional) prior to an Initial Planning Conference (IPC) of a prevention exercise.

The ISEA is an informative method that seeks to develop the picture of the jurisdiction's prevention landscape by answering the following questions:

- What activities encompass all of the exercising jurisdiction's antiterrorism efforts (e.g., outreach programs, internal initiatives, personnel job responsibilities)?

- What agencies, departments, units, and programs support and lead these activities?

- What are the narrowly defined purposes of each of these organizations' participation in these activities?

- What are the administrative, communication, implementation, and interoperable systems that connect these organizations?

- How are these systems physically built, populated with information, accessed by partners, and trained upon? What is the narrowly defined purpose of each system?" (DHS, *Homeland Security Exercise and Evaluation Program, Volume V: Prevention Exercises* (Draft), December 2005, p. 6)

Information Sharing Environment Analysis (ISEA): "Prior to a prevention exercise, jurisdictions can use this process to identify, describe, and depict their State or local information-sharing environment as it pertains to standard operating procedures (SOPs), policies, and systems." (**FEMA**, *HSEEP Glossary*, 2008)

InfraGard: "InfraGard - a partnership between the Federal Government, an association of businesses, academic institutions, State and local law enforcement agencies, and other participants dedicated to sharing information and intelligence to prevent hostile acts against the United States." (**White House**, *National Strategy for Information Sharing*, October 2007, p. 23)

Infrastructure: "The underlying foundation, basic framework, or interconnecting structural elements that support an organization." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 58)

Infrastructure: "The framework of interdependent networks and systems comprising identifiable industries, institutions, and distribution capabilities that provide a continual flow of goods and services essential to the defense and economic security of the United States, the smooth functioning of government at all levels, or society as a whole." (**DoD**, *CAAP*, 1998)

Infrastructure: "The framework of networked assets that comprise identifiable industries, institutions, or distribution capabilities that enable a continued flow of goods and services. (**DoD**, *Defense Critical Infrastructure Program (DCIP)*, (DODD 3020.40), Aug. 2005, p. 12)

Infrastructure: "The manmade physical systems, assets, projects, and structures, publicly and/or privately owned, that are used by or provide benefit to the public. Examples of infrastructure include utilities, bridges, levees, drinking water systems, electrical systems, communications systems, dams, sewage systems and roads." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 53)

Infrastructure Asset: "Any Infrastructure facility, equipment, service or resource that supports a DoD Component. A Critical Infrastructure Asset is an infrastructure asset deemed essential to DoD operations or the functioning of a Critical Asset." (**DoD**, *CAAP*, 1998)

Infrastructure Asset Assurance: "In the context of CAAP [Critical Asset Assurance Program], assurance is a process of identifying assets deemed critical to the Department of Defense in peacetime, crisis and war; assessing the potential threats to these assets and the capabilities they provide; quantifying the likely non-availability to the Department of Defense under various hazard scenarios; identifying potential actions that can be taken to restore those assets (or

functionality they provide) if they are lost, damaged, corrupted, or compromised; and identifying and recommending options to protect, mitigate, and improve the availability of these Critical Assets to the DoD organizations that own, use, and control them. It includes a range of activities to systematically inform planners and decisionmakers of the probability of availability and quality (e.g., integrity, reliability, confidentiality, survivability, endurability, capacity, adequacy) of specific assets or services under given scenarios; quantifying the likely impact of non-availability to the military operation or defense activity; and identifying and prioritizing options to improve the likelihood of the availability of specific assets or services in specific scenarios. Examples of assurance activities that can improve the likelihood of asset availability include protection (preventing, by whatever means, the disruption or corruption of an asset); mitigation or moderation of the effects of disruption or corruption (by controlling the damage, providing alternative services, and reducing demand on the asset); and planning for and providing timely restoral or recovery. Alternatively, plans can be made to absorb the loss of otherwise anticipated services. Assurance of a Critical Asset is the responsibility of the owning or controlling DoD Component." (**DoD**, *CAAP*, 1998)

Infrastructure Liaison: "The Infrastructure Liaison is assigned by the DHS Office of Infrastructure Protection and advises the Unified Coordination Group [within Joint Field Office] on regionally or nationally significant CIKR issues." (**DHS**, *NRF*, 2008, 64)

Infrastructure Protection Program (IPP) DHS. See Department of Homeland Security, IPP.

Infrastructure Risk Management: "Infrastructure risk management is a process of analyzing trends, threat and capabilities, vulnerabilities, and dependencies of systems and assets supporting the U.S. Army core competencies. The results of this analysis are twofold. The first result is a better understanding of the environment within which the U.S. Army operates; the second provides the basis for the development of risk management strategies. Infrastructure risk management brings to bear all the skills and abilities residing within the U.S. Army, both organizationally and individually, in order to ensure its continued functioning as an institution. This means that the effort is not specifically focused on protection but that it considers protection as one of many methods for mitigating risk resulting from vulnerabilities." (**DOD**, *Infrastructure Risk Management (Army)*, Army Regulation 525-26, June 22, 20040

Inherent Risk: "A risk which it is impossible to be managed or transferred away is said to be an *inherent risk*." (**Risky Thinking**, *Risk Glossary*, 2007)

Initial Action: "The actions taken by those responders first to arrive at an incident site." (**DHS**, *NIMS*, 2004, p. 131)

Initial Isolation Distance: "The "Initial Isolation Distance" is a distance within which all persons should be considered for evacuation in all directions from the actual spill/leak source. It is a distance (radius) which defines a circle (Initial Isolation Zone) within which persons may be exposed to dangerous concentrations upwind of the source and may be exposed to life threatening concentrations downwind of the source. For example, in the case of Compressed gas, toxic, n.o.s., ID No. 1955, Inhalation Hazard Zone A, the isolation distance for small spills is 600

meters, therefore, representing an evacuation circle of 1200 meters in diameter." (**DOT**, *Emergency Response Guidebook*, 2004, p. 2)

Initial Isolation Zone: "The Initial Isolation Zone defines an area SURROUNDING the incident in which persons may be exposed to dangerous (upwind) and life threatening (downwind) concentrations of material." (**DOT**, *Emergency Response Guidebook,* 2004, p. 295)

Initial Nuclear Radiation: "Nuclear radiation (essentially neutrons and gamma rays) emitted from the fireball and the cloud column during the first minute after a nuclear (or atomic) explosion. The time limit of one minute is set, somewhat arbitrarily, as that required for the source of part of the radiations (fission products, etc., in the radioactive could) to attain such a height that only insignificant amounts of radiation reach the earth's surface." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, Glossary, p. 635)

Initial PFO: "For an actual incident, the Secretary may designate a local Federal official as an "initial PFO" until the primary PFO is in place. The initial PFO is accountable for the same responsibilities as the PFO. In certain scenarios, a PFO may be pre-designated by the Secretary of Homeland Security to facilitate Federal domestic incident planning and coordination at the local level outside the context of a specific threat or incident." (**DHS**, *Notice of Change to the National Response Plan* (Version 5.0), May 25, 2006, p. 5)

Initial Planning Conference (IPC): "The IPC is typically the first step in the planning process and lays the *foundation* for the exercise (unless a *C&O Meeting* is held). Its purpose is to gather input from the exercise planning team on the *scope*; design requirements and conditions (such as assumptions and artificialities); *objectives*; level of participation; and *scenario* variables (e.g., location, threat/hazard selection), and *MSEL*. During the IPC, the exercise planning team decides on exercise location, schedule, duration, and other details required to develop exercise documentation. Planning team members should be assigned responsibility for the *tasks* outlined in the conference." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 08)

Initial Response: "Resources initially committed to an incident." (**DHS**, *NIMS*, 2004, p. 131)

Initial Response Phase: "For the purposes of this guidebook, the "initial response phase" is that period following arrival at the scene of an incident during which the presence and/or identification of dangerous goods is confirmed, protective actions and area securement are initiated, and assistance of qualified personnel is requested." (**DOT**, *Emergency Response Guidebook*, 2004, p. 2)

Initial Response Resources (IRR): "Disaster support commodities that may be pre-staged, in anticipation of a catastrophic event, at a Federal facility close to a disaster area for immediate application through an NRP ESF operation. The initial response resources are provided to victims and all levels of government responders immediately after a disaster occurs. They are designed to augment State and local capabilities. DHS/EPR/FEMA Logistics Division stores and maintains critically needed initial response commodities for victims and responders and pre-positions supplies and equipment when required. The initial response resources include supplies (baby food, baby formula, blankets, cots, diapers, meals ready-to-eat, plastic sheeting, tents, and

water) and equipment (emergency generators, industrial ice-makers, mobile kitchen kits, portable potties with service, portable showers, and refrigerated vans)." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, pp. 53-54)

Initial Strategy Implementation Plan (ISIP), Office of Domestic Preparedness.

Inject: "Injects are *MSEL* entries that *controllers* must simulate—including directives, instructions, and decisions. Exercise controllers provide injects to exercise *players* to drive exercise play towards the achievement of *objectives*. Injects can be written, oral, televised, and/or transmitted via any means (e.g., fax, phone, e-mail, voice, radio, or sign). Injects can be contextual or contingency:

- A controller introduces a **contextual inject** to a player to help build the exercise operating environment. For example, if the exercise is designed to test information-sharing capabilities, a MSEL inject can be developed to direct a controller to select an *actor* to portray a suspect. The inject could then instruct the controller to prompt another actor to approach a law enforcement officer and inform him/her that this person was behaving suspiciously.

- A controller verbally introduces a **contingency inject** to a player if players are not performing the actions needed to sustain exercise play. This ensures that play moves forward, as needed, to adequately test performance of activities. For example, if a simulated secondary device is placed at an incident scene during a terrorism response exercise, but is not discovered, a controller may want to prompt an actor to approach a player to say that he/she witnessed suspicious activity close to the device location. This should prompt the discovery of the device by the responder, and result in subsequent execution of the desired notification procedures." (**FEMA**, *HSEEP Glossary*, 2008)

INRP: Initial National Response Plan, 2003.

INS: Incident of National Significance.

INSS: Institute for National Strategic Studies, National Defense University.

Institute for Business and Home Safety (IBHS): "The Institute for Business & Home Safety's mission is to reduce the social and economic effects of natural disasters and other property losses by conducting research and advocating improved construction, maintenance and preparation practices…. The Institute for Business & Home Safety envisions a nation that promotes resiliency from natural disasters and other property losses by developing an infrastructure that is damage-resistant and through personal and corporate action that helps minimize disruption to normal life and work patterns… Our members are insurers and reinsurers that conduct business in the United States or reinsure risks located in the United States. Associate membership is open to all others who support our mission." (**IBHS**, *About the IBHS*, 2008)

Insurance: "The business of insurance centers around the pooling of risks individual participants might not be able to handle on their own. Two main parameters govern the pricing

and availability of insurance: the frequency of the risk event (or the probability of loss), and the size of the loss given the occurrence of the event. In statistical terms, event frequency or probability of loss is modeled as a "loss distribution." The most common distribution is a "normal" one, which has the familiar inverted "U" shape, with a peak in the middle, and "tails" at the two extremes. For routine events, like auto accidents, and most risks to homes (fire and tornadoes), the loss distribution is well known. Much of the probability is centered on the peak in the middle, and the tails at the end – the low frequency events – are spread out rather thinly. Insurers have relatively little difficulty pricing the insurance for such events, since the average loss can be readily predicted (it is generally the "peak" of the loss distribution), and there is not a lot of uncertainty or "variance" around the average.

"The events or risks that create difficulties for insurers are those where the loss distribution is spread out over a large range, reflecting large uncertainties around the likely costs in each year. A further complication is that the shape of the loss distribution itself may be uncertain. In these cases, insurance prices are more difficult to determine, and in some cases, insurers may be reluctant to provide any insurance coverage at all.

"Large natural catastrophes – hurricanes and earthquakes – present these sorts of difficulties. They are difficult to predict and when they occur they can generate claims that substantially deplete, or in a worst case exceed, the accumulated capital that the insurer has built up over time. In technical terms, large mega-CATs therefore pose "timing" risks (the event happens before sufficient premiums have been collected to fund payment of claims) and "ambiguity" risks (the shape of the loss distribution itself is not well known or understood).[77] Terrorism risks are especially difficult for insurers to price and to cover, since it is essentially impossible to statistically model the likelihood of terrorist incidents or the magnitude of losses, should they occur." (**Financial Services Roundtable**, *Nation Unprepared for Mega-Catastrophe*, 2007, 45)

"Higher insurance premiums understandably are unwelcome to homeowners and owners of commercial properties. But to the extent they reflect, or are permitted to reflect, the true risks of future damage from all sorts of catastrophes, then high premiums do serve a socially useful function: they send appropriate signals to individuals and businesses of the social costs of their decisions to locate in hazard-prone areas and to the consequences of investing, or not investing, in various mitigation measures that may be available. Indeed…if the marketplace, rather than regulators, set premiums, the effect will be to lower future disaster losses – suffered by individuals and absorbed by taxpayers through disaster relief – by inducing private actors in invest in mitigation measures, or in some cases to move, to reduce their exposure to catastrophic losses.

"But higher insurance rates also can lead to public policy problems and challenges, and these constitute additional concerns with the current system. As homeowner insurance premiums continue to rise in areas facing above-average catastrophe risks, increasing numbers of

[77] The larger the losses from an insured event, the more significant the timing risk. For example, according to information supplied by the Insurance Information Institute,
homeowners' losses in Louisiana from Katrina wiped out 25 years of insurance premiums collected in the state. In Mississippi, the damages from Katrina wiped out 17

individuals may choose either to drop their insurance or buy policies with considerably higher deductibles. Where this occurs, homeowners are exposed to higher and potentially devastating losses in the event of future catastrophic events. Because the federal government always responds out of humanitarian concern to catastrophes by providing disaster relief to help cover uninsured losses of victims, any reduction in private insurance coverage induced by higher premiums most likely will raise future federal disaster relief costs.

"Any increase in disaster relief payments caused by insufficient insurance coverage leads to a second problem with the current financing system. Unlike insurance premiums, which are paid by homeowners directly exposed to catastrophe risks, disaster relief costs are borne by taxpayers (either currently or more likely in the future, because the costs of relief typically are financed by additional federal borrowing) who live outside the damaged regions. This raises an issue of fairness: why should residents of the Midwest, for example, bear disaster costs incurred by those who choose to live on the coasts? There are also potential efficiency costs. To the extent that homeowners do not insure or under-insure because they expect at least some disaster relief, then they will have less incentive to invest in mitigation.

"Mounting insurance premiums for catastrophe risks, even if actuarially appropriate, lead to a third policy-related concern. As insurance rates rise, so does political pressure on state insurance regulators to suppress them artificially – that is, to not permit insurers to charge premiums based on actuarial experience or the best available scientific evidence, or to not allow insurers to pass on fully the costs of reinsurance. In either of these events, more insurers will find it unprofitable not only to write new policies, but to renew existing ones. The net result will be a reduction in the availability of privately-supplied insurance, aggravating one of the main problems that now exists in coastal communities along the Gulf and East coasts. Further, if insurers cannot charge actuarially and scientifically appropriate premiums, then there is a higher risk of insurer insolvencies in the event of future Mega-CATs (thus placing greater burdens on state guaranty funds, and on the surviving insurers who finance these funds, and their policyholders who most likely will ultimately bear these costs)." (**Financial Services Roundtable**, *Nation Unprepared for Mega-Catastrophe*, 2007, 48-49)

Insurance: "`Insurance' is a practical method of handling a major risk. It is the pooling of potential losses by transferring the risk to insurers that agree to indemnify those they insure against such losses." (**GAO**, *Natural Disasters: Public Policy Options*, Nov 2007, 2)

Insurance, Home Insurance and Disasters: "A homeowner's damage can include roofs, doors, garages, windows, patio decks, swimming pools, outdoor furniture, small boats, automobiles and personal property that may be destroyed due to floods, but what coverage is determined by the type of policy you have. Insurance industry experts note that it's important to obtain both hurricane and flood insurance when it comes to protecting your home.

"Homeowners, renters and business insurance policies have coverage for wind," says Jeanne Salvatore, a spokesperson for III. "Insurance covers a list of disasters, but the biggest is floods and earthquakes, in which case you need a separate policy. If a tree hits your house or a fallen object hits due to a storm, that type of coverage typically comes with your standard homeowner's insurance. If you live down in the Gulf, you should get flood insurance. Since 90 percent of all

natural disasters result in some form of flooding, everybody should ask their agent about it." A homeowner's policy does not protect you for the range of threats that accompany a hurricane or tropical storm. While some homeowner's policies cover wind damage, they will only cover water damage that is the direct result of a burst pipe or rain entering through a damaged area. Home insurance also generally covers fire or vandalism, debris removal and repairs, and cash or replacement value of damaged property as well as additional living expenses when you can't live at home. Flood insurance primarily covers repair and restoration costs to homes and businesses, protecting against losses to buildings and their contents. What it does not cover is the land surrounding them." (*Insure.com*, "Hurricane Gustav Losses at Least $4 Billion," Sep 2, 2008)

Insured Loss: "The term "insured loss" means any loss resulting from a natural disaster that is covered by primary and excess property and casualty insurance by an insurer that can be filed as a claim. Commercial and business property losses include roofing materials (such as tiles, awnings, siding, etc.) and other exterior materials such as windows, signs and piers/docks used for loading and unloading, as well as business losses due to mandatory evacuation." (*Insure.com*, "Hurricane Gustav Losses at Least $4 Billion, September 2, 2008)

Insurrection Act: "The Insurrection Act governs when the President can declare a form of martial law. When the act is invoked, the military, including the National Guard, can carry out law enforcement functions without the consent of a Governor. *Posse comitatus*, a broad law that generally prevents the military from policing within the domestic United States, does not apply when the act is invoked.

Until the "Insurrection Act Rider" was enacted in the fall of 2006, U.S. law focused on enabling the President to invoke the Insurrection Act during violent situations where the states or local communities were resisting lawful orders. The intent of the law, as the title suggests, was to deal with insurrection from individuals or groups. The law was not designed to address other situations, including natural disasters, or attacks from outside the country.

In its original form, the Act has been invoked sparingly -- only ten times in the past five decades. Over the past 40 years, the act has only been invoked with the consent of the governors, using authorities under other sections of the U.S. Code that allow states to invite in federal military forces for police functions.

Under the new language, added to the law in the fall of 2006, the President can invoke the act and declare martial law in cases where public order breaks down as a result of a natural disaster, epidemic, terrorist attack, or under the nebulous term of "other conditions."

This change makes it easier for the President to invoke the Act in cases beyond an insurrection – cases which were not intended under the previous purpose of the Act. With these succinct but sweeping changes, the President now does not have to contact or collaborate with any state agency in taking control of the Guard and injecting federal military forces, to carry out patrols or make arrests. The President has to notify but not explain to Congress that he or she believes that states cannot handle the situation.

The change goes against practical and historical arrangements for handling emergencies, which constitutionally and practically have been headed and handled by governors and local officials. When operating under a governor in a state status, the National Guard is not bound by *posse comitatus* and can integrate seamlessly with local, state, and federal law enforcement agencies and first responders." (**Leahy**, "Insurrection Act," 2007)

Insurrection Act: "The Insurrection Act (enacted in 1807) delegates authority to the President to federalize and deploy the National Guard domestically during an insurrection or civil disturbance (10 U.S.C. Sections 331-335). Section 331 authorizes the President to use federal military forces to suppress an insurrection at the request of a state government. Section 332 authorizes the President to use armed forces in such manner as he deems necessary to enforce the laws or suppress a rebellion. Section 333 authorizes the President to use federal military forces to protect individuals from unlawful actions that obstruct the execution of federal laws or which impede the course of justice under federal laws. Section 333 was enacted to implement the Fourteenth Amendment and does not require the request or consent of the governor of the affected state." (**Lowenberg**, "Statement by Major General Timothy Lowenberg, April 24, 2007)

Insurrection Act Rider of 2006: [Section 1076 of the 2007 National Defense Authorization Act (Public Law 109-364), 2006.]

"In [Congressional] conference, the chairs…[adopted a] provision that simultaneously amended the federal Insurrection Act and authorized the President to take control of the Guard in response to any "natural disaster, epidemic or other serious public emergency, terrorist attack or incident, or other condition in any State or possession of the United States….." Because this was done under an expansion of the President's Insurrection Act powers, military forces operating at the President's direction in such circumstances are not subject to the Posse Comitatus Act and can be used to force compliance with laws by any rules for use of lethal force (RUF) or rules of engagement (ROE) authorized by the President or those acting under his delegated authority. The conference report was agreed to in the House on the same day as its filing (September 29, 2006) and in the Senate the following day (September 30, 2006). Without any hearing or consultation with the governors and without any articulation or justification of need, Section 1076 of the 2007 NDAA changed more than 100 years of well-established and carefully balanced state–federal and civil -military relationships. One hundred years of law and policy were changed without any publicly or privately acknowledged author or proponent of the change. As written, the Act does not require the President to contact, confer or collaborate in any way with a governor before seizing control of a state's National Guard forces. It requires only notice to Congress that the President has taken the action but no explanation, justification or consent of congress is required." (**Lowenberg**, "Statement by Major General Timothy Lowenberg, April 24, 2007).

Insurrection Act Rider of 2006: "The changes made to the "Insurrection Act" by Section 1076 of the National Defense Authorization Act confuse the issue of who commands the Guard during a domestic emergency. By granting the President specific authority to use the Guard during a natural disaster or emergency without the consent of a governor, Section 1076 could result in confusion and an inability to respond to residents' needs. As currently written, it calls into question whether the governor or the President has primary responsibility during a domestic

emergency." (Easley, "Statement of [NC] Governor Michael F. Easley, Before Senate Judiciary Committee, Hearing on "`The Insurrection Act Rider'…", April 24, 2007, p. 4)

Insurrection Act Rider of 2006: "I can assure you that outside parties such as the military and National Guard lack the familiarity with a particular community which is necessary to effectively and efficiently secure its residents during a time of disaster or emergency. To provide a blanket authority to such federal agencies and individuals to conduct domestic law enforcement functions, as the new language of the Insurrection Act does, jeopardizes the likelihood of a timely response and effective assistance to our citizens in times of need." (**Kamatchus**, "Statement of …President, National Sheriffs' Association, Senate Hearing on 'The Insurrection Act Rider'." April 24, 2007, p. 3)

Insurrection Statutes: "The Insurrection Statutes, 10 U.S.C. 331-334. Recognizing that the primary responsibility for protecting life and property and maintaining law and order in the civilian community is vested in State and local governments, the Insurrection Statutes authorize the President to direct the armed forces to enforce the law to suppress insurrections and domestic violence. Military forces may be used to restore order, prevent looting, and engage in other law enforcement activities. Given this specific statutory authority, the Posse Comitatus Act does not apply to such civil disturbance missions." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 70)

Intangible Elements of Emergency Operational Capability: "Those elements of organization, training, experience, and expertise which make up the ability to make effective emergency use of existing tangible assets. Emphasis is on the ability of key local officials to make appropriate decisions in response to a disaster situation and to direct and control coordinated lifesaving operations in emergencies of any type. Included are the organization, training, and exercising needed in areas such as (a) damage assessment capability to determine the effects of peacetime or attack-caused disasters, including what assistance is needed where, and a radiological defense organization adequately staffed, trained, and exercised to identify and analyze radiological hazards resulting from peacetime radiological incidents or enemy attack; (b) operational reporting capability within the disaster area and to the local EOC and the next higher level, including the ability to develop prompt, accurate, and complete information as to the effects of the disaster on the population; and (c) other organization training needed to conduct effective, coordinated operations in major disasters or emergencies, such as emergency medical care, emergency public information, or the operation of the shelter system." (**DCPA**, *On-Site Assistance* (MP 63), 1974, p. 5)

Integrated (Core Principle of Emergency Management): "Integrated: emergency managers ensure unity of effort among all levels of government and all elements of a community." (**EM Roundtable**, 2007, p. 4)

Integrated Emergency Management (IEM): Integrated emergency management (IEM) comprises six related activities: anticipation, assessment, prevention, preparation, response and recovery. United Kingdom, Cabinet Office. (*UK Resilience* (website). June 23, 2008 Update)

Integrated Emergency Management System is an all-hazards concept for improving the program implementation and development of emergency management capabilities. It is based on identifying functional activities needed to handle all types of emergency situations and augmenting them with specific event planning as needed. The IEMS concept recognizes that emergency management activities occur in four separate but related phases and are based on an analysis of potential hazards [Mitigation, Preparedness, Response, and Recovery].

Integrated Emergency Management System (IEMS): A strategy for implementing emergency management activities which builds upon those functions common to preparedness for any type of occurrence and provides for special requirements of individual emergency situations.

Integrated Emergency Management System (IEMS): "FEMA published interim guidance in FY 1984 to introduce State and local jurisdictions to the concepts of hazards analysis, capability assessment, and multi-year development planning…. The interim guidance was developed as part of the initial implementation of an integrated approach to emergency management that would broaden the application of emergency management resources to all hazards to capitalize on the similarities that exist in the planning and response functions of both peacetime and attack emergencies." (**FEMA**, *Hazard Identification, Capability Assessment, and Multi-Year Development Plan* (CPG 1-34), Integrated Emergency Management System, 1985, p. 1-1)

Integrated Emergency Management System (IEMS): "Within FEMA the evolution of the Integrated Emergency Management System (IEMS) is a movement towards an integrated approach to the management of the full spectrum of emergencies, hazards and disasters. IEMS stresses using the resources available to all agencies in dealing with the elements common to all emergency related situations. There is general satisfaction that the under-one-roof concept being pursued here that IEMS is leading to will, if allowed to continue, eventually meet the mandate to create a national capacity to assist state and local governments in dealing with natural and manmade disasters." (**Conner**, *An Assessment of FEMA Today*, 1986)

Integrated Emergency Management System (IEMS) Concept and Goal: "FEMA is continually reassessing the delivery of program funds and technical assistance in an attempt to become more responsive to State and local emergency management needs and to reduce the number of response plans required without sacrificing program integrity. The agency believes that the most effective way to do this is through increased emphasis on developing the common and unique capabilities require to perform specific functions across the full spectrum of hazards, rather than focusing on the requirements of specific hazards. The approach FEMA is taking to accomplish this reorientation is characterized by the Integrated Emergency Management System (IEMS). The goal of the system is to develop and maintain a credible emergency management capability nationwide by integrating activities along functional lines at all levels of government and, to the fullest extent possible, across all hazards.

State and local governments can begin to achieve this goal by (1) determining the hazards and magnitude of risk in a logical, consistent manner; (2) assessing the existing and required capability with respect to those hazards; and (3) establishing realistic local and State-tailored plans that lay out necessary actions for closing the gap between existing and required levels of

capability. These efforts are related and must be undertaken sequentially. The identification of hazards forms the basis for assessing capability and determining the capability shortfall. The shortfall, in turn, leads to preparation of a multi-year development plan. These initial steps are the starting point for integrated emergency management activities on a multihazard, functional basis. " (**FEMA**, *IEMS Process Overview*, 1983, p. 5)

Integrated Emergency Management System (IEMS): "Fiscal Year 1984 marks the initial implementation of the Integrated Emergency Management System at all levels of government nationwide. The material provided by the Federal Emergency Management Agency (FEMA) to support this implementation has been labeled INTERIM GUIDANCE. The word interim should not be interpreted to mean tentative. FEMA is totally committed to the concept and direction exemplified by the IEMA process." (**FEMA**, *IEMS Multi-Year Development Planning*, 1984, Director Louis O. Giuffrida Foreword)

Integrated Emergency Management System (IEMS) 13-Step Process: "FEMA instituted IEMS in 1983. Its objective was to develop and maintain a credible emergency management capability nationwide by integrating activities along functional lines at all levels of government and, to the fullest extent possible, across all hazards. Through a 13-step process, IEMS collected basic information from State and local emergency management organizations on which reasonable and justifiable plans could be made and implemented to increase emergency management capabilities nationwide. The 13 steps in the IEMS process were:

1) Hazards analysis,
2) Capability assessment,
3) Emergency operations plan development,
4) Capability maintenance,
5) Mitigation efforts,
6) Emergency operations,
7) Emergency operations evaluation,
8) Capability determination shortfall,
9) Multi-year development plan for annual increments,
10) Modification of multi-year development plan for annual increments,
11) Estimate of State/local financial resource requirements,
12) Estimate of Federal financial resource requirements, and
13) Annual review of completed work." (**FEMA**, *Multi Hazard Identification and Risk Assessment*, 1997, p. xxii)

[Note: IEMS was replaced by the Capability and Hazard Identification Program (CHIP) in 1989. (**FEMA**, *Multi Hazard Identification and Risk Assessment*, 1997, p. xxii)]

Integrated Exercise: "An exercise conducted on multiple interrelated components of a Business Continuity Plan, typically under simulated operating conditions. Examples of interrelated components may include interdependent departments or interfaced systems." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 58)

Integrated Federal Support Plan (IFSP): Required for all Special Event Assessment Report Events (formerly Special Event Homeland Security events). (**DHS**, *Interagency Planning Workshop*, Nov. 29, 2007, 26)

Integrated Federal Support Plan (IFSP): "For every SEAR Level 1 and 2 event, an IFSP is also prepared. The IFSP is a collaborative effort of the SEWG and is designed to:

- Inform the Secretary and FC of all the Federal activities and support in preparation for and execution of a Special Event

- Facilitate the FC's ability to initially participate within the Unified Coordination Group in case of an incident to support the Secretary's incident management responsibilities

- Educate federal interagency partners on Federal resource application." (**DHS**, *Statement of Rufe*, July 9, 2008, pp. 4-5)

Integrated Financial Management Information System (IFMIS): FEMA's "key financial reporting system, and has several feeder subsystems (budget, procurement, accounting, and other administrative processes and reporting)." (**DHS/OIG**, *IT Management Letter for FY 2005*, 17)

Integrated Planning Guidance (IPG): "The IPG is intended to translate national homeland security strategy and policy into actionable guidance for programming, budgeting, and execution, including investment and acquisition. The IPG starts from the four goals of the *National Homeland Security Strategy* (2007), focuses on the Secretary's goals and priorities as articulated in *One Team, One Mission, Securing the Homeland: U.S. Department of Homeland Security Strategic Plan, Fiscal Years 2008-2013*, and sets forth strategic guidance for development of capabilities in accordance with the *Homeland Security Enterprise Architecture*." (DHS, *Integrated Planning Guidance (IPG) FY 2011-2015* (FOUO Pre-Decisional Draft), Oct 2008, 3)

Integrated Planning System (IPS): "The goal of RCP [Regional Catastrophic Preparedness Grant Program] is to support an integrated planning system that enables regional all-hazard planning for catastrophic events and the development of necessary plans, protocols, and procedures to manage a catastrophic event." (**DHS**, *Fact Sheet FY08 Preparedness Grants*)

Integrated Planning System (IPS): "The IPS is envisioned to be "*a planning process involving three levels of planning: (a) strategic; (b) operational; and (c) tactical. The planning process will result in the development of a family of related planning documents to include strategic guidance statements, strategic plans, concepts of operations, operations plans, and, as appropriate, tactical plans"* (Source: Annex I, HSPD-8). The IPS deliverable is due to the Homeland Security Council (HSC) on 4 February, 2008." (**DHS**, *IPS* (**Ruff)** 8 Jan 2008 Memo.)

Integrated Planning System (IPS): "The IPS provides the process by which we translate our policies, strategies, doctrine, and planning guidance into a family of strategic, operational, and tactical plans. This system applies to all Federal agencies with a role in homeland security. The IPS should also inform the planning activities of state, local and tribal governments, non-governmental organizations, and private sector entities with a role in homeland security. The

Secretary of Homeland Security (Secretary) administers the IPS. The IPS planning process will result in the continuous development and revision of a family of integrated, related planning documents, including strategic guidance statements, strategic plans, concepts of operations, and operations plans." (**DHS**, *IPS Description* **(Ruff)**, v2.2 1-3-2008)

Integrated Planning System (IPS): "The Integrated Planning System is the national planning system used to develop interagency and intergovernmental plans based upon the National Planning Scenarios. Local, tribal, State, regional, and Federal plans are mutually supportive." (**DHS**, *National Response Framework*, January 2008, 28)

Integrated Planning System (IPS): "The IPS fulfills the requirement for a standardized national planning process and integration system as directed by Annex I to HSPD-8. The IPS provides a basic, general framework for developing a series of products leading to a synchronized Federal plan. The IPS is designed to provide a "how to" guide for Federal agencies (as well as State, local, and Tribal governments) for the development of contingency planning documents." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3).* July 3, 2008 copy, p.1-1)

Integrated Planning System (IPS): "The IPS replaces the National Planning and Execution System (NPES)." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3).* July 3, 2008 copy, p.1-2), footnote 7)

Integrated Planning System (IPS): "The Integrated Planning System (IPS) was mandated by the President in Annex I (National Planning) to HSPD-8 (National Preparedness). The system will guide planning across Federal Departments and Agencies, and the integration between Federal scenario-based planning and State / local capabilities-based planning. IPS will provide consistent direction and delineation of authorities, responsibilities and requirements. It was designed on the same planning principles established by the State and Local emergency management community through the Comprehensive Preparedness Guide – 101 (draft) "A Guide for All-Hazard Emergency Operations Planning for State, Territorial, Local and Tribal Governments" to ensure consistency between the Federal and State, Local and Tribal planning structures." The development and management of IPS is handled by the DHS Office of Operations Coordination and Planning. FEMA is participating in the effort and manages several actions associated with its implementation, including CONPLAN development and integration with State/local/Tribal planning (**FEMA**, *Statement of R. David Paulison…Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath – the Federal Response,"* June 26, 2008, p. 2)

Integrated Planning System (IPS): Mandated by Annex I to HSPD-8, entitled "National Planning:" "No later than 2 months after the issuance of this Annex, the Secretary of Homeland Security (Secretary) shall submit to the President for approval…an Integrated Planning System (IPS) that is developed in coordination with the heads of Federal agencies with a role in homeland security and that (a) provides common processes for developing plans, (b) serves to implement phase one of the Homeland Security Management System, and (c) includes the following:

i. national planning doctrine and planning guidance, instruction, and process to ensure consistent planning across the Federal Government;
ii. a mechanism that provides for concept development to identify and analyze the mission and potential courses of action;
iii. a description of the process that allows for plan refinement and proper execution to reflect developments in risk, capabilities, or policies, as well as to incorporate lessons learned from exercises and actual events;
iv. a description of the process that links regional, State, local, and tribal plans, planning cycles, and processes and allows these plans to inform the development of Federal plans;
v. a process for fostering vertical and horizontal integration of Federal, State, local, and tribal plans that allows for State, local, and tribal capability assessments to feed into Federal plans; and
vi. a guide for all-hazards planning, with comprehensive, practical guidance and instruction on fundamental planning principles that can be used at Federal, State, local, and tribal levels to assist the planning process." (**White House**, *Annex I "National Planning*," NSPD-8, December 4, 2007, p. 3)

Integrated Planning System (IPS) Fundamental Concepts: "Understanding of several key fundamental concepts is important to ensure effective use and implementation of the IPS:

1. The IPS has been developed recognizing that homeland security planning is based on coordination and synchronization rather than command and control.
2. The IPS applies to Federal departments and agencies with a role in homeland security when conducting scenario-based planning….
3. While State, local and Tribal governments are not required to adopt this system, they are strongly encouraged to do so….
4. The IPS establishes a process for developing Federal plans….
5. The IPS is not designed to solve every planning problem that exists at the present time….

(**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*. July 3, 2008, pp. iii-v)

Integrated Planning System (IPS) Purpose: "*The purpose of the Integrated Planning System (IPS) is to further enhance the preparedness of the United States by formally establishing a standard and comprehensive approach to national planning.* It is meant to provide guidance for conducting planning in accordance with the Homeland Security Management System (HSMS), described in the *National Strategy for Homeland Security of 2007*. The *Strategy* calls for a national effort to create and transform homeland security principles, systems, structures and institutions across four key pillars of homeland security:

- Prevent and disrupt terrorist attacks;
- Protect the American people, our critical infrastructure, and key resources;
- Respond to and recover from incidents that do occur; and Continue to strengthen the foundation to ensure our long-term success….

By introducing a standardized approach to national homeland security planning, the IPS is an important step in enhancing our national preparedness. As this system is implemented over time, it will align and synchronize our efforts at all levels of government – Federal, State, local and Tribal." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*. July 3, 2008, Foreward, p. iii)

Integrated Planning System (IPS) Purpose: "The IPS lays the initial foundation necessary to actualize the Homeland Security Management System (HSMS). It is a major step in

- establishing common Federal planning doctrine,

- providing a means for synchronizing operations across the spectrum of homeland security operations (prevent, protect, respond and recover) and

- integrating national planning efforts both horizontally across the Federal Government and vertically among Federal, State, local and Tribal entities.

However, further work is necessary to successfully integrate existing Federal guidance, policies, strategies, plans and legislation with the HSMS. To this end, through future refinement of the IPS and the development of other HSPD-8 Annex I deliverables such as the National Homeland Security Plan (NHSP), the Federal Government remains committed to addressing the following key issues in follow-on efforts:

- A mechanism to inform National Homeland Security planning efforts through a U.S. Government-wide risk-based analysis process.

- A process used to update the National Planning Scenarios.

- A standardized methodology to define and develop the required national capabilities and capacity necessary to execute IPS-generated plans.

- A standardized methodology that ensures the success of IPS-generated plans by integrating the Federal budgeting and resourcing processes necessary to execute IPS-generated plans." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*. July 3, 2008, Foreward, pp. iv-v)

Integrated Planning System (IPS) Scope and Applicability: "The IPS applies to Federal departments and agencies (henceforth, "agencies") with a role in homeland security when developing plans based on the National Planning Scenarios. Agencies with existing planning processes are required to ensure their systems are capable of producing plans consistent with plans produced using the IPS. Agencies with no existing planning processes are required to adopt the IPS.

The IPS does not supersede any existing State, local, or Tribal planning processes. However, it is the standard general planning system the Federal government will use for scenario based planning. It is designed to highlight commonalities among most planning processes as planners

often apply the same fundamentals, principles, and processes to developing plans regardless of the objective or desired effect of the plan they are developing. As such, the IPS accommodates many existing planning systems. The aim of the IPS is broad. Existing Federal planning processes can be better aligned through standard planning, shared nomenclature, transparency, and agreed upon allocations of capabilities and common objectives. The intent is not to disrupt ongoing Federal efforts, but to introduce a standardized planning methodology that best supports the Nation's homeland security priorities. The IPS also provides a method for Federal agencies to maintain their NIMS compliance as it is tied to the Preparedness component of NIMS." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*. July 3, 2008 copy, p.1-2)

Integrated Planning System (IPS) Target Audience: "The target audience for the Integrated Planning System (IPS) is, primarily, those Federal departments and agencies that engage in operational activities requiring significant complex planning, especially those reliant on, or responsible for providing, assistance to other agencies and thus reliant on the effective, understandable planning of other agencies. Ultimately, the IPS provides a common Federal planning process composed of three levels of planning: strategic, operational, and tactical. The IPS supports the development of a family of related planning documents. These documents include strategic guidance statements, strategic plans, concept plans, operations plans, and tactical plans. (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*. July 3, 2008 copy, p.1-1)

Integrated Preparedness: "FEMA will be the Department's and U.S. Government's focal point for building our Nation's preparedness to defend and secure the United States of America from terrorist attack, and to respond to and recover from attacks, major disasters, and other emergencies. To accomplish this we will lead the preparedness efforts across the Department, coordinate preparedness efforts across the U.S. government, and partner with State and local governments, tribal organizations, the private sector, and the American people to ensure a Nation prepared. The primary goals of Integrated Preparedness are to:

- Build, sustain, and improve the Nation's capability to *prevent* terrorist attacks in the US.
- Build, sustain, and improve the Nation's capability to *protect* against terrorist attacks in the United States and other catastrophic threats to the Nation.
- Build, sustain, and improve the Nation's capability to *respond* to and *recover* from terrorist attacks, major disasters, and other emergencies, with an emphasis on catastrophic incidents.
- Ensure development of national standards and measures of effectiveness for preparedness.
- Promote and institutionalize mechanisms for information sharing and collaboration to enhance preparedness.
- Foster an adaptive, risk-based approach to preparedness that maintains an all-hazard incident management foundation and focuses on preparedness enhancements for catastrophic threats, where appropriate.
- Demonstrate good stewardship of public resources by identifying opportunities for synergy between terrorism preparedness and non-terrorism preparedness.
- Create, operate and promote a premier learning organization by providing professional development, education and other opportunities to ensure the highest caliber of staff working in a professional environment in support of the goals and objectives of the Department.

- Streamline and speed delivery of preparedness activities and services." (**FEMA**, *Vision for New FEMA*, December 12, 2006, p. 23)

Integrated Preparedness and Response: "*Integrate strategies.* Emergency preparedness must be integrated into the operations of all state agencies. And emergency response must produce a unified strategy that brings together the response capacity of fire, law enforcement, emergency management, public health and public works and other agencies and professions that would be called upon for emergency and catastrophic response. The State's preparedness leader must ensure that each agency in a leadership and supporting capacity for preparedness is up to the job and reliable when called upon. A cabinet-level, interagency council for preparedness can help integrate preparedness throughout the executive branch and across disciplines. The governor's emergency preparedness leader could chair that council." (**Little Hoover Commission**, *Safeguarding the Golden State: Preparing for Catastrophic Events*, 2006, 39)

Integrated Public Alert Warning System (IPAWS): "The Integrated Public Alert and Warning System (IPAWS) is the Nation's next generation public communications and warning capability. FEMA and the IPAWS Program Management Office (PMO) will work with public and private sectors to integrate warning systems to allow the President and authorized officials to effectively address and warn the public and State and local emergency operations centers via phone, cell phone, pagers, computers and other personal communications devices." (**FEMA** *Integrated Public Alert and Warning System (IPAWS)*, 11 Nov 2007).

Integrated Public Alert Warning System (IPAWS): "Pursuant to Executive Order 13407, IPAWS is a comprehensive DHS/FEMA program, in partnership with NOAA, the FCC, and other public and private stakeholders, begun in 2004 to improve public alert and warning. The system will deliver digitally-based alert and warning messages to radio and television stations, personal computers, cell phones and other consumer wireless devices. The System seeks to upgrade EAS, enhance NAWAS, and begin other pilot programs, among other initiatives for current technological options." (**Homeland Security Council**, *NCPIP*, Aug 2007, p. 63)

Integrated Risk Information System (IRIS): "IRIS (Integrated Risk Information System) is a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects. IRIS was initially developed for EPA staff in response to a growing demand for consistent information on substances for use in risk assessments, decision-making and regulatory activities. The information in IRIS is intended for those without extensive training in toxicology, but with some knowledge of health sciences." (**EPA**, *IRIS*, Dec. 2007)

Integrated Systems Approach: "An integrated systems approach recognizes the necessity of cooperation and partnerships between schools and systems outside of the school. These may include law enforcement, social services and mental health providers, the courts, community agencies, families, worksites, religious organizations, and others." (**US Secret Service and DOE**, *Threat Assessment in Schools…*, 2002, p. 36)

Integrated Timeline: "The integrated timeline provides a retrospective timeline of exercise events created during exercise analysis." (**FEMA**, *HSEEP Glossary*, 2008)

Integration: "Integration is the combining of efforts and capabilities from multiple sources to more efficiently and effectively achieve a common purpose. Integration is achieved by appropriately leveraging strengths from available sources to fill gaps and compensate for weaknesses." (**DHS**, "The Homeland Security Challenge, *Draft DHS Pub 1*, Feb 2008, p. 1-10)

Intelligence: "Can be defined slightly differently depending on the agency or organization of focus, but generally speaking can be defined as, the combination of credible information with quality analysis—information that has been evaluated and from which conclusions have been drawn.

- **Raw Intelligence** – Collected information/data that has not been processed, integrated, analyzed, evaluated, and interpreted.
- **Finished Intelligence** – The product resulting from the processing, exploitation, integration, evaluation, analysis and interpretation of collected information & data.
- **Strategic Intelligence** – Information tailored to support the planning and execution of agency-wide intelligence and investigative programs, and the development of long term policies, plans and strategies.
- **Tactical Intelligence** – Information that directly supports on-going operations and investigations." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 36)

Intelligence and Information Sharing and Dissemination Capability Description: "The Intelligence and Information Sharing and Dissemination capability provides necessary tools to enable efficient prevention, protection, response, and recovery activities. Intelligence/ Information Sharing and Dissemination is the multi-jurisdictional, multidisciplinary exchange and dissemination of information and intelligence among the Federal, State, local, and tribal layers of government, the private sector, and citizens. The goal of sharing and dissemination is to facilitate the distribution of relevant, actionable, timely, and preferably declassified or unclassified information and/or intelligence that is updated frequently to the consumers who need it. More simply, the goal is to get the right information to the right people at the right time. An effective intelligence/information sharing and dissemination system will provide durable, reliable, and effective information exchanges (both horizontally and vertically) between those responsible for gathering information and the analysts and consumers of threat-related information. It will also allow for feedback and other necessary communications in addition to the regular flow of information and intelligence." (**DHS**, *TCL,* 2007, p. 69)

Intelligence Gap: "An unanswered question(s) regarding a criminal, cyber or national security issue or threat. (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 36)

Intelligence Information Need: "Describes information and/or intelligence needed to eliminate intelligence gaps." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 37)

Intelligence/Investigations Function (IIF): "The Intelligence/Investigations Function within the Incident Command System (ICS) provides a flexible and scalable framework that will allow for the integration of intelligence and investigations activities and information -- Defined as information that either leads to the detection, prevention, apprehension, and prosecution of criminal activities (or the individual(s) involved) including terrorist incidents or information that

leads to determination of the cause of a given incident (regardless of source) such as public health events or fires with unknown origins." (**FEMA**, *IIFOG Ver. 3*, Feb 2008, 1)

The Intelligence/Investigations Function provides several crucial benefits to an Incident Commander/Unified Command (IC/UC), including, but not limited to the following:

- Provides an IC/UC with classified information, Sensitive Compartmented Information and Sensitive Information in the same manner as these types of information would be made available to Federal government personnel who may be responding to the incident.

    - Allows an IC/UC to initiate Intelligence/Investigations operations concurrently with life safety operations in order to protect evidence at crime and investigative scenes while ensuring that life safety operations remain the primary incident objective (See chart 1, page 4).

    - Allows an IC/UC to determine whether the incident is the result of criminal acts or terrorism, and to maximize efforts to prevent additional criminal activities or terrorism.

      When appropriate, provides a means of linking directly to the Federal Bureau of Investigation's (FBI) Joint Operations Center (JOC) to provide for constant information-sharing to ensure that operational activities undertaken by varying agencies are not in conflict (e.g., crime scene processing, interviewing witnesses, physical surveillance), and affords coordination with other information-sharing entities including Regional Fusion Centers, Regional Intelligence Sharing Consortiums and the National Counter Terrorism Center.

    - Ensures that an IC/UC has the appropriate personnel with the necessary subject matter expertise to conduct the required intelligence/investigative operations. (Ibid, p.3)

Intelligence Personal Radiation Locator (IRPL): "The IPRL emerged from an end user requirement for a next-generation personal radiation detection system similar to the radiation pagers often used by CBP, first responders, and law enforcement officials. IPRL will have sufficient energy resolution and sensitivity to reliably discriminate between NORM, background, and potential threats, and will be used by law enforcement, first responder, counterterrorism, the intelligence community and others in routine activities and surveillance. (**DHS**, *Opening Statement of Vayl Oxford*, March 8, 2007, 7)

Intelligence Reform and Terrorism Prevention Act (IRTPA) of 2004 (P.L.108-458): "…authorizes state and local government officials in the National Capital Region (NCR), and federal officials, to enter into mutual aid agreements for emergency response, preparing for or recovering from an emergency, or training for such activities. The law also specifies that EMAC [Emergency Management Assistance Compact] provisions are not affected by the legislation." (**CRS**, *The Emergency Management Assistance Compact (EMAC): An Overview*, 2008, p. 5)

Intelligence Requirement: "The information and/or intelligence that must be collected and produced to eliminate intelligence gaps. Intelligence requirements convert intelligence gaps and

the associated intelligence information needs into specific instructions regarding what information and/or intelligence to collect, report, produce and disseminate. Intelligence requirements provide the questions that you ask your HUMINT, and the information that you seek from your SIGINT, IMINT and OSINT. They are categorized as either Standing or Ad hoc Intelligence requirements. Standing intelligence requirements are focused on significant intelligence gaps that require a sustained, long term effort to resolve. Ad hoc intelligence requirements normally involve a particular investigation or incident and are resolved in short order." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 37)

Intensity: "…refers to the damage-generating attributes of a hazard. For example, water depth and velocity are commonly used measures of the intensity of a flood. For hurricanes, intensity typically is characterized with the Saffir/Simpson scale, which is based on wind velocity and storm surge depths…The absolute size of an earthquake is given by its Richter magnitude (and other similar magnitude scales), but its effects in specific locations are described by the Modified Mercalli Intensity (MMI) Scale…Earthquake intensity is also ascertained by physical measures such as peak ground acceleration (expressed as a decimal fraction of the force of gravity, e.g., 0.4 g), peak velocity, or spectral response, which characterizes the frequency of the energy content of the seismic wave." (**Deyle, French, Olshansky, and Paterson** 1998, 124.)

Intensity (Earthquake): "A number by which the consequences of an earthquake at a particular place are scaled by its effects on persons, structures, and earth materials. Intensity scales in most common use are the modified Mercalli (MM) and Medvedev, Sponheuer and Karnik (MSK), both having twelve degrees." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 47)

Intensity (Earthquake): "A measure of ground shaking describing the local severity of an earthquake in terms of its effects on the Earth's surface and on humans and their structures. The Modified Mercalli Intensity (MMI) scale, which uses Roman numerals, is one way scientists measure intensity." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Interagency Board (IAB): "A working group established by the NCC [National Continuity Coordinator] to review and recommend validation of potential PMEFs [Primary Mission Essential Functions] submitted by agencies for submission to the NCC for final approval." (**DHS**, *FCD 1*, Nov 2007, P-6)

InterAgency Board for Equipment Standardization and Interoperability (IAB): "IAB, made up of local, state, and federal first responders, is designed to establish and coordinate local, state, and federal standardization, interoperability, compatibility, and responder health and safety to prepare for, train and respond to, mitigate, and recover from any CBRN incident." (**GAO**, *Homeland Security: First Responders*, June 27, 2008, p. 2)

Interagency Centers (Federal Disaster Assistance and Relief Centers): "Experience gained in the disasters of 1955 has contributed a workable plan of relief action that is still under development. It calls for the establishment of task force offices at strategic points in disaster areas. These offices are located to give on-the-spot relief to disaster victims and provide a central point for coordinating the activiites of Federal agencies and the American National Red

Cross. Representatives of the latter and FCDA constitute the staffs." (**FCDA**, *1955 Annual Report*, p. 42)

Interagency Centers (Federal Disaster Assistance and Relief Centers): "In the floods in California in December 1955, FCDA set up Interagency Centers at strategicv points in the disaster areas to coordinate Federal disaster relief. Twehnty-three Federal agencies and the American National Red Cross were represented at the Interagency Centers." (**FCDA**, *1956 Annual Report*, 1957, p. 34)

Interagency Coordinating Committee on Earthquake Hazards Reduction (ICC):
Established under section 5(a) of the Earthquake Hazards Reduction Act of 1977, as amended. "The Interagency Coordinating Committee shall oversee the planning, management, and coordination of the Program [National Earthquake Hazard Reduction Program]." (**Earthquake Hazards Reduction Act of 1977**)

Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities. See Department of Homeland Security, ICCEPID.

Interagency Guidelines for Homeland Security Coordination: "Working in concert forges the vital links between the military instrument of national power and the economic, diplomatic and informational instruments of the US Government. Synchronization and integration of all instruments of national power are required to ensure the successful execution of HS missions. The challenges facing the Nation are increasingly complex and will require the skills and resources of many organizations…. Guidelines for interagency coordination include:
(1) Achieve unity of effort among a mix of federal, state and local agencies.
(2) Identify all agencies and organizations potentially involved in the operation.
(3) Identify key elements of information that various agencies can share.
(4) Establish an interagency hierarchy for the response effort.
(5) Identify appropriate resources of each participant.
(6) Define the objectives of the response effort.
(7) Define the desired end state and exit criteria.
(8) Define courses of action for the supporting effort.
(9) Identify potential obstacles.
(10) Maximize the mission's assets to support long-term goals.
(11) Establish interagency assessment teams.
See JP 3-08, Interagency Coordination During Joint Operations*, and National Security Presidential Directive (NSPD) 1,* Organization of the National Security Council System*, for more information.*" (**JCS/DoD**, *Homeland Security* (JP-3-26), 2005, p. II-15)

Interagency Incident Management Group (IIMG): "The IIMG facilitates headquarters level domestic incident management and coordination. The Secretary of Homeland Security activates the IIMG based on the nature, severity, magnitude, and complexity of the threat or incident. The IIMG is comprised of senior representatives from DHS components, Department of Justice, Department of Defense, Department of State, and other Federal departments and agencies and Non-Governmental Organizations (NGOs), as required. The IIMG membership is flexible and can be tailored to provide the appropriate subject matter expertise required for the specific

incident at hand." (*National Response Plan* (Draft #1), February 25, 2004, p. 21) [Replaced by the Interagency Advisory Council (IAC); (**DHS**, *Notice of Change to the NRP*, May 2006, p. 8)

Interagency Modeling and Atmospheric Assessment Center (IMAAC): "The IMAAC is responsible for the production, coordination, and dissemination of consequence predictions for an airborne hazardous material release. The IMAAC generates the official Federal prediction of atmospheric dispersions and their consequences utilizing the best available resources from the Federal Government. Guided by an interagency memorandum of agreement, several Federal agencies and departments support IMAAC planning and activities." (**DHS**, *Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework* (Draft), Sep 2007, p. 56)

Interagency Modeling and Atmospheric Assessment Center (IMAAC): "The goal of the IMAAC is to enhance our national capability through robust scientific cooperation among federal agencies that incorporates the best practices from federal and other programs as it seeks to improve federal modeling and assessment capabilities….The IMAAC will provide atmospheric hazards predictions in support of the lead federal agency for incidents of national significance. The IMAAC products will be recognized as the single source of federal hazards prediction and will be provided to federal, state, and local emergency responders and other government officials as necessary. The IMAAC will leverage existing federal capabilities and will be responsible for providing accurate, reliable estimates of predicted hazard areas, with associated concentrations, which will serve as the foundation for decisions by the authorized emergency managers." (**MOU**, *IMAAC, DHS*, September 23, 2004, p. 3)

Interagency Payment and Collection (IPAC) System: "The automated intergovernmental information system developed by the Department of the Treasury for billing services and supplies for small agencies. IPAC is the fastest/least costly method for reimbursing other Federal agencies for costs incurred as a result of mission assignments." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 54)

Interagency Threat Assessment and Coordination Group (ITACG): "To improve the coordination of the sharing of terrorism-related information, as well as to implement recommendations developed in response to the President's December 16, 2005, Memorandum to the Heads of Executive Departments and Agencies, we have established an Interagency Threat Assessment and Coordination Group (ITACG) within the NCTC [National Counterterrorism Center]. Participants in this coordination group include DHS, FBI, members of the Intelligence Community, and State and local representatives. The coordination group will enable the development of "federally coordinated" perspectives on intelligence reports and analytical products regarding terrorist threats and related issues that address the needs of State, local, tribal, and, as appropriate, private sector entities." (**White House**, *National Strategy for Information Sharing*, 2007, p. 18)

InterCEP: International Center for Enterprise Preparedness, New York University.

Intercity Bus Security Grants (IBSGP): "IBSGP focuses on vulnerability assessments, security plans and preparedness exercises for explosives and non-conventional threats. Program priorities include facility, driver and vehicle security enhancements; emergency communications

technology; coordinating with local police and emergency responders; training and exercises; and passenger and baggage screening programs in defined UASI service areas. IBSGP provides funding competitively to eligible charter and fixed route intercity bus systems servicing UASI urban areas." (**DHS**, *Fact Sheet FY08 Preparedness Grants*, 1Feb08)

Interim Operating Facility (IOF): "Temporary field facility used by a FEMA-led ERT in the early stages of an incident prior to establishing the JFO. Generally located near the State EOC or the incident site. Site of interaction with State representatives and key ESF agencies, collection and assessment of information, and initiation of assistance programs." (**FEMA**, *IS 292*, 2007, p. 4-9)

Interim Site: "A temporary location used to continue performing business functions after vacating a recovery site and before the original or new home site can be occupied. Move to an interim site may be necessary if ongoing stay at the recovery site is not feasible for the period of time needed or if the recovery site is located far from the normal business site that was impacted by the disaster. An interim site move is planned and scheduled in advance to minimize disruption of business processes; equal care must be given to transferring critical functions from the interim site back to the normal business site. See Alternate Site, Cold Site, Hot site, Internal Hot Site, Recovery Site, Warm site." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 58)

International Board of Standards for Training Performance and Instructions (IBSTPI): "The International Board of Standards for Training, Performance and Instruction (ibstpi®) was founded as a not-for-profit corporation in 1984. ibstpi® has assembled a set of professionals of the highest repute from academia, private industry, military and government that represent diverse regions and cultures. ibstpi® is a leader in setting standards that help to improve individual and organizational performance by articulating and promoting the integrity of professional practice through research, development, definition of competencies and education." (**IBSTPI**, *We Set the Standards!* 2007)

International Code Council (ICC): "The International Code Council, a membership association dedicated to building safety and fire prevention, develops the codes used to construct residential and commercial buildings, including homes and schools. Most U.S. cities, counties and states that adopt codes choose the International Codes developed by the International Code Council…. The International Code Council (ICC) was established in 1994 as a nonprofit organization dedicated to developing a single set of comprehensive and coordinated national model construction codes. The founders of the ICC are Building Officials and Code Administrators International, Inc. (BOCA), International Conference of Building Officials (ICBO), and Southern Building Code Congress International, Inc. (SBCCI). Since the early part of the last century, these nonprofit organizations developed the three separate sets of model codes used throughout the United States. Although regional code development has been effective and responsive to our country's needs, the time came for a single set of codes. The nation's three model code groups responded by creating the International Code Council and by developing codes without regional limitations the International Codes." (**IIC**, *About the ICC*, 2008)

International Decade for Natural Disaster Reduction (1990-1999): "Given the increasing concern about the impact of disasters, the UN General Assembly declared 1990-1999 the

International Decade for Natural Disaster Reduction (IDNDR). Under the theme 'Building a Culture of Prevention', work was done to advance a wider commitment to activities that could reduce the consequences of natural disasters. Initially, IDNDR was influenced by largely scientific and technical interest groups. However, a broader global awareness of the social and economic consequences of natural disasters developed as the decade progressed." (**UN ISDR**, *Living With Risk*, Chapter One, 2002, p. 9)

International Emergency Management Compact (IEMAC): "On the 18th day of July [2000], in Halifax, Nova Scotia, Canada at the 25th Annual Meeting of the New England Governors and Eastern Canadian Premiers, the International Emergency Management Assistance Memorandum of Understanding (IEAMMOU) was signed by all parties. Modeled on EMAC, when ratified by the Legislature of each state, Congress and the comparable levels of government in Canada, this Compact will provide form and structure for mutual aid between the cited international parties. A similar Pacific Northwest Emergency Management Agreement has also been legally ratified and established between the States of Alaska, Washington, Oregon and Idaho and the Canadian Province of British Columbia and the Yukon." (**Libby**, *Statement of*, July 19, 2007, p. 4)

International Emergency Management Compact (IEMAC): "IEMAC is a mutual aid agreement between northeastern states and the eastern Canadian provinces. Signatories to IEMAC have established protocols to share personnel and equipment in a major emergency. IEMAC is known in Canada as the International Emergency Management Assistance Memorandum of Understanding (IEMAMOU). The International Emergency Management Group (IEMG) meets twice a year to review protocols and improve coordination. IEMAC has been used to send Maine DOT crews to Nova Scotia to help clear roads after a blizzard, and to bring search and rescue crews to Aroostook County from New Brunswick." (**Maine Emergency Management Agency**, *IEMAC*, December 7, 2007 Update)

International Standards Organization (ISO): "ISO is a network of the national standards institutes of 157 countries, on the basis of one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system. ISO is a non-governmental organization: its members are not, as is the case in the United Nations system, delegations of national governments. Nevertheless, ISO occupies a special position between the public and private sectors. This is because, on the one hand, many of its member institutes are part of the governmental structure of their countries, or are mandated by their government. On the other hand, other members have their roots uniquely in the private sector, having been set up by national partnerships of industry associations. Therefore, ISO is able to act as a bridging organization in which a consensus can be reached on solutions that meet both the requirements of business and the broader needs of society, such as the needs of stakeholder groups like consumers and users." (**ISO**, *About ISO*, 2007)

International Strategy for Disaster Reduction (ISDR): "Mission: The ISDR aims at building disaster resilient communities by promoting increased awareness of the importance of disaster reduction as an integral component of sustainable development, with the goal of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters." (**UN/ISDR**, *Mission and Objectives*)

Interoperability: "`Interoperability' has two meanings: (1) The ability of systems, personnel, or agencies to provide services to and accept services from other systems, personnel, or agencies, and to use the services so exchanged so that these organizations can operate together effectively; (2) A condition that is realized among electronic-communications operating systems or grids and/or among individual electronic-communications devices, when those systems and/or devices allow the direct, seamless, and satisfactory exchange of information and services between the users of those systems and devices." (**DHS**, *FDC 1*, Nov 2007, P-6)

Interoperability: "We have known since September 11th and if not earlier that interoperability, the ability to talk among different emergency responders and police agencies is critical to effective management of an incident, whether it's a terrorist attack or a natural disaster. What this money is designed to do is give resources to states and cities to allow them to acquire the equipment and do some of the training necessary to make sure they have achieved the kind of interoperability that first responders are entitled to expect. We have begun this process in a disciplined way. The President instructed a little over a year ago that we do a survey with respect to how interoperability was doing in our states and our major urban areas. We completed that survey. We identified where there were shortfalls in equipment or shortfalls in terms of governance or agreements about the rules of the road. And then we began working with states and cities to see how those gaps could be filled. Having identified the gaps and having set forth a path to filling those gaps, the money that is being allocated here is the final piece of the puzzle that needs to be in place to make sure that we do have interoperability across the country….

"Let me conclude by saying this. You know part of the capability that is necessary is not just a matter of equipment. I mean clearly you have got to have the right equipment. But it is also a matter of training and it's a matter of having a common agreement on governance. People have to know what are the frequencies they're going to use or what is the gateway they're going to use to bridge the frequencies. They have to know what language they're going to use. Are they going to use the 10-code language familiar to the police or are they going to use plain English or are they going to use another set of terminology that is used by emergency responders. They have to determine who are the command elements that actually talk to one another. Some of this is a matter that can be addressed by money, but some of it requires frankly getting people to sit down and come to a common vision of the way they're going to organize themselves so they can be interoperable. I want to encourage communities not just to look to the money, but to make sure they're undertaking the hard work of putting together disciplined plans which are the keys to getting interoperability to become a reality….

"The stuff we can fix is this. We can give people money to buy equipment like gateways or things of that sort and to do some training. We can give people an assessment – states and cities – an assessment of where they are. We can give them guidance. Here are the things that states and cities have to do. They have to ultimately reach an agreement on governance. The police department, the fire department, the emergency services unit in a particular city or a particular region have to come to an understanding of the language they will speak to when they communicate with one another. They have to come to an understanding of what the appropriate level of a commander is to have interaction with colleagues in other services. They have to come to an agreement and an understanding of who will manage the gateway or the switch that allows people to talk to each other. That is not something the federal government can make people do.

We do not have the authority to do it and it would be unwise even if we had the authority to try to impose a Washington-based solution. We can put the tools on the table but the training and the willpower to use the tools has to rest with state and local officials." (**DHS Secretary Chertoff**, in: **DHS**, *Transcript Of Press Conference With Secretary Michael Chertoff And Secretary Carlos M. Gutierrez To Announce Nearly $1 Billion In First Responder Communications Grants*," July 18, 2007)

Interoperability & Compatibility: "A principle of the NIMS that holds that systems must be able to work together and should not interfere with one another if the multiple jurisdictions, organizations, and functions that come together under the NIMS are to be effective in domestic incident management. Interoperability and compatibility are achieved through the use of such tools as common communications and data standards, digital data formats, equipment standards, and design standards." (**DHS**, *National Incident Management System*, March 2004, p. 55.)

Interoperable Communications: "Communications that provide the capability to perform essential functions, in conjunction with other agencies, until normal operations can be resumed." (DHS, FED 1, Nov 2007, P-6)

Interoperable Communications Technical Assistance Program (ICTAP) DHS. See Department of Homeland Security, ICTAP.

Interoperable Continuum: "The Interoperability Continuum…outlines critical elements for the planning and implementation of successful public safety and service agencies' communications and interoperability solutions. These elements include governance, standard operating procedures, technology, training and exercises, and usage of interoperable communications. To drive progress along the five elements of the continuum and improve interoperability, public safety and service agency practitioners should observe the following principles:

- Gain leadership commitment from all public safety and services agencies.
- Foster collaboration across all public safety and services agencies for planning and implementation.
- Work with policy makers to gain leadership commitment and resource support for interoperability.
- Plan and budget for ongoing updates to systems, procedures, and documentation.
- Use interoperability solutions on a regular basis." (**DHS**, *TCL*, 2007, p. 39)

Interoperable and Survivable Communications: "To achieve interoperability, we must have compatible equipment, standard operating procedures, planning, mature governance structures, and a collaborative culture that enables all necessary parties to work together seamlessly. Survivable communications infrastructure is even more fundamental. To achieve survivability, our national security and emergency preparedness communications systems must be resilient – either able to withstand destructive forces regardless of cause or sufficiently redundant to suffer damage and remain reliable." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 47)

Interoperable Communications: "Public safety officials generally recognize that effective "interoperable" communications is the ability to talk with whom they want, when they want, when authorized, but not the ability to talk with everyone all of the time." (**GAO**, *Homeland Security: Federal Leadership Needed to Facilitate Interoperable Communications Between First Responders*, September 8, 2004, p. 1)

Interoperable Communications Technical Assistance Program (ICTAP): "…a program designed to enhance interoperable communications among local, State, and Federal emergency responders and public safety officials, and is associated with the Department of Homeland Security Office of Grants and Training's (G&T) Urban Area Security Initiative (UASI) grant program. Each team provides technical assistance in four phases: Phase 1: Define Technical Assistance Requirements; Phase 2: Define Enhancements Needed; Phase 3: Implementation; Phase 4: Continued services as needed until local support is in place." (**DHS**, *TCL*, 2007, p. 38)

Interoperability: "Interoperability is the communication between disciplines and jurisdictions that permits real time exchanges of information on demand, with whoever needs it, when properly authorized, in conformance with the Incident Command System." (**DHS**, *TCL*, 07, 38)

Investigation: "The systematic collection and analysis of information pertaining to factors suspected of contributing to, or having caused, an incident." (**FEMA**, *IIFOG Ver 3 Draft*, 2008, p. 37)

Investigative Scene: "An area or areas where investigative information may be obtained by identifying/interviewing witnesses; performing non-technical and technical canvasses; examining conventional, analog and digital investigative evidence (e.g., documents/text, images/photos, audios, data; utilizing eyewitness identification techniques). Investigative Scenes include:

- Casualty collection areas where ill/injured persons are gathered for emergency triage, treatment, and/or transportation to a health care facility.
- Areas where decontamination operations are conducted.
- Evacuation assembly areas/facilities.
- Shelter-in-place facilities/locations, when appropriate.
- Personnel checkpoints.
- Vehicle roadblocks.
- Traffic Control Points and Access Control Points.
- Family Assistance Centers.
- Mass transit facilities/conveyances.
- Health care facilities, when appropriate." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 37)

Investment Planning Technical Assistance: A DHS service implemented in October 2006. Mission stated as to "seek to bring together a multi-disciplinary and multijurisdictional group of planners and homeland security personnel, and… [to] promote a common approach for investment planning and program management. These TA services…can be delivered either to individual states or regionally. The Investment Planning TA highlights best practices and is intended to guide state and local managers in a planning process for homeland security investments, including:

• Identifying and prioritizing the multiple homeland security program initiatives that may require funding;
• Collaborating with neighboring jurisdictions to discuss regional investments;
• Developing a business case and acquisition strategy that justifies investments;
• Identifying milestones and timelines necessary to meet project requirements; and
• Managing funding challenges related to re-scoping investment plans after funding is awarded." (DHS, *G&T Information Bulletin No. 221, Subject: Investment Planning and Program Management Technical Assistance*, October 2, 2006, p. 1)

Investment Officer: "`Investment Officers' applies to GPD [Grant Programs Division] personnel commonly known as 'Preparedness Officers' located within the Regions and at Headquarters." (FEMA, *Regional-National Preparedness Concept of Operations*, 8Feb2008, 5)

Invocation: "The act by which a Business Continuity Management or Crisis Management process is formally started. The term is often used to refer to the act of using a service such as work area recovery as offered by a commercial or third party provider. See: Activation and Declaration." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, p. 58)

IO: Information Operations. (**DSB**, *Protecting the Homeland, 2000 Summer Study Vol. II*, 2001, p. ES-2)

IOF: Initial Operating Facility. (**DHS**, *TCL*, 2007, p. 209)

IOM: Institute of Medicine, National Academies.

Ionizing Radiation: "Ionizing Radiation. The extent of tissue damage resulting from exposure to ionizing radiation depends on the type of radiation and the dose of exposure experienced.

1. Localized or focal tissue damage. One type of localized injury "beta burns" results when skin is exposed to beta emissions, either an intense source or for a long period. Another type of localized or focal tissue damage may be a result of an internal dose as a result of inhalation or ingestion of a radioactive particle. For example, if the common fission product iodine-131 is inhaled or ingested, it will likely concentrate in the thyroid gland and may cause tissue damage.

2. Acute radiation syndrome (ARS) occurs from whole-body exposure to radiation, not just specific areas of the body . . . the higher the radiation dose and dose rate, the earlier the symptoms will appear and more danger to exposed personnel. Individuals with a combination of injuries, blast and/or thermal combined with radiation exposure, will be more vulnerable to ARS. (*For additional information, see Military Medical Operations Armed Forces Radiobiology Research Institute, http://www.afrri.usuhs.mil.*) (**JCS/DOD**, *CBRNE CM*, 2006, p. I-9)

IP: Improvement Plan. (**FEMA**, IS 120.A, *An Introduction to Exercises*, February 2008, 57)

IP: Infrastructure Protection.

IPAC: Institute for the Protection of American Communities, University of TX at San Antonio.

IPAC: Interagency Payment & Collection System.

IPAWS: Integrated Public Alert Warning System**.** (**HSC**, *NCPIP*, August 2007, p. 63)

IPB: Intelligence Preparation of the Battlefield. (**DA**, *WMD-CST Operations*, 2007, Glossary-4)

IPC: Initial Planning Conference. (**FEMA**, IS-120 A, *An Introduction to Exercises*, 23Jan08, 20)

IPCC: Intergovernmental Panel on Climate Change.

IPET: Interagency Performance Evaluation Taskforce. (**Galloway**, *A CA Challenge*, 2006, 22)

IPG: Incident Planning Guide. (CA EMSA, *Hospital Incident Command System Guidebook*, 2006, p. 103)

IPG: Integrated Planning Guidance. (**DHS**, *Integrated Planning Guidance*, FY 2011-15, 2008)

IPG: Office of Intergovernmental Programs, DHS. (**DHS**, Statement of Rufe, July 9, 2008, 2)

I Plan: National Exercise Program Implementation Plan. (**FEMA**, *Statement of Dennis Schrader*, October 2007, p. 3)

IPOCM: Incident Preparedness and Operational (Business) Continuity Management. (**ISO/PAS** 22399, 2007, p. v)

IPP: Infrastructure Protection Program. (**DHS**, *DHS Awards $445 Million to Secure Nation's Critical Infrastructure*, 10 May 2007)

IRPL: Intelligence Personal Radiation Locator. (**DHS**, *Statement of Vayl Oxford*, 2007, 7)

IPS: Integrated Planning System, DHS.

IR: Increased Readiness. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B-7)

IRC: International Residential Code.

IRIS: Increased Readiness Information System [defunct]. (**OCD**, *Abbreviations*, 1971, p. 2)

IRIS: Integrated Risk Information System. (**EPA**, *IRIS*, December 14, 2007)

IRM: Institute of Risk Management (UK). (**IRM**, *A Risk Management Standard*, 2002, p. 1)

IRR: Initial Response Resources. (**FEMA**, *DHS/FEMA 2008 Hurricane CONPLAN*, 2007, p. 3)

IRTPA: Intelligence Reform and Terrorism Prevention Act of 2004 (P.L.108-458).

IS: Independent Study. (**FEMA**, Emergency Management Institute)

ISAA: Information Sharing Access Agreement. (**DHS**, IPG FY 2011-2015 Draft, 2008, p. 21)

ISAC: Information Sharing and Analysis Center. (**DHS,** *NIPP* 2006, p. 101)

ISDR: International Strategy for Disaster Reduction (United Nations)

ISE: Information Sharing Environment. http://www.ise.gov/

ISEA: Information Sharing Environment Analysis. (**FEMA**, *HSEEP Glossary*, 2008)

ISIP: Initial Strategy Implementation Plan, Office of Domestic Preparedness.

ISO: International Organization for Standardization (International Standards Organization).

ISO 17799: "International Standards Organization standard for information systems security management. The international standard includes best practices for business continuity management as it relates to information technology. The ISO standard is also available as British Standard BS 7799." (**Risky Thinking**, *Risk Glossary*, 2007)

ISO/PAS 22399, Societal Security – Guideline for Incident Preparedness and Operational Continuity Management: "ISO/PAS 22399:2007 provides general guidance for an organization — private, governmental, and nongovernmental organizations — to develop its own specific performance criteria for incident preparedness and operational continuity, and design an appropriate management system. It provides a basis for understanding, developing, and implementing continuity of operations and services within an organization and to provide confidence in business, community, customer, first responder, and organizational interactions. It also enables the organization to measure its resilience in a consistent and recognized manner.

ISO/PAS 22399:2007 is applicable to all sizes of public or private organizations engaged in providing products, processes, or services that wishes to:

- understand the overall context within which the organization operates;
- identify critical objectives;
- understand barriers, risks, and disruptions that may impede critical objectives;
- evaluate residual risk and risk tolerance to understand outcomes of controls and mitigation strategies;
- plan how an organization can continue to achieve its objectives should a disruptive incident occur;
- develop incident and emergency response, continuity response and recovery response procedures;
- define roles and responsibilities, and resources to respond to an incident;
- meet compliance with applicable legal, regulatory, and other requirements;
- provide mutual and community assistance;

- interface with first responders and the media;
- promote a cultural change within the organization that recognizes that risk is inherent in every decision and activity and must be effectively managed.

ISO/PAS 22399:2007 presents the general principles and elements for incident preparedness and operational continuity of an organization. The extent of the application will depend on factors such as the policy of the organization, the nature of its activities, products and services, and the location where and the conditions under which it functions. ISO/PAS 22399:2007, however, excludes specific emergency response activities following an incident, such as disaster relief and social infrastructure recovery that are primarily to be performed by the public sector in accordance with relevant legislation. It is important, however, that coordination with these activities be maintained and documented." (**ISO,** *ISO/PAS 22399*, 2007)

Isobar: "A line represented on a map or chart, connecting points on the surface that have equal barometric pressure over a given time or period." (**UNDHA**, *DM Gloss.*, 1992, 47; cites OFDA)

Isolation: "Definition: Isolation refers to the separation of persons who have a specific infectious illness from those who are healthy and the restriction of their movement to stop the spread of that illness. Isolation allows for the focused delivery of specialized health care to people who are ill, and it protects healthy people from getting sick. In sum, isolation is for treatment of a known illness and quarantine is for observation of possible exposure to an agent." (**DHS**, *Lexicon; Terms and Definitions*, October 19, 2007, p. 21)

Isolation and Quarantine: "Individuals who are ill, exposed, or likely to be exposed are separated, movement is restricted, basic necessities of life are available, and their health is monitored in order to limit the spread of a newly introduced contagious disease (e.g., pandemic influenza). Legal authority for those measures is clearly defined and communicated to all responding agencies and the public. Logistical support is provided to maintain measures until danger of contagion has elapsed." (**DHS**, *National Preparedness Guidelines*, 2007, p. 9)

ISP: Independent Study Program, FEMA Emergency Management Institute.

ISR: Intelligence, Surveillance, and Reconnaissance.

Issues Management Communication: "Issues management communication is similar to crisis communication; however, the organization has the luxury of foreknowledge of the impending crisis and the opportunity, to some extent, to choose the timing of its revelation to stakeholders and the public and reveal the organization's plan to resolve the issue. Again, the organization is central to the event." (**CDC**, *Crisis and Emergency Risk Communication*, 2002, p. 5)

IST: Incident Support Team, US&R, FEMA. (**FEMA**, *US&R IST In Federal Dis. Ops.* 2000)

IST: Inherently Safer Technologies.

IT: Information Technology. (**DHS**, *FCD 1*, Nov. 2007, p. O-2)

ITACG: Interagency Threat Assessment and Coordination Group. (**WH**, *NSIS*, 2007, p. 18)

IV&V: Independent Verification and Validation. (**FEMA NPD** Nov. 7, 2007 Report)

J-2: Intelligence Staff Officer. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

J3: Operations Staff Officer. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

J-3: Operations Staff Officer. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

J-6: Communications Staff Officer. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

JAC: Joint Advisory Committee on Communications Capabilities of Emergency Medical and Public Health Care Facilities.

JAC: Joint Analysis Center, DHS/DNDO. (**DHS**, *DHS Exhibit 300…BY08…JAC*, 12Feb2007)

JACCIS: Joint Analysis Center Collective Information System, DHS/DNDO. (**DHS**, *DHS Exhibit 300 Public Release BY08…JAC*, Feb 12, 2007)

JCAHO: Joint Commission on Accreditation of Healthcare Organizations.

JCDSG: Joint Catastrophic Disaster Steering Group (FEMA, Catastrophic Incident Planning Initiative)

JCOP: Joint Common Operational Picture. (**DOD/Defense Information Systems Agency**, 2003)

JCS: Joint Chiefs of Staff. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

JDOMS: Joint Directorate of Military Support. (**JDOMS**, April 26, 2007)

JFHQ JOC: Joint Force Headquarters Joint Operations Centers. (**Blum**, July 19, 2007, pp. 4-5)

JFHQ-S/State: Joint Force Headquarters – State, National Guard. (**Blum**, July 19, 2007, p. 4)

JFO: Joint Field Office.

JFO CG: Joint Field Office Coordination Group.

JFO CS: Joint Field Office Coordination Staff.

JHSEM: *Journal of Homeland Security and Emergency Management*, GWU.

JHSG: Joint Housing Solutions Group, FEMA. (**FEMA**, *Statement of Cannon*, Dec. 2007, 8)

JIACG: Joint Interagency Coordination Group. (**JCS/DoD**, *Civil Support*, 2007, p. GL-10)

JIC: Joint Information Center. (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, p. 7)

JICC: Joint Intelligence Community Council. (DHS, *Remarks by Secretary of Homeland Security Tom Ridge Before the House Select Committee on Homeland Security*, September 14, 2004)

JIISE: Joint Interagency Intelligence Support Element (**FBI**, *USG Interag. Dom. Ter. CONPLAN*, 2001, A-1)

JIS: Joint Information System. (**HSGAC**, *Katrina: A Nation Still Unprepared*, 2006, p. 632)

JOC: Joint Operations Center. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

Johannesburg Plan of Implementation (World Summit on Sustainable Development, 2002): "In September 2002, representatives of 191 governments gathered in Johannesburg for the World Summit on Sustainable Development (WSSD). The aim was to examine progress in achieving the outcomes of the 1992 Earth Summit, and to reinvigorate global commitment to sustainable development. The result was a 54-page agreement called the *Johannesburg Plan of Implementation* which sets out new commitments and priorities for action on sustainable development in areas as diverse as poverty eradication, health, trade, education, science and technology, regional concerns, natural resources and institutional arrangements. Paragraph 37 (IV. Protecting and managing the natural resource base of economic and social development) states the need for: *An integrated, multi-hazard, inclusive approach to address vulnerability, risk assessment and disaster management, including prevention, mitigation, preparedness, response and recovery, is an essential element of a safer world in the 21st century.* The paragraph has several action points including: (d) *Reduce the risks of flooding and drought in vulnerable countries by, inter alia, promoting* ***wetland and watershed protection*** *and restoration, improved land-use planning, improving and applying more widely techniques and methodologies for assessing the potential adverse effects of climate change on wetlands and, as appropriate, assisting countries that are particularly vulnerable to these effects*." (WWF, Natural Security, 2008, p. 104)

John Warner National Defense Authorization Act (Public Law 109-364, 120 Stat. 2083, Section 1076): "…authorizes the President to employ the armed forces to 'restore public order and enforce the laws of the United States" during a "serious public health emergency…'." (**ACLU**, *Pandemic Preparedness*, 2008, 31)

"President Bush left no doubt as to what he thought should be done regarding this particular issue of federalism [disagreement with Governor Blanco of Louisiana on placement of incident management ultimate authority following Hurricane Katrina]. At a speech two weeks later in New Orleans and at a press conference a few days after that, the president called on Congress to give him the authority to use the military for all forms of disaster response (including natural disasters, and including local law enforcement powers) anywhere in the country anytime he deemed it necessary. He also wanted the ability to use these powers whether the governors of the

affected states asked for it and agreed to it or not (Sanger, 2005)[78]…. In the autumn of 2006, one of the final legislative actions of the out-going Republican-led Congress was a little-notice rider to a defense appropriations bill giving the president just the authority he had requested (P.L. 109-364, § 1076). However, a strong negative reaction to this provision by state governors led to its repeal just over a year later (P. L. 110-181, 2008 National Defense Authorization Act, § 1068)." (**Burton**, "The Constitutional Roots of All-Hazards Policy, Management, and Law," 2008, 8)

Joint Advisory Committee on Communications Capabilities of Emergency Medical and Public Health Care Facilities: "The Joint Advisory Committee on Communications Capabilities of Emergency Medical and Public Health Care Facilities (JAC) was created by Congress to examine the communications capabilities and needs of emergency medical and public health care facilities. Specifically, the Joint Advisory Committee is charged with assessing:
1. Specific communications capabilities and needs of emergency medical and public health care facilities, including the improvement of basic voice, data, and broadband capabilities;
2. Options to accommodate growth of basic and emerging communications services used by emergency medical and public health care facilities; and
3. Options to improve integration of communications systems used by emergency medical and public health care facilities with existing or future emergency communications networks." (JAC, *Report to Congress*, February 4, 2008, p. 4)

Joint Analysis Center (JAC) DHS: "Staffed with personnel from the Departments of Defense, Energy, Homeland Security, the Federal Bureau of Investigation and the Nuclear Regulatory Commission, the Joint Analysis Center (JAC) will provide status tracking for the United States Government Global Nuclear Detection Architecture. With a direct conduit from the alarm source to national assets for spectrum analysis, the Joint Analysis Center will provide 24/7 response for radiological alarm resolution and provide the capability to marry intelligence, illicit activity, and threats with a known radiological architecture that will provide total situational awareness to decision makers. The JAC facilitates the USG Interagency Nuclear Decision Protocols to adjudicate nuclear detection events.

"*Situational Awareness*: The JAC achieves situational awareness through visibility into deployed components, access to information, and historical data. Information is received from deployed radiological/nuclear detection assets, radiological/nuclear related events, the global nuclear detection architecture, the NRC and Agreement State Material Licensing Data, and historical data on all detection events, illicit and legitimate." (**DHS**, *DNDO: JAC*, 2007)

Joint Coordination Group: "The term Unified Coordination Group replaces the term Joint Coordination Group described in the *NRP*. The JFO is led by the Unified Coordination Group, which is comprised of specified senior leaders representing State and Federal interests, and in certain circumstances tribal governments, local jurisdictions, the private sector, or NGOs." (**DHS**, *NRF FAQs*, Jan 2008, 6)

[78] Sanger, David, 2005. Bush Wants to Consider Broadening of Military's Powers During Natural Disasters, *New York Times*, September 27, p. A18.

Joint Field Office (JFO): "The JFO is the primary Federal incident management field structure. The JFO is a temporary Federal facility that provides a central location for the coordination of Federal, State, tribal and local governments and private sector businesses and NGOs with primary responsibility for response and short-term recovery. The JFO structure is organized, staffed and managed in a manner consistent with *NIMS* principles and is led by the Unified Coordination Group. Personnel from Federal and State departments and agencies, other jurisdictional entities and private sector businesses and NGOs may be requested to staff various levels of the JFO, depending on the requirements of the incident. When incidents impact the entire nation or multiple States or localities, multiple JFOs may be established. In these situations, coordination will occur following the principles of Unified Area Command. The physical location of such a coordination entity depends on the situation. As the primary field structure, the JFO provides the organizing structure to integrate diverse Federal authorities and capabilities and coordinate Federal response and recovery operations. For additional information on staffing and procedures, see the JFO Standard Operating Procedure.26 The JFO is internally organized and operated using the concepts and principles of the *NIMS* Incident Command System." (**DHS** *National Response Framework* **(**Comment Draft), 2007, p. 61)

Joint Field Office (JFO): "A temporary Federal facility established locally to provide a central point for Federal, State, local, and tribal executives with responsibility for incident oversight, direction, and/or assistance to effectively coordinate protection, prevention, preparedness, response, and recovery actions. The JFO will combine the traditional functions of the JOC, the FEMA DFO and the JIC within a single Federal facility." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 54)

Joint Field Office (JFO): "The JFO is a multiagency coordination center established at the field level. The JFO is the primary hub for coordination of Federal, state, local, tribal, private, and nongovernmental organizations to manage the CBRNE incident. The JFO is a temporary Federal facility established locally to coordinate operational Federal assistance activities to the affected jurisdiction(s) during incidents of national significance. Other Federal operations centers or operational entities, to include the JTF headquarters, also collocate at the JFO whenever possible. In the event collocation is not practical, the JTF headquarters will be connected virtually to the JFO and will assign liaisons to the JFO to facilitate the coordination of Federal incident management and assistance efforts. There are three organization components within the JFO — the coordination group, coordination staff, and sections." (**JCS/DOD**, *CBRNE CM*, 2006, II-17)

Joint Field Office (JFO): "A temporary Federal facility established locally to provide a central point for Federal, State, local, and tribal executives with responsibility for incident oversight, direction, and/or assistance to effectively coordinate protection, prevention, preparedness, response, and recovery actions. The JFO will combine the traditional functions of the JOC, the FEMA DFO, and the JIC within a single Federal facility." (**USCG**, *IM Handbook*, 2006, Glossary 25-13)

Joint Field Office (JFO) Commander: "Based on the complexity and type of incident, and the anticipated level of DOD resource involvement, DOD may elect to designate a JTF to command Federal (Title 10) military activities in support of the incident objectives. If a JTF is established, consistent with operational requirements, its command and control element will be co-located

with the senior on-scene leadership at the JFO to ensure coordination and unity of effort. The co-location of the JTF command and control element does not replace the requirement for a DCO/Defense Coordinating Element as part of the JFO Unified Coordination Staff. The DCO remains the DOD single point of contact in the JFO for requesting assistance from DOD. The JTF Commander exercises operational control of Federal military personnel and most defense resources in a Federal response. Some DOD entities, such as the U.S. Army Corps of Engineers, may respond under separate established authorities and do not provide support under the operational control of a JTF Commander. Unless federalized, National Guard forces remain under the control of a State Governor. Close coordination between Federal military, other DOD entities, and National Guard forces in a response is critical." (**DHS**, *NRF*, 2008, 68-69)

Joint Field Office (JFO) Coordination Group. "The JFO Coordination Group directs the JFO's activities. The following officials typically comprise the group.

- **Principal Federal Official (PFO).**
- **Federal Coordinating Officer (FCO).**
- **Federal Resource Coordinator (FRC).**
- **Senior Federal Officials (SFOs).**
- **Senior Federal Law Enforcement Official (SFLEO).**
- **State/Local/Tribal Official(s).**" (DHS, 2007)

Joint Field Office Coordination Group: "Consists of the PFO, the Federal coordinating officer (FCO), the state coordinating officer (SCO), other senior Federal officials such as the senior Federal law enforcement officer, and possibly other nongovernmental and private-sector representatives. If a JTF is established by the CCDR [Combatant Commander], consistent with operational requirements, its C2 [Command and Control] element will be collocated with the PFO at the JFO to ensure coordination and unity of effort. The PFO has no direct authority over other officials, but represents the Secretary of Homeland Security as the lead Federal official. The PFO ensures overall coordination of Federal domestic incident management and resource allocation activities; ensures seamless integration of Federal activities in support of and in coordination with state, local, and tribal requirements; provides strategic guidance to Federal entities; facilitates interagency conflict resolution as necessary; serves as a primary point of contact for Federal interface with state, local, and tribal senior elected/appointed officials, the media, and the private sector; provides real-time incident information to the Secretary of Homeland Security through the NOC and the IAC as required; coordinates response resource needs between multiple incidents as necessary or as directed by the Secretary of Homeland Security; coordinates the overall Federal public communications strategy locally to ensure consistency of Federal interagency communications to the public; and ensures that adequate connectivity is maintained between the JFO and the NOC; local, county, state, and regional EOCs; nongovernmental EOCs and relevant elements of the private sector. The FCO conducts an initial appraisal of the types of assistance most urgently needed; coordinates the timely delivery of Federal assistance to affected state, local, and tribal governments and disaster victims; supports the PFO; administers the financial aspects of assistance authorized under the Stafford Act; works in partnership with the SCO; and takes other action consistent with the authority delegated to him or her as deemed necessary to assist local citizens and public officials in promptly obtaining assistance to which they are entitled. The SCO is the state's counterpart to

the FCO, managing the state's incident management programs and activities." (**JCS/DOD**, *CBRNE Consequence Management* (JP 3-41), 2006, p. II-19) [Note: See "Joint Field Office Unified Coordination Group,"]

Joint Field Office Coordination Staff: "The JFO coordination staff provides specialized assistance to the JFO. The DCO is the single point of contact from DOD in the JFO for civil support. The defense coordinating element (DCE) is the DCO's staff. The DCO with the DCE processes requirements for military support; forwards mission assignments to the appropriate military organizations through DOD channels; and assigns military liaisons to activated ESFs, as appropriate. The collocation of the JTF C2 element does not replace the requirement for a DCO/DCE as part of the JFO coordination staff and it will not coordinate requests for assistance for DOD." (JCS/DOD, CBRNE Consequence Management (JP 3-41), 2006, p. II-19)

Joint Field Office Sections: "JFO sections are established, as necessary, to meet the essential management functions of operations, planning, logistics and finance/administration.

a. The *operations section* coordinates operational support to on-scene incident management efforts. Branches may be added or deleted as required, depending on the nature of the incident. The operations section also is responsible for coordination with other Federal command posts that may be established to support incident management activities. The 15 ESFs provide staff and resources to the sections of the JFO, principally the operations section, consistent with the purpose and scope defined in the NRP annexes. A joint force conducting CBRNE CM should be aware of their activities through the DCO. The joint force conducting CBRNE CM will not typically be involved with law enforcement activities…

b. The *planning section* collects, evaluates, disseminates, and uses information regarding the threat or incident and the status of Federal resources. It is also responsible for preparing and documenting Federal support actions, and developing strategic, contingency, long-term, and other plans related to the threat or incident, as needed. The planning section provides current information to the JFO coordination group to ensure situational awareness, determine cascading effects, identify national implications, and determine specific areas of interest requiring long-term attention. The planning section also provides technical and scientific expertise.

c. The *logistics section* coordinates the logistic response of the Federal Government to the entire disaster area and coordinates closely with the state and local officials for Federal supplies and equipment; resource ordering; delivery of equipment, supplies, and services to the JFO and other field locations; and transportation coordination and fleet management services.

d. The *finance/administration section* is responsible for the financial management, monitoring, and tracking of all Federal costs relating to the incident and the functioning of the JFO while adhering to all Federal laws, acts, and regulations." (**JCS/DOD**, *CBRNE CM*, 2006, II-19-21)

Joint Field Office Unified Coordination Group: "The Joint Field Office Unified Coordination Group—consisting of the Principal Federal Official (if designated), the Federal Coordinating Officer, the State Coordinating Officer, and the DHS Infrastructure Protection senior Federal official—serves as the Unified Command for all disaster operations in the respective states. All

State requests for Federal support are staffed and coordinated through the Operations Section for this group. Additionally, this group is charged with the integration and coordination of all Federal support—the Stafford Act as well as the unique authorities of other Federal departments — involved in the disaster. The Joint Field Office Unified Coordination Group, through the Joint Field Office, also provides directional control for all Federal field activities including but not limited to: Federal Operational Staging Areas, Disaster Recovery Centers, the United States Army Corps of Engineers (USACE), and other departments' field operations. Based on the circumstances, the Joint Field Offices may establish one or more Area Field Offices (AFOs) to provide responsive support. All Area Field Offices will report directly to their respective Joint Field Offices." (F**EMA**, *Federal Interim Contingency Plan – Predecisional Draft: NMSZ*, December 15, 2007, pp. 21-22)

Joint Force Headquarters Joint Operations Centers (JFHQ JOC): "The JOC is a network composed of the National Guard Bureau JOC, located in Arlington, Virginia and a separate JOC in each of the 54 States and Territories. The JFHQ JOC serves as the primary entity for coordinating, facilitating, and synchronizing efforts in support of their states, information requirements of the National Guard Bureau and customers at the Federal level during natural disasters, National Special Security Events (NSSE), exercises and domestic activities." (**Blum**, July 19, 2007, p. 5)

Joint Force Headquarters – State (National Guard): "JFHQ-State is a joint command and control entity in each State and territory. It is integrated into national consequence management and contingency planning structures. JFHQs provide situational updates (common operating picture) information to national level headquarters before and during any contingency operation and Joint Reception, Staging, and Onward Movements, and Integration (JRSOI) for all inbound military forces…. created in times of emergency by the Joint Force Headquarters." (**Blum**, July 19, 2007, p. 4)

Joint Housing Solutions Group (JHSG): "In 2006, FEMA…launched a Joint Housing Solutions Group (JHSG) charged with identifying viable alternatives to FEMA travel trailers and manufactured homes, and recommending improvements for conducting disaster housing operations. The Joint Housing Solutions Group has developed housing evaluation criteria, a Housing Assessment Tool, and screened, tested and rated more than 100 alternative housing providers and their products ranging from panelized, manufactured, and modular homes to shipping container prototypes. In October 2007, the JHSG released a one year report to identify the milestones of the JHSG Steering Committee. The next step is to pilot test select housing units in order to gauge field performance." (**FEMA**, *Statement of Glenn Cannon*, Dec. 4, 2007, p. 8)

Joint Information Center (JIC): "In order to coordinate the release of emergency information and other public affairs functions, a State or tribal government may establish a Joint Information Center (JIC), a physical location from which external affairs professionals from all the organizations involved in an incident work together. The JIC serves as a focal point for coordinated and timely release of incident-related information to the public and the media." (**DHS** *National Response Framework* (Comment Draft), 2007, p. 49)

Joint Information Center (JIC): "A central point of contact for all news media near the scene of a large-scale disaster. News media representatives are kept informed of activities and events by public information officials who represent all participating Federal, State, and local agencies that are collocated at the JIC." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), 1996, pp. GLO 7-8)

Joint Information Center (JIC): "A joint information center is a physical location where public affairs professionals from organizations involved in incident management activities can colocate to perform critical emergency information, crisis communications, and public affairs functions. It is important for the center to have the most current and accurate information regarding incident management activities at all times. The center provides the organizational structure for coordinating and disseminating official information. Centers should be established at each level of incident management, as required." (**NFPA 1600**, 2007, p. 19)

Joint Information Center (JIC): "A facility established within or near the ICP where the PIO and staff can coordinate and provide information on the incident to the public, media, and other agencies. The JIC is normally staffed with representation from the FOSC, SOSC, and FO." (**USCG**, *IM Handbook*, 2006, Glossary 25-13)

Joint Information Center (JIC) Types:

- Incident
- Virtual
- Satellite
- Area
- Support
- National (**FEMA**, *Basic Guidance for PIOs (FEMA 517)*, Nov 2007, p. 16)

Joint Information System (JIS): "The JIS provides the mechanism to organize, integrate, and coordinate information to ensure timely, accurate, accessible, and consistent messaging across multiple jurisdictions and/or disciplines, including the private sector and NGOs. It includes the plans, protocols, procedures, and structures used to provide information to:

- general public;
- disaster victims;
- affected jurisdictions;
- elected officials;
- community leaders;
- private sector;
- media;
- NGOs (e.g., American Red Cross);
- response and recovery organizations (e.g., urban search and rescue, utilities);
- volunteer groups (e.g., CERT, VOAD);
- international interests (e.g., international media and donations); and
- other impacted groups." (**FEMA 517**, *Basic Guidance for PIOs*, Nov 2007, 14)

Joint Information System (JIS): **"**Integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, accurate, accessible, timely,

and complete information during crisis or incident operations. The mission of the JIS is to provide a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies on behalf of the IC; advising the IC concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 153)

Joint Information System (JIS): "Integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during a crisis or incident operations." (**USCG**, *IM Handbook*, 2006, Glossary 25-13/14)

Joint Interagency Coordination Group (JIACG): "In 2002, the National Security Advisor and Secretary of Defense directed that each combatant command establish a Joint Interagency Coordination Group (JIACG) in order to enhance interdepartmental coordination. As USNORTHCOM became a reality, the plankholders saw that the JIACG concept could be invaluable in building and maintaining relationships with Federal departments and agencies as well as state and local governments, nongovernmental organizations, and the private sector, all key players in homeland defense and security. The bicommand leadership established the Interagency Coordination Directorate as a primary staff directorate, "dual-hatted" to both NORAD and USNORTHCOM, to facilitate the interagency coordination process across the commands." (**Castle,** "Supporting Homeland Partners," *JFQ*, Issue 8, 1st Qtr. 2008, p. 42)

Joint Interagency Coordination Group (JIACG): "An Interagency staff group that establishes regular, timely, and collaborative working relationships between civilian and military operational planners. Composed of US Government civilian and military experts accredited to the combatant commander and tailored to meet the requirements of a supported joint force commander, the joint interagency coordination group provides the joint force commander with the capability to coordinate with other US Government civilian agencies and departments. Also called JIACG." (**JCS/DoD**, *Civil Support* (JP 3-28), 2007, p. GL-10)

Joint Interagency Intelligence Support Element (JIISE) "The JIISE is an interagency intelligence component designed to fuse intelligence information from the various agencies participating in a response to a WMD threat or incident within an FBI JOC. The JIISE is an expanded version of the investigative/intelligence component which is part of the standardized FBI command post structure. The JIISE manages five functions including: security, collections management, current intelligence, exploitation, and dissemination." (**FBI**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, B-3)

Joint Logistics Advisory Council Strategy: "DHS/FEMA Headquarters Logistics in coordination with appropriate ESFs will selectively employ Joint Advisory Councils consisting of public/private-sector partnerships to establish and maintain robust incident supply chains. For select commodities, such as difficult-to-source and/or life-saving/life-sustaining supplies, DHS/FEMA Headquarters Logistics will solicit private-sector input on better ways to source and deliver materiel and services." (**DHS**, *NRF Logistics Management Support Annex*, 2007, p. 7)

Joint Operations Center (JOC). "The JOC is an interagency command post established by the FBI to manage terrorist threats or incidents and investigative and intelligence activities. The JOC coordinates the necessary interagency law enforcement assets required to prepare for, respond to and resolve the threat or incident with State, tribal and local law enforcement agencies." (**DHS** *NRF Comment Draft*, 2007, p. 62; see, also, **DHS**, NRF, 2008, 65))

Joint Operations Center (JOC): "The JOC is the focal point for all Federal investigative law enforcement activities during a terrorist or potential terrorist incident or any other significant criminal incident, and is managed by the SFLEO. The JOC becomes a component of the JFO when the NRP is activated." (**USCG**, *IM Handbook*, 2006, Glossary 25-14)

Joint Operations Planning and Execution System (JOPES): "The Joint Operations Planning and Execution System (JOPES) is the Department of Defense's (DoD's) principal means for translating national security policy decisions into military plans and operations." (**USJFCOM**, *Joint Operation Planning and Execution System*)

Joint Reception, Staging, and Onward Movements, and Integration (JRSOI): "In very simplistic terms, JRSOI is simply a selection of predetermined sites (distribution points, airports etc.) and routes for moving supplies and personnel into affected areas." (**Blum**, 19July2007, 10)

Joint Regional Information Exchange System (JRIES): "…originally developed by state and local authorities in partnership with the federal government…this system allows all states and major urban areas to collect and disseminate information between federal, state, and local agencies involved in combating terrorism." (**DHS**, *DHS Implements Information Exchange System for G-8 Summit Events*, May 28, 2004)

"JRIES is a counterterrorism communications program founded and managed in conjunction with state and local governments, counterterrorism authorities, and law enforcement agencies. At the request of state and local partners, this platform has been adopted by Homeland Security as the system of choice for information sharing between DHS partners as part of the Homeland Security Information Network. JRIES provides real-time collaboration and advanced analytic capabilities." (**DHS**, *Homeland Security Launches Expansion of Information Exchange System to States and Major Cities*, February 24, 2004)

Joint Task Force (JTF). "Based on the magnitude, type of incident and anticipated 1 level of resource involvement, the combatant commander may utilize a JTF to command Federal military forces in support of the incident response. If a JTF is established, consistent with operational requirements, its command and control element will be co-located with the senior DHS on-scene leader at the JFO to ensure coordination and unity of effort. The co-location of the JTF command and control element does not replace the requirement for a Defense Coordinating Officer (DCO)/Defense Coordinating Element as part of the JFO Unified Coordination Staff. The DCO remains the Department of Defense (DOD) single point of contact in the JFO for requesting assistance from DOD." (**DHS**, *NRF Comment Draft*, September 2007, p. 63)

Joint Task Force Civil Support (JTF-CS): "JTF-CS is a standing JTF assigned to CDRUSNORTHCOM dedicated to planning and integrating DOD domestic CBRNE consequence management support for incidents or accidents. When directed by SecDef,

CDRUSNORTHCOM [Commander NORTHCOM] deploys JTF-CS as a CBRNE CM headquarters to establish C2 [Command and Control] of designated DOD forces at the CBRNE incident site and to provide CS to save lives, prevent injury, and provide temporary critical life support. If the CBRNE event occurs outside the USNORTHCOM AOR, JTF-CS may be attached to CDRUSPACOM or CDRUSSOUTHCOM to provide domestic CBRNE support." (**JCS/DoD**, *Civil Support*, 2007, p. II-9)

Joint Task Force (JTF) Commander. "Based on the complexity and type of incident, and the anticipated level of DOD resource involvement, DOD may elect to designate a JTF to command Federal (Title 10) military activities in support of the incident objectives. If a JTF is established, consistent with DOD operational requirements, its command and control element will establish effective liaison with the JFO to ensure coordination and unity of effort. The JTF Commander exercises operational control of all allocated DOD resources (excluding U.S. Army Corps of Engineers resources). National Guard forces operating under a Governor's control are not DOD-controlled resources. The use of a JTF does not replace the requirement for a Defense Coordinating Officer as part of the JFO Coordination Staff. The JTF does not coordinate requests for assistance from DOD." (**DHS**, *NRF Comment Draft*, September 2007, p. 65)

Joint Task Force Consequence Management: "…Joint Task Force Consequence Management East (headquartered at Fort Gillem, Georgia) and Joint Task Force Consequence Management West (headquartered at Fort Sam Houston, Texas), is a deployable, standing task force of 160 assigned military personnel led by a two-star Army National Guard general officer serving on active duty, who is under the command of the U.S. Northern Command (USNORTHCOM) commander. The mission of JTF-CS is to deploy, when directed, to a CBRNE incident site to exercise command and control of assigned Federal military forces to support civil authorities." (**DoD**, *Statement of Verga*, July 19, 2007, pp. 5-6)

Joint Terrorism Task Forces (JTTF): "Joint Terrorism Task Forces (JTTFs) are small cells of highly trained, locally based, passionately committed investigators, analysts, linguists, SWAT experts, and other specialists from dozens of U.S. law enforcement and intelligence agencies. It is a multi-agency effort led by the Justice Department and FBI designed to combine the resources of federal, state, and local law enforcement. The National JTTF was established in July 2002 to serve as a coordinating mechanism with the FBI's partners. Some 40 agencies are now represented in the NJTTF, which has become a focal point for information sharing and the management of large-scale projects that involve multiple partners." (**DOJ**, *JTTF*, 2006)

Joint Training System (JTS) JCS: "The development and promulgation of the Joint Training System in 1994, by Chairman of the Joint Chiefs of Staff, General Colin Powell, was then and arguably still remains **the** *re-engineering joint training* effort within the Department of Defense. Even-though General Powell's successors, including the current Chairman, have not used the "re-engineering" phrase – their intent has been consistent and clearly focused precisely on what some have now termed *re-engineering joint training*. Department of Defense (DoD) Transformation Policy, and its center-piece, Training Transformation (T2), has not replaced the re-engineering joint training objective. Instead, the T2 Policy crystallized the re-engineering focus and accelerated the impetus for cultural change across the Department. Now, the Joint Training System provides the basis for training implementation throughout the entire Department

of Defense. The Secretary of Defense directed that, "The Joint Training System will be refined, fully implemented, and used to manage training throughout the Department.[79]

"Evolving the joint preparation of the Armed Forces of the United States remains the sole overarching objective for all processes that define the Joint Training System (JTS). The focus for the process has transitioned from a historical *events-based* approach to a *requirements-based* framework for affecting the joint training of individuals, staffs, units, and forces. The Chairman of the Joint Chiefs of Staff (CJCS), as well as the Service Chiefs, combatant commanders and other senior officials, determined that the new world order's challenges demanded breaking the paradigm of *event-based training* that had predominantly defined joint preparation before the first Gulf War. The implementation of the Joint Training System in 1998 marked the first training cycle in which combatant command joint training events were accomplished based on the requirements identified, and a command Joint Training Plan developed, using the processes of the Joint Training System.

"The core elements of the Joint Training System -- mission capability-based requirements, a common joint language, performance-based evaluation against pre-determined mission-oriented standards, and readiness assessment more clearly linked to mission requirements -- have since not only been embraced within the training environment but have been adopted by many other governmental entities and functionalities. They are now at the heart of preparation and readiness assessment policy throughout the Department of Defense and beyond. This holistic, warfighting requirements-based approach not only supports the CJCS intent for re-engineering joint training but affirms its effectiveness." (**JCS**, DoD, *Required Training Capabilities for Joint Force Commanders "Re-engineering Joint Training" Study*, Joint Staff J7, Joint Training Div. Draft)

JOPES: Joint Operations Planning and Execution System, DOD.

JRC: Joint Requirements Council, DHS.

JRIES: Joint Regional Information Exchange System. (**DHS**, *Statement of Roger Rufe,* 11Sep07, p. 4)

JRSOI: Joint Reception, Staging, and Onward Movements, and Integration. (**Blum**, 19July07, 4)

JSETA: Joint Special Event Threat Assessments. (**DHS**, *Statement of Rufe*, July 9, 2008, 5)

JTF: Joint Task Force. (**HSGAC**, *Katrina: A Nation Still Unprepared*, 2006, p. 632)

JTF-AK: Joint Task Force Alaska. (**JCS/DOD**, *CBRNE CM*, 2006, II-10)

JTF C2: Joint Task Force Command & Control Element. (JCS/DOD, CBRNE CM, 2006, II-19)

JTF-CM: Joint Task Force-Consequence Management (East and West). (**DoD**, *Verga*, 2007, 5)

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[79] Strategic Plan for Transforming DoD Training, Office of the Under Secretary of Defense for Personnel and Readiness, Director, Readiness and Training Policy and Programs, 1 March 2002

JTF-CS: Joint Task Force-Civil Support. (**JCS/DOD**, *CBRNE CM*, 2006, II-10)

JTF-NCR: **J**oint Task Force-National Capital Region. (**JCS/DOD**, *CBRNE CM*, 2006, II-10)

JTF-S: Joint Task Force-State. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, 2-4)

JTIF: Joint Terrorism Task Force. (**DHS**, *National Infrastructure Protection Plan*, 2006, p. 101)

JUA: Florida Residential Property and Casualty Joint Underwriting Association. (**GAO**, Nov 2007)

JumpSTART: "The JumpSTART Pediatric MCI Triage Tool is…[an] objective tool developed specifically for the triage of children in the multicasualty/disaster setting. JumpSTART was developed in 1995 to parallel the structure of the START system, the adult MCI triage tool most commonly used in the United States and adopted in many countries around the world. JumpSTART's objectives are:

1) to optimize the primary triage of injured children in the MCI setting
2) to enhance the effectiveness of resource allocation for *all* MCI victims
3) to reduce the emotional burden on triage personnel who may have to make rapid life-or-death decisions about injured children in chaotic circumstances

JumpSTART provides an objective framework that helps to assure that injured children are triaged by responders using their heads instead of their hearts, thus reducing overtriage that might siphon resources from other patients who need them more and result in physical and emotional trauma to children from unnecessary painful procedures and separation from loved ones. Undertriage is addressed by recognizing the key differences between adult and pediatric physiology and using appropriate pediatric physiologic parameters at decision points.

JumpSTART has rapidly gained acceptance by EMS agencies and hospitals throughout the US and Canada and is being taught in numerous countries internationally. The tool has been recognized for use by groups such as the US National Disaster Medical System's federal medical response teams and EMS providers in the National Park Service. JumpSTART is referenced in numerous EMS and disaster texts and has been incorporated into courses such as Pediatric Disaster Life Support (PDLS) and Advanced Pediatric Life Support (APLS).

…JumpSTART was designed for use in disaster/multicasualty settings, not for daily EMS or hospital triage. The triage philosophies in the two settings are different and require different guidelines… JumpSTART is also intended for the triage of children with acute injuries and may not be appropriate for the primary triage of children with medical illnesses in a disaster setting. Note also that no MCI triage tool, including START and JumpSTART, has been clinically or scientifically validated at the time of publication of this website." (**Romig**, *The JumpSTART Pediatric MCI Triage Tool,* August 7, 2006 Revision)

Justice: "Preparation for a potential pandemic (or any disaster) should ensure a fair distribution of the benefits and burdens of precautions and responses and equal respect for the dignity and autonomy of each individual." (**ACLA**, *Pandemic Preparedness*, 2008, 7)

JWARN: Joint Warning and Reporting Network. (**DA**, *WMD-CST Operations*, 2007, Glossary-4)

Kaizen: Japanese word meaning "continuous improvement." (**WY Environmental Quality Dept**.)

Key Resources: "As defied in the Homeland Security Act [2002], 'key resources' are publicly or privately controlled resources essential to the minimal operations of the economy and government." (**DHS**, *National Infrastructure Protection Plan*, 2006, p. 104)

KI: Potassium Iodide.

Kiloton: Thousand tons of TNT. (**Glasstone**, *The Effects of Nuclear Weapons*, 1977, 2)

Kind (NIMS Resource Typing): "Kind refers to broad classes that characterize like resources, such as teams, personnel, equipment, supplies, vehicles, and aircraft." (FEMA, *National Incident Management System* (FEMA 501/Draft). Washington, DC: August 2007, p. 41)

Kirkpatrick Learning and Training Evaluation Model: "The four levels of Kirkpatrick's evaluation model essentially measure:

- reaction of student - what they thought and felt about the training
- learning - the resulting increase in knowledge or capability
- behaviour - extent of behaviour and capability improvement and implementation/application
- results - the effects on the business or environment resulting from the trainee's performance." (**Businessballs.com**. "Kirkpatrick's Learning and Training Evaluation Theory")

Knowledge Structure: "Three types of knowledge structures are declarative, procedural, and strategic. *Declarative knowledge* tells us why things work the way they do, or that an object or thing has a particular name or location. It includes information about the concepts and elements in the domain and the relationships between them. *Procedural knowledge* tells how to perform a given task. It contains the discrete steps or actions to be taken and the available alternatives when performing a given task. With practice, procedural knowledge can become an automatic process, thus allowing people to perform tasks without conscious awareness. *Strategic knowledge* is composed of information that is the basis of problem solving, such as action plans to meet specific goals, knowledge of the context in which procedures should be implemented, actions to be taken if a proposed solution fails, and how to respond if necessary information is absent." (**DHS**, *DHS Training Glossary*, 2006, p. 32)

KSAs: Knowledge, Skills, and Ability.

KT: Kiloton. (**OCD**, *Abbreviations and Definitions*, 1971, p. 3)

Kyoto Protocol: "The Kyoto Protocol was adopted at the Third Session of the Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC) in 1997 in

Kyoto, Japan. It contains legally binding commitments, in addition to those included in the UNFCCC. Countries included in Annex B of the Protocol (most OECD countries and EITs) agreed to reduce their anthropogenic emissions of greenhouse gases (CO2, CH4, N2O, HFCs, PFCs, and SF6) by at least 5 % below 1990 levels in the commitment period 2008 to 2012." (European Environment Agency, EEA Environmental Glossary; cites: **IPCC**, *Climate change 2001 Impacts, Adaptation and Vulnerability*.)

L: Lewisite. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

La Niña: The opposite of an El Niño event, during which waters in the west Pacific are warmer than normal, trade winds or Walker circulation is stronger and, consequently, rainfalls heavier in Southeast Asia. (**Bryant** 1991)

Laboratory Response Network: "The Laboratory Response Network (LRN) was established by the Department of Health and Human Services, Centers for Disease Control and Prevention (CDC) in accordance with Presidential Decision Directive 39, which outlined national anti-terrorism policies and assigned specific missions to federal departments and agencies. Through a collaborative effort involving LRN founding partners, the Federal Bureau of Investigation and the Association of Public Health Laboratories, the LRN became operational in August 1999. Its objective was to ensure an effective laboratory response to bioterrorism by helping to improve the nation's public health laboratory infrastructure, which had limited ability to respond to bioterrorism. Today, the LRN is charged with the task of maintaining an integrated network of state and local public health, federal, military, and international laboratories that can respond to bioterrorism, chemical terrorism and other public health emergencies. The LRN is a unique asset in the nation's growing preparedness for biological and chemical terrorism. The linking of state and local public health laboratories, veterinary, agriculture, military, and water- and food-testing laboratories is unprecedented. In the years since its creation, the LRN has played an instrumental role in improving the public health infrastructure by helping to boost laboratory capacity. Laboratories are better equipped, their staff levels are increasing, and laboratories are employing advanced technologies." (**CDC**, *The Laboratory Response Network*, 2005)

LAC: Local Assistance Center. (**EG&G**, *San Diego County Firestorms AAR 2007*, Feb 08, v)

Lahar: "A term originating in Indonesia, designating a debris flow over the flank of a volcano." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 48)

Land Degradation: "Progressive deterioration of land quality or land forms resulting from natural phenomena or human activity." (**UNDHA**, *Disaster Mgmt. Glossary*, 1992, p. 48)

Landslide: "Landslides occur in all U.S. states and territories. In a landslide, masses of rock, earth, or debris move down a slope. Landslides may be small or large, slow or rapid. They are activated by storms, earthquakes, volcanic eruptions, fires, and human modification of land.

Debris and mud flows are rivers of rock, earth, and other debris saturated with water. They develop when water rapidly accumulates in the ground, during heavy rainfall or rapid snowmelt, changing the earth into a flowing river of mud or "slurry." They can flow rapidly, striking with

little or no warning at avalanche speeds. They also can travel several miles from their source, growing in size as they pick up trees, boulders, cars, and other materials." (**FEMA**, "Fact Sheet – Land Slide," June 2007, p. 1)

Landslide: "In general, all varieties of slope movement, under the influence of gravity. More strictly refers to down-slope movement of rock and/or earth masses along one or several slide surfaces." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 48)

Landslide: "A mass movement of soil, mud, and (or) rock down a slope." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Landslide Stabilization: "Measures to prevent a landslide." (**UNDHA**, *DM Glossary*, 1992, 49)

Land Use Planning: "Branch of physical and socio-economic planning that determines the means and assesses the values or limitations of various options in which land is to be utilized, with the corresponding effects on different segments of the population or interests of a community taken into account in resulting decisions.

Land-use planning involves studies and mapping, analysis of environmental and hazard data, formulation of alternative land-use decisions and design of a long-range plan for different geographical and administrative scales. Land-use planning can help to mitigate disasters and reduce risks by discouraging high-density settlements and construction of key installations in hazard-prone areas, control of population density and expansion, and in the siting of service routes for transport, power, water, sewage and other critical facilities." (**UN/ISDR,** *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

LANL: Los Alamos National Laboratory.

Lateral and Multi-Level Coordination: "To be evaluated as fully-qualified, the jurisdiction shall have demonstrated a capability for lateral and multi-level operations and coordination, in addition to operations and coordination needed within it's own boundaries and relating to its own emergency forces. Means for developing and demonstrating this capability may include: (1) Two-community total-system exercises (e.g., involving use of mutual-assistance plans that were jointly developed); (2) local to next higher EOC exercise (e.g., city-county, or county State Area, using reporting systems specified by the State); or (3) local-State-Regional (or local-State-Regional- National) exercises, such as the "CDEX" exercises." (**DCPA**, *Standards For Local Civil Preparedness*, 1978, p. 36)

Lava Flow: "Molten rock which flows down-slope from a volcanic vent, typically moving at between a few metres to several tens of kilometres per hour." (**UNDHA**, *DM Glossary* 1992, 49)

Law and Order, Maintenance of: "OCDM's primary emphasis on this responsibility during FY 1960 was to provide technical information and guidance to State and local governments. The objective is to help them develop the capability of maintaining law and order under emergency conditions requiring actions uncommon to normal police activities; e.g., control of mass movement; prevention and control of panic, mob action, crimes of violence, looting, and

vandalism; maintenance of order in reception areas; and protection of vital installations and supplies." (**OCDM**, *Annual Report 1960*, p. 22)

Law Enforcement (LE): "Individuals who, on a full-time, part-time, or voluntary basis, work for agencies at the local, municipal, and State levels with responsibilities as sworn law enforcement officers." (**FEMA**, *TEI/TO Course Catalog*, 2008, 3)

Law Enforcement Agencies in the U.S.: "There are 17,784 law enforcement agencies spread across Federal, State, and local levels of government." (**DHS**, Chap. 2, *Draft DHS Pub 1*, 08, 2)

Law Enforcement Domain Working Group: "This working group includes federal, state, local, and tribal entities, and those activities which support both the enforcement of criminal and civil laws, and the other operational responsibilities and authorities of these entities." (**DHS**, *Fact Sheet: National Applications Office*, August 15, 2007)

Law Enforcement Terrorism Prevention Program (LETPP). See Department of Homeland Security, LETPP.

Layered Approach: "We also believe in layered security. That's recognition of the fact that there's no magic bullet for security, whether it be our ports or elsewhere. Any single approach can fail. Therefore, the right answer is to build layers of security that build rings of protection. What that does is it counts on redundancy and on randomness as allies in building a total security network." (**DHS**, *Remarks by Homeland Security Secretary Michael Chertoff to the American Association of Port Authorities*, March 20, 2007)

Layered Approach: "I think our general philosophy on taking a layered approach is not to put all our eggs in one basket but to have vigorous intelligence and vigorous prevention, but also be prepared to have a process in place and a response in place if there is an attack. It could even come from a single individual; it doesn't need to come from a terrorist group. So I think we need to do the full menu of approaches." (**DHS**, *Testimony of Secretary of Homeland Security Michael Chertoff Before the House Homeland Security Committee*, July, 14, 2005)

Layered Security: "Our posture is one of 'layered security'--pushing our borders continuously outward from American shores." (**DHS**, *Remarks by Secretary of Homeland Security Tom Ridge at the Port of Portland*. May 4, 2004)

Layered System: "We have significantly bolstered our nation's security by implementing a layered system of protections along our borders and at our ports of entry, on our roadways, railways, and waterways, and even far from our borders and shores." (**DHS**, *Remarks by* [DHS Secretary] *Tom Ridge Before the House Select Committee on Homeland Security*, 14 Sep 2004)

LC: Logistics Center. (**DHS**, *NRF Logistics Management Support Annex*, Sep. 2007. p. 2)

LC50: "Lethal concentration 50. The concentration of a material administered by inhalation that is expected to cause the death of 50% of an experimental animal population within a specified

time. (Concentration is reported in either ppm or mg/m3)." (**DOT**, Emergency *Response Guidebook…Hazardous Materials Incidents*, 2004, p. 362)

LD50: Lethal dose 50. Level of radiation exposure expected to cause the death of 50% of exposed population. (**OCD**, *Abbreviations and Definitions*, 1971, p. 3)

LE: Law Enforcement. (**FEMA**, *TEI/TO Course Catalog*, 2008, 2)

Lead Evaluator: "The lead evaluator should participate fully as a member of the *exercise planning team*, and should be a senior-level individual familiar with: *prevention*, *protection*, *response*, and/or *recovery* issues associated with the exercise; Plans, policies, and procedures of the exercising jurisdiction/organization; Incident Command and decision-making processes of the exercising jurisdiction/organization; and interagency and/or inter-jurisdictional coordination issues relevant to the exercise. The lead evaluator must have the management skills needed to oversee a team of *evaluators* over an extended process, as well as the knowledge and analytical skills to undertake a thorough and accurate *analysis* of all *capabilities* being tested during an exercise." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Lead Exercise Planner: "The lead exercise planner oversees the *exercise planning team*; develops the exercise *project management timeline* and the exercise project management assignment list; assigns exercise responsibilities; provides overall guidance; and monitors the development process." (**FEMA**, *Homeland Security Exercise and Eval Pgm Glossary*, 2008)

Lead Federal Agency: "The federal agency that leads and coordinates the overall federal response to an emergency. Designation and responsibilities of a lead federal agency vary according to the type of emergency and the agency's statutory authority. Also called LFA." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

LEADERS: Lightweight Epidemiology Advanced Detection & Emergency Response System.

Leadership: "Leaders are needed to set priorities and keep focus." (**DHS**, *FCD 1*, Nov 2007, 3)

Leadership: "The senior decisionmakers who have been elected (e.g., the President, State governors) or designated (e.g., Cabinet Secretaries, chief executive officers) to head a branch of Government or other organization. The survivability of leadership is accomplished by physically protecting the officeholder (sheltering the individual in place or relocating him or her away from the threat area) and by developing a prioritized list of designated successors to that leadership position, who would assume the roles and responsibilities of that position in the event of the incapacitation or unavailability of the current officeholder. The designation as a successor enables an individual to act for the officeholder and exercise the powers and authorities of the officeholder's position, in the event of the officeholder's death, permanent disability, or resignation." (**DHS**, *FCD 1*, Nov 2007, P-6)

Leadership: Question: "If you were to pick the three most important character traits for an effective leader, what would those be? Answer: **Murphy:** First is to be open to, listen to, and absorb alternative ideas and perspectives, no matter how different they are from your own.

Second would be the ability to select and clearly articulate objectives and intent. And third, to have the ability to build, nurture, and support an effective, top-notch work force."

Leadership: "…California's emergency preparedness strategy is weakened by a lack of leadership. Researchers for years have highlighted California's vulnerabilities to a catastrophic earthquake. No imagination is needed to see in those forecasts the destruction that would result. And models are in place today to reduce threats and vulnerabilities, promote prevention and mitigation, and harness the capabilities and resources of public servants and the private sector to respond when called. No innovation is required to deploy those models in California. If California only relies on current practices to respond to its threats and vulnerabilities, the emergency management system will continue to fall just short of preventing the damage of recurrent flooding and fires that dominate the headlines. And in the event of a catastrophic incident – the earthquake that is projected within the lifetimes of most of the Californians living here today – too many of us will not survive." (**Little Hoover**, *Safeguarding…State*, 2007, 63)

Leadership: Leadership competencies identified in National Academy of Public Administration series on 21st Century Federal Managers:

> • cognitive ability, both raw intellectual horsepower and mental agility
> • strategic thinking skills, especially regarding application of technology to business strategy and operations
> • analytical ability, especially the ability to sort through myriad information and focus on the most relevant data
> • ability to make sound decisions in an environment of ambiguity and uncertainty
> • ability to manage in a diverse environment which includes employing various management styles given that there are three or four generations and cultures in one workplace, each dealing with work-life balance issues
> • ability to lead people not physically co-located with the manager, requiring new approaches to assigning work, communicating expectations, monitoring work products, integrating work products and assessing performance
> • ability to lead a contingent or blended workforce of contractors, permanent and temporary personnel, U.S. and local national employees, military, public health service, and others using matrix resources (that is, using personnel for their individual skills notwithstanding their permanent assignment to another organization and/or leaders).
> (**NAPA**, *Developing the Leadership Team: An Agency Guide*, December 2003, p. 3)

Leadership: "Competitive advantage goes to the organization with effective leaders at all levels. Leaders create change, and they help organizations and people navigate through change to produce results. Spurred by technology, globalization, downsizing, economics and public expectations, this is a time of change that calls for leaders. In any corner of industry or government—identifying, recruiting, developing, and selecting—must be a priority for any serious executive or manager." (**NAPA**, *Managing Succession and Developing Leadership: Growing the Next Generation of Public Service Leaders*, 1997HRM Series III)

Leadership and Management: "*Management is about coping with complexity*. It is a response to a significant development of the 20th century, namely the emergence of large, complex

organizations. Good management brings order to what would otherwise be chaos. *Leadership, by contrast, is about coping with change*. *Management* remains important for the day-to-day success of any organization and focuses on such issues as planning/budgeting, organizing/staffing, and controlling/problem solving. By contrast, *leadership* begins with setting direction and aligning people, as well as motivating them to success." (**McCausland**, *Developing Strategic Leaders for the 21st Century*, February 8, 2008, p. x)

Leadership, Crisis Readiness: "Frequently mentioned leadership characteristics

- Generating buy-in and commitment
- Getting adequate resources for crisis readiness
- Institutionalizing concerns of the community and other stakeholders
- Recruiting and motivating a high-caliber workforce
- Implementing sound day-to-day business management practices
- Taking a comprehensive approach to crisis readiness, and bridging gaps within the organization and between the organization's members and stakeholders.
- Visioning a "business-anew paradigm"
- Developing trust within the organization
- Conducting vulnerability assessments
- Not letting risk aversion drive all decisions
- Actively engaging in learning
- Being aware of the special role of the leader" (**Light**, *Predicting Organizational Crisis Readiness*, 2008, p. 29)

Leadership, Expectations of:

- recruit, develop, and retain high performing leaders
- generate high levels of motivation, commitment and focus on results in the workforce
- maintain high standards of honesty and integrity (**The OPM Human Capital Scorecard**, Memorandum for Heads of Executive Departments from Kay Cole James, Director, December 7, 2001; cited in **NAPA**, *The 21st Century Federal* July 2002, p. 20)

Leadership Development Program: The National Academy of Public Administration 21st Century Workforce Series identified "the following as key dimensions of a successful leadership development program…

- Program leadership and governance roles are established. Specifically,
  - The program's mission, vision, and guiding principles are communicated;
  - The program's offerings are competency based;
  - The program covers the continuum of leadership positions; and
  - The program includes developmental experiences in other program areas and agencies.
- Leadership development is linked to succession planning.
- A Learning Management System (LMS) is used o communicate, deliver, and manage training opportunities based on automated and web based tools." (**NAPA**, *Addressing the 2009 Presidential Transition at the…DHS*, May 2008 Agency Review Draft, p. 60)

Leadership Development Program: "The model [NAPA Leadership Development Model] sets forth the key criteria for successful programs—primarily, the support and active involvement of the top leader and a performance management system that supports the early identification of talent with critical skills and evaluates their ability to assume greater responsibility with further development. The model also emphasizes attention to other human capital challenges, such as diversity and retention. Leading organizations recognize that diversity can be an organizational strength and have created programs to identify and develop senior managers from among ethnic minorities, individuals with disabilities and females who have the potential to reach senior executive positions at an accelerated rate. Leading organizations also use succession planning and management to provide an incentive for high-potential employees to stay with the organization, thereby preserving future leadership capacity." (**NAPA**, *Developing the Leadership Team: An Agency Guide*, December 2003, p. 6)

Leadership in Emergency Management: "Successful emergency management requires an effective leadership to establish an organizational mission and adopt new organizational changes and cultures. In implementing strategic plans, organizations need to obtain a strong leadership commitment and support to guide in new directions, and to inspire people to achieve the organizational mission… Leaders play a pivotal role in the implementation of emergency management. Leaders must possess the ability to help mobilize the organization to develop a vision to assist in achieving the organizational goals, and to make a commitment to institutionalize the organizational changes… The emphasis is on achieving a profound level of organizational change which raises the level of consciousness about the importance and value of certain outcomes, causing employees to transcend self-interest for organizational interest and even changing their needs and desires. As Bass (1985) points out, an effective leader should work within the current organizational culture, while at the same time also changing the organizational culture." (**Choi**, "Emergency Management: Implications from a Strategic Management Perspective," *Journal of Homeland Security and Emergency Management*, Vol. 5, Issue 1, Article 1, 2008, p. 10)

Leadership in Emergency Management: "[The]…leader must be prepared to achieve the following:
Establish a vision. The emergency services leader must have a proven record of developing and implementing a broad vision for preparedness. The leader must demonstrate the capacity, knowledge and confidence to garner public and professional trust.

Create an effective strategy. The leader must possess acute analytic, critical thinking and decisionmaking skills. The ability to plan strategically and make good judgments – in advance of emergency events and under extreme pressure – is essential. And the leader must continually measure progress and refine the preparedness strategy to achieve outcomes.

Build commitment. This leader must demonstrate the ability to collaborate, form coalitions and resolve conflicts among various levels of government, disparate emergency management professionals, the private sector and the public to forge a commitment to success.

Leverage multiple tools. The…emergency services leader must be skilled at using every available tool to ensure…preparedness. The leader must be prepared to develop market, fiscal,

policy, regulatory and other tools to prepare and protect…" (**Little Hoover Commission**, *Safeguarding the Golden State*…, 2006, 41)

Leadership versus Coordination: In the 2006 Little Hoover Commission report to the California State Government on preparing for catastrophic events it notes as a section heading that "EOS [Office of Emergency Services] is Charged with Leadership, but Defines its Mission as Coordination." (13). The report states that "great authority is housed" in the CA OES and that the State had "vested it with powers beyond other state agencies – during emergencies and in advance….Yet despite these vast powers, the State is not prepared for the risks it faces….OES largely defines its role as coordinating resources in support of state and local agencies" (14-15). (**Little Hoover Commission**, *Preparing for Catastrophic Events*, 2007)

Learning: "A change in behavior that can be measured. Learning occurs as a result of knowledge transfer and includes gaining knowledge, skills, or developing new behaviors through study, instruction, and experience." (**DHS**, *DHS Training Glossary*, 2006, p. 33)

LEMOS: Local Emergency Operating System computer program.

LEO: Law Enforcement Organization(s). (**DHS**, *The ODP Guidelines*…, 2003, p. 12)

LEP: Limited English Proficiency. (**CDC**, *Reaching At Risk Populations*, 2007, p. 21)

LEPC: Local Emergency Planning Committee.

LEPC Emergency Response Plans: "The Governor of each State has designated a State Emergency Response Commission (SERC) to implement EPCRA statewide. The SERCs, in turn, have appointed about 3,500 local emergency planning districts and appointed an LEPC for each district. The SERC supervises and coordinates the activities of the LEPC and reviews the local emergency response plans. LEPC developed emergency response plans are local emergency operations plans. Incorporation of NIMS into ALL Emergency Operations Plans (EOPs) within the State is a specific requirement for States to be NIMS compliant. Therefore, LEPC emergency response plans must be NIMS compliant." (**FEMA**, *Fact Sheet: NIMS Compliance Requirements for LEPCs*, March 1, 2007)

LERT: Logistics Emergency Response Team. (**USACE**, *Response Planning Guide*, 1995, A-3)

Lessons Learned: "Lessons learned are knowledge and experience (both positive and negative) derived from observations and historical study of actual operations, training, and exercises. Exercise AAR/IPs should identify lessons learned and highlight *best practices*, and should be submitted to DHS for inclusion in the lessons learned / best practices Web portal, http://www.llis.gov/, which serves as a national network for generating, validating, and disseminating lessons learned and best practices." (**FEMA**, *HSEEP Glossary*, 2008)

Lessons Learned: "Knowledge gained through operational experience (actual events or exercises) that improve performance of others in the same discipline." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 6)

Lessons Learned, Reasons Lessons not Learned: "Why is it so difficult to draw lessons from crises and to make organizational changes as a result of these lessons? The main reasons advanced are as follows:

- the time or temporal framework of the crisis analysis is too limited (Bourrier, 2002);
- the issue does not remain a priority once the immediate crisis has passed (Petak, 1985; Lagadec, 1996; Rosenthal & Kouzmin, 1996; Nathan, 2000);
- after having experienced a crisis, the area is too sensitive for any discussions (Lagadec, 1996; Bourrier, 2002);
- the pressure of managing day-to-day affairs resurfaces and tends to eclipse the period which could be devoted to post-crisis reflection (Rosenthal & al., 1989; and Rosenthal & Kouzmin, 1996);
- the manager is avoiding his or her responsibilities (Lagadec, 1991, 1996);
- managers tend to pass this off to the experts (Rosenthal & Kouzmin, 1996; Bourrier, 2002) and to use them for political ends (Hart & al., 2001);
- administrators and interveners do not envisage the transferability of experiences during a crisis to routine practices (Roux-Dufort, 2000; Bourrier, 2002). These experiences are seen as eminently contingent with their own idiosyncrasies;
- there is a lack of sharing of experiences in crisis management across organizations (Bourrier, 2002), between sectors of activities and amongst countries (Hart & al., 2001)." (**Lalonde**, "Crisis Management and Organizational Development…", 2007, p. 509)

Lessons Learned Information Sharing System (LLIS): "LLIS.gov is a national on-line network of lessons learned and best practices designed to help emergency response providers and homeland security officials prevent, prepare for, respond to, and recover from all hazards, including terrorism. LLIS.gov will enhance national preparedness by allowing response professionals to tap into a wealth of validated front-line expertise on effective planning, training, equipping, and operational practices for homeland security." (**LLIS**, *Lessons Learned Information Sharing System*)

LETPP: Law Enforcement Terrorism Prevention Program.

Letter of Determination Review (LODR): "A Letter of Determination Review (LODR) is FEMA's comment on the determination made by the lender or third party that the borrower's structure is in the Special Flood Hazard Area (SFHA). Borrowers who have good reason to dispute the flood hazard determination presented by a lender may request, jointly with the lender, that FEMA review that determination. Because of the fee required to process the request, borrowers should not consider this alternative unless they have already had the subject STRUCTURE plotted on the current effective Flood Insurance Rate Map (FIRM) and are certain it is wholly outside the SFHA. It is important to keep in mind that if any portion of a structure falls within the SFHA, the flood insurance purchase requirement will apply." (**FEMA**, *Frequently Asked Questions: General Information-What is a LODR*, 2006)

Letter of Map Amendment (LOMA): An administrative procedure to change the designation of properties identified in a Flood Insurance Rate Map (FIRM)…. Through these processes, an individual who owns, rents, or leases property may submit certain mapping and survey

information to FEMA and request that FEMA issue a document that officially removes a property and/or structure from the SFHA. In most cases, the applicant will need to hire a Licensed Land Surveyor or Registered Professional Engineer to prepare an Elevation Certificate for the property." (**FEMA**, *Letter of Map Amendment*…, 2007)

Letter of Map Change (LOMC): "A LOMC is a letter which reflects an official revision to an effective NFIP map. LOMCs are issued in place of the physical revision and republication of the effective map." (**FEMA**, *Letters of Map Change*, May 23, 2006 update)

Letter of Map Revision (LOMR): "…an official amendment, by letter, to the currently effective Flood Insurance Rate Map; issued by the Federal Emergency Management Agency and changes flood zones, delineations, and elevations." (**ASFPM**, *National Flood Programs and Polices in Review—*2007, p. 90)

Letter of Map Revision based on Fill (LOMR-F): "…an official revision, by letter, to an effective National Flood Insurance Program map. A LOMR-F provides the Federal Emergency Management Agency's determination whether a structure or parcel has been elevated on fill above the base flood elevation and excluded from the Special Flood Hazard Area. (**ASFPM**, *National Flood Programs and Polices in Review—2007*, p. 90)

Levee: "Levees and other flood damage reduction structures only reduce the dangers of flooding; they do not eliminate them. Indeed, the most extreme and dangerous events are those that are not eliminated. As the state and nation have learned in the last two decades, levees can fail and when they fail, the failure brings catastrophic consequences to those who depend upon them for flood protection." (**Galloway**, *A California Challenge*, 2007, iv)

Levee (synonym - bund, dike, embankment, stop bank): "Water-retaining earthwork used to confine streamflow within a specified area along the stream or to prevent flooding due to waves or tides. (**UNDHA**, *Disaster Management Glossary*, 1992, p. 49)

Levee, Smart: "Dealing with future floods will also require the use of the best and most innovative tools available. This includes the use of state-of-the-art technology to develop "smart" levees and flood control systems that will enable more control over water management systems during a flood and allow the possibility to act, for instance when sensors indicate the probability of a levee breach or an overtopping. These tools are available or under development right now." (**Galloway**, *A California Challenge – Flooding in the Central Valley*, October 15, 2007, p. 26)

Levees and Floodwalls: "Levees and floodwalls are constructed to exclude flood waters from the protected area, up to a certain magnitude of flood. Unlike reservoirs and channel enlargements, the flood control effectiveness of a levee or floodwall will cease abruptly if a flood should overtop it. Interior runoff impeded by the structure may cause interior flooding if there are not proper provisions for interim storage behind it or discharge past the barrier. Potential effects outside a levee, upstream and downstream, are too complex and too site dependent to generalize otherwise, but generally the constriction of flow area caused by the structure will raise flood stages upstream. Within the levee reach, flood stages may be increased or decreased depending on whether the structure forms a hydraulically long or short constriction. A levee may

reduce valley storage enough to cause the same impacts downstream as a channel. (**USACE**, *Water Resources Policies and Authorities - Digest of Water* Resources..., 1999, 13-4 and 5)

Levee Deterioration: "…levees…deteriorate due to natural and system-induced erosion, degradation and/or removal of natural berms, animal burrows, settlement, inadequate maintenance, and the build up of sediment deposits which…[reduce] the amount of water that flows through…bypass channels and river segments."[80] (**Galloway**, *A California*…, 2007, 2)

Level of Protection: "Level of Protection represents a determination by decision makers of the level of risk that they are willing to accept for the area being protected. This must be balanced against the economic and engineering feasibility of providing that level of protection." (**Galloway**, *A California Challenge*…, 16)

Lewisite: "Lewisite is a type of chemical warfare agent. This kind of agent is called a vesicant or blistering agent, because it causes blistering of the skin and mucous membranes on contact. Lewisite is an oily, colorless liquid in its pure form and can appear amber to black in its impure form. Lewisite has an odor like geraniums. Lewisite contains arsenic, a poisonous element. Lewisite is also known by its military designation, "L." Lewisite was produced in 1918 to be used in World War I, but its production was too late for it to be used in the war. Lewisite has been used only as a chemical warfare agent. It has no medical or other practical use. Lewisite is not found naturally in the environment." (**CDC**, *Facts About Lewisite*, March 14, 2003 Update)

LFA: Lead Federal Agency. (**FBI**, *USG Interagency Domestic Terrorism CONPLAN*, 2001)

Liaison: "An agency official sent to another agency to facilitate interagency communications and coordination." (**FBI**, *USG Interagency Domestic Terrorism CONPLAN*, 2001, B-3)

Liaison Officer: "The Liaison Officer is the IC/UC point of contact for representatives of other governmental agencies, non-governmental organizations (NGOs), and/or the private sector (with no jurisdiction or legal authority) to provide input on their agency's policies, resource availability, and other incident related matters." (**FEMA**, *FEMA 517*. Nov 2007, p. 2)

Liberty Down Exercise: Annual FEMA Region III interagency continuity of operations exercise. The 2007 exercise was "designed to test and evaluate the ability of organizations to activate their continuity of operations plans during a natural emergency. The exercise focused on the capability of the federal community to communicate and work effectively with various state and local agencies responsible for emergency services and safety." (**FEMA**, *Rgn. III*, *FY 07*,17)

LiDAR: Light Detection and Ranging.

Lifelines: "The public facilities and systems that provide basic life support services such as water, energy, sanitation, communications and transportation." (**UNDHA**, *DM Gloss.*, 1992, 49)

Lifeline Systems: "Public works and utilities such as electrical power, gas and liquid

[80] The Galloway 2007 report notes that "even the most perfectly engineered, impeccably maintained levee will be overtopped during a flood event that exceeds its design capacity." (At p. 10)

fuels, telecommunications, transportation, and water and sewer systems." (**APA**, 2005, p. 83)

Lightning: Luminous manifestation accompanying a sudden electrical discharge which takes place from or inside a cloud or, less often, from high structures on the ground or from mountains. (**WMO** 1992, 358)

Lightweight Epidemiology Advanced Detection and Emergency Response System The Lightweight Epidemiology Advanced Detection and Emergency Response System is an enhanced data collection, surveillance, analysis, and management system for bioterrorism incidents and has been deployed at a number of events.[81] This system includes Internet Web-based data collection, casualty tracking, ED status, and overall incident visualization tools to improve detection and management. While primarily a system for surveillance, the Lightweight Epidemiology Advanced Detection and Emergency Response System has many facets that could be easily adapted for acute disaster and MCI events." (**Chan**, "Information Technology and Emergency Medical Care During Disasters," 2004)

Likelihood: "**LIKELIHOOD** is expressed as either a frequency or a probability. Frequency is a measure of the rate at which events occur over time (e.g., events/year, incidents/year, deaths/year, etc.). Probability is a measure of the rate of a possible event expressed as a fraction of the total number of events (e.g., one-in-a-million, 1/1,000,000, or 1X10-3)." (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

LIMS: Logistics Inventory Management System. (**OIG/DHS**, *IT Mgmt. Ltr. for FY 2005*, 12)

Liquefaction: "The temporary loss of shear strength in a water-saturated, cohesionless soil deposit, or temporary transformation of unconsolidated materials into a fluid mass." (**APA**, *Planning For A Disaster-Resistant Community*, 2005, p. 83)

Liquefaction: The process that occurs when an earthquake shakes wet sandy soil until it behaves like a liquid, allowing sand to "boil up" to the surface, buildings to sink, or sloping ground to move." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Liquefaction: "Loss of resistance to shear stress of a water-saturated sandy soil.

LLIS: Lessons Learned Information Sharing System.

LLRM: Local Level Risk Management (UNDP/BCPR/DRU, *LLRM*, 2006, p. 3)

LMD: Logistics Management Directorate, FEMA. (**FEMA**, *LMD Fact Sheet*, 31Jan08 mod.)

LMTI: Logistics Management Transformation Initiative. (**FEMA**, *LMA Fact Sheet*, 31Jan2008)

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[81] Such as New York and Phoenix during 2001 World Series "when the threat of anthrax attacks had put security officials on a heightened state of alert." See p. 6 in: Cohen, John D. and John A. Hurson. *The State and Local Role in Domestic Defense* (Policy Brief). Progressive Policy Institute, January 2002, 9 pages. Accessed at: http://www.ppionline.org/documents/local_home_d.pdf

LNG: Liquefied Natural Gas. "A natural gas that has been cooled to minus 260 degrees Fahrenheit to a liquid state so that it can be transported. Consists almost entirely of methane (85-95 percent) along with small concentrations of ethane, propane, butane, and trace amounts of nitrogen. Mainly used as fuel for electricity generation, home heating, industrial manufacturing, and, to a lesser extent, motor vehicles." (**GAO**, *Maritime Security*, December 2007, p. 87)

LNO: Liaison Officer. Military. ICS. (**DHS**, *NIMS*, 2004, p. 13)

Loaned Executive Program: "The LMD [Logistics Management Directorate, FEMA] began hosting a pilot program for DHS /FEMA. The loaned executive program worked through the U.S. Chamber of Commerce and the United Parcel Service's (UPS) Foundation to bring a seasoned UPS executive into the LMD to share private sector expertise." (**FEMA**, *LMD Fact Sheet*, 31Jan2008 modification)

Local Chief Executive Responsibilities:

■ Coordinates local resources to address the full spectrum of actions to prevent, prepare for, respond to, and recover from incidents involving all hazards, including terrorism, natural disasters, accidents, and other contingencies.
■ When necessary, uses the extraordinary powers of the position (depending on state and local law) to establish a curfew, direct evacuations, and/or, in coordination with the local health authority, to order a quarantine.
■ Provides leadership and plays a key role in communicating to the public, and in helping people, businesses, and organizations cope with the consequences of any type of domestic incident within the jurisdiction.
■ Negotiates and enters into mutual aid agreements with other jurisdictions to facilitate resource sharing.
■ Requests state and, if necessary, federal assistance through the governor of the state when the jurisdiction's capabilities have been exceeded or exhausted." (**The Joint Commission**, **Standing Together**, 2005, p. 4 citing DHS, NRP, Dec, 2004))

Local Emergency Operational Capability: "The ability or level of readiness of a local government to conduct coordinated operations to minimize the effects of both peacetime and war-caused disasters or emergencies. Such operational capability consists in general of two broad categories, tangible and intangible, which can be further broken down into specific capabilities. In most functional areas, operational capability includes both essential hardware systems and trained personnel." (**DCPA**, *On-Site Assistance* (MP 63) 1974, pp. 4-5) [See "Tangible Elements…" and "Intangible Elements…]

Local Emergency Planning Committees (LEPCs): "…the Emergency Planning and Community Right-to-Know Act (EPCRA) establishes the LEPC as a forum at the local level for discussions and a focus for action in matters pertaining to hazardous materials planning. LEPCs also help to provide local governments and the public with information about possible chemical hazards in their communities. The major legal responsibilities of LEPCs are listed below. The citations are from EPCRA, Public Law 99-499. Each LEPC:

Shall review local emergency management plans once a year, or more frequently as circumstances change in the community or as any facility may require (Section 303 (a)).

Shall make available each MSDS, chemical list described in Section 311(a)(2) or Tier II report, inventory form, and follow-up emergency notice to the general public, consistent with Section 322, during normal working hours at a location designated by the LEPC (Section 324(a)).

Shall establish procedures for receiving and processing requests from the public for information under Section 324, including Tier II information under Section 312. Such procedures shall include the designation of an official to serve as coordinator for information (Section 301(c)).

Shall receive from each subject facility the name of a facility representative who will participate in the emergency planning process as a facility emergency coordinator (Section 303(d)).

Shall be informed by the community emergency coordinator of hazardous chemical releases reported by owners or operators of covered facilities (Section 304(b)(1)(a)).

Shall be given follow-up emergency information as soon as practical after a release, which requires the owner/operator to submit a notice (Section 304(c)).

Shall receive from the owner or operator of any facility a MSDS for each such chemical (upon request of the LEPC or fire department), or a list of such chemicals as described (Section 311(a)).

Shall, upon request by any person, make available an MSDS to the person in accordance with Section 324 (Section 311(a)).

Shall receive from the owner or operator of each facility an emergency and hazardous chemical inventory form (Section 312(a)).

Shall respond to a request for Tier II information no later than 45 days after the date of receipt of the request (Section 312(e)).

May commence a civil action against an owner or operator of a facility for failure to provide information under Section 303(d) or for failure to submit Tier II information under Section 312(e)(1) (Section 32 6(a)(2)(B)).” (**EPA Region VI**, *LEPC Handbook*, 2004, pp. 4-5)

Local Emergency Planning Committees (LEPCs): Local Emergency Planning Committees were established under the Emergency Planning and Community Right-to-Know Act. LEPCs are non-profit community organizations that must include in their membership, at a minimum, local officials including police, fire, civil defense, public health, transportation, and environmental professionals, as well as representatives of facilities subject to the emergency planning requirements, community groups, and the media. LEPCs must assist in the development of emergency response plans, conduct annual reviews at least annually, and provide information

about chemicals in the community to citizens. What are the required elements of a community emergency response plan that is developed by an LEPC?

• Identify facilities and transportation routes of extremely hazardous substances;
• Describe emergency response procedures, on and off site;
• Designate a community coordinator and facility coordinator(s) to implement the plan;
• Outline emergency notification procedures;
• Describe how to determine the probable affected area and population by releases;
• Describe local emergency equipment and facilities and the persons responsible for them;
• Outline evacuation plans;
• Provide a training program for emergency responders (including schedules); and,
• Provide methods and schedules for exercising emergency response plans." (**FEMA**, *Fact Sheet: NIMS Compliance Requirements for LEPCs.* March 1, 2007)

Local Emergency Planning Committees (LEPCs): "Process established by the U.S. Environmental Protection Agency for particular hazards and suggested as a method for local business and government to partner in the critical incident planning process. (**Jones**, *Critical Incident* Protocol, 2000, 37)

Local Government. "Local is defined as "(A) a county, municipality, city, town, township, local public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; (B) an Indian tribe or authorized tribal organization, or in Alaska a Native village or Alaska Regional Native Corporation; and (C) a rural community, unincorporated town or village, or other public entity." (**Homeland Security Act of 2002**)

Local Level Risk Management: "For the purpose of this global analysis, the following working definition of Local Level Risk Management will be applied:

> *A social process through which society manages to reduce the levels of disaster risk and foresee and control the emergence of new risks, through organisational and institutional structures, individual participation and motivation.*

(**UNDP BCPR DRU**, *Local Level Risk Management* (Draft Short Version), 15 March 2006, 3)

Localized Flooding: "Localized flooding refers to smaller scale flooding that can occur anywhere in a community. This can include flooding in B, C, and X Zones as depicted on the Flood Insurance Rate Map. The term is also used to refer to shallow flooding that occurs in low-lying areas after a heavy rain, flooding in small watersheds, ponding, and localized stormwater and drainage problems anywhere in the community. In this guide, "local flooding" and "localized flooding" are used interchangeably." (FEMA, *Reducing Damage from Localized Flooding – A Guide for Communities*, 2005, viii)

Locally Built and Locally Maintained Levees: "Non-Federal projects built by a local community. These projects can be incorporated into the RIP [Rehabilitation and Inspection Program] at the request of a local community and if properly maintained and operated by a local

community, may stay in the program. (**USACE**, *Fact Sheet: National Levee Safety Program*. February 1, 2007, 2)

LODR: Letter of Determination Review. (**FEMA**, *FAQs: General Info.-What is a LODR*, 2006)

Logistics: "The range of operational activities concerned with supply, handling, transportation and distribution of materials. Also applicable to the transportation of people." (**UNDHA**, *DM Glossary*, 1992, 50)

Logistics Centers (LC): "FEMA's strategically located logistics centers that support disaster operations through a variety of preparedness and response measures. These centers serve as storage sites for strategic disaster supplies and equipment, including initial supplies of certain Initial Response Resources (IRR) goods and prepackaged kits to support disaster field facilities." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 54)

Logistics Emergency Response Team (LERT), USACE: "The LERT can be established at the Division or District level or can be a consolidation of Logistics personnel from several Divisions, Districts, Laboratories, or Field Operating Activities. The LERT will be made up of Logistics personnel who have volunteered and been preselected for assignment to specific positions. Each selection will be coordinated through their appropriate Commander. The team shall be capable to deploy within 24 hours of notification to a specific site and establish and manage logistics operations in support of the emergency or disaster." (**USACE**, *Response Planning Guide*, 1995, p. B-2)

Logistics Inventory Management System (LIMS III): "LIMS III provides for material management, maintenance, and logistics reporting." (**OIG/DHS**, *IT Mgmt. Ltr. for FY 2005*, 12)

Logistics Management: "Logistics Management is that part of Supply Chain Management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements." (**Council of Supply Chain Mgmt. Professionals**)

Logistics Management: "Logistics management is the process of planning, preparing, implementing, and evaluating all logistics functions that support an operation or activity. Effective logistics management ensures all functions are executed in a unified manner to reduce costs, ensure appropriate support actions, and decrease delivery time. Individual logistics functions and associated subfunctions include:

a. Materiel Management. Requisitioning, ordering, and sourcing (requirements processing); acquisition; asset visibility (resource tracking); receipt; storage and handling; security; accountability; inventory; deployment; issue and distribution; recovery; reuse; and disposition;

b. Property Management (Personal Property). Accountability, inventory, disposal, and record processing;

c. Facility Management. Facility selection and acquisition, building services, information systems, communications, fleet management, safety and health, and physical security; and

d. Transportation Management. Transportation prioritizing, ordering, sourcing, and acquisition; time-phasing plans; and movement coordination and tracking." (**FEMA**, *Logistics Management Support Annex*, Jan 2003, p. LM-1-2)

Logistics Management Directorate: See "FEMA Logistics Management Directorate."

Logistics Management Transformation Initiative (LMTI): "The LMD initiated a comprehensive analysis and assessment of current logistics core competencies with the intent to incorporate various elements of a third party logistics (3PL) structure, while ensuring fiscal prudence and accountability." (**FEMA**, *LMA Fact Sheet*, 31Jan2008)

Logistics Section (ICS): "The Section that provides support and resources to meet the needs of the incident." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 55)

LOMA: Letter of Map Amendment. (**FEMA**, *Letter of Map Amendment*, October 17, 2007)

LOMR-F: Letter of Map Revision Based on Fill. (**FEMA**, *Letter of Map Amendment*, 2007)

Long Term Community Recovery: "Long Term Community Recovery provides a framework for Federal Government support to State, regional, local, and tribal governments, nongovernmental organizations (NGOs), and the private sector designed to enable community recovery from the long-term consequences of incidents requiring a coordinated Federal response." (**DHS**, *Notice of Change to the NRP*, May 22, 2006, p. 31)

Long-Term Recovery Committee (LTRC): "Inevitably, some people affected by... [disaster] will not meet the eligibility criteria of government disaster aid programs or will have unmet needs even after receiving help from these programs. For them, assistance may come from a committee of churches, non-profit agencies and state and local agencies who work on problems that may range from home repair to counseling." FEMA has in the past worked with local and State organizations in federally declared disasters to set up a LTRC to work with people who have unmet needs. "One of the key elements in the committee's work is knowledge of survivors' needs. They urge emergency management personnel as well as others working with specific cases to inform the LTRC…of possible involvement…." Typically, the Long-Term Recovery Committee:

- Seeks to strengthen area-wide disaster coordination by sharing information, simplifying client access and jointly resolving cases with unmet needs;
- Helps families to develop a plan and receive adequate assistance for the recovery;
- Is composed of representatives from disaster response agencies; and
- Operates with all participating organizations as equal partners.
  (**FEMA**, *Long-Term Recovery Committee in Action*, 1999)

Loss: "Unrecoverable resources that are redirected or removed as a result of a Business Continuity event. Such losses may be loss of life, revenue, market share, competitive stature, public image, facilities, or operational capability." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, p. 58)

Loss Estimation: "Forecasts of human and economic impacts and property damage from future hazard events, based on current scientific and engineering knowledge." (**FEMA**, *Developing the Mitigation Plan* (FEMA 386-3), 2003, p. a-5)

Loss Estimation Process Benefits: The loss estimation process (2nd phase of mitigation planning process), should help determine the following:

- Which areas of the community or state are affected by hazards;
- What assets will be affected and how;
- How likely it is that the hazard event may occur; and
- How intense the hazard event may be in terms of its economic and social impacts. (**FEMA**, *Developing the Mitigation Plan* (FEMA 386-3), 2003, p. 1-2)

Loss Reduction: "The technique of instituting mechanisms to lessen the exposure to a particular risk. Loss reduction involves planning for, and reacting to, an event to limit its impact. Examples of loss reduction include sprinkler systems, insurance policies, and evacuation procedures." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, p. 59)

Louisiana Citizens Property Insurance Corporation: "The Louisiana Citizens Property Insurance Corporation (Louisiana Citizens) is a nonprofit, tax-exempt entity that acts as a market of last resort for residential and commercial property insurance in Louisiana." (GAO, Natural Disaster: Public Policy Options…, Nov 2007, p.63; see pp. 63-65)

Low-Signature Threats: Some "…matters…ought to be really state responsibilities, particularly in the area of prevention where we're dealing, again, with concerns about home-grown terrorism. In many cases, the challenges are what we would call "low-signature threats" -- threats that may not be detectable from spies and satellites, but require community-based policing and community-based knowledge to detect and deter and prevent threats before they come into effect. Because of that…we don't want to have the federal government become the choke point to which all this information has to pass before action takes place. That's why we're supporting fusion centers, including fusion centers with responders as well as police officials, so that states and localities can take action quickly to address issues. Now, we want to be able to have visibility into that, we want to share information up and down, but we don't want to slow up the process." (**DHS**, *Remarks by Secretary Michael Chertoff to the National Congress for Secure Communities*, December 17, 2007)

LPG: Liquefied Petroleum Gas. (**GAO**, *Maritime Security*, December 2007, pp. iv, 87)

LRC: Learning Resource Center, FEMA NETC, Emmitsburg, MD

LRC: Logistics Response Center. (**DHS**, *NRF Logistics Management Support Annex*, 2007 Draft, p. 10)

LRN: Laboratory Response Network, CDC, HHS.

LSA: Logistic(s) Staging Area. (**DHS**, *TCL*, 2007, p. 224)

LTBP: Long-Term Business Plan.

LTC: Long Term Care.

LTRC: Long-Term Recovery Committee. (**FEMA**, *Typed Resource Definitions: Incident Management Resources* (FEMA 508-2), p. 35)

Lucas v. South Carolina Coastal Commission (1992): "In *Lucas v. South Carolina Coastal Commission*, a slim majority on the high court found that since plaintiff Lucas had purchased his coastal property with the intent of residential development prior to passage of state legislation empowering the Coastal Commission to restrict such development for the purpose of natural disaster mitigation, the state owed Lucas compensation for diminution in the value of his property occasioned by this regulation. *Lucas* has since come to be seen as something of an outlier in Supreme Court takings jurisprudence, in that in subsequent decisions the high court has reverted to its more traditional stance of generally supporting government efforts at disaster mitigation land use regulation, including protection against legal attacks by landowners who purchased their property before such regulation was imposed (e.g., the *Tahoe Regional Planning Commission* decision). However, *Lucas* does serve as a reminder to policy makers and land use planners that the difference between reasonable regulation and a compensable taking still ultimately rests in the eye of the judge beholding the government action being challenged." (**Burton**, "The Constitutional Roots of All-Hazards Policy, Management, and Law," 2008, 9-10)

MA: Mission Assignment. (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 43)

MAA: Mission Area Analysis. (**HSI**, *Homeland Security Strategic Planning*, March 2007, vii)

MAA: Mutual Aid Agreement. (**FEMA**, *HSEEP Glossary*, 2008)

MAC: Mapping Analysis Center. (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 43)

MAC: Multi-Agency Coordination. (AHRQ, Mass Medical Care…, 2007, p. 54)

MACC: Multi-Agency Command Center. (**FEMA**, *Mission Assignment SOPs Draft*, 2007, 43)

MACDIS: Military Assistance for Civil Disturbances. (**DoD**, *MACDIS*, 1194, p. 1)

MAE: Mid-America Earthquake Center, University of Illinois at Urbana-Champaign.

MAEC: Mid-America Earthquake Center, University of Illinois at Urbana-Champaign.

MAEViz: Mid-America Earthquake Center Seismic Loss Assessment System. "MAEviz is a joint effort between the Mid-America Earthquake (MAE) Center and the National Center for Supercomputing Applications (NCSA) to develop the next generation of seismic risk assessment software. MAEviz is leveraging off NCSA's cyberenvironment efforts and the University of Michigan's Sakai collaboratory to provide an advanced framework for earthquake engineering,

as well as general hazard and risk research, harnessing multi-institutional expertise, as well as existing and new tools across a broad range of technologies. The open-source framework of MAEviz employs the latest and most advanced workflow tools to provide a flexible and modular conduit through which the culmination of the interdisciplinary research and development efforts of the MAE Center are integrated and delivered to end-users. MAEviz follows the Consequence-based Risk Management methodology…using a visually-based, menu-driven system to generate damage estimates from scientific and engineering principles and data, test multiple mitigation strategies, and support modeling efforts to estimate higher level impacts of earthquake hazards, such as impacts on transportation networks, social, or economic systems. It enables policy-makers and decision-makers to ultimately develop risk reduction strategies and implement mitigation actions." (**MAE Center**, *MAEviz Software*, 2006)

Magma: "The molten matter including liquid rock and gas under pressure which may emerge from a volcanic vent." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 50)

Magnitude ("Richter scale"): "Devised by C.F. Richter in 1935, an index of the seismic energy released by an earthquake (as contrasted to intensity that describes its effects at a particular place), expressed in terms of the motion that would be measured by a specific type of seismograph located 100 km from the epicentre of an earthquake. Nowadays several "magnitude scales" are in use. They are based on amplitudes of different types of seismic waves, on signal duration or on the seismic moment." (**UNDHA**, *Disaster Management Glossary*, 1992, p. 51)

Magnitude: "A number that represents the size of an earthquake source, as determined from seismographic observations. The original earthquake magnitude scale was the Richter or "local" scale (ML), defined by Charles Richter in 1935, but it has limited range and applicability. Modern magnitude scales are based on the area of fault rupture times the amount of slip (seismic moment).The moment magnitude (MW) is the preferred magnitude scale, as it provides the most reliable estimate of the size of the largest quakes. For smaller quakes, ML and MW values are nearly the same. An increase of one unit of moment magnitude (for example, from 4.6 to 5.6) corresponds approximately to a 31.6-fold increase in energy released [by definition, a two-unit increase in magnitude —for example, from 4.7 to 6.7—represents an increase in energy released of 1,000 times (31.6_31.6)]. Quakes below magnitude 2.5 are not generally felt by humans." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Major Accident Reporting System (MARS): "The major accident reporting system (MARS) is used by both EU and OECD member countries to report industrial accidents in the MARS standard format and to exchange accidents information on this basis. It is a distributed information network, consisting of local databases on a MS-Windows platform in each Member State of the European Union and a central UNIX-based analysis system at the European Commission's Joint Research Centre in Ispra (MAHB) that allows complex text retrieval and pattern analysis." (**European Environment Agency**, *EEA Environmental Glossary*; citing: **Institute for the Protection and Security of the Citizen** (EC Joint Research Center). Major Accident Hazards Bureau (MAHB).)

Main shock: "The biggest of a particular sequence of earthquakes." (**UNDHA**, *DM Glossary*, 1992, 51)

Major Disaster: "`Major disaster' means natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which, in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby." (**Robert T. Stafford Act** 102; 44 CFR 206.2 and 206.36)

Major Disaster Declaration: Under the Stafford Act, "A Presidential major disaster declaration puts into motion long-term Federal recovery programs, some of which are matched by State programs, and designed to help disaster victims, businesses and public entities." (**DHS**, *NRP Comment Draft*, September 2007, p. 39)

Major Disaster Declaration: "The forms of public assistance typically flow either from a major disaster declaration or an emergency declaration.32 A **major disaster** could result from any natural or manmade event that the President determines warrants supplemental Federal aid. The event must be clearly more than State or local governments can handle alone." (**DHS**, *NRF*, 2008. 41)

Major Disaster Declaration Procedures, Stafford Act (Sec. 401, 42 U.S.C. 5170): "All requests for a declaration by the President that a major disaster exists shall be made by the Governor of the affected State. Such a request shall be based on a finding that the disaster is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments and that Federal assistance is necessary. As part of such request, and as a prerequisite to major disaster assistance under this Act, the Governor shall take appropriate response action under State law and direct execution of the State's emergency plan. The Governor shall furnish information on the nature and amount of State and local resources which have been or will be committed to alleviating the results of the disaster, and shall certify that, for the current disaster, State and local government obligations and expenditures (of which State commitments must be a significant proportion) will comply with all applicable cost-sharing requirements of this Act. Based on the request of a Governor under this section, the President may declare under this Act that a major disaster or emergency exists." (**Stafford Act**, June 2007 (FEMA 592), p. 26)

Major Event: "Definition: a planned, non-emergency activity that draws national attention. Extended definition. a significant or designated non-emergency activity requiring additional security, such as inaugurals, State of the Union addresses, the Olympics, and international summit conferences." (**DHS**, *Lexicon: Terms and Definitions*, 2007, p. 17)

Major Event: "Refers to terrorist attacks, major disasters, and other emergencies within the United States." (**White House**, HSPD-8, December 17, 2003)

Major Events: "The term 'major events' refers to domestic terrorist attacks, major disasters, and other emergencies." (White House, HSPD-7, December 17, 2003)

Major Events, Assumptions: (**DHS**, *Target Capabilities List*, 2007, p. 2)

- May occur at any time with little or no warning
- Require significant information-sharing at the unclassified and classified levels across multiple jurisdictions and between the public and private sectors
- Involve single or multiple geographic areas
- May have significant international impact and/or require significant international information sharing, resource coordination, and/or assistance
- Can span the spectrum of incident management to include prevention, protection, response, and recovery
- Involve multiple, highly varied hazards or threats
- May result in numerous casualties; fatalities; displaced people; property loss; disruption of normal life support systems, essential public services, and basic infrastructure; and significant damage to the environment
- Impact critical infrastructure across sectors
- Overwhelm capabilities of State, local, and Tribal governments, and private-sector infrastructure owners and operators
- Attract an influx of spontaneous volunteers and supplies
- May require short-notice asset coordination and response
- May require prolonged, sustained incident management activities."[82]

Major Hazard: "Definition: a natural or human-induced phenomenon that has the potential for significant and substantial harm to human health, property, activity, and/or animals or the environment." (**DHS**, *Lexicon: Terms and Definitions*. 2007, pp. 17-18)

Major Hurricane: "A hurricane that is classified as Category 3 or higher." (**NHC**, *Glossary of NHC Terms*, 2007)

Man-Made Disaster: "Definition: a human-caused incident resulting in severe property damage, deaths, and/or multiple injuries." (**DHS**, *Lexicon: Terms and Definitions*, 2007, p. 18)

Man-Made Disasters: "A technological disaster threatens the viability of the technological system, causes massive loss of life or property, and may endanger the social environment in which it occurs. Technological disasters can have a global impact, such as the Chernobyl nuclear power plant explosion. Events of this mission type could include accidental or intentional releases of oil or other hazardous materials, power grid outage, terrorist attacks on critical infrastructure, etc." (**JCS/DoD**, *Civil Support* (Joint Publication 3-28), 2007, p. III-3)

Manage Incident: "Definition: Control access to impacted site(s) and manage and command all activities in that area." (**DHS**, *Universal Task List 2.1*, 2005, p. 66)

Manageable Span of Control (See "Span of Control")

[82] The assumptions for major events mirror those for Catastrophic events found in the National Response Plan.

Management: Management consists of decision-making activities undertaken by one or more individuals to direct and coordinate the activities of other people in order to achieve results that could not be accomplished by any one person acting alone. Effective management focuses on group effort, various forms of coordination, and the manner of making decisions. Management is required whenever two or more persons combine their efforts and resources to accomplish a goal that cannot be accomplished by acting alone. Coordination is necessary when the actions of group participants constitute parts of a total task. If one person acts alone to accomplish a task, no coordination may be required; but when that person delegates a part of the task to others, the individual efforts must be coordinated. (Unknown source)

Management and Leadership: "*Management is about coping with complexity*. It is a response to a significant development of the 20th century, namely the emergence of large, complex organizations. Good management brings order to what would otherwise be chaos. *Leadership, by contrast, is about coping with change*. *Management* remains important for the day-to-day success of any organization and focuses on such issues as planning/budgeting, organizing/staffing, and controlling/problem solving. By contrast, *leadership* begins with setting direction and aligning people, as well as motivating them to success." (**McCausland**, *Developing Strategic Leaders for the 21st Century*, February 8, 2008, p. x)

Management by Objective: "A management approach that involves a five-step [four?] process for achieving the incident goal. The Management by Objectives approach includes the following: establishing overarching incidents objectives;

> developing strategies based on overarching incidents objectives;
>
> developing and issuing assignments, plans, procedures, and protocols;
>
> establishing specific, measurable tactics or tasks for various incident management, functional activities, and directing efforts to attain them, in support of defined strategies; and
>
> documenting results to measure performance and facilitate corrective action. (**FEMA**, *NIMS Draft*, 2007, 154)

Management By Objectives: "In ICS, this is a top-down management activity which involves the following steps to achieve the incident goal:

> (1) establishing incident objectives,
>
> (2) selection of appropriate strategy(s) to achieve the objectives, and
>
> (3) the tactical direction associated with the selected strategy." (**USCG**, *IM Handbook*, 2006, Glossary 25-14)

Management Support Team (MST): "An MST is a command and control team that provides support and liaison functions for other…teams in the field." (**FEMA**, *Typed Resource Definitions*, 2005)

Manager: "Personnel within the ICS organizational units that are assigned specific managerial responsibilities, e.g. Staging Manager and Camp Manager." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 55)

Managers: "Managers should translate goals into results, which requires effective leadership by top executives and incentives that reward manager performance." (NAPA, *The 21st Century Federal Manager*, July 2002, p. 15)

Mandated Recovery Time: "The legally or organizationally specified time objective that identifies the allowable time from interruption until system/function recovery." (**DHS**, *FCD 2*, Nov. 2007, p. C-1)

Mandatory or Directed Evacuation: "This is a warning to persons within the designated area that an imminent threat to life and property exists and individuals MUST evacuate in accordance with the instructions of local officials." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (State and Local Guide (SLG) 101), September 1996, GLO-6)

MAP: Mission Action Plan.

Map Modernization: "Map Modernization is responding to National Flood Insurance Program (NFIP) requirements and feedback provided by Federal, State, and local Program stakeholders. Flood hazard conditions are dynamic, and many NFIP maps may not reflect recent development and/or natural changes in the environment. Updated NFIP maps can take advantage of revised data and improved technologies for identifying flood hazards. Up-to-date maps support a flood insurance program that is more closely aligned with actual risk, encourage wise community-based floodplain management, and improve citizens' flood hazard awareness. Local communities and various stakeholders desired more timely updates of flood maps and easier access to the flood hazard data used to create the maps. Map Modernization is a cornerstone for helping community officials and citizens be better prepared for flood-related disasters." (**FEMA**, *Map Modernization, Why Modernize?* June 6, 2007 update)

Maritime Domain Awareness (MDA): "…knowledge of the area, of conditions and of our capabilities. The more we work to achieve MDA, the more terrorists we stop in their tracks--and the more we deter from attempting to penetrate our ports. The concept of MDA can be applied to the entire country--we must be aware of both the terrorists' capabilities and our own--on land, sea, and air." (**DHS**, *Statement…[DHS Sec] Ridge at Port of Portland*, 4May2004)

Maritime Infrastructure Recovery Plan (MIRP): "The Maritime Infrastructure Recovery Plan (MIRP)—a supporting plan for the National Strategy for Maritime Security—contains procedures for managing the economic consequences and recovery of maritime infrastructure after a transportation security incident, such as a terrorist attack. The MIRP provides strategic-level guidance for national, regional, and local decisionmakers to set priorities for restoring the

flow of domestic cargo. The plan recommends that the Captain of the Port consider key shipping channels and waterways for homeland security; military traffic; and commercial operations; key landside transportation infrastructure, such as tunnels and bridges; and other infrastructure key to maintaining continuity of operations in the port." (**GAO**, *Maritime Security*, Dec 2007, p. 57)

Maritime Operational Threat Response Plan (MOTR): "Aids coordination of U.S. government response to threats against the United States and its interests in the maritime domain by establishing roles and responsibilities for government response.**" (GAO,** *Maritime Security*, Dec 2007, p. 56)

Maritime Security Condition System (**MARSEC):** "MARSEC is a three-tiered system developed by the Coast Guard to communicate the prevailing threat environment to the marine elements of the national transportation system, including ports, facilities, and critical assets and infrastructure. The levels align closely with DHS's color-coded Homeland Security Alert System in the following way: MARSEC 1 applies when threat conditions Green, Blue, or Yellow are set; MARSEC 2 applies when threat condition Orange is set; and MARSEC 3 applies when threat condition Red is set." (**GAO**, *Maritime Security: Federal Efforts Needed.…*, Dec. 2007, 24)

Maritime Security Risk Assessment Model: "...a tool developed by the Coast Guard to determine relative risks at ports that can be compared both within the port and among ports." (**GAO**, *Maritime Security: Federal Efforts Needed to Address Challenges*…, Dec 2007, 49)

MARS: Major Accident Reporting System. (European Union).

MARS: Military Affiliate Radio System. (**OCDM**, *Annual Report 1961*, p. 88)

MARSEC: Maritime Security Condition System. (**GAO**, *Maritime Security*, Dec. 2007, iv)

Martial Law: "Martial law is not explicitly mentioned in the Constitution, but the suspension of habeas corpus is mentioned in Article 1, Section 9, and the activation of the militia in time of rebellion or invasion is mentioned in Article 1, Section 8…. In strict dictionary terms, martial law is the suspension of civil authority and the imposition of military authority. When we say a region or country is "under martial law," we mean to say that the military is in control of the area, that it acts as the police, as the courts, as the legislature. The degree of control might vary - a nation may have a civilian legislature but have the courts administered by the military. Or the legislature and courts may operate under civilian control with a military ruler. In each case, martial law is in effect, even if it is not called 'martial law.'…. Article 1, Section 9 states, 'The privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.' Habeas corpus is a concept of law, in which a person may not be held by the government without a valid reason for being held. A writ of habeas corpus can be issued by a court upon a government agency (such as a police force or the military). Such a writ compels the agency to produce the individual to the court, and to convince the court that the person is being reasonably held. The suspension of habeas corpus allows an agency to hold a person without a charge. Suspension of habeas corpus is often equated with martial law. Because of this connection of the two concepts, it is often argued that only Congress can declare martial law, because Congress alone is granted the power to suspend

the writ. The President, however, is commander-in-chief of the military, and it has been argued that the President can take it upon himself to declare martial law. In these times, Congress may decide not to act, effectively accepting martial law by failing to stop it; Congress may agree to the declaration, putting the official stamp of approval on the declaration; or it can reject the President's imposition of martial law, which could set up a power struggle between the Congress and the Executive that only the Judiciary would be able to resolve.…..[83]

What the Supreme Court had to decide [Supreme Court case, Civil War] was "Had [the military commission] the legal power and authority to try and punish…?" Resoundingly, the Court said no. The Court stated what is almost painfully obvious: "Martial law ... destroys every guarantee of the Constitution." The Court reminded the reader that such actions were taken by the King of Great Britain, which caused, in part, the Revolution. "Civil liberty and this kind of martial law cannot endure together; the antagonism is irreconcilable; and, in the conflict, one or the other must perish." Did this mean that martial law could never be implemented? No, the Court said. The President can declare martial law when circumstances warrant it: When the civil authority cannot operate, then martial law is not only constitutional, but would be necessary: 'If, in foreign invasion or civil war, the courts are actually closed, and it is impossible to administer criminal justice according to law, then, on the theatre of active military operations, where war really prevails, there is a necessity to furnish a substitute for the civil authority, thus overthrown, to preserve the safety of the army and society; and as no power is left but the military, it is allowed to govern by martial rule until the laws can have their free course. As necessity creates the rule, so it limits its duration; for, if this government is continued after the courts are reinstated, it is a gross usurpation of power. Martial rule can never exist where the courts are open, and in the proper and unobstructed exercise of their jurisdiction. It is also confined to the locality of actual war.'….

"On 8/26/2005, in the wake of Hurricane Katrina, New Orleans was placed under martial law after widespread flooding rendered civil authority ineffective. The state of Louisiana does not have an actual legal construct called 'martial law,' but instead something quite like it: a state of public health emergency. The state of emergency allowed the governor to suspend laws, order evacuations, and limit the sales of items such as alcohol and firearms. The governor's order limited the state of emergency, to end on 9/25/2005, /unless terminated sooner.'

"There have been many instances of the use of the military within the borders of the United States, such as during the Whiskey Rebellion and in the South during the civil rights crises, but these acts are not tantamount to a declaration of martial law. The distinction must be made as clear as that between martial law and military justice: deployment of troops does not necessarily mean that the civil courts cannot function, and that is one of the keys, as the Supreme Court noted, to martial law." (**Mount**, "Constitutional Topic: Martial Law," March 15, 2006)

MASF: Mobile AeroMedical Staging Facility, USAF (**Largoza**, *Joint Medical Evac.*, 2000)

[83] As Gessert observes "The 'proclamation of limited martial law by President Eisenhower during the Operation Alert exercise of 1955…prompted broad reexamination of…emergency requirements and functions of government." (*Federal Civil Defense Organization*, 1965, p. 29)

Mass Care (ESF 6): Mass Care: Includes sheltering, feeding operations, emergency first aid, bulk distribution of emergency items, and collecting and providing information on victims to family members. (**DHS**, *Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework* (Draft), Sep.10, 2007, p. 21)

Mass Casualty: "Any large number of casualties produced in a relatively short period of time, usually as the result of a single incident such as a military aircraft accident, hurricane, flood, earthquake, or armed attack that exceeds local logistic support capabilities." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Mass Casualty Event: "…a catastrophic public health- or terrorism-related event, such as influenza pandemic or the detonation of improvised nuclear devices, the resulting tens of thousands of victims will be likely to overwhelm the resources of a community's health care system." (**AHRQ**, *Mass Medical Care with Scarce Resources*, February 2007, p. viii)

Mass Casualty Event Planning Themes and Recommendations:

- Be Proactive -- Good planning must be undertaken ahead of time.
- Build and Maintain Relationships -- forge partnerships.
- Establish Regional and Local Multiagency Coordination.
- Devise, Model, and Exercise MCE Response Plans.
- Establish Clear Channels of Communication.
- Establish Clear Messages and Communications Strategies.
- Emphasize Prevention.
- Clarify the Process for Leadership and Coordination.
- Identify Existing National and State Tools, Protocols, and Processes for Each MCE Phase.
- Consider the Legal and Ethical Issues Related to Planning and Responding to an MCE.
- Integrate Palliative Care Strategies Across the Planning Process.
- Consider the Financial Implications of Responding to an MCE.
- Consider Vulnerable Populations.
- Develop Robust Security Plans. (**AHRQ**, *Mass Medical Care*…, pp. xi-xiii)

Mass Casualty Incident: "An incident which generates more patients at one time than locally available resources can manage using routine procedures. It requires exceptional emergency arrangements and additional or extraordinary assistance." (**World Health Organization**, *Mass Casualty Management Systems*, 2007, p. 30)

Mass Emergency: "An unexpected or undesirable event which requires the resources from most of all municipal departments and limited assistance from outside agencies may be needed." (**Drabek** 1996, Session 2, p. 3)

Mass Evacuation Incident Annex, National Response Framework, Scope:

- Establishes the criteria under which Federal support to mass evacuations is provided.
- Provides a concept of operations for Federal-level mass evacuation support.

- Identifies the agencies and organizations involved in a federally supported mass evacuation.
- Defines the roles and responsibilities of Federal entities in planning, preparing for, and conducting mass evacuations in support of State, tribal, and local authorities.

- Identifies guidelines to improve coordination among Federal, State, tribal, and local authorities when Federal evacuation support is required. (FEMA, Mass Evacuation Incident Annex, June 2008, p. 1)

Mass Evacuation Management Unit (MEMU): "**Programs and Tools Available under ESF-6** In the event a catastrophic disaster, the **Mass Evacuation Management Unit (MEMU)** may be activated. This unit serves as the coordinating and integrating unit to support mass evacuation activities at the Federal level. MEMU works in coordination with other mass care and emergency assistance units and ESF- 6 partners to ensure that appropriate and timely life sustaining services are delivered to evacuees. MEMU interacts with other FEMA Directorates and Regional and JFO staff to ensure coordination during multi-state mass evacuation events and during incidents requiring the support of host states." (**FEMA**, *Statement of R. David Paulison…Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath – the Federal Response,"* June 26, 2008, p. 11)

Mass Migration Planning: "A mass migration from another country could be triggered by many events, including political unrest or all hazard incidents. Since 2003 FEMA has participated as a member of the DHS Task Force – Southeast, led by the U.S. Coast Guard and charged with preparing plans for a potential mass migration into the United States." (**FEMA**, *NEMA Initiatives and Issues From the Disaster Operations Directorate*, August 20, 2007, p. 14)

Mass Panic: "The Mass Panic Warning Myth: It is extremely important to note that "mass panic" is commonly expected by civil authorities but is almost never found, even in cases such as the 1993 and 2001 World Trade Center bombings. People generally engage in rational adaptive action even when they are very frightened. When people take inappropriate actions, it usually is because they had inadequate information about the situation or were not provided instructions on what actions to take. Timely and effective public warnings can do much to diminish the risk of panic in an emergency situation." (**Partnership for Public Warning**, *Protecting America's Communities: An Introduction to Public Alert & Warning*, 2004, 29, pp. 7-8)

Mass Prophylaxis: The process by which an entire community is to receive prophylactic drugs and vaccines over a defined period of time in response to possible exposure to a biological agent. (**Agency for Healthcare Research and Quality,** Community-Based Mass Prophylaxis – A Planning Guide for Public Health Preparedness, August 2004)[84]

Mass Prophylaxis: "Mass Prophylaxis is the capability to protect the health of the population through the administration of critical interventions in response to a public health emergency in

[84] Hupert N, Cuomo J, Callahan MA, Mushlin AI, Morse SS. *Community-Based Mass Prophylaxis: A Planning Guide for Public Health Preparedness*. AHRQ Publication No. 04-0044, August 2004. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/research/cbmprophyl/

order to prevent the development of disease among those who are exposed or are potentially exposed to public health threats. This capability includes the provision of appropriate follow-up and monitoring of adverse events, as well as risk communication messages to address the concerns of the public." (**DHS**, TCL, 2007, p. 479)

Mass Sheltering and Housing Assistance Recovery Strategy: "The…Federal Emergency Management Agency's (FEMA) `Mass Sheltering and Housing Assistance' recovery strategy outlines guidance and protocols for providing sheltering and housing assistance in support of a mass evacuation in connection with a Presidentially declared emergency or disaster. While this strategy focuses on assistance associated with large hurricane evacuations, the procedures and underlying processes also may apply to no-notice events, such as major earthquakes generating a subsequent need for mass sheltering and housing.

- *Congregate Shelters* are facilities used for sheltering large groups of people, but that normally serve other purposes (e.g., schools, stadiums, churches, or church-sponsored facilities).
- *Transitional Shelters* are facilities that provide short-term lodging and additional privacy, such as hotels or motels.
- *Temporary Housing* facilities are intended to provide living accommodations for an extended period of time, to include single- and multi-family homes, apartments and manufactured homes." (**FEMA**, *FEMA Recovery Strategy*, August 3, 2006)

Mass Sheltering and Housing Assistance Recovery Strategy: "Key elements of the strategy are advance identification of Congregate and Transitional Shelters to provide short-term lodging and Temporary Housing facilities for an extended period of time. Contained within the strategy is a Shelter Registration Protocol which will allow FEMA field personnel to proactively register evacuees at designated congregate shelter locations and organized evacuee reception sites, including those out-of-State. FEMA also has a Transitional Sheltering Protocol, which may be implemented when large numbers of evacuees are being housed in congregate shelters and will not be able to return to their homes for an extended period of time. In addition to the sheltering protocol, FEMA has an initiative to offer Evacuee Return Transportation, which can be used if FEMA, in support of the affected State, coordinates the out-of-State evacuation of State residents, and the evacuees are able to return to and occupy their homes within a short period of time, FEMA will organize a reverse, mass relocation effort. If evacuees are not able to return to their homes for an extended period of time, eligible evacuees may be reimbursed for independent transportation expenses to return to their homes." (**FEMA**, *Statement of Cannon*, December 4, 2007, pp. 6-7)

Master Business Continuity Professional (MBCP): "The Master Business Continuity Professional (MBCP) or Master level [offered by DRI International], targets an individual with a minimum of five years of experience as a business continuity/disaster recovery planner. In addition, the MBCP must attain a higher score on the CBCP Examination, and either successfully complete a case-study examination or complete a directed research project and paper. An additional prerequisite for the CBCP and MBCP certification levels is the demonstration of proficiency in a specific number of Subject Areas of the Professional Practices for Business Continuity Planners." (**ISSA**, *Certifications*, 2007)

Master Exercise Practitioner Program (MEPP): "The Master Exercise Practitioner Program (MEPP) eligibility includes local, Tribal, State, Territorial, Department of Homeland Security (DHS), and other Federal agency emergency management/emergency services personnel whose responsibilities involve emergency management exercises. This includes exercise training officers, emergency managers, emergency services personnel from fire, emergency medical, hospitals, public/environmental health, coroners, law enforcement, corrections officials, public works/utilities, community service/volunteer agencies, non-profits, and private entities who participate in emergency services/emergency management exercise design/development, conduct, evaluation, and improvement planning activities, members of exercise planning teams, evaluation teams, and/or who manage exercise programs." The three principle Courses comprising the MEPP Series are:

E132 Exercise Design and Evaluation
E133 Exercise Program Management and Control Simulation
E136 Exercise Development Course (**FEMA**, MEPP Series), March 3, 2008

Master Scenario Events List (MSEL): "A MSEL contains a chronological listing of the events that drive exercise play. The MSEL links simulation to action and reflects each incident or activity that will prompt players to implement the policy or procedure being tested. MSEL entries are called injects. An event may be injected via player action or controller simulation. Each MSEL inject contains:

- Designated scenario time
- Real-time delivery time
- Event synopsis
- Controller responsible for delivering inject, with controller/evaluator special instructions (if applicable)
- Expected action (player response expected after a MSEL inject is delivered)
- Intended player (agency or individual player for whom the MSEL inject is intended)
- Means of delivery (the system through which the inject is delivered, or the system that is being mimicked by an inject)
- Notes section (for controllers and evaluators to track actual events against those listed in the MSEL, with special instructions for individual controllers and evaluators)." (**DHS**, *HSEEP*, Vol. V, 2005, pp. 33-34)

Master Scenario Events List (MSEL): "The MSEL is a chronological timeline of expected actions and scripted events to be injected into exercise play by *controllers* to generate or prompt *player* activity. It ensures necessary events happen so that all *objectives* are met. Larger, more complex exercises may also employ a *Procedural Flow (ProFlow)*, which differs from the MSEL in that it only contains expected player actions or *events*. The MSEL links simulation to action, enhances exercise experience for players, and reflects an incident or activity meant to prompt *players* to action. Each MSEL record contains a designated *scenario* time, an *event* synopsis, the name of the *controller* responsible for delivering the inject; and, if applicable, special delivery instructions, the *task* and *objective* to be demonstrated, the expected action, the intended player, and a note-taking section." (**FEMA**, *HSEEP Glossary*, 2008)

Material Safety Data Sheet (MSDS): "A compilation of information required under the OSHA Hazard Communication Standard on the identity of hazardous chemicals, health and physical hazards, exposure limits, and precautions. Section 311 of Title Ill of SARA requires facilities to submit MSDSs under certain conditions." (**EPA**, *Technical Guidance for Hazards Analysis: Emergency Planning for Extremely Hazardous Substances*, 1987, p. A-6)

Material Threat Assessment (MTA): "Material Threat Assessment refers to an official estimate of the magnitude and severity of the threat that a specific CBRN agent poses to the U.S. population, based on scientific evidence and classified intelligence information of plausible worse case scenarios." (**HHS**, *Pandemic and All-Hazards Preparedness Act Progress* Report, November 2007, Appendix 1, Abbreviations and Glossary)

Material Threat Consultation: "The Homeland Security Secretary, in consultation with the Secretary [HHS] and the heads of other agencies as appropriate, shall on an ongoing basis—
''(i) assess current and emerging threats of chemical, biological, radiological, and nuclear agents; and
''(ii) determine which of such agents present a material threat against the United States population sufficient to affect national security." (**Congress**, *Project BioShield Act of 2004* (Public Law 108-276), July 21, 2004, p. 844).

Material Threat Determination (MTD): "DHS Responsibilities Under Project BioShield: In accordance with section 319F-2(c)(2) of the Project BioShield Act of 2004, it is the DHS' responsibility, in consultation with HHS and other agencies, to assess current and emerging threats of natural or chemical, biological, radiological, and nuclear agents, and to determine which agents present a significant material threat to the U.S. population. To fulfill this responsibility, DHS conducted detailed modeling of threats, vulnerabilities, and consequences for various plausible scenarios of a terrorist attack. As a result of this work, DHS identified 12 biological threats, plus radiological and nuclear devices, meeting the statutory requirement to merit a Material Threat Determination (MTD)….Accompanying each MTD is a Population Threat Assessment (PTA). The PTA estimates the size of the population exposed by the agents identified in the MTDs to gauge the impact on the population and national infrastructure if that particular agent was released for a given high consequence plausible scenario. (**DHS**, *Statement for the Record, Jeffrey W. Runge*, April 18, 2007)

Material Threat Determination (MTDs) and Population Threat Assessments (PTAs) Issued by the Department of Homeland Security:

Bacillus anthracis (ANTHRAX)
Botulinum toxins (BOTULISM)
Burkholderia mallei (GLANDERS)
Burkholderia pseudomallei (MELIODOSIS)
Ebola virus (HEMORRHAGIC FEVER)
Franciscella tularensis (TULAREMIA)
Junin virus (HEMORRHAGIC FEVER)
Marburg virus (HEMORRHAGIC FEVER)
Multi-drug resistant *Bacillus anthracis* (MDR ANTHRAX)
Radiological/Nuclear agents
Rickettsia prowazekii (TYPHUS)
Variola virus (SMALLPOX)
Volatile nerve agents [PTA only]
Yersinia pestis (PLAGUE)

(**HHS**, *HHS Public Health Emergency Medical Countermeasure Enterprise Implementation Plan for Chemical, Biological, Radiological and Nuclear* Threats, April 2007, p. 5)

Material Threat Determination (MTD): "Material Threat Determination refers to an official statement that a specific CBRN agent has been determined to pose a material threat to the U.S. population sufficient to affect national security." (**HHS**, *Pandemic and All-Hazards Preparedness Act Progress Report*, November 2007, Appendix 1, Abbreviations and Glossary)

Maximum Threat: "The greatest destruction that can be expected from an event." (**FEMA**, *Hazards Analysis for Emergency Management (Interim Guidance)*, September 1983, p. 5)

Maximum Tolerable Downtime (MTD): "The maximum number of hours for which it is acceptable that a function can be interrupted following a continuity event." (**DHS**, *FCD 2*, Nov. 2007, p. C-1)

MBCP: Master Business Continuity Professional.

MCI: Mass Casualty Incident. (Com. of MA, *Independent State Auditor's Report on Certain Activities of the Department of Public Health Bioterrorism Grants…*, March 24, 2008, p. ii)

MCI/MPI: Multiple Casualty Incident/Multiple Patient Incident.

MCATI: Managing Civil Actions in Treat Incidents. (**FEMA**, *Compendium of Terrorism Training*, 2003, p. 4)

MCE: Mass Casualty Event. (**AHRQ**, *Mass Medical Care with Scarce Resources*, 2007, p. 3)

MCE: Maximum Credible Event. (**FEMA**, *Hazards Analysis for EM*, 1983, p. ii, Glossary)

McWaters v. FEMA: "*McWaters v. FEMA* was a class action lawsuit brought by survivors of Hurricane Katrina against the Federal Emergency Management Agency for its handling of recovery efforts, with particular regard to its administration of the emergency housing assistance program as provided for in the Stafford Act. This case raised both constitutional and sovereign immunity issues, the treatment of which are intertwined in the court's decision….

In *McWaters*, the plaintiffs charged that FEMA had been so inept in its administration of the Stafford Act's temporary housing assistance program as to constitute an illegal denial of benefits accruing to them under the act. But while the federal trial court judge agreed that FEMA's actions hardly exemplified bureaucratic efficiency or even competence, he nonetheless ruled that FEMA was immune from suit under the Stafford Act's sovereign immunity provisions – but with one important exception. FEMA had summarily terminated housing assistance benefits (rental payments to motels in which displaced Gulf Coast residents were staying) without affording them a pre-termination due process opportunity to challenge such termination. FEMA asserted that it was under no such procedural obligation, since recipients had no property interest in the housing assistance benefit.

Au contraire, the court ruled. Though plaintiffs had no right to receive rental assistance past their eligibility deadline, they did have a congressionally created property interest in

entitlement to participation in the housing assistance program within the confines of those deadlines. As a result of this property interest, plaintiffs were also entitled to pre-termination due process to ensure that FEMA was making its termination decisions fairly and accurately. And since these due process rights are grounded in the Fifth Amendment to the U.S. Constitution, they trump the Stafford Act's assertion of sovereign immunity for all response and recovery actions FEMA undertook post-Hurricane Katrina." (**Burton**, "The Constitutional Roots of All-Hazards Policy, Management, and Law," 2008, pp. 10-11)

MDA: Maritime Domain Awareness. (**DHS**, *Statement…[DHS Sec] Ridge at Port of Portland*, 4May2004; **US Navy, Marine Corps, USCG**, *Cooperative Strategy for 21st Century Seapower*, Oct. 2007, p. 16)

MDMP: Military Decision-Making Process. (**DA**, *WMD-CST Operations*, Dec. 2007. 1-4)

MDR-TB: Multi-Drug Resistant Tuberculosis.

Mean Return Period: "The average time between occurrences of a particular hazardous event." (**UNDHA**, *DM Glossary*, 1992, 52)

Measure: "A determination of a jurisdiction's specific level of NIMS compliance, evaluated according to that jurisdiction's responses to the NIMS metrics that have been established by the NIMS Integration Center (NIC)." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 6)

Measures and Metrics: Performance measures of quantitative or qualitative levels against which achievement of a task or capability outcome can be assessed. They describe how much, how well, and/or how quickly an action should be performed and are typically expressed in way that can be observed during an exercise or real event. The measures and metrics are not standards. They serve as guides for planning, training, and exercise activities. However, nationally accepted standards of performance, benchmarks, and guidelines are reflected, if applicable. (**DHS**, *Target Capabilities List*, March 2007)

ME/C: Medical Examiner/Coroner. (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, Acronym List)

Medical Countermeasure: "Medical countermeasure (used interchangeably with security countermeasure (SC))as defined in Section (3) of the Project BioShield Act of 2004, Section 319F-2 of the Public Health Service Act (PHS Act.): a drug (as that term is defined by section 201(g)(1) of the Federal Food, Drug, and Cosmetic Act [FDCA] (21 U.S.C. 321 (g)(1))), biological product (as that term is defined by section 351(i) of PHS (42 U.S.C. 262(i))), or device (as that term is defined by section 201 (h) of the Federal FDCA (21 U.S.C. 321 (h))) that the Secretary of HHS determines to be a priority (consistent with sections 302(2) and 304(a) of the Homeland Security Act of 2002) to treat, identify, or prevent harm from any biological, chemical, radiological or nuclear agent identified as a material threat under paragraph (2)(A)(ii), or to treat, identify, or prevent harm from a condition that may result in adverse health consequences or death and may be caused by administering a drug, biological product, or device against such an agent; the Secretary determines under Section 319F-2(c)(2)(B)(ii) of the PHS

Act to be a necessary countermeasure, and is a countermeasure for which the Secretary determines that sufficient and satisfactory clinical experience or research data (including data, if available, from pre-clinical and clinical trials) support a reasonable conclusion that the countermeasure will qualify for approval or licensing within eight years after the date of a determination under paragraph (5) of Section 319F-2(c) or is approved or cleared under chapter V of the FDCA or licensed under section 351 of the PHS Act; or is authorized for emergency use under section 564 of the FDCA." (**HHS**, *Pandemic and All-Hazards Preparedness Act Progress Report*, November 2007, Appendix 1, Abbreviations and Glossary)

Medical Education for National Defense (MEND): "Jointly with the Armed Services, OCDM continued to support the Medical Education for National Defense (MEND) program which introduces mass emergency medical care training into the curriculum of the Nation's medical schools. Fifteen additional selected schools jointed this program in FY 1960. On June 30, 1960, 70 of the Nation's 85 accredited medical schools were participating in the program." (**OCDM**, *Annual Report 1960*, p. 27)

Medical Examiner: "A physician who is appointed by the government to oversee and/or perform medicolegal death investigations. (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 37)

Medical Radiobiology Advisory Team (MRAT), DoD: "provides advice and consultation to command and control regarding health physics, medical, and radiobiological issues during nuclear/radiological incidents." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, 11)

Medical Reserve Corps (MRC): "The mission of the MRC is to organize medical, public health, and other volunteers in support of existing programs and resources to improve the health and safety of communities and the Nation. MRC units provide personnel to support and supplement the existing emergency and public health agencies in the community. MRC leaders are encouraged to adopt an all-hazards approach and more broad-based public health initiatives, including a focus on increasing disease prevention efforts, and enhancing emergency preparedness. Medical Reserve Corps volunteers include medical and public health professionals such as physicians, nurses, pharmacists, dentists, veterinarians, and epidemiologists." (**AHRQ/HHS**, *Mass Medical Care…,* 2007, p. 66)

Medical Surge: "Medical Surge is defined as rapid expansion of the capacity of the existing healthcare system in response to an event that results in increased need of personnel (clinical and non-clinical), support functions (laboratories and radiological), physical space (beds, alternate care facilities) and logistical support (clinical and non-clinical equipment and supplies)." (**DHS**, *TCL*, 2007, p. 449)

Medical Surge Capacity and Capability (MSCC) Management System: "The Medical Surge Capacity and Capability (MSCC) Management System describes a management methodology based on valid principles of emergency management and the Incident Management System (IMS). Medical and health disciplines may apply these principles to coordinate effectively with one another, and to integrate with other response organizations that have established IMS and emergency management systems (fire service, law enforcement, etc.). This promotes a common management system for all response entities—public and private—that

may be brought to bear in an emergency. In addition, the MSCC Management System guides the development of health and medical response that is consistent with the new National Incident Management System (NIMS). The MSCC Management System emphasizes *responsibility* rather than authority alone for assigning key response functions and advocates a management-by-objectives approach. In this way, the MSCC Management System describes a framework of coordination and integration across six tiers of response:

• ***Management of Individual Healthcare Assets (Tier 1):*** A well-defined IMS to collect and process information, to develop incident plans, and to manage decisions is essential to maximize MSCC. Robust processes must be applicable both to traditional hospital participants and to other healthcare facilities (HCFs) that may provide "hands on" patient care in an emergency. Thus, each healthcare asset must have information management processes to enable integration among HCFs (at Tier 2) and with higher management tiers.

• ***Management of a Healthcare Coalition (Tier 2):*** Coordination among local healthcare assets is critical to provide adequate and consistent care across an affected jurisdiction. The healthcare coalition provides a central integration mechanism for *information sharing* and *management coordination* among healthcare assets, and also establishes an effective and balanced approach to integrating medical assets into the jurisdiction's IMS.

• ***Jurisdiction Incident Management (Tier 3):*** A jurisdiction's IMS integrates healthcare assets with other response disciplines to provide the structure and support needed to maximize MSCC. In certain events, the jurisdictional IMS promotes a *unified incident management* approach that allows multiple response entities, including health and medicine, to assume significant management responsibility.

• ***Management of State Response (Tier 4):*** State Government participates in medical incident response across a range of capacities, depending on the specific event. The State may be the lead incident management authority, it may primarily provide support to incidents managed at the jurisdictional (Tier 3) level, or it may coordinate multijurisdictional incident response. Important concepts are delineated to accomplish all of these missions, ensuring that the full range of State health and medical resources is brought to bear to maximize MSCC.

• ***Interstate Regional Management Coordination (Tier 5):*** Effective mechanisms must be implemented to promote incident management coordination between affected States. This ensures consistency in regional response through coordinated incident planning, enhances information exchange between interstate jurisdictions, and maximizes MSCC through interstate mutual aid and other support. Tier 5 incorporates existing instruments, such as the Emergency Management Assistance Compact (EMAC), and describes established incident management and mutual aid concepts to address these critical needs.

• ***Federal Support to State and Jurisdiction Management (Tier 6):*** Effective management processes at the State (Tier 4) and jurisdiction (Tier 3) levels facilitate the request, receipt, and integration of Federal health and medical resources to maximize MSCC. The current status of

the Federal health and medical response is described, emphasizing the management aspects that are important for State and local managers to understand." (**HHS**, *Medical Surge Capacity and Capability* Handbook, August 2004, pp. vii-viii)

Medical Unit: "The unit within the Service Branch of the Logistics Section responsible for providing emergency medical services to incident personnel and for the development of the Medical Emergency Plan." (**Capital Health Region**, Edmonton Ca, *ICS Training SM*, 2007, 55)

Medicolegal Group: Component of the Intelligence/Investigations ICS Function. "The Medicolegal Group will manage and direct intelligence/investigations activities involving fatality management operations; and, decedents, and missing persons and unidentified persons investigations. Additionally, the Group will participate in Family Assistance Center operations to gather information regarding the decedents, missing persons and unidentified persons. As the configuration of the ICS organization is flexible, the IC/UC may choose to combine these functions or create teams to perform these functions." (**FEMA**, *IIFOG Version 3*, Feb 2008 Draft, p. 30)

Medicolegal: "Of, relating to, or concerning both medicine and law." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 37)

Medicolegal Death Investigator: "A professional having the legal authority to investigate deaths for a medicolegal (medical examiner/coroner) jurisdiction, who performs scene investigations, collects evidence and develops decedents' medical and social histories to assist the medical examiner/coroner in determining the cause and manner of death. Medicolegal death investigators should have a combination of education and skills encompassing areas of medicine and law." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 37)

Medicolegal Investigation: "The collection of data, photographs, evidence, witness interviews, external examination of the body at the scene, and other forensic information and analysis that will contribute to the determination of cause and manner of death, reconstruction of the accident or crime scene, and support the provision of survivability factors. The medicolegal investigation falls within the exclusive purview of the Medicolegal Authority operating at the scene of an incident." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 38)

MEF: Mission Essential Functions. (**DHS**, *FCD 1*, November 2007, p. 2)

Mega-CAT: Mega-Catastrophe. (**FSR**, *Nation Unprepared for Mega-Catastrophe*, 2007, 5)

Mega-Catastrophe: "A mega-catastrophe is a natural or man-made event that has *significant* adverse nati*onal impacts on economic activity, property or human life."* (**FSR**, *Nation Unprepared*, 2007, 3)

"Although it is difficult to define such events with numerical precision, we know enough to make a vital distinction between relatively "routine" catastrophes – tornadoes, most floods, forest fires, and the like – which inevitably adversely affect many Americans in every part of the country throughout every year, and "Mega-CATs" like Katrina and 9/11 whose consequences

not only loom large in economic and human terms in a particular city or region of the country, but also adversely affect the national economy and even psyche: interrupting and depressing economic activity, leading to a drop in national output and possibly a major disruption of financial markets and activity." (**FSR**, *Nation Unprepared*, 2007, 3)

Megacommunity: "The megacommunity is a relatively recent phenomenon. It is made possible by the increasing complexity, interdependence, and technological sophistication of modern society. A megacommunity takes advantage of the pervasive information technologies (such as shared servers, satellite phones, and geographic information systems) that enable people and organizations to communicate easily across national and organizational boundaries, sharing information and collaborating in ways not possible just 10 or 15 years ago." (**Himberger**, **Sulek and Krill**, "When There Is No Cavalry," Autumn 2007, pp. 6-7)

"A megacommunity is more than a public–private partnership or alliance. It is a carefully designed effort in which all the key actors are invited to collaborate with the understanding that they are co managing the problem and the development of solutions." (Ibid, p. 9)

Megacommunity Disaster Preparedness: "Megacommunity - a public sphere in which public, private, and civil organizations join together to address a compelling issue of mutual importance. Specifically, we argue there are five core elements to a megacommunity:

- Tri-sector involvement: the public, private, and civil sectors must all be involved
- Overlapping vital interests: members share a compelling reason or need to address an issue of mutual importance
- Alliance: members demonstrate their commitment by establishing an organizing framework for working toward shared goals
- Network structure: cross-boundary, collective participation and problem-solving activities create the social network that underpins true collaboration
- Sustainability and adaptability: over time, the megacommunity becomes institutionalize and capable of evolving….

"…six guideposts that can help initiating groups - whether they are government agencies, private-sector corporations, or NGOs - begin a responsiveness-oriented megacommunity:

- *Identify and Empower Stakeholders*. The unpredictability of disaster events requires not just a full panorama of allies, but creative and engaging ways for them to participate from the beginning. U.S. Northern Command, for example, maintains an "NGO desk" to mobilize support from the civil sector. The desk is run by employees of the Humanitarian International Services Group, a nonprofit that specializes in identifying, mobilizing, and managing private-sector resources in response to a disaster.
- *Be an Initiator*. Florida state officials played an essential role by convening the state's disaster preparedness megacommunity. This involved engaging publicly elected officials at the state and local levels emergency management officials and professionals, first responders, public health professionals, private-sector and civil organization experts, academic leaders, and others. The key was engaging these players as full partners.
- *Embrace Interdependence*. During a crisis, effective medical assistance cannot be provided if hospitals lack electric power; if various police jurisdictions don't work together to provide safe, open roads for travel; or if vehicles are not available to deliver

water and medical supplies and to remove medical waste. Plan, train, and rehearse the methods by which these separate but interrelated organizations will function together if a crisis occurs.

- *Allow for Ambiguity*. Accept that your organization will have overlapping responsibilities with other organizations. For example, in the U.S. federal government, the Interior Department, Health and Human Services, Department of State, DHS, and U.S. Northern Command have all been assigned crucial but sometimes overlapping roles in the fight against pandemic influenza. Rather than ignoring this reality or resisting perceived encroachments on their turf, these organizations - if they want to succeed - will have to communicate, negotiate, and decide together in advance of a disaster how they will manage their common responsibilities.
- *Reward Collaboration*. Everyone knows collaboration is a must, but organizations and people often need a push in the right direction. Instead of protecting their turf by punishing cooperative behavior, agency leaders should create incentives that encourage it. And, of course, example is the best teacher: How much planning and training are you doing with stakeholders in your preparedness community?
- *Strengthen Your Social Networks.* Many officials have learned through sad experience that an emergency is not the time to start exchanging business cards. The more contacts that preparedness leaders have already developed in the community, the more effective their networks will be in facilitating preparedness. An important part of megacommunity activities is establishing the trust and rapport ahead of time that will be needed during a crisis…."

"…the megacommunity approach has at its core the notion of 'overlapping vital interests'. Not everyone will have the same opinion or interest but they may have a vital interest -- public safety as an example that can help unite their efforts." (**Krill and Sulek**, *The Megacommunity: A Group Discussion on Cross-Sector Collaboration for Preparedness*. EIIP Virtual Forum Presentation, February 27, 2008)

Megaports Initiative: "NNSA's [National Nuclear Security Administration, DOE] Megaports Initiative, which began in 2003, teams up with other countries to enhance their ability to screen cargo at major international seaports. The Initiative provides radiation detection equipment and trains their personnel to specifically check for nuclear or other radioactive materials. In return, NNSA requires that data be shared on detections and seizures of nuclear or radiological material that resulted from the use of the equipment provided. The Megaports Initiative has three main objectives:

- **Deterring** terrorists from using the world's seaports to ship illicit materials;
- **Detecting** nuclear or radioactive materials if it shipped via sea cargo; and
- **Interdicting** harmful material before it is used against the U.S. or one of our allies.

In cooperation with foreign governments, Megaports representatives determine the most effective placement of radiation equipment for each seaport. Installed sensors then screen cargo containers for special nuclear or other radioactive materials. If anything is detected, the sensors alert foreign port officials of the need to further examine the cargo so they can take appropriate action." (**NNSA/DOE**, *Megaports Initiative*, 2008)

Megaton: Million tons of TNT. (**Glasstone**, *The Effects of Nuclear Weapons*, 1977, 2)

MEIR: Medical Effects of Ionizing Radiation.

MEMS: Modular Emergency Medical System. (**AHRQ**, *Altered Standards of Care in Mass Casualty Events,* April 2005, p. B-1)

MEMU: Mass Evacuation Management Unit. (**DHS**, *National Response Framework Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex* (Comment Draft), September 10, 2007, p. 4)

MEMU: Mass Evacuation Management Unit. (**FEMA**, *Statement of David Paulison…Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath – the Federal Response,"* June 26, 2008, p. 11)

MEND: Medical Education for National Defense. (**OCDM**, *Annual Report 1960*, p. 27)

MEOVs: Mobile Emergency Operations Vehicles. (**FEMA**, *Statement of Paulison*, 31July2007)

MEPP: Master Exercise Practitioner Program, FEMA/EMI. (**FEMA**, MEPP Series)

MERRTT: Modular Emergency Response Radiological Transportation Training (DOE).

MERS: Mobile Emergency Response Support. (**HSGAC**, *A Nation Still Unprepared*, 2006, 633)

METL: Mission-Essential Task List. (**DA**, *WMD-CST Operations*, December 2007, p. 2-4)

Metric: "A nationwide system of assessment developed by the NIC for the purpose of evaluating a jurisdiction's specific level of NIMS compliance. This system consists of a collection of questions derived from the NIMS compliance statements. Answers to these questions are analyzed to determine a jurisdiction's level of compliance with the NIMS." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For FY 2007), October 23, 2006, p. 6)

Metropolitan Medical Response System (MMRS): See DHS Section, MMRS, above.

METT-TC: Mission, Enemy, Terrain and Weather, Troops and Support Available, Time Available and Civil Considerations. (**Dept. of Army**, *WMD-CST Operations*, Dec. 2007, 1-3)

MEU: Marine Expeditionary Unit. (**HSGAC**, *Katrina: A Nation Still Unprepared*, 2006, p. 633)

MFI: Mass or Multi-Fatality Incident. (**LA County**, *MFI Mgmt Guidance*…, 2008)

MGRS: Military Grid Reference System. (**DA**, *WMD-CST Operations*, 2007, Glossary-4)

MHFP: Multi-Hazard Functional Planning. (**CA OES**, *SEMS Guidelines*, 2006)

MHIP: Multi-Year Flood Hazard Identification Plan, FEMA, National Flood Insurance Program.

MHIRA: Multi Hazard Identification and Risk Assessment.

MIACG: Medical Interagency Coordination Group, National Disaster Medical System (NDMS)

Mid-America Earthquake Center (MAE): "The Mid-America Earthquake Center is one of three national earthquake engineering research centers established by the National Science Foundation and its partner institutions. The MAE Center, headquartered at the University of Illinois at Urbana-Champaign, consists of a consortium of nine core institutions, and is funded by NSF and each core university as well as through joint collaborative projects with industry and other affiliations. Center projects fall under four general types: (a) core research, (b) stakeholder research, (c) education and (d) outreach. Core research is separated into four thrust areas. The four thrust areas are (a) Consequence-based Risk Management Framework (b) Engineering Engines, (c) Social and Economic Sciences, and (d) Information Technology. A thrust leader for each of these four programs is responsible for the planning and execution of research and implementation projects." (**MAE**, *About the Center*, 2006)

Military Assistance for Civil Disturbances (MACDIS) Policy: "4. POLICY
4.1. National Policy
4.1.1. The President is authorized by the Constitution and laws of the United States to employ the Armed Forces of the United States to suppress insurrections, rebellions, and domestic violence under various conditions and circumstances. Planning and preparedness by the Federal Government and the Department of Defense for civil disturbances are important due to the potential severity of the consequences of such events for the Nation and the population.
4.1.2. Military resources may be employed in support of civilian law enforcement operations in the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. territories and possessions only in the parameters of the Constitution and laws of the United States and the authority of the President and the Secretary of Defense, including delegations of that authority through this Directive or other means.
4.1.3. The primary responsibility for protecting life and property and maintaining law and order in the civilian community is vested in the State and local governments. Supplementary responsibility is vested by statute in specific Agencies of the Federal Government other than the Department of Defense. The President has additional powers and responsibilities under the Constitution of the United States to ensure that law and order are maintained.
4.1.4. Responsibility for the management of the Federal response to civil disturbances rests with the Attorney General of the United States.
4.1.5. Any employment of Military Forces in support of law enforcement operations shall maintain the primacy of civilian authority. Requests from the Attorney General to the Department of Defense shall be provided in response to an official request by State or Federal civil law enforcement or Executive authorities.
4.1.6. The employment of U.S. Military Forces to control civil disturbances shall be authorized by the President through an Executive order directing the Secretary of Defense to act in a specified civil jurisdiction under specific circumstances.

4.1.7. Planning by the DoD Components for MACDIS shall be compatible with contingency plans for national security emergencies, and with planning for MSCA under DoD Directive 3025.1 (reference (d)). For example:
4.1.7.1. Under E.O. 12656 (reference (b)), it is the policy of the Federal Government to have sufficient capabilities at all levels of government to meet essential defense and civilian needs during any national security emergency. That policy directs the Heads of the Federal Departments and Agencies to identify facilities and resources, both Government and private, essential to the national defense and national welfare, and to develop strategies, plans, and programs to provide for the security of such facilities and resources, and avoid or minimize disruptions during any national security emergency. In some circumstances, risks to such facilities and resources may coincide with or constitute civil disturbances." (**DoD**, *MACDIS* Directive No. 3025.12, February 4, 1994, pp. 3-4)

Military Assistance for Civil Disturbances: "The President is authorized by the Constitution and statutory laws to employ the Armed Forces of the United States to suppress insurrections, rebellions, and riots, and provide federal supplemental assistance to the states to maintain law and order. Responsibility for the management of federal response for civil disturbances rests with the Attorney General." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. ix) "However, any DOD forces employed in MACDIS operations shall remain under military C2 at all times." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p IV-7)

Military Assistance to Civil Authorities (MACA): "Those DoD activities and measures covered under MSCA (natural and manmade disasters...) plus DoD assistance for civil disturbances, counter-drug, sensitive support, counterterrorism, and law enforcement." (**DoD**, *Military Assistance to Civil Authorities*, 1997, pp. 15-16)

Military Assistance to Civil Authorities (MACA) Immediate Response: " Requests for an immediate response (i.e., any form of immediate action taken by a DoD Component or military commander to save lives, prevent human suffering, or mitigate great property damage under imminently serious conditions) may be made to any Component or Command. The DoD Components that receive verbal requests from civil authorities for support in an exigent emergency may initiate informal planning and, if required, immediately respond as authorized in DoD Directive 3025.1... Civil authorities shall be informed that verbal requests for support in an emergency must be followed by a written request. As soon as practical, the DoD Component or Command rendering assistance shall report the fact of the request, the nature of the response, and any other pertinent information through the chain of command to the DoD Executive Secretary, who shall notify the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and any other appropriate officials. If the report does not include a copy of the civil authorities' written request, that request shall be forwarded to the DoD Executive Secretary as soon as it is available." (**DoD**, *MACA*, 1997, p. 4)

Military Assistance to Civil Authorities (MACA) Policy: "4. POLICY. It is DoD policy that:
4.1. The Department of Defense shall cooperate with and provide military assistance to civil authorities as directed by and consistent with applicable law, Presidential Directives, Executive orders, and this Directive.

4.2. All requests by civil authorities for DoD military assistance shall be evaluated by DoD approval authorities against the following criteria:
4.2.1. Legality (compliance with laws).
4.2.2. Lethality (potential use of lethal force by or against DoD Forces).
4.2.3. Risk (safety of DoD Forces).
4.2.4. Cost (who pays, impact on DoD budget).
4.2.5. Appropriateness (whether the requested mission is in the interest of the Department to conduct).
4.2.6. Readiness (impact on the Department of Defense's ability to perform its primary mission).
4.3. The Secretary of the Army is approval authority for emergency support in response to natural or man-made disasters, as specified by this Directive.
4.4. The Secretary of Defense retains approval authority for support to civil authorities involving: use of Commander in Chief (CINC)-assigned forces (personnel, units, and equipment) when required under paragraph 4.5., below; DoD support to civil disturbances; DoD responses to acts of terrorism; and DoD support that will result in a planned event with the potential for confrontation with specifically identified individuals and/or groups or will result in the use of lethal force. Nothing in this Directive prevents a commander from exercising his or her immediate emergency response authority as outlined in DoD Directive 3025.1...
4.5. With the exception of immediate responses under imminently serious conditions, as provided in subparagraph 4.7.1., below, any support that requires the deployment of forces or equipment assigned to a Combatant Command by Secretary of Defense Memorandum (reference (j)), must be coordinated with the Chairman of the Joint Chiefs of Staff. The Chairman shall evaluate each request to use Combatant Command forces or equipment to determine if there is a significant issue requiring Secretary of Defense approval. Orders providing assistance to civil authorities that are approved by the Secretary of Defense involving the use of Combatant Command forces or equipment shall be issued through the Chairman of the Joint Chiefs of Staff. Upon Secretary of Defense approval, the Secretary of the Army, when designated "the DoD Executive Agent," shall implement and oversee DoD support in accordance with such approved orders.
4.6. This Directive does not address non-Federalized National Guard assets in support of local and/or State civil agencies approved by the Governor. However, there exists potential for such deployments to result in confrontation, use of lethal force, or national media attention. Therefore, the Director of Military Support (DOMS) shall keep the Chairman of the Joint Chiefs of Staff and the Secretary of Defense informed of such support." (**DoD**, *MACA*, 1997, pp. 2-3)

Military Assistance to Civil Authorities (MACA) Support for Domestic Civil Disturbance:
"The employment of active duty military forces in domestic civil disturbances may be requested only by the President or Attorney General and authorized only by the President. When requested by the Attorney General and approved by the Secretary of Defense or when authorized by the President, the Secretary of Defense shall employ active Federal military forces under rules of engagement approved by General Counsel of the Department of Defense (GC, DoD) and the Attorney General. The Secretary of the Army, as Executive Agent for the Secretary of Defense, and with the advice and assistance of the Chairman of the Joint Chiefs of Staff, and the DOMS, shall direct the required DoD assistance, in accordance with DoD Directive 3025.12…, DoD Directive 5160.54…, and DoD Directive 3025.1…, unless otherwise directed by the Secretary of

Defense. The Secretary of the Army, in coordination with the Chairman of the Joint Chiefs of Staff, shall at all times maintain contingency plans, with rules of engagement approved by the Department of Justice, for use in civil disturbance situations." (**DoD**, *MACA*, 1997, pp. 5-6)

Military Assistance to Civil Authorities (MACA) Support for Domestic Counter-terrorism Operations:
"4.7.5. Support for Domestic Counter-terrorism Operations. The employment of U.S. military forces in response to acts or threats of domestic terrorism may be requested only by the President (or in accordance with Presidential Decision Directives) and must be authorized by the President. All requests for assistance in responding to acts or threats of domestic terrorism must also be approved by the Secretary of Defense.
4.7.5.1. Informal action on counter-terrorist support requests shall normally be requested by contacting the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict (ASD(SO/LIC)), who shall review such requests or actions from a policy perspective. Following the policy review, the informal request will be passed to the Joint Staff for operational analysis. Any requests requiring consequence management preparation shall be coordinated between the Joint Staff and DOMS staff.
4.7.5.2. When a formal or informal request for support is made, or the ASD(SO/LIC) determines that such a request is imminent, the ASD(SO/LIC) shall establish a Crisis Coordination Group (consisting of, at a minimum, representatives from the Office of the ASD(SO/LIC), Office of the Under Secretary of Defense (Comptroller) (USD(C)), Department of the Army, Joint Staff, and the office of the GC, DoD, to coordinate and integrate all aspects of the DoD response actions. Before submission of a request to the Secretary of Defense for approval, all crisis management requests shall be coordinated by the ASD(SO/LIC) with the GC, DoD and the USD(C), and shall be submitted to the Under Secretary of Defense for Policy (USD(P)) for a policy review.
4.7.5.3. The Secretary of Defense shall manage the Department of Defense's response to any acts or threats of terrorism.
4.7.5.4. The Chairman of the Joint Chiefs of Staff shall assist the Secretary of Defense when he or she is implementing the DoD operational response to acts or threats of terrorism. The Chairman of the Joint Chiefs of Staff shall at all times maintain contingency plans for use in counter-terrorism situations.
4.7.5.5. The Secretary of the Army, as the DoD Executive Agent of the Secretary of Defense for civil emergencies, shall direct and execute DoD consequence management assistance, in accordance with DoD Directive 3025.1…and applicable Presidential Decision Directives, unless otherwise directed by the DOMS." (**DoD**, *MACA,* 1997, p. 6)

Military Improved Response Program (MIRP): "The Military Improved Response Program (MIRP) integrates core civilian and military response capabilities and involves representatives from the broad response community, such as fire, hazardous materials, law enforcement and security, base operations, disaster management, emergency medical services, public health and civilian communities surrounding partnering installations. Specifically, MIRP offers functional workshops that address critical responses to chemical/biological (CB) incidents." (**US Army RDECOM**, *Homeland Defense*, 2008)

Military Involvement in Disaster Activities, Problem Areas: "Coordination between military units and civilian organizations, and the channeling of civilian requests for military assistance are

undoubtedly two of the major problems in military-civilian relations during natural disaster. These problems, along with the problem of authority…have to be resolved, however, if effective military assistance is to be accomplished. There are a number of factors that are responsible for such problems. Among the main ones are:

(1) the failure of civilian officials to understand and appreciate military structure and operations, and similarly

(2) the less frequent failure of military authorities to comprehend and to accept the manner in which civilian organizations are structured and how they operate, and

(3) the absence in many cases of any viable civilian means for coordinating and integrating the activities of the numerous groups and organizations -- both civilian and military -- that assume emergency tasks." (**Anderson**, *Military-Civilian Relations in Disaster Operations*, 1968, p. 31)

(4) "Local community officials often find it particularly upsetting and frustrating when they find they have to move through a state hierarchy first, and then through a federal organization before they can acquire military disaster assistance." (**Anderson**, *Military-Civilian Relations*, 1968, 33)

(5) "Sometimes community officials do not know what resources are available at the local level… Thus, valuable time and effort may be lost because civilians request and receive military assistance which could have been acquired more easily from local sources. This problem is particularly prone to occur in communities with poor disaster planning." (**Anderson,** 1968, 36)

(6) "The issuance of vague requests for assistance by civilian officials may hinder a rapid response by the military." (**Anderson**, *Military-Civilian Relations*, 1968, 36)

(7) "It can be said as a general rule that in a community-wide disaster, when official executive authority is not exercised -- either as a result of abdication, physical incapacitation, or absence of the legitimate incumbent of the positions having executive authority -- considerable pressure is generated for other officials to assume authority. When this void occurs in the civilian sphere, the pressure goes over to the military "to do something."…. The absence of an effective community organization and authority structure through which military units can work and give support poses a serious problem for them." (**Anderson**, *Military-Civilian Relations*, 1968, 41-42)

Military Support of Civil Defense (MSCD): "MSCD is the emergency activity taken by DOD components when directed by the Secretary of Defense to help the civilian population overcome an enemy attack on CONUS, its territories and possessions." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-3)

Military Support to Civil Authorities (MSCA): "Those activities and measures taken by Department of Defense components to foster mutual assistance and support between the Department of Defense and any civil government agency in planning or preparedness for, or in the application of resources for response to, the consequences of civil emergencies or attacks, including national security emergencies." (**DoD**, *MSCA* (Directive 3025.1), 1993, p. 22; **DoD**, *MACDIS*,

1994, p. 19; **DoD**, *MSCA*, 1997, p. 16) The Secretary of the Army is designated as the DOD executive agent for MSCA. (**Title 32 CFR 185**)

Military Support to Civil Authorities (MSCA): "MSCA refers to support provided by Federal military forces, DOD civilians, contractor personnel, and DOD agencies and components in response to requests for assistance during domestic incidents to include terrorist threats or attacks, major disasters, and other emergencies. MSCA missions consist of DOD support to US domestic emergencies and for designated law enforcement, civil disturbances, and other activities." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. ix)

Military Support to Civilian Law Enforcement Agencies: "The use of the military in law enforcement roles is a sensitive topic and restrictions apply to such use. Military forces performing in this role support the lead Federal agency and other supporting agencies and may be armed depending on the SecDef decision. Military support to civilian law enforcement agencies (LEAs) may include, but is not limited to national special security events, support for combating terrorism, support to counterdrug operations, maritime security, intelligence, surveillance, and reconnaissance capabilities, and general support (training support to LEAs/loan of equipment/personnel and expert advice)." (**JCS/DoD**, *Homeland Security*, 2005, p. ix)

MIRP: Maritime Incident Recovery Plan. (**GAO**, *Maritime Security*, December 2007, p. iv)

MIRP: Military Improved Response Program. (**US Army RDECOM**, *Homeland Defense*, 2008)

MIRV: Multiple Independent Reentry Vehicle. (**OCD**, *Abbreviations and Definitions*, 1971, p. 3)

Missing Persons: "Persons whose whereabouts are unknown to family or friends following an incident." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 38)

Mission: "The principal components of strategic goals." (**HSI**, *HS Strategic Planning*, 2007, 63)

Mission Analysis: See "National Planning and Execution System Mission Analysis".

Mission Area Analysis: "The MAA hierarchy includes five levels: Goals, Missions, Objectives, Functions, and function-specific Tasks. These describe the HS [Homeland Security] operational mission space with sufficient granularity to enable the MAA to serve as an effective analysis and measurement tool." (**HSI**, *Homeland Security Strategic Planning*, March 28, 2007, p. vii)

Mission Area Analysis Levels:

- Mission
- Objective
- Function
- Task ((**HSI**, *HS Strategic Planning MAA*, March 28, 2007, p. 63)

Mission Assignment (MA): An "MA is a work order issued by FEMA to another Federal Agency directing completion of a specific task, and citing funding, other managerial controls,

and guidance during a federally declared disaster or emergency." (**FEMA**, "DHS OIG Letter RE: Post-Katrina Improvements." October 2007)

Mission Assignment (MA): "44 Code of Federal Regulations (CFR), Part 206 provides the definitions and general rules pertaining to mission assignments issued by FEMA. 44 CFR defines a mission assignment as a *"work order issued to a Federal agency by the Regional Director (RD), Associate Director, or Director, directing the completion by that Federal agency of a specified task and citing funding, other managerial controls, and guidance." NOTE: To date, the CFR has not been updated to reflect organizational or position title changes, e.g. Regional Administrator Director vs. Regional Director.*" (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 25, 2007. p. 1; see also, p. 55)

Mission Assignment (MA): "The term 'mission assignment' means a work order issued to a Federal agency by the Agency [FEMA], directing completion by that agency of a specified task and setting forth funding, other managerial controls, and guidance." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1424)

Mission Assignment (MA): "The vehicle used by DHS/EPR/FEMA to support Federal operations in a Stafford Act major disaster or emergency declaration. It orders immediate, short-term emergency response assistance when an applicable State or local government is overwhelmed by the event and lacks the capability to perform, or contract for, the necessary work." (**USCG**, *IM Handbook*, 2006, Glossary 25-15)

Mission Assignment Task Order: "Specific instruction given to a Federal agency under a mission assignment directing it to perform work of certain quantity or in a certain area under that mission assignment. Federal Emergency Management Agency." (FEMA, *100% Funding for Direct Federal Assistance and Grant Assistance, Recovery Policy 9523.9*, June 9, 2006)

Mission Assignment Types: "Due to different criteria for eligibility and reimbursement, mission assignments are classified into three types:

1. **Federal Operations Support (FOS) (Object Class 2501)** is defined as one Federal agency providing direct technical, operational, or logistical support to FEMA or another responding Federal agency. FOS is 100-percent federally funded and may be provided prior to a Presidential declaration of a major disaster or emergency.

Example: A mission assignment issued to U.S. Forest Service (USFS) to establish and operate a base camp to provide housing for Federal disaster workers.

2. **Technical Assistance (TA) (Object Class 2507)** is technical expertise provided by the Federal government to State and/or local jurisdictions when the State has the resources, but lacks the knowledge and/or skills needed to perform the work related to the disaster or emergency. TA is 100-percent federally funded but must be requested and approved by the State.

Example: A mission assignment issued to the U.S. Army Corps of Engineers to provide TA to affected counties in the writing of debris contracts.

3. **Direct Federal Assistance (DFA) (Object Class 2508)** consists of goods and services provided by the Federal government to the affected State when it lacks the resources to perform or contract for eligible emergency work such as the provision of food, water, generators, and medical assistance. DFA is subject to the cost-share provisions of the Declaration, normally a 25-percent State share, though the President may waive the cost share. Eligibility criteria for a DFA mission assignment:

    a. Must be as a result of the Declaration, not a pre-existing condition.
    b. Must be provided within the designated disaster area.
    c. Must consist of only emergency non-permanent work.
    d. Can be provided until the FEMA/State Agreement is signed except where it is under compelling circumstances and approved/authorized by the FEMA RA.
    e. Must be beyond the capability of the State and local government to perform or contract for the work.
    f. Must be completed within 60 days of the Declaration unless waived by the FEMA RA or the FAO with delegated authority.

Example: A mission assignment issued to the Department of Health and Human Services (HHS) to establish temporary medical facilities for disaster victims within the affected disaster area." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 10)

Mission-Critical Application: "An application that is essential to the organization's ability to perform necessary business functions. Loss of the mission-critical application would have a negative impact on the business, as well as legal or regulatory impacts." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, p. 60)

Mission Essential Function (MEF) Business Process Analysis (BPA): The identification and mapping of "the functional processes, workflows, activities, personnel expertise, systems, data, and facilities inherent to the execution of each identified MEF (e.g., define how each MEF is performed and executed, using a business-process flow map) that must be performed under all circumstances either uninterrupted, with minimal interruption, or requiring immediate execution in an emergency." (**DHS**, *FCD 1*, Nov. 2007, p. D-3) [Note: *FCD 1* does not provide a definition of or elaboration on the term "business-process flow map" other than to note on D-4 that one should "Outline each MEF in a business process mapping format (i.e., inputs, outputs, resources, systems, facilities, expertise, authorities) that impact the ability to complete the MEF products/services." As a possible aid, see "Business Process Map."]

Mission Essential Functions (MEFs): A subset of Governmental Functions – see "Primary Mission Essential Functions" which are a subset of MEFs, and "National Essential Functions" which are a subset of PMEFs.

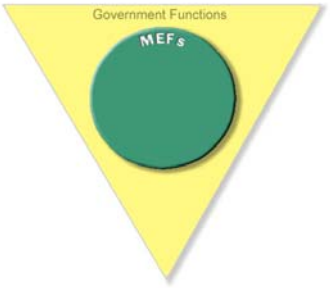

Figure 8

"MEFs are described as the limited set of agency-level government functions (as depicted in Figure 8) that must be continued throughout, or resumed rapidly after, a disruption of normal activities. MEFs are those functions that enable an organization to provide vital services, exercise civil authority, maintain the safety of the public, and sustain the industrial and economic base, during the disruption of normal operations. Once identified, MEFs serve as key continuity planning factors for agencies to determine appropriate staffing, communications, information, facilities, training, and other continuity requirements." (**DHS**, *FCD 1*, Nov. 2007, D-3)

Mission Essential Functions (MEFs): "The limited set of department- and agency-level government functions that must be continued throughout, or resumed rapidly after, a disruption of normal activities. (**HSC**, *National Continuity Policy Implementation Plan*, Aug 2007, p. 64)

Mission Essential Functions (MEFs) Initial Screening Aid:

- Is the function directed by law, directed by law, presidential directive, or executive order?
- Did a Business Process Analysis (BPA) determine that the function must be performed under all circumstances either uninterrupted, with minimal interruption, or requiring immediate execution in an emergency?

[A note to the MEF Initial Screening Aid indicates that "If the *answer to one or both of these questions is 'No,' the function is probably not a MEF."* (***DHS***, *FCD* 1, Nov. 2007, p. D-3)]

Mississippi Windstorm Underwriting Association (Mississippi Windpool): "… provides coverage against windstorms and hail for people in the six coastal counties of Mississippi who might not be able to get wind coverage in the private insurance market." (**GAO**, *Natural Disasters: Public Policy Options*…, Nov 2007, p. 21; see, also, pp. 65-67)

MIST: Mobile Incident Support Team. (**USFA**, *Responding to Incidents of National Consequence.*…, 2004, p. 26)

Mitigate: To lessen in force or intensity. This definition does not preclude "Lessening to Zero" when mitigation or to mitigate are used in relation to hazards that could cause or contribute to a peacetime civil emergency. (**FEMA**, *Definitions of Terms*, 1990)

Mitigate: "1: to cause to become less harsh or hostile; 2: to make less severe or painful." (**FEMA**, *Developing the Mitigation Plan*, 2003, i)

Mitigate: "Any action to contain, reduce, or eliminate the harmful effects of a spill or release of a hazardous substance/material." (**USCG**, *IM Handbook*, 2006, Glossary 25-15)

Mitigation: "Actions taken in response to a warning or after an incident occurs that are intended to lessen the potentially adverse effects on a given military operation or infrastructure." (**DoD**, *Defense Critical Infrastructure Protection (DCIP)*, DODD 3020.40, August 19, 2005, p. 13)

Mitigation: "Mitigation activities provide a critical foundation across the incident management spectrum from prevention through response and recovery. Examples of key mitigation activities include the following:

1. Ongoing public education and outreach activities designed to reduce loss of life and destruction of property;
2. Structural retrofitting to deter or lessen the impact of incidents and reduce loss of life, destruction of property, and impact on the environment;
3. Code enforcement through such activities as zoning regulation, land management, and building codes; and
4. Flood insurance and the buy-out of properties subjected to frequent flooding, etc." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 16)

Mitigation: "Activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident. Mitigation measures may be implemented prior to, during, or after an incident. Mitigation measures are often developed in accordance with lessons learned from prior incidents. Mitigation involves ongoing actions to reduce exposure to, probability of, or potential loss from hazards. Measures may include zoning and building codes, floodplain buyouts, and analysis of hazard-related data to determine where it is safe to build or locate temporary facilities. Mitigation can include efforts to educate governments, businesses, and the public on measures they can take to reduce loss and injury." (**DHS,** *NIPP*, **2006**, p. 104)

Mitigation: "…mitigation is the *social* attempt to reduce the occurrence of a disaster, to reduce the vulnerability of certain populations, and to more equitably distribute the costs within the society." (**Dynes** 1993, 179)

Mitigation: Those activities designed to alleviate the effects of a major disaster or emergency or long-term activities to minimize the potentially adverse effects of future disaster in affected areas. (**FEMA**, *Definitions of Terms*, **1990**; **DHS**, *National Response Plan* (Draft #1), Feb 25, 2004, 77)

Mitigation: "Mitigation actions involve lasting, often permanent, reduction of exposure to, probability of, or potential loss from hazard events. They tend to focus on where and how to build. Examples include: zoning and building code requirements for rebuilding in high-hazard areas; floodplain buyouts; and analyses of floodplain and other hazard-related data to determine where it is safe to build in normal times, to open shelters in emergencies, or to locate temporary housing in the aftermath of a disaster. Mitigation also can involve educating businesses and the public on simple measures they can take to reduce loss and injury, like fastening bookshelves, water heaters, and file cabinets to walls to keep them from falling during earthquakes." (**FEMA**, *Guide for All Hazards Emergency Operations Planning* (SLG 101), September **1996**, p. 1-3)

Mitigation: All steps necessary to minimize the potentially adverse effects of the proposed action and to restore, preserve, and enhance natural values of wetlands; or long-term activities to minimize the potentially adverse effects of future disaster in affected areas. (**FEMA,** *Guide…SLG 101*, **1996**)

Mitigation: "Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. Mitigation activities may be implemented

prior to, during, or after an incident. However, it has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs." (**FEMA**, *Local Multi-Hazard Mitigation Planning Guidance*, July 1, 2008, p. 3)

Mitigation: "Mitigation means sustained action taken to reduce or eliminate long-term risk to people and property from hazards and their effects. Mitigation distinguishes actions that have a long-term impact from those that are more closely associated with preparedness for, immediate response to, and short-term recovery from a specific event" (**FEMA**, *Multi Hazard Identification and Risk Assessment*, **1997,** p. xxii)

Mitigation: "Mitigation actions protect life and property and reduce long term risks from hazards…. Mitigation is achieved primarily through community actions, although they can be greatly enhanced by the support of individuals, public-private partnerships, and Federal and State assistance." (**FEMA**, *Strategic Plan FY 1998- FY 2002*, June 1997, p. 21)

Mitigation: "Any action taken to eliminate or reduce the long-term risk to human life and property from natural hazards. Mitigation actions are accomplished by:

- **Acting on the hazard.** Seeding hurricanes or triggering avalanches may eliminate a hazard before a disaster occurs.

- **Redirecting the hazard.** A seawall or dune restoration program helps keep water away from people by redirecting the impact areas away from vulnerable locations.

- **Interacting with the hazard.** Seismic safety provisions incorporated into building codes result in structures that are more able to withstand impacts and earthquakes.

- **Avoiding the hazard.** River corridor projects create multiple beneficial uses of the floodplain while relocating structures to less vulnerable locations." (**FEMA** *IS-513*, **1999**, I-50)

Mitigation: "Taking sustained actions, such as supporting the use of strong building codes and guiding community disaster resistance, to reduce or eliminate long-term risk to people and property from hazards and their effects." (**FEMA**, *A Nation Prepared–FEMA Strategic Plan*, **2002**, p. 58)

Mitigation: "Mitigation is the effort to reduce loss of life and property by lessening the impact of disasters. Effective mitigation measures can break the cycle of disaster damage, reconstruction, and repeated damage…. Effective mitigation is achieved through three critical components – analyzing risk, reducing risk, and insuring for flood risk.

- **Analyze Risk:** Determining the impact of natural hazards that lead to effective strategies for reducing risk.

- **Reduce Risk:** Reducing or eliminating long-term risk from hazards on the existing built environment and future construction.

- **Insure for Flood Risk:** Reducing the impact of floods on the Nation by providing affordable flood insurance." (**FEMA**, *Fact Sheet, FEMA's Mitigation Directorate*, **August 2007**, p. 1)

Mitigation: "Provides a critical foundation in the effort to reduce the loss of life and property from natural and/or manmade disasters by avoiding or lessening the impact of a disaster and providing value to the public by creating safer communities. Mitigation seeks to fix the cycle of disaster damage, reconstruction, and repeated damage. These activities or actions, in most cases, will have a long-term sustained effect." (**FEMA**, *NIMS* (FEMA 501 Draft), **2007**, p. 154)

Mitigation: "Examples of mitigation activities include the following:
• ongoing public education and outreach activities designed to reduce loss of life and destruction of property;
• complying with or exceeding floodplain management and land-use regulations;
• enforcing stringent building codes, seismic design standards, and wind-bracing requirements for new construction, or repairing and/or retrofitting existing buildings;
• supporting measures to ensure the protection and resilience of critical infrastructure and key resources designed to ensure continuity of business and the economic stability of communities;
• acquiring damaged homes or businesses in flood-prone areas, relocating the structures, and returning the property to open space, wetlands, or recreational uses;
• identifying, utilizing, and refurbishing shelters and safe rooms to help protect people in their homes, public buildings, and schools in hurricane− and tornado-prone areas;
• implementing a vital records program at all levels of government to prevent loss of crucial documents and records;
• intelligence sharing and linkage leading to other law enforcement activities, such as infiltration of a terrorist cell to prevent an attack;
• periodic remapping of hazard or potential hazard zones, using geospatial techniques; and
• management of data regarding historical incidents to support strategic planning and analysis." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), **August 2007**, pp. 21-22)

Mitigation: "Activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of a hazard. Mitigation involves ongoing actions to reduce exposure to, probability of, or potential loss from hazards. Examples include zoning and building codes, floodplain buyouts, and analysis of hazard-related data to determine where it is safe to build or locate temporary facilities. Mitigation can include efforts to educate governments, businesses and the public on measures they can take to reduce loss and injury." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-7, Glossary)

Mitigation: "Limitation of any negative consequence of a particular incident." (**ISO 22399**, *Societal Security*…, 2007, 4)

Mitigation: In its simplest sense, mitigation is risk management. It is a term that we at FEMA use to describe actions that can be taken at the individual, local, State and Federal levels to reduce the overall risk from natural disasters. It is getting a handle on the costs of disasters in our society, including not only moneys, but also suffering and economic disruptions. (**Krimm** 1998)

Mitigation and Prevention: "Mitigation planning includes a review of ways to eliminate or reduce the impact of future emergencies. Specific hazard mitigation plans are prepared following a federally-declared disaster. They reflect the current risk analysis and mitigation priorities specific to the declared disaster. An alternate and more common term for mitigation is prevention. In the field of emergency services, however, the term prevention is used to refer to stopping an event from happening. Emergency managers point out that while it is possible to prevent terrorist attacks, it is not possible to prevent earthquakes. It is, however, possible to reduce or mitigate their impact. Despite years of using the term mitigation for reducing harm, the federal government has recently adopted the term prevention to refer to mitigation activities." (**Little Hoover Commission**, *Safeguarding the Golden State*…, 2006, 6)

Mitigation: "Activities that reduce the degree of long-term risk to human life and property from natural and man-made hazards; e.g., building codes, disaster insurance, land-use management, risk mapping, safety codes, and tax incentives and disincentives." (**McLoughlin** 1985, 166)

> "Mitigation consists of planned and orderly efforts to prevent hazards that are preventable and lessen the impact of those that are not. Mitigation activities can act in three ways to prevent or reduce effects of potential hazards. First, they can act on the hazard to eliminate it or to reduce the frequency and intensity of its occurrence. Second, they can change the way a hazard interacts with people and their support systems. Third, they can alter the way people live and the systems they create." (**McLoughlin** 1985, 170)

Mitigation: "Actions taken to prevent or reduce product loss, human injury or death, environmental damage, and property damage due to the release or potential release of hazardous materials." (**NFPA 471**, 1997, p. 8)

Mitigation: "Activities taken to reduce the severity or consequences of an emergency." (**NFPA 1600**, 2007, p. 8)

Mitigation: "Mitigation includes any activities that actually eliminate or reduce the probability of occurrence of a disaster (for example, arms build-up to deter enemy attack or legislation that takes the unstable double-bottom tanker off the highways). It includes long-term activities designed to reduce the effects of unavoidable disaster (for example, land-use management, establishing comprehensive emergency management programs, or legislating building safety codes)." (**NGA**, *Comprehensive Emergency Management Governors' Guide*, 1979, p. 12)

Mitigation: Action to reduce the effects of a disaster on a population. (**Nimpuno**, 1998)

Mitigation: "…mitigation is seen as prevention – stopping a negative event before it happens." (**Peterson and Perry** 1999, 242)

Mitigation: "…sustained actions to reduce or eliminate long-term risks to people and property from hazards and their effects." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1399)

Mitigation: "Measures taken in advance of a disaster aimed at decreasing or eliminating its impact on society and on environment." (**UNDHA** *Internationally Agreed Glossary…*, 1992, p.53)

Mitigation: "Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards." (**UN ISDR** 2002, 25)

Mitigation, Homeland Security: "Because we must not permit the threat of terrorism to alter the American way of life, we have to accept some level of terrorist risk as a permanent condition. We must constantly balance the benefits of mitigating this risk against both the economic costs and infringements on individual liberty that this mitigation entails. No mathematical formula can reveal the appropriate balance; it must be determined by politically accountable leaders exercising sound, considered judgment informed by top-notch scientists, medical experts, and engineers." (**White House**, *National Strategy for Homeland Security*, July 2002, p. 2)

Mitigation, Non-Structural: ***"****Non-structural mitigation* refers to elements of the building that do not belong to the load-bearing system. It reduces risk by means of such actions as land-use planning, early warning systems, insurance policies, legislation and regulatory measures such as zoning and building codes, and education and training activities such as evacuation plans, drills, and preparedness curricula." (**OAS**, *School/Shelter Hazard Vulnerability Reduction Resource Page*, 2001)

Mitigation, Structural: "*Structural mitigation* consists of measures that involve the creation/erection of physical structures. Some examples are levees, drainage systems, retaining walls, earthquake bracing systems, and hurricane straps and shutters." (**OAS**, *School/Shelter Hazard Vulnerability Reduction Resource Page*, 2001)

Mitigation Goals:
1. Save lives and reduce injury.
2. Avoid, minimize or reduce damage to property including but not limited to critical facilities, infrastructure and those properties known to receive or experience repetitive damages.
3. Reduce exposure to risk, while protecting or restoring natural processes to the maximum extent possible.
4. Consider the wise uses of land in known or identified hazard areas.
5. Encourage the development and implementation of long-term, cost-effective and environmentally sound mitigation projects.
6. Promote hazard mitigation awareness and education throughout the County.
7. Improve community emergency management capability (i.e., prepare, respond, recover, mitigate).
8. Maintain economic viability after a hazard event. (**Tetra Tech EM**, *Suffolk*, 2007, p. ES-4)

Mitigation Mortgage: A proposal of the Financial Services Roundtable wherein the financial industry would develop "lending instruments with maturities and interest rates comparable to those they now offer in financing first and second residential mortgages. Such loans would be marketed for individuals seeking loans to finance mitigation upgrades to their existing structures. For new structures, the costs of mitigation can be added to the initial mortgage (ratings of the ability of homes to withstand wind, water, or earthquake damage would help stimulate interest in obtaining such mortgages)." (**FSR**, *Mega-Catastrophe*, May 2007, 37)

Mitigation Planning Under the Stafford Act (Sec. 322, 42 U.S.C. 5165):
"(a) Requirement of Mitigation Plan - As a condition of receipt of an increased Federal share for hazard mitigation measures under subsection (e), a State, local, or tribal government shall develop and submit for approval to the President a mitigation plan that outlines processes for identifying the natural hazards, risks, and vulnerabilities of the area under the jurisdiction of the government.
(b) Local and Tribal Plans - Each mitigation plan developed by a local or tribal government shall: (1) describe actions to mitigate hazards, risks, and vulnerabilities identified under the plan; and (2) establish a strategy to implement those actions.
(c) State Plans - The State process of development of a mitigation plan under this section shall - (1) identify the natural hazards, risks, and vulnerabilities of areas in the State; (2) support development of local mitigation plans; (3) provide for technical assistance to local and tribal governments for mitigation planning; and (4) identify and prioritize mitigation actions that the State will support, as resources become available.
(d) Funding - (1) In general - Federal contributions under section 5170c of this title may be used to fund the development and updating of mitigation plans under this section. (2) Maximum federal contribution - With respect to any mitigation plan, a State, local, or tribal government may use an amount of Federal contributions under section 5170c of this title not to exceed 7 percent of the amount of such contributions available to the government as of a date determined by the government.
(e) Increased Federal Share for Hazard Mitigation Measures - (1) In general - If, at the time of the declaration of a major disaster, a State has in effect an approved mitigation plan under this section, the President may increase to 20 percent, with respect to the major disaster, the maximum percentage specified in the last sentence of section 5170c(a) of this title. (2) Factors for consideration -In determining whether to increase the maximum percentage under paragraph (1), the President shall consider whether the State has established - (A) eligibility criteria for property acquisition and other types of mitigation measures; (B) requirements for cost effectiveness that are related to the eligibility criteria; (C) a system of priorities that is related to the eligibility criteria; and (D) a process by which an assessment of the effectiveness of a mitigation action may be carried out after the mitigation action is complete. (**Stafford Act**, June 2007 (FEMA 592) pp. 22-23; **Public Law 106-390**, *DMA*, October 20, 2000)

Mitigation Plans: "Mitigation plans describe activities that can be taken prior to, during, or after an incident to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident." (**DHS**, *NIMS*, 2004, p. 37)

Mitigation Plans, Common Elements Within Successful Plans: "The most successful of mitigation plans – where practical, meaningful mitigation actions resulted – have two common elements:

- Comprehensive risk and capability assessments that form a solid foundation for decision making; and
- Participation by a wide range of stakeholders who plan a role in identifying and implementing mitigation actions." (**FEMA**, *Local Multi-Hazard Mitigation Planning Guidance*, July 1, 2008, p. 4)

Mitigation Strategy: "FEMA's mitigation strategy has four areas of focus:

1. *Federal Mitigation*. FEMA will lead the effort to ensure that the authorities and resources of the federal government which affect the built environment are supporting, the maximum degree practicable, community-based mitigation decisions/actions.
2. *State Mitigation.* FEMA will establish a collaborative partnership with State-level mitigation stakeholders to develop criteria and incentives for the establishment of comprehensive State mitigation initiatives which marshal the resources and authorities of State government to support community-based mitigation decisions/actions.
3. *Community Mitigation*. FEMA will establish a collaborative partnership with community-level stakeholders to develop a national initiative to reduce risk through a voluntary, community-based, incentive-driven decisions/actions.
4. *Private/Public Mitigation Partnership*. FEMA will lead an effort to identify and maximize the contributions of the private sector to the national mitigation effort – through business-driven construction and land-use decisions, as well as incentives for mitigation decisions/actions through insurance and financial market instruments." (**FEMA**, *Strategic Plan FY 1998-2002*, 1997, p. 21-22)

Mitigation Strategy: "**A.5.5.1** The mitigation strategy should include the following:
(1) Use of applicable building construction standards
(2) Hazard avoidance through appropriate land use practices
(3) Relocation, retrofitting, or removal of structures at risk
(4) Removal or elimination of the hazard
(5) Reduction or limitation of the amount or size of the hazard
(6) Segregation of the hazard from that which is to be protected
(7) Modification of the basic characteristics of the hazard
(8) Control of the rate of release of the hazard
(9) Provision of protective systems or equipment for both cyber and physical risks
(10) Establishment of hazard warning and communication procedures
(11) Redundancy or diversity of essential personnel, critical systems, equipment, information, operations, or materials
(12) Acceptance/retention/transfer of risk (insurance programs)
(13) Protection of competitive/proprietary information

A.5.5.2 The mitigation strategy should establish interim and long-term actions to reduce the risks from hazards. (**NFPA 1600**, 2007, p. 15)

Mitigation Strategy Section, Mitigation Plan:

- A summary of past and current mitigation efforts
- Local hazard mitigation goals and objectives
- Identification and analysis of mitigation measures and projects being considered
- Multi-jurisdictional mitigation strategy (goals and objectives)
- Mitigation action plan (summary of specific actions) (**Tetra Tech**, *Suffolk*, 2007, ES-4)

MLA: Maritime Liaison Agent. (**GAO**, *Maritime Security*, December 2007, pp. iv, 98-99)

MMA: Major Metropolitan Area.

MMMS: "Map Modernization Management Support (FEMA).

MMRS: Metropolitan Medical Response System.

MOA: Memorandum of Agreement. (**DA**, *WMD-CST Operations*, December 2007, Glossary-4)

Mob CNTR: Mobilization Center.

MOBDES: Mobilization Designee, DOD.

Mobile Emergency Response Support (MERS): "The primary function of MERS is to provide mobile telecommunications capabilities and life, logistics, operational and power generation support required for the on-site management of disaster response activities. MERS support falls into three broad categories: (1) operational support elements; (2) communications equipment and operators; and (3) logistics support. MERS supports Federal, State and local responders in their efforts to save lives, protect property and coordinate disaster operations. Staged in six strategic locations, one with offshore capabilities, the MERS detachments can concurrently support multiple field operating sites within a disaster area." (**DHS**, *NRF Comment Draft*, 2007, 60)

Mobile Emergency Response Support (MERS): "Another key FEMA disaster response asset…is the MERS System. The primary function of MERS is to provide mobile telecommunications, logistics, and operational capabilities for the on-site management of disaster response activities. MERS support falls into three broad areas:

- Operations - Mobile Emergency Operations Centers, quick reaction support, disaster preparedness (HAZMAT) officers, and MERS security officers.
- Communications - satellite, multiple radio vans, High Frequency line of sight microwave, land mobile radios, voice, video, and data capabilities, and wide area interoperability.
- Logistics - fuel, water, HVAC, life support, transportation, and power.

"MERS provides support required by Federal, State and local responders and can provide prompt and rapid multi-media communications, information processing, logistics, administrative, and operational support. Staged in six strategic locations, one with offshore capabilities, the MERS detachments can concurrently support a large JFO and multiple field operating sites within a disaster area. The telecommunications function is accomplished using a variety of communications transmission systems including satellite, high frequency, and microwave line-of-sight interconnected by fiber optic cables to voice and data switches, local area networks, and desktop devices such as personal computers and telephones. MERS telecommunications assets can be provided for one or multiple locations within a disaster area and can be used to establish or reestablish communications connectivity with the public telecommunications system or Government telecommunications networks. Facilities within a disaster region can be interconnected by MERS assets to enhance emergency communications interoperability and

austere facilities can be wired for computer, telephone, and video networks." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, p. 8)

Mobile Registration Intake Centers (MRICs) Pilot: "Recognizing many disaster victims may be stranded or located in congregate shelters without communications, and unable to register for assistance, FEMA has established a new registration pilot program that pushes registration capabilities directly into the field. For the 2007 hurricane season, FEMA will have the ability to deploy Mobile Registrations Intake Centers immediately to congregate shelters and provide an on-site capability to quickly register for FEMA assistance." (**FEMA**, *Statement of Paulison*, July 31, 2007, p. 18)

Mobilization: "The process and procedures used by all organizations—Federal, State, tribal, and local—for activating, assembling, and transporting all resources that have been requested to respond to or support an incident." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p. 154)

Mobilization (MOB) Center: "An off-incident location at which emergency service personnel and equipment are temporarily located pending assignment, release, or reassignment." (**USCG**, *IM Handbook*, 2006, Glossary 25-15)

Mobilization (MOB) Centers: "Temporary federal facilities in theater at which commodities, equipment and personnel can be received and pre-positioned for deployment as required; commodities remain under the control of HQ Logistics and can be deployed to multiple states; generally projected to hold 3 days of commodities." (**FEMA**, *Logistics Supply Chain*, 2006)

Mobilization, Historical Federal Organization for Emergency Mobilization (1947-1979):

- National Security Resources Board (NSRB, 1947-1949)
- NSRB, Executive Office of the President (EOP, 1949-1953)
- Office of Defense Mobilization, (ODM, EOP, 1950-1953)
- Defense Production Administration (DPA, 1951-1953)
- Office of Defense Mobilization (ODM, EOP, 1953-1958)
- Office of Defense and Civilian Mobilization (ODCM, EOP, 1958)
- Office of Civil and Defense Mobilization (OCDM, EOP, 1958-1961)
- Office of Emergency Planning (EOP, 1961-1968)
- Office of Emergency Preparedness (EOP, 1968-1973)
- Office of Preparedness (OP, General Services Administration, 1973-1975)
- Federal Preparedness Agency (FPA, GSA, 1975-1979)

(**National Archives**, *Guide to Federal Records*, Records of FEMA, Record Group 311, p. 1)

MOC: Medical Operations Center. (**EG&G**, *San Diego County Firestorms AAR 2007*, Feb 08, vi)

MOC: MERS Operations Center. (**FEMA**, *Statement of Glenn Cannon*, November 2007, p. 5)

Mock Disaster: "One method of exercising teams in which participants are challenged to determine the actions they would take in the event of a specific disaster scenario. Mock disasters usually involve all, or most, of the applicable teams. Under the guidance of exercise

coordinators, the teams walk through the actions they would take per their plans, or simulate performance of these actions. Teams may be at a single exercise location, or at multiple locations, with communication between teams simulating actual 'disaster mode' communications. A mock disaster will typically operate on a compressed timeframe representing many hours, or even days." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, 60)

Model State Emergency Health Powers Act (MSEHPA): "Many State legislatures and health departments have amended State statutes and regulations to reflect modern principles of public health emergency preparedness based, in part, on the Model State Emergency Health Powers Act (MSEHPA) drafted in fall of 2001 by the Center for Law and the Public's Health at Georgetown University and The Johns Hopkins University.8 MSEHPA presents State and local governments with a template for reviewing existing emergency declaration laws and developing legislative or other regulatory reforms to facilitate an effective public health response.9 While this chapter refers to MSEHPA to explain common provisions that are featured in many States' emergency preparedness laws, MSEHPA is not law unless a State has enacted it. According to the Center, more than 35 States have enacted laws based in whole or part on MSEHPA since the Act's completion.10 These laws vary across jurisdictions and may be interpreted differently depending on a host of factors." (**AHRQ,** *Mass Medical Care*, 2007, p. 27)

Model State Emergency Health Powers Act (MSEHPA): "In the spring of 2001, officials of the Centers for Disease Control and Prevention (CDC) asked the staff of the Center for Law and the Public's Health (based at Georgetown University and the Johns Hopkins University) to draft a…[MSEHPA]. This Model Act would enable states to revise their public health statutes in order to take account of contemporary scientific knowledge, communications technology, and case law on the rights of individuals and the duties of government. Many states had not substantially revised their public codes for a half century or longer.

"Drafting the Model Act accelerated after September 11th and especially after the first anthrax case was identified on October 4th. The Georgetown/Hopkins lawyers posted a draft on the World Wide Web in late October (and revised it in December). Secretary of Health and Human Services Tommy G. Thompson enthusiastically endorsed the draft. Across the political spectrum, however, but especially among liberals and libertarians, attacks began immediately on the need for the act and its major provisions—especially on its recommendations for planning, surveillance, public information, taking property, directing the work of health professionals and immunizing them from liability, and interfering with the privacy and liberty of persons to prevent the spread of infectious disease.

"Nevertheless, legislation inspired by the Model Act has been introduced in more than 30 states.[2] In some states, legislators and governors who supported the main thrust of the act decided that archaic provisions were better than anarchy. They feared that opening the entire public health code to amendment risked the repeal of substantial sections of it. In other states, lawmakers have used the Model Act as a checklist against which to review and revise their public health statute. No state, to our knowledge, has adopted the Model Act posted on the Web.

"The Model Act has become a contentious document in a process of policymaking that is likely to continue as long as the threat of bioterrorism persists. This new fact of life is recognized in the

new Department of Health and Human Services grant program to improve public health infrastructure for better defense against terrorism, which requires states to conduct ongoing review and revision of pertinent laws and regulations." (**Colmers and Fox**, March 2003)

Modified Mercalli Intensity Scale: A measure of the effects of an earthquake in a specific location. (**Deyle, French, Olshansky, and Paterson** 1998, 124)

Modified Mercalli Intensity Scale: (**Jaffe, Buffer, and Thurow** 1981)

Intensity	Detectability/Level Impact
I	Detected only by sensitive instruments
II	Felt by a few persons at rest, especially on upper floors
III	Felt noticeably indoors, but not always recognized as a quake
IV	Felt indoors by many, outdoors by a few
V	Felt by most people, damage to glass and plaster
VI	Felt by all, many frightened and run outdoors, damage small
VII	Everybody runs outdoors, damage to buildings varies
VIII	Panel walls thrown out of frames, fall of walls and chimneys
IX	Buildings shifted off foundations, cracked, thrown out of plumb
X	Most masonry and framed structures destroyed, ground cracked
XI	New structures still standing, bridges destroyed, ground fissures
XII	Damage total, waves seen on ground surface

Modular Emergency Medical System (MEMS): "The Modular Emergency Medical System (MEMS) offers a comprehensive plan of operations and standards for responding to a mass casualty event of such size that alternate care delivery sites would be required. MEMS emerged in response to Title IV of The Defense against Weapons of Mass Destruction Act of 1996 (Public Law 104-201). The law required that the Secretary of Defense develop and carry out a program to improve the responses of Federal, State, and local agencies to emergencies involving biological and chemical weapons. In response, the U.S. Department of Defense (DOD) created the Biological Warfare Improved Response Program. DOD then invited the Departments of Health and Human Services (DHHS), Energy (DOE), and Agriculture (USDA), and the Federal Emergency Management Agency (FEMA), the Federal Bureau of Investigation (FBI) and the Environmental Protection Agency (EPA), as well as emergency responders and managers from multiple States and local communities, to participate. MEMS offers detailed standards for a system of care that can be expanded and contracted in modular units as the need arises. It provides a framework for the organization of care, particularly for setting up predetermined, special-use alternate care sites. Thus, MEMS answers the questions of what general kinds of care are provided and where (alternate site standards). In specifying the staffing required for alternate care sites, MEMS also addresses who will provide care. One of the underlying assumptions in MEMS is that resources will be brought in or created within the area most affected by the mass casualty event." (AHRQ, *Altered Standards of Care in Mass Casualty Events*, 2005, p. B-2)

Modular Organization (ICS): "The ICS organizational structure develops in a top-down fashion that is based on the size and complexity of the incident, as well as the specifics of the hazard environment created by the incident. When needed separate functional elements can be

established, each of which may be further subdivided to enhance management and coordination. Responsibility for the establishment and expansion of the ICS rests with the Incident Commander (IC), who bases these on requirements of the situation. As incident complexity increases, the organization expands from top down as functional responsibilities are delegated." (**FEMA**, *National Incident Management System National Standard Curriculum Training Development Guidance*. October 2005, p. 8)

MOM: Multi-Objective Management. (**Galloway**, *A California Challenge*, 2007, 32)

Moral Hazard: "…insured parties take greater risks because they know they are insured). Insurers try to minimize adverse selection by marketing insurance to a broad class of customers, and by charging higher premiums to higher risk customers.[85] Insurers can address moral hazard by imposing deductibles – or requirements that policyholders bear certain "first dollar" losses – before receiving insurance coverage. " (**Financial Services Roundtable**, *Nation Unprepared for Mega-Catastrophe*, 2007, 45)

Moral Hazard: "`Moral hazard' is an increase in the probability of loss that could be caused by the behavior of the policyholder. For example, providing insurance protection to an individual may lead that person to behave more carelessly than before." (**GAO**, *Natural Disasters*, Nov 2007, 2)

Mortgage Portfolio Protection Program (MPPP): The Mortgage Portfolio Protection Program (MPPP) was introduced on January 1, 1991, as an additional tool to assist the mortgage lending and servicing industries in bringing their mortgage portfolios into compliance with the flood insurance requirements of the Flood Disaster Protection Act of 1973. The MPPP is not intended to act as a substitute for the need for mortgagees to review all mortgage loan applications at the time of loan origination and comply with flood insurance requirements as appropriate. Proper implementation of the various requirements of the MPPP usually results in mortgagors, after their notification of the need for flood insurance, either showing evidence of such a policy, or contacting their local insurance agent or appropriate Write Your Own (WYO) company to purchase the necessary coverage. It is intended that flood insurance policies be written under the MPPP only as a last resort, and only on mortgages whose mortgagors have failed to respond to the various notifications required by the MPPP." (**FEMA**, *MPPP*, 2005)

MOTR: Maritime Operational Threat Response Plan. (**GAO**, *Maritime Security*, Dec 2007, iv)

MOU: Memorandum of Understanding. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-4)

MPC: Maximum Permissible Concentration. (**OCD**, *Abbreviations and Definitions*, 1971, 3)

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[85] The FSR adds a footnote that "There is a limit, however, to addressing the adverse selection problem through pricing alone. As risk pools narrow to include only those presenting the highest risks, the actuarially appropriate premium may be so high that few will purchase the insurance. This may so increase the uncertainty about the expected loss from the risk pool that insurers become unable to price the risks correctly, or even become unwilling to provide any coverage at all. This is essentially why private insurers dropped out of covering flood risks…) (p. 45)

MPC: Mid-Term Planning Conference, HSEEP. (**FEMA**, *About HSEEP*, 2008)

MPE: Maximum Permissible Exposure. (**OCD**, *Abbreviations and Definitions*, 1971, 3)

MPPP: Mortgage Portfolio Protection Program. (**FEMA**, *MPPP*, 2005)

MRC: Medical Reserve Corps Program. (DHS, *Citizen Corp Program*, 2008)

MRAT: Medical Radiobiology Advisory Team, DoD. (**FEMA** *Statement of Cannon*, 2007, 11)

MRE: Meal Ready to Eat. (**HSGAC**, *Katrina: A Nation Still Unprepared*, 2006, p. 633)

MRICs: Mobile Registration Intake Centers. (**FEMA**, *Statement of Paulison*, 31 July 2007, 18)

MSCA: Military Support to Civil Authority. (**DA**, *WMD-CST Operations*, 2007, Glossary-4)

MSCC: Medical Surge Capacity and Capability.

MSCD: Military Support of Civil Defense. (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-3)

MSDS: Material Safety Data Sheet. (**EPA**, *Technical Guidance for Hazards Analysis*,1987, A-6)

MSEHPA: Model State Emergency Health Powers Act (Proposed).

MSEL: Master Scenario Event List. (**FEMA**, IS 120.A, *An Introduction to Exercises*, 2Feb08, 34)

MS-ISAC: Multi-State Information Sharing and Analysis Center. (**DHS,** *NIPP* 2006, p. 101)

MSP: Maritime Security Program, FBI. (**GAO**, *Maritime Security*, Dec. 2007, p. 98)

MST: Management Support Team. (**HSGAC**, *Katrina: A Nation Still Unprepared*, 2006, p. 633)

MT: Megaton. (**OCD**, *Abbreviations and Definitions*, 1971, p. 3)

MTA: Material Threat Assessment. (**HHS**, *Pandemic and All-Hazards…Report,* Nov. 2007)

MTD: Material Threat Determination. (**HHS**, *Pandemic and All-Hazards…Report,* Nov. 2007)

MTD: Maximum Tolerable Downtime. (**DHS**, *FCD 2*, Nov. 2007, p. C-1)

MTP: Master Trainer Program, EMI, FEMA.

MTPD: Maximum Tolerable Period of Disruption. (**BCI**, *Good Practice Guidelines*, 2007)

MTR: Maritime Transportation Response. (**GAO**, *Maritime Security*, December 2007, iv, 68)

MTSA: Maritime Transportation Security Act of 2002. (**GAO**, *Maritime Security*, Dec 2007, iv)

Mudflow: "The down-slope transfer of fine earth material mixed with water." (**UNDHA**, *DM Glossary*, 1992, 54)

Multi-Agency Command Center MACC: "An interagency coordination center established by the Department of Homeland Security (United States Secret Service) during National Security Special Events as a component of the Joint Operations Center. The MACC serves as the focal point of interagency security planning and coordination." (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, p. 55)

Multi-Agency Coordination (MAC): "A generalized term which describes the functions and activities of representatives of involved agencies and/or jurisdictions who come together to make decisions regarding the prioritizing of incidents, and the sharing and use of critical resources. The MAC organization is not a part of the on-scene ICS and is not involved in developing incident strategy or tactics." (**USCG**, *IM Handbook*, 2006, Glossary 25-15)

Multi-Agency Coordination (MAC) Centers: "A seventh requirement of incident management consists of the various multi-agency coordination centers that exist throughout all levels of government. They are essential to maintaining situational awareness and overall incident management, and they assist in the flow of information, the reporting of actions and activities, and ultimately the development of a common operating picture, but they also are hubs for coordinating operational activities during an incident. Examples include State, local, and Tribal emergency operations centers; State, local, and Tribal fusion centers; the National Operations Center, National Infrastructure Coordination Center, and the Federal Emergency Management Agency's National Response Coordination Center (all part of the Department of Homeland Security); the Federal Bureau of Investigation's Strategic Information and Operations Center and National Joint Terrorist Task Force (both part of the Department of Justice); and the National Counterterrorism Center (part of the Office of the Director of National Intelligence)." (**White House**, *National Strategy for Homeland Security*, HSC, October 2007, pp. 47-48)

Multiagency Coordination Entities. "When incidents cross disciplinary or jurisdictional boundaries or involve complex incident management scenarios, a multiagency coordination entity, such as an emergency management agency, may be used to facilitate incident management and policy coordination. The situation at hand and the needs of the jurisdictions involved will dictate how these multiagency coordination entities conduct their business, as well as how they are structured. Multiagency coordination entities typically consist of principals (or their designees) from organizations and agencies with direct incident management responsibility or with significant incident management support or resource responsibilities. These entities are sometimes referred to as crisis action teams, policy committees, incident management groups, executive teams, or other similar terms." (**DHS**, *NIMS*, 2004, pp. 27-28)

Multi-agency Coordination (MAC) Group: "Typically, administrators/executives, or their appointed representatives, who are authorized to commit agency resources and funds, are

brought together and form MAC Groups. MAC Groups may also be known as multiagency committees, emergency management committees, or as otherwise defined by the System. It can provide coordinated decisionmaking and resource allocation among cooperating agencies, and may establish the priorities among incidents, harmonize agency policies, and provide strategic guidance and direction to support incident management activities." (**FEMA**, *NIMS*, 2007, 154)

Multiagency Coordination System (MACS). "The primary function of MACS is to coordinate activities above the field level and to prioritize the incident demands for critical or competing resources, thereby assisting the coordination of the operations in the field. MACS consists of a combination of elements: personnel, procedures, protocols, business practices, and communications integrated into a common system. For the purpose of coordinating resources and support between multiple jurisdictions, MACS can be implemented from a fixed facility or by other arrangements outlined within the system. Examples of multiagency coordination include a State or county emergency operations center, a State intelligence fusion center, the National Operations Center, the Department of Homeland Security/Federal Emergency Management Agency (FEMA) National Response Coordination Center, the Department of Justice/Federal Bureau of Investigation (FBI) Strategic Information and Operations Center, the FBI Joint Operations Center, and the National Counterterrorism Center." (**DHS,** *NRF*, 2008, 48)

Multi-agency Coordination System(s) (MACS): "Multiagency coordination systems provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The elements of multiagency coordination systems include facilities, equipment, personnel, procedures, and communications. Two of the most commonly used elements are EOCs and MAC Groups. These systems assist agencies and organizations responding to an incident." (**FEMA**, *NIMS Draft*, 2007, p. 154)

Multi-Agency Coordination System (MACS) DHS – Concepts and Principles: "The core concepts and principles of the Multi-Agency Coordination System as taught by DHS (and as defined in the NIMS Document) incorporate the following components:

- A multi-agency coordination system is a combination of facilities, equipment, personnel, procedures, and communications integrated into a common system with responsibility for coordinating and supporting domestic incident management activities.
- The primary functions of multi-agency coordination systems are to support incident management policies and priorities, facilitate logistics support and resource tracking, inform resource allocation decisions using incident management priorities, coordinate incident management related information, and coordinate interagency and intergovernmental issues regarding incident management policies, priorities, and strategies.
- A typical multi-agency coordination system may contain one or several Emergency Operations Centers (EOCs). A typical multi-agency coordination system may contact numerous Department Operations Center (DOCs). Depending upon the type and location of the emergency/disaster various command elements (i.e. area commands, unified command or the incident commander) will have to coordinate activities within an established multi-agency coordination system.

Training dealing with the NIMS multi-agency coordination system shall describe to participants the components of a multi-agency coordination system and establish relationships between all elements of the system. It shall also increase the participant's knowledge of NIMS relevant to the multi-agency coordination system. It shall increase the participant's knowledge of the integrated nature of emergency management throughout the nation and advocate the adoption of the guidelines established in the NIMS document. The training shall contain specific disaster/emergency related examples that relate to multi-agency coordination systems at the local, state and federal levels of government." (**FEMA**, *National Incident Management System National Standard Curriculum Training Development Guidance*, October 2005, pp. 22-23)

Multi-Casualty/Multi-Patient Incident Plan (Multiple Casualty/Multiple Patient IP) (MCI/MPI): "An effective …MCI/MPI plan should include all of the health and medical resources within a local area/region. Significant components of an MCI plan include EMS, private ambulance providers, fire department, law enforcement, hospitals, medical education facilities, and public health capabilities. Freestanding minor emergency treatment centers/clinics should be included in the plan as well." (USFA, *Responding to Incidents of National Consequence*, 2004, p. 53)

Multi-hazard: "Multihazards include significant events such as infrastructure deterioration, natural disasters, accidents, and malevolent acts." (**TISP**, *Regional Disaster Resilience*, 2006, 2)

"Today's preparedness needs require a comprehensive, multihazards regional approach that addresses natural disasters of all types, human error, systems failures, pandemics, and malevolent acts, including those involving cyber systems and weapons of mass destruction (chemical, biological, radiological, and nuclear devices)." (**TISP**, *Regional Disaster Resilience*, 2006, p. 3)

Multihazard Advisory Maps: "In this subsection, the term 'multihazard advisory map' means a map on which hazard data concerning each type of natural disaster is identified simultaneously for the purpose of showing areas of hazard overlap." (**Disaster Mitigation Act of 2000**, Title I, Sec. 203 (k))

Multihazard Mitigation Council (MMC): "The purpose of the Multihazard Mitigation Council (MMC) is to reduce the total costs associated with natural and other related hazards to buildings by fostering and promoting consistent and improved multihazard risk mitigation strategies, guidelines, practices, and related efforts. The Council was established in 1997 as a voluntary advisory, facilitative body of the National Institute of Building Sciences (NIBS), a nonprofit corporation incorporated in the District of Columbia." (FEMA, "Fact Sheet – Mitigation's Value to Society," August 2007, p. 2)

Multi-jurisdiction Incident: "An incident that extends across political boundaries and/or response disciplines, requiring action from multiple governments and agencies to manage certain aspects of an incident. These incidents may best be managed under Unified Incident Management." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-8)

Multi-Objective Floodplain Management: "Within the field of floodplain management, ecosystem restoration is becoming increasingly important with the emphasis upon *multi-*

objective floodplain management. Rather than just focusing upon "flood control" to protect lives and property, proactive floodplain management strives to consider multiple objective alternatives in order to determine the best overall strategy for any given location." (**CA Department of Water Resources**, *Multi-Objective Approaches to Floodplain Mgmt*., 2005, 1)

Multi-Year Development Plan (MYDP): "Multi-Year Development Plan – presents a step-by-step procedure for estimating (a) total resource requirements for alleviating shortfalls that the jurisdiction plans to address at some point in the future, (b) additional capability development activities not identified in the Capability Assessment, and (c) major maintenance efforts. The MYDP also enables a local jurisdiction to plan in more detail for specific capability improvement activities where work will actually begin in the upcoming year. Finally, the MYDP asks for information on actual expenditures during the most recent local fiscal year which will be used to project what it will cost to maintain capability at current levels." (**FEMA**, *IEMS, HICA MYDP* (CPG 1-34), 1985, p. II-1)

Multi-Year Development Plan (Planning) (MYDP): "Based on…capability shortfall [analysis]…the jurisdiction should prepare a multi-year development plan tailored to meet its unique situation and requirements. The plan should outline what needs to be done to reach the desired level of capability. Ideally, this plan should cover a five-year period so that long-term development projects can be properly scheduled and adequately funded. The plan should include all emergency management projects and activities to be undertaken by the jurisdiction regardless of the funding source." (**FEMA**, *IEMS Process Overview*, 1983, pp. 8-9)

Multi-Year Development Plan (Planning) (MYDP): "…the MYDP at all levels of government is a planning document. As such, information forwarded to FEMA Headquarters will be used as one basis for planning and projecting budgetary requirements at the national level. In a similar fashion at other levels of government, the MYDP can serve as a useful planning and management tool that allows emergency managers to project (or provide an initial estimate of) how they wish to approach improvement of identified capability shortfalls over time and to estimate levels of assistance that may be required to aid them in capability building and maintenance efforts." (**FEMA**, *IEMS MYDP*, 1984, p. I-3)

Multi-Year Exercise Schedule: "… should identify all exercises planned by a state/region/jurisdiction within a long term timeframe. Planners should use this to deconflict and synchronize their exercise efforts in terms of resources and objectives - combining exercises, where appropriate and more efficient." (**FEMA**, IS-120 A, *An Intro to Ex.*, 23 Jan 2008, p. 19)

Multi-Year Flood Hazard Identification Plan (MHIP): "The Multi-Year Flood Hazard Identification Plan (MHIP) details FEMA's plan for prioritizing and delivering modernized flood maps for areas of the United States with the greatest flood risk. The MHIP provides: detailed tables and graphs of projected flood map production sequencing and projected funding allocations; a summary of stakeholder input, including information provided through business plans developed by FEMA Regional Offices and State mapping partners; and a summary of FEMA's progress in meeting Key Performance Indicators for the Flood Map Modernization program." (**FEMA/NFIP**, *Multi-Year Flood Hazard Identification Plan* (Version 2.5), 2007)

Multi-Year Strategy and Program Management Plan: "A process that ensures the maintenance and continued viability of COOP plans.**"** (**DHS**, *FCD 1*, Nov 2007, P-6)

Multi-Year Training & Exercise Plan: "The Multi-Year Training and Exercise Plan is the *foundational* document guiding a successful exercise program. The multi-year plan provides a mechanism for long-term coordination of training and exercise activities toward a jurisdiction's *preparedness* goals. This plan describes the program's training and exercise priorities and associated *capabilities*, and aids in employing the *building-block approach* for training and exercise activities. Within the Multi-Year Training and Exercise Plan, the multi-year schedule graphically illustrates training and exercise activities that support the identified priorities. The schedule is color-coded by priority and presents a multi-year outlook for task and priority achievement. As training and exercises are completed, the document can be annually updated, modified, and revised to reflect changes to the priorities and new capabilities that need to be assessed. The Multi-year Training and Exercise Plan and schedule is produced through the work completed at the *Training and Exercise Plan Workshop (T&EPW)*. The T&EPW focuses on discussion of *capabilities-based planning*, overview of the National Priorities, review of the State or jurisdiction priorities, and analysis of previous training and exercises. After this information is synthesized, *participants* develop the plan and schedule for their State or jurisdiction." (**FEMA**, *HSEEP Glossary*, 2008)

Multi-Year Training & Exercise Plan:

- Takes stock of current program plans and capabilities.
- Lays out long-term program goals and objectives.
- Develops a mix of exercises to meet goals and objectives.
- Determines what training is needed as a prerequisite to planned exercises.
- Sets a multiyear schedule of exercises.
- Sets a multiyear schedule of training events. (**FEMA**, IS-120 A, *An Introduction to Exercises*, 23 Jan 2008, p. 17)

Multiple Direction Planning: "Federated planning flows in multiple directions. From a municipal leader's perspective it begins locally, processes up through State, regional, and Federal authorities as necessary, and comes back. Local leaders assess their threats, hazards, and risk posture and determine what actions and capabilities are required to achieve steady-state and incident security. They resource what they can and petition State and Federal authorities to fill capability shortfalls as needed.

1) In between, State officials often establish planning assumptions and objectives with which local governments in the State are required or encouraged to adopt and support. State-wide interoperable communications plans and systems are an example. State governments exercising leadership in a complex competitive environment relegate local and Federal government officials to a supporting role.

2) At every level of government, officials set strategic goals and objectives for their jurisdictions. They also examine how their security challenge fits with higher, lower, and adjacent jurisdictions. They determine how to operationalize their own and other relevant

strategies, and resource appropriately. Federated planning constitutes an approach where each member of the homeland security community is supporting and supported by others." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-3)

Mustard Gas: "Sulfur mustard is a type of chemical warfare agent. These kinds of agents are called vesicants or blistering agents, because they cause blistering of the skin and mucous membranes on contact. Sulfur mustard is also known as "mustard gas or mustard agent," or by the military designations H, HD, and HT. Sulfur mustard sometimes smells like garlic, onions, or mustard and sometimes has no odor. It can be a vapor (the gaseous form of a liquid), an oily-textured liquid, or a solid. Sulfur mustard can be clear to yellow or brown when it is in liquid or solid form." (**CDC**, *Facts About Sulfur Mustard*, March 12, 2003 Modification)

Mutual Aid Agreement: "A written agreement between agencies, organizations, and/or jurisdictions that they will assist one another on request by furnishing personnel, equipment, and/or expertise in a specified manner." (**DHS**, *National Response Plan*, December 2004, p.69; **DHS**, *National Incident Management System*, March 2004, p. 133.)

Mutual Aid: "Mutual-aid agreements are the means for one jurisdiction to provide resources, facilities, services, and other required support to another jurisdiction during an incident. Each jurisdiction should be party to a mutual-aid agreement with appropriate jurisdictions from which they expect to receive or to which they expect to provide assistance during an incident." (**DHS**, *National Incident Management System*, March 2004, p. 5)

Mutual Aid Agreement: "Written agreement between agencies, organizations, and/or jurisdictions that they will assist one another on request by furnishing personnel, equipment, and/or expertise in a specified manner." (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 55)

Mutual Aid Agreement: "Pre-arranged agreement developed between two or more entities to render assistance to the parties of the agreement." (**ISO 22399**, *Societal Security*…, 2007, 4)

Mutual Aid Agreements: "**A.5.7** Mutual aid/assistance agreements between entities are an effective means to obtain resources and should be developed whenever possible. Mutual aid/assistance agreements should be in writing, be reviewed by legal counsel, be signed by a responsible official, define liability, and detail funding and cost arrangements. The term *mutual aid/assistance agreement* as used here includes cooperative assistance agreements, intergovernmental compacts, or other terms commonly used for the sharing of resources. Mutual aid/assistance agreements are the means for one entity to provide resources, facilities, services, and other required support to another entity during an incident. Each entity should be party to a mutual aid/assistance agreement (such as the Emergency Management Assistance Compact) with appropriate entities from which they expect to receive or to which they expect to provide assistance during an incident. This would normally include all neighboring or nearby entities, as well as relevant private sector and nongovernmental organizations. States should participate in interstate compacts and look to establish intrastate agreements that encompass all local entities. Mutual aid/assistance agreements are also needed with private organizations, such as the International Red Cross, to facilitate the timely delivery of private assistance at the

appropriate entity level during incidents. At a minimum, mutual aid/assistance agreements should include the following elements or provisions:

(1) Definitions of key terms used in the agreement
(2) Roles and responsibilities of individual parties
(3) Procedures for requesting and providing assistance
(4) Procedures, authorities, and rules for payment, reimbursement, and allocation of costs
(5) Notification procedures
(6) Protocols for interoperable communications
(7) Relationships with other agreements among entities
(8) Workers' compensation
(9) Treatment of liability and immunity
(10) Recognition of qualifications and certifications
(11) Sharing agreements, as required." (**NFPA 1600**, 2007, p. 16; DHS, *NRF*, 2008, 38)

[Note: FEMA *NIMS* adds a 12th element (or provision) – "Termination Clause." (FEMA 501/Draft), August 2007, p. 18.]

MWEOC: Mount Weather Emergency Operations Center. (**FEMA**, *About FEMA*, 2007)

MYDP: Multi-Year Development Planning. (**FEMA**. *IEMS: MYDP,* 1984, p. 1-1)

9-1-1 Centers and EOCs: "The assumption that the duties identified as fundamental to an Emergency Operations Center dismisses the fact that the 9-1-1 Center, in many locations, performs these duties well in advance of any EOC activation. The information to and from the public, local/county field units, outside agency responders, related state and federal agencies as well as medical and health resources begins at the PSAP/Public Safety Communication Center." (**Association of Public Safety Communications Officials**. *APCO Homeland Security Commitment.* National Homeland Security Consortium Meeting, May 24-25, 2005, slide 5)

N+1: "A fault tolerant strategy that includes multiple systems or components protected by one backup system or component. (Many-to-one relationship)." (**DigitalCare**, *State of OR Business Continuity Workshop*, 2006, 60)

NAC: National Advisory Committee (FEMA).

NACCHO: National Association of County and City Health Officials.

NACHS: National Academic Consortium for Homeland Security. The Ohio State University.

NADB: National Asset Database. (**DHS,** *NIPP* 2006, p. 32)

NAIC: National Association of Insurance Commissioners. (**FEMA**, *Call for Issues*, 2000, xxiii)

Named Storm: "Named Storm – (NS) A hurricane or a tropical storm." (**Klotzbach and Gray**, *Extended Range Forecast of Atlantic Seasonal Hurricane Activity and U.S. Landfall Strike Probability for 2008*, April 9, 2008, p. 6)

NARAC: National Atmospheric Release Advisory Center. **(LLNL,** *GT&S*, 2006, p. 21)

NAS: National Academy of Sciences

NASCDD: National Association of Civil Defense Directors. (**OCD**, *Abbreviations*, 1971, 3)

NASEMSO: National Association of State Emergency Medical Services Officials.

National Academic Consortium for Homeland Security (NACHS): "The goal of the National Academic Consortium for Homeland Security is to help improve the security of the U.S. and its worldwide interests, while protecting and preserving its values, freedoms and civil liberties, and economic interests and competitiveness. The specific objectives of the Consortium are to help:
(1) Improve understanding of national security issues, especially terrorism and strategies for counter-terrorism;
(2) Promote development of better-informed public policy, strategy, plans and programs regarding national security issues;
(3) Develop new technologies and transition those technologies into effective, practical and affordable solutions to (current and future) international and homeland security problems; and
(4) Educate and train the people required by governmental and non-governmental organizations, to effectively accomplish international and homeland security roles and responsibilities.
The primary role of the Consortium is to promote, support and enhance academic research, technology development, education and training, and service programs dealing with all aspects of international and homeland security, through collaboration and information- sharing among academic institutions, researchers and scholars. Our vision is that the Consortium also becomes an effective sounding board and consultative body to assist federal-government decision makers in developing more effective national policies and programs concerning academic research and technology development, education and training, and related service programs pertaining to national security. (**NACHS**, The Ohio State University)

National Advisory Council for Rural Civil Defense: Established by the Federal Civil Defense Administration in December 1955. (**FCDA**, *1956 Annual Report*, 1957, 108)

National Air & Radiation Environmental Laboratory (NAREL): "The National Air and Radiation Environmental Laboratory (NAREL) is a comprehensive environmental laboratory managed by the U.S. Environmental Protection Agency's Office of Radiation and Indoor Air (ORIA). NAREL is located on the Gunter Annex of Maxwell Air Force Base in Montgomery, Alabama, and provides services to a wide range of clients, including other EPA offices and Federal and State agencies. NAREL facilities incorporate state-of-the-art laboratory technology and equipment and include the latest health and safety techniques, as well as strict monitoring and control of laboratory emissions. The NAREL staff are highly trained professionals with backgrounds including health physics, radiochemistry, engineering, biology, mathematics, and computer science. Fundamental to the NAREL mission is the commitment to developing and

applying the most advanced methods for measuring environmental radioactivity and evaluating its risk to the public." (**EPA**, *NAREL*, Feb 13, 2008 Update)

National Alert Warning System (NAWAS): "Operated and maintained by FEMA, the NAWAS was originally created as part of the Civil Defense Act of 1950 in order to pass emergency information to the American public regarding an actual attack or an accidental missile launch against the United States. The NAWAS is available on a 24/7 basis as a non-secure, continuous, private line, telephone system and is used to convey warnings to Federal, State, and local governments, as well as the military and civil populations. Although the original mission of NAWAS was to warn of an enemy attack or missile launch, the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 expanded the NAWAS mission to include warning for acts of terrorism, as well as natural and technological disasters and events. NAWAS is used by the National Oceanic and Atmospheric Administration (NOAA) to pass severe weather alerts as conditions develop as well and to pass critical sheltering information in the event these severe weather conditions materialize. There are currently approximately 2050 NAWAS drops (referred to as Warning points) across the Nation, to include Alaska, Hawaii, Puerto Rico, and the US Virgin Islands" (**Homeland Security Council**, *NCPIP*, 2007, p. 64)

National Asset Database (NADB): "…the National Asset Database (NADB) is not a list of critical assets assembled into a database of only those assets (facilities, systems, and infrastructures) deemed 'critical'. The NADB is the primary Federal data repository for analysis and integration required to provide the Department of Homeland Security (DHS) with the capability to identify, collect, catalog, and maintain a national asset inventory…..The NAPB is a continually evolving and comprehensive catalog of the assets that comprise the Nation's infrastructure; containing descriptive information regarding those assets. Since the NAPB is an inventory of assets, it can be queried in many ways that can help inform public and private risk-reduction activities across the 17 Critical Infrastructures and Key Resources (CI/KR) sectors. It provides the 'universe' from which various lists of critical assets are produced. The NADB enables a wide-ranging robust risk analysis process that ties asset information, as well as analyses concerning consequence of loss/attack, vulnerability of an asset, system or network, to the threat to those assets, systems, or networks." (**DHS/OIG**, *Progress in Developing the National Asset Database*, "Response to Recommendations Contained in the Draft OIG Report" (DHS), June 2006, p. 29)

National Applications Office. See Department of Homeland Security, National Appl. Office.

National Atmospheric Release Advisory Center (NARAC): "The National Atmospheric Release Advisory Center (NARAC), located at Livermore, is the premier capability in the U.S. for real-time assessments of the dispersion and potential impact of hazardous materials released into the atmosphere. NARAC provides the technical, scientific, and operational capabilities for the DHS-led Interagency Modeling and Atmospheric Assessment Center (IMAAC), which serves as the coordinating center and single source of federal plume-modeling predictions in the event of a nationally significant incident." (**LLNL**, *Global Treats and Security*, 2006, p. 21)

National Biodefense Science Board (NBSB): "The National Biodefense Science Board (NBSB) was created under the authority of the Pandemic and All-Hazards Preparedness Act,

signed into law on December 19, 2006. NBSB was established to provide expert advice and guidance to the Secretary of the U.S. Department of Health and Human Services (HHS) on scientific, technical, and other matters of special interest to HHS regarding activities to prevent, prepare for, and respond to adverse health effects of public health emergencies resulting from chemical, biological, nuclear, and radiological events, whether naturally occurring, accidental, or deliberate. By statute, the NBSB will have 13 voting members with a broad range of expertise in science, medicine, and public health. Additionally, there may be non-voting, ex officio members, as determined appropriate by the Secretary." The Inaugural Meeting of the NBSB was December 17-18, 2007. (**HHS/ASPR**, *National Biodefense Science Board*, 2007)

National Biosurveillance Integration Center (NBIC): See DHS NBIS.

National Biosurveillance Integration System (NBIS): "HSPD-9 dated 30 January 2004 and HSPD-10 dated 21 April 2004 directs DHS to establish a National Biosurveillance Integration System (NBIS) to provide early detection and situational awareness of biological events of potential national consequence by acquiring, integrating, analyzing, and disseminating existing human, animal, plant, and environmental biosurveillance system data into a common operating picture (COP) that represents a comprehensive depiction of the global biosurveillance security environment (GBSE). The National Biosurveillance Group (NBSG), comprising of representatives from all member agencies, will integrate and analyze all-agency/source biosurveillance information to recognize unusual biological events and provide situational awareness to the NBIS community and decision-makers through the development of a biosurveillance COP (BCOP) and targeting reporting. The BCOP will augment the DHS National Operation Center's COP, which provides a consistent, integrated picture of biosurveillance situational awareness throughout the country. The NBIS will facilitate collaborative interagency analysis to ensure fully-integrated biosurveillance situational awareness and provide near-real time awareness to the Incident Management Group (IMG) and the DHS National Operations Center (NOC). The resulting improved information sharing and enhanced situational awareness facilitates national decision-making to enable timely response." (**DHS**, *DHS Exhibit 300 Public Release BY08*, February 12, 2007, p. 1).

National Biosurveillance Integration System (NBIS): In FY 2006 there were 493 "bioaerosol collectors deployed in the U.S. cities determined to be at the highest risk. These collectors serve to determine the characteristic and extent of a potential terrorist airborne health threat to the public and protect the public by enabling early response actions to identification of airborne materials in the event of an attack." The goal for FY 2007-08 was 660. (**DHS**, *Performance Budget Overview, FY 2008*, March 2007, p. 23)

National Biosurveillance Integration System Operational Display System (NODS): "…an IT system that provides our Center [NBIC] the visibility into over 300-plus unclassified sources of biosurveillance information from across multiple sources. This information is aggregated with various reports that we receive from the departments of Defense, State, Health and Human Services, Agriculture, and Transportation and other sources. Our relationship and integration of such valuable sources, such as ARGUS is firmly established within NODS." (**DHS**, *Testimony of Dr. Kimothy Smith…NBIC...,* 4 Oct 2007)

National Bioterrorism Hospital Preparedness Program (NBHPP): "The purpose of the National Bioterrorism Hospital Preparedness Program (NBHPP) is to prepare hospitals and supporting healthcare systems, in collaboration with other partners, to deliver coordinated and effective care to victims of terrorism and other public health emergencies. Cooperative agreement funds may be used for activities that include increasing surge capacity, which encompasses beds, personnel, pharmaceuticals, PPE, decontamination capacity, isolation capacity and interoperable communications, as well as the enhancement of EMS services, competency based training, and exercises." (**DHS/ODP**, *FY 2006 EMPG*, 2005, p. 11)
[Note: "The Pandemic and All Hazards Preparedness Act of 2006 (PAHPA) transferred the National Bioterrorism Hospital Preparedness Program (NBHPP) from the Health Resources and Services Administration (HRSA) to the newly created office of the Assistant Secretary for Preparedness and Response (ASPR), and the NBHPP was renamed the Hospital Preparedness Program (HPP). In addition to the new name, the program's focus expanded from bioterrorism to all-hazards preparedness. Under PAHPA, the following capabilities must be prioritized:

- Interoperable communications system;
- Fatality management plans;
- Bed tracking system;
- Hospital evacuation plans;
- Emergency System for the Advance Registration of Volunteer Health Professionals;
- National Incident Management System (NIMS) compliance." (**Trust for America's Health**, *Ready or Not?* 2007, p. 65)]

National Biosurveillance Watch Desk: Operates 24/7 within the National Operations Center (NOC), which first stood up in December 2005. (**DHS**, *Testimony of Dr. Kimothy Smith…NBIC.* 4Oct07)

National Capabilities Assessment: "The Office of Grants and Training [DHS] is developing a National Capabilities Assessment through iterative pilot testing. Objectives:

1. Facilitate understanding of regional preparedness through:
    a. Extensive participation of Federal, State, territory, local, and tribal multi-disciplinary partners
    b. Regional collaboration
    c. Measuring preparedness through 'real-world' performance
    d. Identifying capability gaps to be closed, and programs to sustain
    e. Findings that can be used to update strategies and program plans
2. Develop a national picture of preparedness to:
    a. Support strategic decision-making on delivery of preparedness programs
    b. Measure progress in preparedness
    c. Evaluate and update national priorities
    d. Identify research and development requirements
3. Create a better assessment that:
    a. Incorporates feedback to improve the assessment's usefulness
    b. Helps refine to Target Capabilities List (TCL) (**DHS**, *Development of the CAPS*, 2006, slide 9)

- What the Assessment IS

  - Translation of thee TCL from policy to application of a National Capabilities Assessment
  - Focused on capability outcomes
  - Mechanism to encourage regional collaboration
  - Focused on state and local preparedness
  - Enhances 'culture of preparedness'
  - Leverages experience of previous assessments (avoiding pitfalls)
- What the assessment is NOT
  - A detailed accounting of individual assets
  - A internal jurisdiction or departmental analysis (**DHS**, *Development of the CAPS*, 2006, slide 10)

National Capabilities Assessment Pilot: "Pilot strives to develop an assessment that is:
- Systematic
- Repeatable
- Consistent
- Useful (**DHS**, *Development of the CAPS*, 2006, slide 11)

National Capital Region (NCR): "Title 10, United States Code, Section 2674 (f)(2) provides the following definition: *The term "National Capital Region" means the geographic area located within the boundaries of (A) the District of Columbia, (B) Montgomery and Prince Georges Counties in the State of Maryland, (C) Arlington, Fairfax, Loudoun, and Prince William* Counties and the City of Alexandria in the Commonwealth of Virginia, and (D) all cities and other units of government within the geographic areas of such District, Counties, and City. Section 7302(a)(7) of the Intelligence Reform and Terrorism Prevention Act of 2004 (Pub. L. 108-458), December 17, 2004, has since amended the definition of the National Capital Region: The term "National Capital Region" or "Region" means the area defined under section 2674(f)(2) of title 10, United States Code, and those counties with a border abutting that area and any municipalities therein. However, the Homeland Security Act of 2002 limits the purview of the NCRC's oversight and coordination function within the boundaries of the NCR as defined under section 2674(f)(2) of title 10, United States Code." (**DHS**, *National Capital Region Coordination, First Annual Repor*t, 2005, p. 1)

National Capital Region (NCR): "The National Capital Region was created pursuant to the National Capital Planning Act of 1952… The Act defined the NCR as the District of Columbia; Montgomery and Prince George's Counties of Maryland; Arlington, Fairfax, Loudon, and Prince William Counties of Virginia; and all cities now or here after existing in Maryland or Virginia within the geographic area bounded by the outer boundaries of the combined area of said counties. The NCR includes the District of Columbia and eleven local jurisdictions in the State of Maryland and the Commonwealth of Virginia." (**HSC**, NCPIP, 2007, p. 64)

National Center for Biomedical Research and Training – Academy of Counter-Terrorist Education (NCBRT-ACE) at Louisiana State University (LSU**)**: "NCBRT-ACE specializes in curriculum on biological terrorism agents and topics in the law enforcement discipline, including prevention and deterrence. The biological curriculum is based on completed and ongoing studies on agents, such as anthrax, through a bio-safety level 3 laboratory." (**FEMA**, *TEI/TO*, 2008, 4)

National Center for Food Protection and Defense (NCFPD): A Department of Homeland Security Center of Excellence, "… led by the University of Minnesota…defends the safety of the food system from pre-farm inputs through consumption by establishing best practices, developing new tools, and attracting new researchers to prevent, manage, and respond to food contamination events." (**DHS**, *Homeland Security Centers of Excellence*, March 20, 2007)

National Center for Foreign Animal and Zoonotic Disease Defense (FAZD): A Department of Homeland Security Center of Excellence, "led by Texas A&M University, protects against the introduction of high-consequence foreign animal and zoonotic diseases into the United States, with an emphasis on prevention, surveillance, intervention, and recovery." (**DHS**, *Homeland Security Centers of Excellence*, March 20, 2007)

National Center for Preparedness, Detection, Control of Infectious Diseases (NCPDCID) CDC: "The…NCPDCID protects populations domestically and internationally through leadership, partnerships, epidemiologic and laboratory studies, and the use of quality systems, standards, and practices. NCPDCID collaborates with the Coordinating Center for Infectious Diseases (CCID), CDC, and the agency's national and global partners to conduct, coordinate, and support infectious disease surveillance, research, and prevention. Each of the center's 6 divisions complements this cross-cutting mission, working with internal and external partners to improve public health." (**CDC**, *NCPDCIC*, January 23, 2008 update)

National Center for the Study of Preparedness and Catastrophic Event Response (PACER): A Department of Homeland Security Center of Excellence, "led by Johns Hopkins University, optimizes our Nation's preparedness in the event of a high-consequence natural or man-made disaster, as well as develops guidelines to best alleviate the effects of such an event." (**DHS**, *Homeland Security Centers of Excellence*, March 20, 2007)

National Civil Applications Program (NCAP): "The National Civil Applications Program (NCAP) is a component of the U.S. Geological Survey's (USGS) Mapping, Remote Sensing, and Geographic Investigations Program. The NCAP serves Federal civil agencies by providing for the acquisition, dissemination, and exploitation of classified remote sensing systems and data in support of mission responsibilities for land and resource management, environmental and scientific studies, homeland security, and hazards/disaster management.

"Civil applications of classified remotely sensed imagery began in 1969 when the USGS provided Federal civil agencies with access to imagery for various uses, including mapping, charting, geodesy, and management of the Nation's lands and resources. The Civil Applications Committee (CAC) was established in 1975 to provide oversight and coordination of these activities. The CAC is composed of 11 Federal departments and independent agencies. The USGS, through the Secretary of the Interior, is delegated responsibility to chair the CAC.

"The use of classified remotely sensed data has increased dramatically over the past 10 years. There has been an expanded emphasis on using data for environmental monitoring and research and for hazards detection, warning, and emergency response. To address the growing requirements and better serve the Federal civil community, the USGS expanded its investment in

NCAP facilities and infrastructure during the l990s. The USGS Advanced Systems Center (ASC) in Reston, Va., was built in 1993 and serves as the hub of NCAP operations. The USGS operates regional facilities in Denver, Colo.; Rolla, Mo.; Sioux Falls, SD; and Menlo Park, Calif. An interagency NCAP facility is located in Anchorage, Alaska. Each USGS facility provides the infrastructure, systems, and expertise required to support the growing diversity of civil applications." (**USGS**, *NCAP USCG Fact Sheet 121-02*, November 2002)

National Civil Defense Advisory Council: "During 1955 the National Civil Defense Advisory Council met five times…. The National Civil Defense Advisory Council was established by Publi Law 920 to advise the Administrator on general or basic policy matters of the civil defense program. The Council is appointed by the President. The Federal Civil Defense Administrator is chairman, half of the 12 membe3rs are representatives of State and local governments, and the remainder are appointed from the general public on the basis of their qualifications and interest." (**FCDA**, *1955 Annual Report*, 1956, p. 54)

National Civil Defense Four Major Principles, FCDA (1951-1952):

- A Well-Informed Public.
- A Trained Civil Defense Corps.
- Adequate Tools to Do the Job.
- A High State of National Readiness. (**FCDA**, *Annual Report for 1952*, p. 7)

National Civil Defense Training Center, Olney, MD. The first training school initiated by the Federal Civil Defense Administration, 1951.

National Civil Defense Training Center, Olney, MD: "The National Civil Defense Training Center at Olney, Md., consists of two training schools – the Staff College for training in Civil Defense Administration and Operations, and the Rescue School, for training in civil defense rescue operations and related skills such as emergency action to save lives and fire fighting for householders….

"The graduates from FCDA schools return to their home communities where they serve as a cadre of instructors, which multiplies itself by conducting local civil defense schools and courses.

"Both centers also helped plan the administrative, operational, and technical aspects of civil defense at State and local levels. Likewise, each center has served as an actin-research base in which developing policy was interpreted to representatives from the field and tested utilizing their own experiences.

"The school at Olney has become a center not only for instructing civil defense volunteers but also for developing and testing doctrine and devices useful in civil defense. It has also become a public education medium of some importance, particularly through its night exercises which are open to the public. These exercises constitute training activities in which both the Staff College and rescue students pactice and apply what they learned; with units from the fire departments and first-aid squads of nearby municipalities participating. About 10,000 people have observed

these night training exercises in which control center operations are used. Civil defense services units are dispatched to the rescue street, and live 'casualties' extircated under highly realistic fire and rescue situatins. Such exercised have demonstrated to civil defense officials and the public the progress that has taken place and how the services work together.

"During 1953, the Staff College graduated 470 trainees – State and municipal civil defense directors, civil defense service chiefs, civil defense coordinators in industrial organizations and government installations, and others. These trainees came from 31 States, 5 Territories, and foreign countries such as Canada and Brazil. In addition approximately 1,700 persons attended courses and conferences at the Staff College.

"The Staff College also assisted State and local officials by making available material, based on the units of instruction at the Staff College, and by lending personnel to assist in carrying on training or conferences at the State or local level….

A high degree of realism is achieved in rescue training by using a 'Rescue Street' with 5 demolished buildings where wartime rescue conditions are simulated. Trainees learn rescue methods and perform actural rescue operations in these buildings, wich duplicate conditions resulting from enemy attack or natural disaster." (FCDA, 1953 Annual Report, pp. 89-91)

National Civil Preparedness Program: In 1972 the Defense Civil Preparedness Agency was formed [See Defense Civil Preparedness Agency listing]. The DCPA instituted a National Civil Preparedness Program which differed from the existing Federal Civil Defense Program in two major respects: (1) a focus on peacetime natural, technological and man-made hazards, and (2) a movement away from a Federally-focused nuclear attack preparedness program to one focused on building local community preparedness capabilities for all hazards. As the DCPA put it, the new NCPP would begin transitioning to a "Civil Preparedness" program that was "people-oriented" as opposed to the "hardware-oriented" programs of the 1950s and 1960s. This reorientation included a "transition from nationwide exercises involving State and local governments to individualized exercises for selected local governments." (**DCPA**, *Foresight*, 1974, p. 13) "During the year Staff College [DCPA Staff College, Battle Creek MI] resident courses were redirected to increase the capability of local government to conduct emergency operations in an attack on any other emergency situation." (**DCPA**, *Foresight*, 1974, p. 20)

"In support of fiscal year 1973 program emphasis, additional materials were developed for use by State and Civil Defense University Extension personnel in natural disaster training programs. The first Natural Disaster Course Syllabus was made available in January 1973 [The Local Disaster Preparedness course]." (**DCPA**, *Foresight*, 1974, p. 20)

National Command and Coordination Capability (NCCC): "…a national crisis communications capability that is reliable and survivable with robust processes and systems that will serve command, control and coordination operations among federal, state, tribal, territories, and local governments. In a crisis, it will enable the President and other national leaders to make informed decisions, and coordinate efforts appropriately. The NCCC offers an interconnectivity solution inclusive of Katrina Lessons Learned recommendations. DHS has been designated the executive agent for coordinating the development, operation, and maintenance of the NCCC,

with support from the Department of Defense and the interagency community." (**DHS**, *Budget-in-Brief FY 2008*, 2007, p. 82)

National Command and Coordination Capability (NCCC): "The NCCC is the means to provide the President and Vice President with the ability to respond deliberately and appropriately to any crisis. It includes responsive, reliable, survivable, and robust processes and systems to command, control, and coordinate operations among Federal, State, tribal, insular, and local governments, as required. (**Homeland Security Council**, NCPIP, Aug 2007, p. 65)

National Commission on Terrorism: Non-partisan commission established by Congress in 1988 in the wake of the attacks on the US embassies in Nairobi and Dar es Salaam to conduct a six month study of U.S. policies to combat international terrorism. Chaired by Ambassador L. Paul Bremer. Led to production of *Countering the Changing Threat of International Terrorism.* This 2000 report considered and made recommendations on the intelligence communities, stopping support for international terrorism, and preparing to deal with mass catastrophic terrorism.

National Common Operating Picture: "Common operating pictures, also known as common operational pictures, are computer displays created to provide multiple users with a real-time view, also called situational awareness, of a series of events, such as rescue activities following an attack or natural disaster. DHS' national common operating picture uses National Geospatial-Intelligence Agency mapping capabilities and is incorporating dynamic, real-time data…. The Homeland Security Department earlier this year [2006] activated its Common Operating Picture for the National Operations Center. The agency rushed creation of it immediately after Hurricane Katrina to create situational awareness. Over the following months, those efforts became the national system…. A source of data for the DHS national common operating picture is the National Geospatial-Intelligence Agency and its Palanterra application, a map-based common operating picture. It includes overlays for critical infrastructure, including transportation, medical centers, water plants, power facilities and some financial and IT infrastructure…" (**Lipowicz**, "Fine Tuning Needed," Washington Technology, October 16, 2006; see also, **White House**, National Strategy for Information Sharing, October 2007, p. 21))

National Communication System No. 1: "A nationwide FCDA communication system, set up to minimize communication disruptions following an attack, was placed in operation in 1955. The system, known as the FCDA National Communication System No. 1, utilizes voince-teletypewriter circuits, and is engineered to use regular commercial voice telephone circuits, by-passing the regular teletype communication centers located in critical target areas. The network connects FCDA National Headquarters with its seven regional offices, alternate National Headquarters, each State civil defense headquarters, and District of Columbia civil defense headquarters, and has provision for control from FCDA Region 5, Denton, Tex., should the FCDA National Headquarters become inoperative." (**FCDA**, *1955 Annual Plan*, 1956, p. 97)

National Communications System (NCS): "A system governed by Executive Order 12472 and comprised of the telecommunications assets of the 24 Departments and Agencies. DHS serves as the Executive Agent for the NCS which is responsible for assisting the President, the National Security Council, the Director of OSTP, and the Director of OMB in (1) the exercise of

telecommunications functions and their associated responsibilities and (2) the coordination of planning for providing the Federal Government, under all circumstances (including crises and emergencies, attacks, and recovery and reconstitution from those events), with the requisite national-security and emergency-preparedness communications resources." (**DHS**, *FCD 1*, Nov 2007, P-7)

National Communications System: "President Kennedy established the National Communications System by a Presidential Memorandum on August 21, 1963. The NCS mandate included linking, improving, and extending the communications facilities and components of various Federal agencies, focusing on interconnectivity and survivability…. After nearly 40 years with the Secretary of Defense serving as its Executive Agent, President George W. Bush transferred the National Communications System to the Department of Homeland Security (DHS). The NCS was one of 22 Federal agencies transferred to the Department on March 1, 2003, in accordance with Executive Order 13286. A revised Executive Order 12472 reflects the changes of E.O. 13286. On November 15, 2005, the NCS became part of the Department's Directorate for Preparedness after nearly two years under the Information Analysis and Infrastructure Protection Directorate. Currently, the DHS Under Secretary for National Protection and Programs serves as the NCS Manager." (**NCS,** "About the NCS")

National Contingency Plan (National Oil and Hazardous Substances Pollution Contingency Plan): "…the federal government's blueprint for responding to both oil spills and hazardous substance releases. The National Contingency Plan is the result of our country's efforts to develop a national response capability and promote overall coordination among the hierarchy of responders and contingency plans.

"The first National Contingency Plan was developed and published in 1968 in response to a massive oil spill from the oil tanker *Torrey Canyon* off the coast of England the year before. More than 37 million gallons of crude oil spilled into the water, causing massive environmental damage. To avoid the problems faced by response officials involved in this incident, U.S. officials developed a coordinated approach to cope with potential spills in U.S. waters. The 1968 plan provided the first comprehensive system of accident reporting, spill containment, and cleanup, and established a response headquarters, a national reaction team, and regional reaction teams (precursors to the current National Response Team and Regional Response Teams).

"Congress has broadened the scope of the National Contingency Plan over the years. As required by the Clean Water Act of 1972, the NCP was revised the following year to include a framework for responding to hazardous substance spills as well as oil discharges. Following the passage of Superfund legislation in 1980, the NCP was broadened to cover releases at hazardous waste sites requiring emergency removal actions. Over the years, additional revisions have been made to the NCP to keep pace with the enactment of legislation. The latest revisions to the NCP were finalized in 1994 to reflect the oil spill provisions of the Oil Pollution Act of 1990." (EPA, National Contingency Plan Overview, March 9, 2006 Update)

National Contingency Plan (National Oil and Hazardous Substances Pollution Contingency Plan): "Policies and procedures of the federal agency members of the National Oil and Hazardous Materials Response Team. This document provides guidance for responses, remedial action, enforcement, and funding mechanisms for hazardous materials incident responses." (**NFPA 471**, 1997, p.8)

National Continuity Coordinator (NCC): "The President shall lead the activities of the Federal Government for ensuring constitutional government. In order to advise and assist the President in that function, the Assistant to the President for Homeland Security and Counterterrorism (APHS/CT) is hereby designated as the National Continuity Coordinator. The National Continuity Coordinator, in coordination with the Assistant to the President for National Security Affairs (APNSA), without exercising directive authority, shall coordinate the development and implementation of continuity policy for executive departments and agencies. The Continuity Policy Coordination Committee (CPCC), chaired by a Senior Director from the Homeland Security Council staff, designated by the National Continuity Coordinator, shall be the main day-to-day forum for such policy coordination." (**White House,** *HSPD-20*, May 2007)

National Continuity Four Pillars:

- Leadership
- Staff
- Facilities
- Communications (**FEMA**, *MEF/PFEF Workshop*, Unit 5, 2008, slide 119)

National Continuity Goal: "The ultimate goal of continuity in the Executive Branch is the continuation of the eight NEFs [see NEFs] which are the critical responsibilities of the Federal Government needed to lead and sustain the Nation." (**FEMA**, *MEF) and PMEF* Workshop, 5Feb08, slide 20)

National Continuity Implementation Plan: The NCIP includes "prioritized goals and objectives, a concept of operations, performance metrics by which to measure continuity readiness, procedures for continuity and incident management activities, and clear direction to executive department and agency continuity coordinators, as well as guidance to promote interoperability of Federal Government continuity programs and procedures with State, local, territorial, and tribal governments, and private sector owners and operators of critical infrastructure, as appropriate." (**White House,** *HSPD-20*, May 9, 2007)

National Continuity Policy: "Establishes a comprehensive national course of action for the continuity of Federal Government structures and operations." (**DHS**, *FCD 1*, Nov 2007, P-7)

National Continuity Policy: "It is the policy of the United States to maintain a comprehensive and effective continuity capability composed of Continuity of Operations and Continuity of Government programs in order to ensure the preservation of our form of government under the Constitution and the continuing performance of National Essential Functions under all conditions. For continuity purposes, each executive department and agency is assigned to a category in accordance with the nature and characteristics of its national security roles and responsibilities in support of the Federal Government's ability to sustain the NEFs. The Secretary of Homeland Security shall serve as the President's lead agent for coordinating overall continuity operations and activities of executive departments and agencies…" (**White House,** *HSPD-20***,** May 9, 2007)

National Continuity Policy Implementation Plan: Approved by President Bush in August 2007 "to build upon the *Policy* [NSPD-51/HSPD-20] and provide guidance to executive departments and agencies on appropriately identifying and carrying out their Primary Mission Essential Functions that support the eight National Essential Functions—the most critical functions necessary to lead and sustain the Nation during a catastrophic emergency." (**DHS**, *Federal Continuity Directive 1*, November 2007, p. ii) [The NCPIP is Dated 27Sep07]

National Continuity Policy Implementation Plan – Transformation of Continuity:

- The old organizational framework has changed
- Pursuant to NSPD-51/HSPD-20, and with…[the] *National Continuity Policy Implementation Plan*, the President directs the Executive Branch to reorient itself and to utilize an *integrated, overlapping national continuity concept* in order to ensure the preservation of our government and the continuing performance of essential functions. (**FEMA**, *MEF/PMEF Workshop: Unit 2, MEF/PMEF Process*, 2008, slide 27)
- Continuity responsibility and planning is no longer a separate, compartmented function of an independent cell of a few planners in each government D/A. (Ibid, slide 28)

National Continuity Risk Management Options:

- Policy development
- Business process reengineering
- Asset dispersion
- Continuity systems design redundancy (**FEMA**, *MEF/PMEF Workshop*, 2008, slide 132)

National Council on Disability (NCD): "NCD is an independent federal agency and is composed of 15 members appointed by the President, by and with the advice and consent of the Senate. NCD provides advice to the President, Congress, and executive branch agencies to promote policies, programs, practices, and procedures that guarantee equal opportunity for all individuals with disabilities, regardless of the nature or severity of the disability; and empower individuals with disabilities to achieve economic self-sufficiency, independent living, and inclusion and integration into all aspects of society." (National Council on Disability. *Quarterly Meeting: People with Disabilities and Emergency Management,* Jan 29, 2008, p. 2)

National Counterproliferation Center (NCPC): "On December 21, 2005 the Director of National Intelligence (DNI) announced the formal establishment of the DNI National Counterproliferation Center (NCPC). The NCPC will coordinate strategic planning within the Intelligence Community (IC) to enhance intelligence support to United States efforts to stem the proliferation of weapons of mass destruction and related delivery systems. It will work with the IC to identify critical intelligence gaps or shortfalls in collection, exploitation, or analysis, and develop solutions to ameliorate or close these gaps. It will also work with the IC to identify long-term proliferation threats and requirements and develop strategies to ensure the IC is positioned to address these threats and issues. NCPC will reach out to elements both inside the Intelligence Community and outside the IC and the U.S. Government to identify new methods or technologies that can enhance the capabilities of the IC to detect and defeat future proliferation threats….The Intelligence Reform and Terrorism Prevention Act of 2004 provided for the establishment of the NCPC to enhance coordination, planning and information sharing amongst the IC on proliferation issues. The Commission on the Intelligence Capabilities of the United

States Regarding Weapons of Mass Destruction's Report of March 31, 2005 also recommended the establishment of an NCPC. The President accepted the Commission's recommendation on June 30, 2005." (**Office of the Director of National Intelligence**, *NCPC*, 2005)

National Counterterrorism Center (NCTC): "It is a primary mission of NCTC to conduct planning for counterterrorism activities, integrating all instruments of national power, including diplomatic, financial, military, intelligence, homeland security, and law enforcement activities within and among agencies. NCTC also assigns roles and responsibilities as part of its planning duties to lead departments or agencies, as appropriate, for counterterrorism activities that are consistent with applicable law and that support counterterrorism strategic operational plans, but shall not direct the execution of any resulting operations.[86] (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, pp. 3-1 – 3-2)

National Counterterrorism Center (NCTC): "In August 2004, the President established the National Counterterrorism Center (NCTC) to serve as the primary organization in the United States Government (USG) for integrating and analyzing all intelligence pertaining to terrorism and counterterrorism (CT) and to conduct strategic operational planning by integrating all instruments of national power. In December 2004, Congress codified the NCTC in the Intelligence Reform and Terrorism Prevention Act (IRTPA) and placed the NCTC in the Office of the Director of National Intelligence… NCTC is a multi-agency organization dedicated to eliminating the terrorist threat to US interests at home and abroad." (**NCTC**, *About NCTC*, 2007)

National Cyber Response Coordination Group (NCRCG), DHS: "Made up of 13 Federal agencies, this is the principal Federal agency mechanism for cyber incident response. In the event of a nationally significant cyber-related incident, the NCRCG will help to coordinate the Federal response, including US-CERT, law enforcement, and the intelligence community." (**DHS**, *National Cyber Security Division*, September 23, 2006 update)

National Cyber Security Awareness Month, DHS: "Every October the National Cyber Security Division coordinates with multiple states, universities and the private sector to produce National Cyber Security Awareness month." (**DHS**, *NCS Division*, September 23, 2006 update)

National Cyberspace Response System: "The National Cyber Security Division seeks to protect the critical cyber infrastructure 24 hours a day, 7 days a week. The National Cyberspace Response System coordinates the cyber leadership, processes, and protocols that will determine when and what action(s) need to be taken as cyber incidents arise." (**DHS**, *National Cyber Security Division*, September 23, 2006 update)

National Dam Safety Program (NDSP): "As the lead federal agency for the National Dam Safety Program, FEMA is responsible for coordinating efforts to secure the safety of dams throughout the United States. The program makes federal funds available to states, which are primarily responsible for protecting the public from dam failures of non-federal dams, and pursuing initiatives that enhance the safety and security of dams posing the greatest risk to people and property. Congress' passage of the Dam Safety Act of 2006 strengthened and reauthorized the program through FY 2011." (**DHS**, *FEMA OMA FY 2009*, 2008, 28; **FEMA**,

[86] Intelligence Reform and Terrorism Prevention Act of 2004, Section 1021.

About the National Dam Safety Program, 2007)

National Defense Executive Reserve (NDER): Created by *Executive Order 10660: Providing for the Establishment of a National Defense Executive Reserve*. (**White House**, 15 Feb1956)

"NDER is a Government-wide program which recruits business executives and other civilians to serve the Government in key executive positions during national emergencies. According to FEMA, NDER is important to Federal emergency preparedness because of the tremendous increase in Government regulation and direction of the economy and vital resources that would accompany a war emergency. This would create the need to augment the staffs of Federal agencies having emergency functions. FEMA administers and evaluates the NDER program. GAO reports issued in 1978 and 1982 noted that this program had not been very effective" (**GAO**, *NDER Program*, Feb 1983, 3)

National Defense Strategy (NDS): "The NDS supports the NSS [National Security Strategy] by establishing a set of overarching defense objectives that guide the Department's security activities and provide direction for the National Military Strategy. The NDS objectives serve as links between military activities and those of other government agencies in pursuit of national goals. The Department must take action to secure the United States from direct attack and counter, at a safe distance, those who seek to harm the country." (**DOD/JCS**, *NMS*, 2004, 1)

National Disaster Housing Strategy (NDHS): "One of the greatest challenges presented by the scope and scale of catastrophic disasters is the ability to house displaced evacuees…. To further enhance housing capabilities, FEMA has engaged Federal, Tribal, State, and local partners to develop a National Disaster Housing Strategy (NDHS). The purpose of the NDHS is to convey national guidance, operating principles, and a vision for public (Federal, State, tribal, local), private, and non-profit cooperation in providing disaster housing assistance. It defines the roles, programs, authorities, and responsibilities of all entities, detailing shared responsibilities and emphasizing the cooperative efforts required to provide disaster housing assistance. The NDHS further outlines the most efficient and cost-effective options for meeting disaster housing needs. The NDHS is in the final development stages." (**FEMA**, *Statement of Glenn Cannon*, December 4, 2007, pp. 7-8)

National Disaster Medical System (NDMS), HHS: A federally coordinated initiative to augment the nation's emergency medical response capability by providing medical assets to be used during major disasters or emergencies. NDMS has three major components: Disaster Medical Assistance Teams and Clearing-Staging Units to provide triage, patient stabilization, and austere medical services at a disaster site; an evacuation capability for movement of patients from a disaster area to locations where definitive medical care can be provided; and a voluntary hospital network to provide definitive medical care. NDMS is administered by the Department of Health and Human Services/U.S. Public Health Service, in cooperation with the Department of Defense, the Department of Veterans Affairs, FEMA, State and local governments, and the private sector. (**Facts on the NDMS**)

National Disaster Medical System (NDMS), HHS: "NDMS is a coordinated effort among the HHS, DoD, VA, and DHS. NDMS is comprised of full time Federal employees, as well as

intermittent Federal employees drawn from the private sector and organized into a variety of emergency medical disaster response teams who provide health services to the needs of victims of public health emergencies. NDMS, in coordination with the DoD and the VA, also provides patient evacuation to designated locations throughout the United States for casualties that cannot be cared for locally. The NDMS staff continuously evaluate the effectiveness of its systems and programs, based on customer feedback, to improve services and operations, while reducing administrative expenses." (**HHS**, Job Announcement HHS-OS-2008-0169, Program Specialist (Watch Officer), 27 Dec 2007, pp. 2-3)

National Disaster Medical System (NDMS), HHS: "The National Disaster Medical System (NDMS) is a federally coordinated system that augments the Nation's medical response capability. The overall purpose of the NDMS is to establish a single integrated National medical response capability for assisting State and local authorities in dealing with the medical impacts of major peacetime disasters and to provide support to the military and the Department of Veterans Affairs medical systems in caring for casualties evacuated back to the U.S. from overseas armed conventional conflicts." (**HHS**, *National Disaster Medical System*, July 17, 2007 update)

National Disaster Recovery Strategy (Subtitle E – Stafford Act Amendments, PKEARA):
"The National Disaster Recovery Strategy shall –
(1) outline the most efficient and cost-effective Federal programs that will meet the recovery needs of States, local and tribal governments, and individuals and households affected by a major disaster;
(2) clearly define the role, programs, authorities, and responsibilities of each Federal agency that may be of assistance in providing assistance in the recovery from a major disaster;
(3) promote the use of the most appropriate and cost-effective building materials (based on the hazards present in an area) in any area affected by a major disaster, with the goal of encouraging the construction of disaster-resistant buildings; and
(4) describe in detail the programs that may be offered by the agencies described in paragraph (2), including – (A) discussing funding issues; (B) detailing how responsibilities under the National Disaster Recovery Strategy will be shared; and (C) addressing other matters concerning the cooperative effort to provide recovery assistance." (**Stafford Act** (FEMA 592), 2007, p. 77)

National Domestic Preparedness Consortium (NDPC): "ODP's [Office of Domestic Preparedness] major training partner is the National Domestic Preparedness Consortium (NDPC), through which ODP identifies, develops, tests, and delivers training to state and local emergency responders. The NDPC includes:

• *ODP's Center for Domestic Preparedness (CDP):* CDP is ODP's all-hazards training facility. It provides advanced, hands-on training to members of the emergency response community in the areas of command, advanced hazmat, and tactical operations. CDP is the only WMD training facility that provides hands-on training to civilian emergency responders in a toxic chemical agent environment.

• *New Mexico Institute of Mining and Technology (NMIMT):* NMIMT, a world leader in explosives research, serves as the lead NDPC partner for explosives, firearms, and incendiary devices training. New Mexico Tech also delivers a program on suicide bombing prevention.

• *Louisiana State University (LSU):* LSU provides training and expertise in the areas of law enforcement, bioterrorism, agricultural terrorism, weapons of mass destruction, and mass casualty incidents.

• *Texas A&M University System, Texas Engineering Extension Service (TEEX):* TEEX develops and conducts national WMD preparedness training for all emergency response disciplines, as well as courses in incident management/unified command, threat and risk assessments, operations for public works, and WMD operations for emergency medical services. TEEX also conducts a structural collapse technician course to build state capabilities for urban search and rescue operations.

• *Department of Energy's Nevada Test Site (NTS):* NTS conducts radiological and nuclear training at NTS and via mobile training teams. It also develops and delivers radiological/nuclear mobile training at the awareness and operations levels and conducts train-the-trainer courses for first responders across the country." (**DHS**, *Office of State and Local Government Coordination and Preparedness*, 25 July 2005, p. 3)

National Domestic Preparedness Consortium (NDPC): "The National Domestic Preparedness Consortium (NDPC) is the principal vehicle through which G&T [DHS] identifies, develop, tests, and delivers training to state and local emergency responders. The NDPC membership includes G&T's Center for Domestic Preparedness (CDP) in Anniston, Alabama, the New Mexico Institute of Mining and Technology (NMIMT), Louisiana State University (LSU), Texas A&M University (TEEX), and the Department of Energy's Nevada Test Site (NTS); each member brings a unique set of assets to the domestic preparedness program." (**DHS**, *The National Domestic Preparedness Consortium (NDPC).* April 3, 2007 update)

National Domestic Preparedness Consortium (NDPC): "NDPC partners provide training for State and local responders that is focused on preparing for and responding to weapons of mass destruction and terrorism." (**FEMA**, *90 Day Update to Congress on National Preparedness* (Dennis R. Schrader, Deputy Administrator for National Preparedness), April 2008, slide 63)

National Domestic Preparedness Consortium (NDPC): "The NDPC consists of the National Center for Biomedical Research and Training – Academy of Counter-Terrorist Education (NCBRT-ACE) at Louisiana State University (LSU), The Energetic Materials Research and Testing Center (EMRTC) at New Mexico Institute of Mining and Technology (NMIMT), U.S. Department of Energy's Counter Terrorism Operations Support (CTOS) at Nevada Test Site (NTS), and the National Emergency Response and Rescue Training Center (NERRTC) at Texas Engineering Extension Service (TEEX). Each member of the Consortium specializes in a subject area that addresses one of the following: chemical, biological, radiological, nuclear, and explosives. New Mexico Tech, for instance, focuses its training on explosive devices. At present, the NDPC forms the core of TEI/TO's training program. Its members are responsible for training the bulk of the responders who go through TEI/TO's program." (**FEMA**, *Training and Exercise Integration Secretariat Training Operations Course Catalog*, March 21, 2008, p. 4)

National Donations Management Network: "There is a new, easy way to provide financial support, donate time and skills or donate needed products. The National Donations Management Network is a web-based system where individuals and the private sector can offer their support online to the voluntary organizations that are actively engaged in the ongoing disaster.

FEMA works in partnership with the National Voluntary Organizations Active in Disaster (NVOAD), the Aidmatrix Foundation and private sector partners to direct donation offers to voluntary agencies in need as they support the thousands of displaced victims. FEMA and Aidmatrix entered into a cooperative agreement, in 2006, to develop this donations management network. The Aidmatrix Foundation offers a way to connect private sector or individuals wanting to offer support on-line to the leading organizations in humanitarian relief.

The National Donations Management Network is located at www.fema.gov/donations. Visitors to this site have the option to direct their donation to national level voluntary agencies or directly to the affected Midwest; states such as Iowa, Indiana, Minnesota and Missouri are managing their own state portals." (**FEMA**, *Donations for Flood Victims Made Easy*, June 20, 2008)

National Earthquake Hazard Reduction Program (NEHRP): The four goals of NEHRP are:

- Develop effective practices and policies for earthquake loss-reduction and accelerate their implementation.
- Improve techniques to reduce seismic vulnerability of facilities and systems.
- Improve seismic hazards identification and risk-assessment methods and their use.
- Improve the understanding of earthquakes and their effects. (**FEMA**, *About the National Earthquake Hazards Reduction Program*, January 16, 2008 mod.)

National Earthquake Hazard Reduction Program (NEHRP): "The National Earthquake Hazards Reduction Program (NEHRP), which is authorized by the Earthquake Hazards Reduction Act of 1977 (Public Law 95-124), as amended, seeks to mitigate earthquake losses in the United States through both basic and directed research and implementation activities in the fields of earthquake science and engineering. For 30 years, NEHRP has reduced the vulnerability of the people and property of the United States through the following:
• Improvement in the understanding of the processes that generate earthquakes.
• Improvement in the understanding of the effects of earthquakes in terms of ground shaking and ground failure, building shaking and damage, and on the general infrastructure and economic fabric of the United States.
• Development of earthquake hazards and risk assessments and earthquake resistant building codes and practices.
• Implementation of earthquake risk reduction measures through the adoption of building codes, land use practices, and earthquake response exercises at all levels of government and in the private sectors." (**NEHRP** *Annual Report of the National Earthquake Hazards Reduction Program*, March 2007, from Preface)

National Earthquake Hazards Reduction Program (NEHRP) Goals and Objectives:
Goal A: Improve understanding of earthquake processes and impacts.
Objective 1: Advance understanding of earthquake phenomena and generation processes.
Objective 2: Advance understanding of earthquake effects on the built environment.

Objective 3: Advance understanding of social, psychological, economic factors linked to implementing risk reduction and mitigation strategies in the public and private sectors.
Objective 4: Improve post-earthquake information management.

Goal B: Develop cost-effective measures to reduce earthquake impacts on individuals, the built environment, and society-at-large.

Objective 5: Assess earthquake hazards for research and practical application.
Objective 6: Develop advanced loss estimation and risk assessment tools.
Objective 7: Develop tools to improve the seismic performance of buildings and other structures.
Objective 8: Develop tools to improve the seismic performance of critical infrastructure.

Goal C: Improve the earthquake resilience of communities nationwide.

Objective 9: Improve accuracy, timeliness, content of earthquake information products.
Objective 10: Develop comprehensive earthquake risk scenarios and risk assessments.
Objective 11: Support development of seismic standards and building codes and advocate their adoption and enforcement.
Objective 12: Promote implementation of earthquake-resilient measures in professional practice and in private and public policies.
Objective 13: Increase public awareness of earthquake hazards and risks.
Objective 14: Develop the nation's human resource base in earthquake safety fields.
(**NEHRP**, *Strategic Plan for the NEHRP Fiscal Years 2008-2012*, April 2008 Draft, p. v)

National Earthquake Hazards Reduction Program (NEHRP) Interagency Coordinating Committee (ICC): "The NEHRP ICC is composed of the directors of the four NEHRP agencies, the Federal Emergency Management Agency (FEMA), the National Institute of Standards and Technology (NIST), the National Science Foundation (NSF), and the U.S. Geological Survey (USGS), as well as the directors of the White House Office of Science and Technology Policy (OSTP) and Office of Management and Budget (OMB). The ICC is chaired by the Director of NIST." (**NEHRP** *Annual Report of the NEHRP*, March 2007, p. vii)

National Earthquake Hazards Reduction Program (NEHRP) Mission: "To develop, disseminate, and promote knowledge, tools, and practices for earthquake risk reduction – through coordinated, multi disciplinary interagency partnerships among the NEHRP agencies and their stakeholders – that improve the nation's earthquake-resilience in public safety, economic strength, and national security." (**NEHRP**, *Strategic Plan for the NEHRP Fiscal Years 2008-2012*, April 2008 Draft, p. v)

National Earthquake Hazards Reduction Program (NEHRP) National Investment Factors: "The national investment in NEHRP through these agencies [NIST, FEMA, NSF, USGS] recognizes at least four important factors related to the costs of preparing for large-scale disasters.

- First and foremost, ensuring public safety is inherently a government responsibility.
- Second, absent appropriate incentives, private interests and corporations invest in preparedness and mitigation measures that they believe protects their economic well-being, not necessarily those that yield greatest societal well-being.
- Third, earthquake impacts and consequences can be felt at regional and national scales; they are not just restricted to a local area of most severe shaking. As a result, post-

> earthquake performance is based on all infrastructure elements acting as a system, not simply as an aggregation of individual components. In today's economy, damaging earthquakes that strike in some areas of the country will severely impact the national economy and, possibly, national security.

Finally, there are few, if any, construction-related businesses that are large enough to possess the investment resources needed to address major national earthquake safety challenges." (**NEHRP**, *Strategic Plan for the NEHRP Fiscal Years 2008-2012*, April 2008 Draft, p. 4)

National Earthquake Hazards Reduction Program (NEHRP), National Science Foundation Role: "NSF supports a broad range of basic research in geosciences; engineering; and social, behavioral, and economic sciences relevant to the understanding of the causes and impacts of earthquakes. NSF supports research into the causes and dynamics of earthquakes, plate tectonics, and crustal deformation as well as research on the seismic performance of geotechnical, structural, nonstructural, and infrastructure lifeline systems. NSF also supports research on such social, behavioral, and economic phenomena as risk perception, mitigation decision-making, incentive systems related to risk and mitigation, and factors that can promote community resilience. NSF supports advanced earthquake engineering research experimental facilities and cyberinfrastructure. NSF provides support for the education of new scientists and engineers, the integration of research and education, and outreach to professionals and the public." (**NEHRP**, *Strategic Plan for the NEHRP Fiscal Years 2008-2012*, April 2008 Draft, p. 4)

National Earthquake Hazards Reduction Program (NEHRP) Strategic Priorities: "The Plan adds nine new cross-cutting Strategic Priorities that directly support the goals and augment other ongoing agency activities needed to satisfy them…. The priorities are:

- Fully implement the Advanced National Seismic System.
- Improve techniques for evaluating and rehabilitating existing buildings.
- Further develop Performance-Based 1 Seismic Design.
- Increase consideration of socio-economic issues related to hazard mitigation implementation.
- Develop a national post-earthquake information management system.
- Develop advanced earthquake risk mitigation technologies and practices.
- Develop earthquake-resilient lifeline components and systems.
- Develop and conduct earthquake scenarios for effective earthquake risk reduction.
- Facilitate improved earthquake mitigation at state and local levels. (**NEHRP**, *Strategic Plan for the NEHRP Fiscal Years 2008-2012*, April 2008 Draft, pp. vi-vii)

National Earthquake Hazards Reduction Program (NEHRP) USGS Role: "USGS conducts and supports targeted geoscience research investigations on earthquake causes and effects, produces national and regional seismic hazard maps and assessments, monitors and rapidly reports on earthquakes and their shaking intensities in the U.S. and abroad, works to improve public understanding of earthquake hazards, and coordinates post-earthquake reconnaissance carried out and supported by NEHRP agencies and other organizations." (**NEHRP**, *Strategic Plan for the NEHRP Fiscal Years 2008-2012*, April 2008 Draft, p. 4i)

National Earthquake Hazards Reduction Program (NEHRP) Vision: "A nation that is earthquake-resilient in public safety, economic strength, and national security." (**NEHRP**, *Strategic Plan for the NEHRP Fiscal Years 2008-2012*, April 2008 Draft, p. v)

National Electronic Disease Surveillance System (NEDSS): "…NEDSS is an initiative that promotes the use of data and information system standards to advance the development of efficient, integrated, and interoperable surveillance systems at federal, state and local levels. It is a major component of the Public Health Information Network (PHIN)…. The vision of NEDSS is to have integrated surveillance systems that can transfer appropriate public health, laboratory, and clinical data efficiently and securely over the Internet. NEDSS will revolutionize public health by gathering and analyzing information quickly and accurately. This will help to improve the nation's ability to identify and track emerging infectious diseases and potential bioterrorism attacks as well as to investigate outbreaks and monitor disease trends." (**CDC**, *NEDSS*)

National Emergencies Act of 1976: "The **National Emergencies Act of 1976**, 50 U.S.C. 1601 *et seq*, establishes procedures for Presidential declaration and termination of national emergencies. The Act requires the President to identify the specific provision of law under which he will act in dealing with a declared national emergency and contains a sunset provision requiring the President to renew a declaration of national emergency to prevent its automatic expiration. The Presidential declaration of a national emergency under the Act is a prerequisite to exercising any special or extraordinary powers authorized by statute for use in the event of national emergency." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 69)

National Emergency: "A condition declared by the President or the Congress by virtue of powers previously vested in them that authorize certain emergency actions to be undertaken in the national interest. Action to be taken may include partial, full, or total mobilization of national resources." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

National Emergency: "A condition, declared by the President pursuant to 50 U.S.C. 1601 et seq. or by the Congress, which authorizes certain emergency actions to be undertaken in the national interest. Actions to be taken may include partial or full mobilization of national resources." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-3)

National Emergency Alarm Repeater (NEAR) System (1960): Outdoor warning systems are generally inadequate for persons inside buildings. The National Emergency Alarm Repeater INEAR) system has been developed for indoor warnings. Nationwide coverage by the system will require an expenditure of $40 to $60 million for generating equipment. In addition, plug-in alarms will need to be purchased for homes and offives to make this system operative. Two thousand NEAR receivers have been purchased for demonstrating the system at Charlotte, Michingan, during FY 1961. Experience from this operation *will be used to develop policies for nationwide use of the NEAR system." (**OCDM**, Annual Report 1960*, p. 18)

National Emergency Communications Plan (NECP).

National Emergency Communications Strategy (NECS).

National Emergency Family Registry Locator System/National Emergency Child Locator Center: "In a large-scale evacuation, families may become unwillingly separated due to urgency of the evacuation, loss of communication systems, and/or the method and type of evacuation assistance made available. To assist displaced disaster victims reconnect with family members and locate missing children, FEMA has established the National Emergency Family Registry Locator System and the National Emergency Child Locator Center. Families and friends will be able to call an 800 number or go to the internet to send or receive messages for selected friends or family members including those in medical facilities. The National Center for Missing and Exploited Children and FEMA have partnered to facilitate the search and the reunification of missing children due to a disaster or evacuation. A Memorandum of Understanding was signed in 2006 by FEMA, the Department of Justice, the National Center for Missing and Exploited Children, and the American Red Cross to further develop and implement methods for quickly identifying and reunifying missing and separated children and family members following a disaster." (**FEMA**, *Statement of Glenn Cannon*, December 4, 2007, p. 7; see, also, **FEMA**, *National Emergency Family Registry System and Child Locator Center Activated For California Fires*, October 23, 2007)

National Emergency Management Information System (NEMIS): "NEMIS is an integrated system to provide FEMA, the states, and certain other federal agencies with automation to perform disaster related operations. NEMIS supports all phases of emergency management, and provides financial related data to IFMIS via an automated interface." (**OIG/DHS**, *IT Management Letter for FY 2005 DHS Financial Statement Audit (Redacted)*, July 2006, p. 12)

National Emergency Management Association: "NEMA is the professional association of and for state* emergency management directors. NEMA's mission is to:

* Provide national leadership and expertise in comprehensive emergency management.

* Serve as a vital emergency management information and assistance resource.

* Advance continuous improvement in emergency management through strategic partnerships, innovative programs, and collaborative policy positions. (**NEMA**, *Welcome to NEMA*, 2007)

National Emergency Management Baseline Capability Assessment Program (NEMB-CAP), FEMA:

"NEMB-CAP is an ongoing effort sponsored by the Federal Emergency Management Agency (FEMA) that is analyzing existing emergency management programs planning efforts at the State level using the EMAP Standard. To date, 40 States have completed the NEMB-CAP process. Of the 40 States, only two met all criteria for planning, only five were compliant with most or all standards, and only two states were fully compliant in all 14 functional areas. The process has highlighted the importance of ensuring that roles and responsibilities are not only well understood, but also operationalized at the State and local level; additionally, findings from this process have revealed critical national weaknesses in key operational areas and catastrophic planning efforts, including:

• Incident management
• Planning, including continuity of operations and recovery strategies
• Hazard identification, risk assessment, and impact analysis
• Resource management, including identification of resource objectives, by hazard, predisaster." (**DHS/ODP**, *FY 2006 EMPG Program Guidance*, November 2005, p. 7)

National Emergency Management Baseline Capability Assessment Program (NEMB-CAP):

"The NEMB-CAP involves a multi-year effort to assess, analyze, evaluate, and collectively frame state emergency management capabilities against a common national set of criteria. Actual assessments of state and state-level jurisdictions began in January 2003, and are projected to be complete by the end of 2005. Participation is voluntary, but FEMA strongly encourages all states to take part in the program, which will play a key role in our national emergency management improvement strategy.

The NEMB-CAP consists of a review and evaluation of state emergency management systems and programs based on assessment criteria developed by, and employing the assessment processes of the Emergency Management Accreditation Program (EMAP). The EMAP was established through a collaborative partnership involving FEMA, the National Emergency Management Association (NEMA), the International Association of Emergency Managers (IAEM), and other stakeholder organizations, including the National Governors Association, National League of Cities and The Council of State Governments.

The assessment methodology involves the state completing a comprehensive self-assessment, followed up by an on-site, week-long assessment by a team of trained, independent peer assessors. FEMA analyzes assessment reports to identify individual and collective capability strengths and weaknesses. This assessment serves two purposes – one of establishing a national capability baseline and also helping target future federal assistance to areas of greatest common need." (**FEMA**, "Homeland Security And FEMA Achieve Emergency Management Assessment Milestone," April 14, 2004)

National Emergency Preparedness Program (NEPP): "Manages preparedness for nuclear mishaps, catastrophic disasters, support to military supporting disasters, terrorism, immigration, emergencies, and civil disturbances." (**USACE**, *NEPP*)

National Emergency Resource Registry (NEER): "Through NEER, DHS assists the coordination efforts between the resources that are needed and the resources that may be available from the private and public sectors." (**FedCenter.gov**, *The NEER*, Sep 19, 2005)

Developed by the DHS Private Sector Office.

National Emergency Responder Credentialing System: "The National Emergency Responder Credentialing System is currently under development by the Federal Emergency Management Agency's NIMS Integration Center. As a means to routinely identify and dispatch emergency

responders, the National Emergency Responder Credentialing System will help mobilize the swift, safe and successful support of qualified responders who are called upon to assist communities across the nation. Ultimately, credentials verifying an emergency responder's identity and qualifications may be documented through a nationally accepted form of identification and/or through a record-keeping system, as required by NIMS." (**FEMA**, *National Emergency Responder Credentialing System* (Fact Sheet), October 26, 2005, p. 1)

National Emergency Responder Credentialing System Metrics:

- Education: Formal instruction based upon a curriculum that prepares an individual with the core knowledge and skill for entry into a discipline and for performing a job title
- Training: Instruction and/or activities that enhance and individual's core knowledge; increase skill set and proficiency; and strengthen and augment abilities.
- Experience: Time required functioning in a job title for an individual to attain proficiency in applying knowledge, skills, and abilities
- Physical/Medical Fitness: Physical and medical considerations that, when applied, help to ensure safe performance in risky environments
- Certification: Designation granted by Authority Having Jurisdiction[3] that an individual has met the requirements and achieved specific knowledge, skills, and abilities.
- Licensing: Legal designation granted by Authority Having Jurisdiction, indicating that a person has met the necessary legal requirements to function in a job title. (**FEMA**, *Animal Emergency Response Positions Credentials*, 25 Oct 2007, p. 1)

National Emergency Responder Credentialing System Public Works Job Titles:

- PW Job Title 1: Assistant Public Works Director – Logistics
- PW Job Title 2: Assistant Public Works Director – Operations
- PW Job Title 3: Civil/Field Engineer
- PW Job Title 4: Debris Collection Supervisor
- PW Job Title 5: Debris Removal Manager
- PW Job Title 6: Debris Site Manager
- PW Job Title 7: Engineering Branch Manager
- PW Job Title 8: Engineering Division Manager
- PW Job Title 9: Equipment Operator
- PW Job Title 10: Public Works Director
- PW Job Title 11: Quality Assurance Personnel
- PW Job Title 12: Structural Engineer
- PW Job Title 13: Utility Systems Reconstruction Manager
- PW Job Title 14: Wastewater Collection Manager
- PW Job Title 15: Wastewater System Manager
- PW Job Title 16: Wastewater Treatment Manager
- PW Job Title 17: Water Distribution Manager
- PW Job Title 18: Water System Manager
- PW Job Title 19: Water Treatment Manager (**FEMA**, *Designing a National Emergency Responder Credentialing System – Public Works (PW) Working Group*. 22 Nov 2006, 1)

National Emergency Response and Rescue Training Center (NERRTC), Texas Engineering Extension Service (TEEX): "NERRTC prepares state and local officials for the management challenge posed by WMD through hands-on, scenario-driven training and computer-based simulations. The Emergency Operations Training Center uses state-of-the-art simulation and computer-based technologies to train first responders and city officials to manage a crisis through a unified command approach with realistic, real-time simulation and training analysis at a command-post level not provided by any other organization." (**FEMA**, *TEI/TO*, 2008, 5)

National Emergency Response Team (ERT-N): "The ERT-N responds in the early stages of a catastrophic disaster where State and FEMA regional resources have been, or are expected to be, overwhelmed. These teams consist of highly qualified Headquarters and regional staff. One of these teams will be deployed to the site of a catastrophic disaster to conduct ERT operations from the JFO." (**FEMA,** *Mission Assignment SOPs Operating Draft*, July 2007, p. 56)

National Emergency Response Team (ERT-N): "When a significant disaster occurs, an Emergency Response Team, Advance Element (ERT-A) is dispatched by the affected FEMA region to join with State emergency management personnel to coordinate Federal assistance. ERT-A positions are filled based on the type of disaster and the nature of the requirement for continued Federal involvement. If the disaster escalates, the FEMA region may strengthen the ERT-A with additional positions within the team and the team is then referred to as an Emergency Response Team (ERT). A National Emergency Response Team (ERT-N) may be assigned to **disasters of national significance** or when the affected FEMA region is unable to fill the ERT requirement." (Emphasis added; **FEMA**, *US&R IST In Federal Disaster Operations,* January 2000, p. 1-1)

National Emergency Technology (NET) Guard: "The Department of Homeland Security's Federal Emergency Management Agency (FEMA) announced today $320,000 is available in Fiscal Year (FY) 2008 to pilot, test, and develop tools for a potential new Citizen Corps (CC) National Emergency Technology Guard (NET GUARD) Program. NET Guard teams will be comprised of volunteers with information technology (IT) and communications expertise to assist States and localities in responding to and recovering from incidents that cause significant damage or destruction to IT and communications infrastructure. Teams will be a local asset, managed at the local level, and deployed in response to a request from local or State authorities." (**FEMA**, *FEMA Announces Solicitation to Pilot Citizen Corps Net Guard*, June 19, 2008)

National Essential Functions (NEFs): "The eight functions the President and national leadership will focus on to lead and sustain the nation during a catastrophic emergency." (**DHS**, *FCD 2*, Nov. 2007, p. C-1)

National Essential Functions (NEFs): "`National Essential Functions,' or 'NEFs,' means that subset of Government Functions that are necessary to lead and sustain the Nation during a catastrophic emergency and that, therefore, must be supported through COOP and COG capabilities. The following NEFs are the foundation for all continuity programs and capabilities and represent the overarching responsibilities of the Federal Government to lead and sustain the Nation during a crisis, and therefore sustaining the following NEFs shall be the primary focus of

the Federal Government leadership during and in the aftermath of an emergency that adversely affects the performance of Government Functions:

(a) Ensuring the continued functioning of our form of government under the Constitution, including the functioning of the three separate branches of government;

(b) Providing leadership visible to the Nation and the world and maintaining the trust and confidence of the American people;

(c) Defending the Constitution of the United States against all enemies, foreign and domestic, and preventing or interdicting attacks against the United States or its people, property, or interests;

(d) Maintaining and fostering effective relationships with foreign nations;

(e) Protecting against threats to the homeland and bringing to justice perpetrators of crimes or attacks against the United States or its people, property, or interests;

(f) Providing rapid and effective response to and recovery from the domestic consequences of an attack or other incident;

(g) Protecting and stabilizing the Nation's economy and ensuring public confidence in its financial systems; and

(h) Providing for critical Federal Government services that address the national health, safety, and welfare needs of the United States." (**White House,** *HSPD-20*, May 9, 2007)

National Exercise Division (NED), FEMA/NPD/NIC/NED: "The NED provides exercise and evaluation policy and planning support to FEMA, DHS, the Federal Interagency, and State and local stakeholders." (**FEMA/NPD/NIC**, slide 6)

National Exercise Program (NEP): "The NEP is the Nation's overarching exercise program formulated by the National Security Council / Homeland Security Council (NSC/HSC), and executed by the Federal Interagency. All interagency partners have adopted HSEEP as the methodology for all exercises that will be conducted as part of the NEP." (**DHS**, *FCD 1*, Nov. 2007, P-7)

National Exercise Program (NEP): "NEP activities provide emergency responders and policymakers with the tools to plan, organize, conduct, and evaluate exercises as well as a disciplined approach to analyzing findings from exercises. The NEP not only provides opportunities to practice and test capabilities, policies, plans and procedures, but it also highlights potential shortfalls through the processes of after-action reporting and subsequent improvement activities.

"Prior to the NEP, there was no formal approach to prioritizing, scheduling and improvement planning for exercises. This lack of coordination resulted in activities that competed for

resources, contributed to exercise fatigue, and were based on conflicting standards for exercise design, conduct and evaluation. The NEP is designed to provide a framework for prioritizing and focusing Federal and State exercise activities to best utilize departments', agencies' and jurisdictions' limited time and resources, as well as to ensure Federal, State, and local exercises lead to significant improvements in policies, plans and performance.

"The NEP is both a National and an interagency program. It serves as the principal mechanism for examining the preparation and efficiency of national leaders, their staffs, the organizations and systems they lead, as well as to examine and adopt policy changes. The NEP does not preclude or replace individual departments' and agencies' exercise programs. Rather, it is the overarching exercise program that unifies homeland security preparedness exercise strategies and links appropriate department and agency exercises to provide a single, comprehensive exercise program."

"The NEP implements a strategic planning cycle to guide the Tier I exercises, or NLEs. Central to this cycle is the Five-Year Schedule, which will incorporate policy priorities into the strategic scheduling of NLEs, around which departments and agencies can establish supporting training and exercise activities to identify and refine issues beforehand. The Tier I NLEs will be executed on a four-year subject-specific cycle with rotating focus on:

- Administration Transition Training;
- Domestic Natural Disasters;
- National Security; and
- Domestic Terrorism." (**FEMA**, *Statement of Dennis Schrader*, October 2007, pp. 2-4)

"The NEP requires Departments and Agencies to fully fund their respective responsibilities within the NEP." (**FEMA**, *Statement of Dennis Schrader*, October 2007, p. 7)

National Exercise Program (NEP): "HSPD-8 directed the establishment of the NEP under the leadership of the Secretary of Homeland Security. The NEP is the Nation's overarching exercise program formulated by the National Security Council/Homeland Security Council, and executed by the Federal Interagency. The NEP serves as the principal mechanism for examining the preparation of the Federal executive branch and adopting policy changes that might improve such preparation. The NEP is DHS's principal mechanism for training and exercising officials at all levels of government, as well as members of the private sector, and, at times, our international partners. The NEP has developed common policy and guidance and has established collaborative management processes and tools to link its partners and stakeholders nationwide. Lessons learned and peer-validated best practices identified through exercises and actual incidents are made available to the homeland security community." (**Homeland Security Council,** *National Continuity Policy Implementation Plan*, 2007, p. 65; see, also, Homeland Security Exercise & Evaluation Program)

National Exercise Program (NEP) Corrective Action Program (CAP): "Once exercises are successfully planned and conducted, the Corrective Action Program (CAP) provides for systematically developing, prioritizing, tracking, and analyzing corrective actions for improving exercises, and the planning, training, and equipment which drives the cycle of preparation. The

CAP also provides transferability to real-world incidents and policy discussions by employing a stakeholder-driven approach to improvement planning at the Federal interagency, intra-DHS, and State/local levels. Essentially, the CAP provides a systematic means to prevent recurring problems and identify potential "corrective actions" and "lessons learned," which respectively incorporate the *CAP System* and the web-based Lessons Learned Information Sharing support systems (found at *LLIS.gov*). All lessons learned and best practices are broadly shared through the LLIS.gov on-line tool. The CAP completes the cycle of preparedness by ensuring that exercise evaluation and real-world incidents consistently yield concrete advancement toward specified preparedness goals." (**FEMA**, *Statement of Dennis Schrader*, October 3, 2007, 4-5)

National Exercise Program (NEP) Tiers:

- Tier I: White House directed, Federal government-wide, Strategy & Policy Focus
- Tier II: Federal Strategy & Policy Focus, Significant Simulation.
- Tier III: Other Federal Exercises, Operational, Tactical or Organizational Focus
- Tier IV: State, Territorial, Local, Tribal or Private Sector Focus (Non-Federal) (**FEMA**, *Statement of Schrader*, October 3, 2007)

National Exercise Program Implementation Plan (NEP I-Plan): "The NEP I-Plan describes a new "tier" system of exercises and mandates the use of HSEEP Policy and Guidance for all NEP tiered exercises. Once fully implemented, the NEP will work to encourage greater cooperation and joint exercise planning efforts at not just the Federal interagency level, but on the FEMA Region, State, territorial, tribal and local levels as well. (**FEMA**, *Homeland Security Exercise and Evaluation Program HSEEP Newsletter* (Winter 2008, Issue 7), 5 Feb 2008, p. 2)

National Exercise Schedule (NEXS): "The National Exercise Schedule (NEXS) is a compilation of all National-level, Federal, State, tribal, territorial, and local exercises. The NEXS serves as a management tool and reference document for exercise planning. It provides information on exercise date, location, scenario, scope, and participants. The purpose of the NEXS is to provide visibility of upcoming exercises to leadership, exercise planners, and exercise schedulers.
The NEXS was established to support the directive presented to the Department of Homeland Security (DHS) under Homeland Security Presidential Directive (HSPD)-8. HSPD-8 directs that DHS, in coordination with other appropriate Federal Departments and agencies, establish a "national program and a multi-year planning system to conduct homeland security preparedness-related exercises that reinforces identified training standards, provides for evaluation of readiness, and supports the National Preparedness Goal." **(DHS,** *Homeland Security Exercise and Evaluation Program Toolkit -- The National Exercise Schedule*, September 13, 2007)

National Fire Service Incident Management System (IMS) Consortium: "Recognizing the continuing challenges occurring in the fire service in applying a common approach to incident command, the National Fire Service Incident Management System (IMS) Consortium was created in 1990. Its purpose was to evaluate an approach to developing a single command system. The consortium consisted of many individual fire service leaders, representatives of most major fire service organizations and representatives of federal, state and local agencies, including FIRESCOPE and the Phoenix Fire Department. One of the significant outcomes of the

consortium's work was an agreement on the need to develop operational protocols within ICS, so that fire and rescue personnel would be able to apply the ICS as one common system.

In 1993, the IMS consortium completed its first document: Model Procedures Guide for Structural Firefighting. As a result, FIRESCOPE incorporated the model procedures, thereby enhancing its organizational structure with operational protocols. These changes enabled the nation's fire and rescue personnel to apply the ICS effectively regardless of what region of the country they were assigned to work. The National Fire Academy (NFA), having already adopted the FIRESCOPE ICS in 1980, incorporated this material into its training curriculum as well." (**FEMA**, *NIMS and ICS*, 2004)

National Flood Determination Association (NFDA): "The National Flood Determination Association maintains standards of excellence, fosters professionalism, and advocates quality services within the flood zone determination industry." (**NFDA**, *Welcome*, 2006)

National Flood Insurance Act of 1968: The Act credated a coordinated National Flood Insurance Program, incorporating:

- Risk identification/assessment: mapping of flood prone areas in communities which joined the NFIP.
- Risk mitigation: adoption of a set of floodplain management regulations that cmmunities must agree to adopt and enforce as a condition to their participation in the NFIP.
- Insurance: the federal government was authoized to arrange for the sale of federally supported flood insurance in communities which have joined the program.
- Subsidization: insurance premiums for properties in existence when a community joins the NFIP are subsidized (acturarial premiums for many of these older, high risk properties were considered unaffordable). Insurance for properties constructed after a community joins the program (and thus have presumably been constructed in accordance with flood plain management ordinances) is intended to be set at acturarial levels.
- Attrition of high risk properties: while existing properties were grandfathered from compliance with new floodplain ordinances and could be insured at subsidized rates, a structure damaged more than 50% by flooding must be relocated or reconstructed in compliance with current floodplain management regulations." (Abbott, pp. 132-133)

National Flood Insurance Act of 1968: "…the National Flood Insurance Act of 1968 (NFIA, or "the Act"), 42 U.S.C. 4030, as amended by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, Public Law 108-264, [has]… the goal of reducing flood damages to individual properties for which one or more claim payments for losses have been made under flood insurance coverage and that will result in the greatest savings to the NFIF in the shortest period of time. The Catalog of Federal Domestic Assistance (CFDA) number is 97.092." (**FEMA**, *Repetitive Flood Claims Program Guidance, FY 2008*, 2007, p. 1)

National Flood Insurance Program (NFIP): "The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community

floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods." (**FEMA**, *National Flood Insurance Program Description*, August, 2002, p. 2)

National Flood Insurance Program (NFIP) Rationale: "The flood insurance program was initiated because it had become clear by the 1950s that private insurance companies could not profitably provide affordable flood coverage because of the catastrophic nature of flooding and the impossibility of developing an actuarial rate structure that could adequately reflect the risk to flood-prone properties, among other reasons. One of the primary purposes of the National Flood Insurance Act of 1968, which created NFIP, was to reduce federal expenditures for disaster assistance and flood control." (**GAO**, *Natural Disasters: Public Policy Options*, Nov 2007, 17)

National Flood Insurance Program (NFIP) Rationale: "…while mortage lenders would rearely advance funds unless a standard 'all risk' (excluding flood) homeowner's polich were in effect, lenders historically were indefferent as to whether a mortgaged structure was insured against damage caused by flood. Finally, local governments tended not to incorporate flood risk or floodplain management into their zoning or land use planning ordinances and building codes." (Abbot, "Floods, Flood Insurance, Litigation, Politics – and Catastrophe…," 2008, p. 132)

National Flood Insurance Reform Act of 1994. NFIRA: Public Law 103-325, Sec. 511 of the Riegle Community Development and Regulatory Improvement Act of 1994, September 23, 1994. (**FEMA**, NFIRA)

National Fusion Center, DHS: "The NOC [DHS National Operations Center] is also the National Fusion Center and consists of five functional components: a 24/7 multiagency watch and preparedness, prevention, and protection coordination center, an interagency planning element, a response and recovery coordination center, and integrated elements of the DHS Office of Intelligence and Information Analysis (DHS/I&A) and the DHS Office of Infrastructure Protection (DHS/IP). These elements work in close coordination to address information / intelligence analysis and response coordination." (**DHS**, *Notice of Change to the NRP*, May 22, 2006, pp. 11-12)

National Guard (NG): "The NG primarily operates under three different command relationships: Federal funding and Federal control (Title 10 USC – "federalized" status); Federal funding and state control (Title 32 USC); and state active duty (state funding and state control)**.** NG forces, unless federalized, operate under the C2 of the governor and adjutant general in state active duty and/or Title 32 status. The NG, when in state status, responds under the governor's control for CS missions in accordance with state laws. However, when NG personnel or units are federalized by order of the President under Title 10 USC, they respond under the same legal restrictions and C2 structures as active component military forces. The NG, when in state status, is also normally the first military responder to CS incidents that require resources beyond the

capabilities of local and other state-level emergency response organizations. Working under the control of the governor, their actions are closely coordinated with those of other agencies, to include any DOD assets committed to the same or related incidents. Additionally, in many states, the adjutant general is also the state's director for emergency management, and as such, not only controls the response of the state's NG forces, but also manages and coordinates the state's response to CBRNE CM in support of local governments." (**JCS/DOD**, *CBRNECM*, 2006, II-11)

National Guard Bureau (NGB): "The National Guard Bureau (NGB) is neither a reserve component nor an operational command. Instead, it coordinates between DOD and the several states and territories on matters pertaining to the National Guard. It also prescribes the discipline and training requirements for the Army National Guard (ARNG) and the Air National Guard (ANG); ensures that units and members of the ARNG and ANG are trained by the states in accordance with programs, policies, and guidance from the Secretaries of the Army and Air Force and the Chief of the National Guard Bureau; and facilitates and supports the training of members and units of the National Guard to meet state requirements. Since the terrorist attacks of 9/11, the NGB has taken on the responsibility of coordinating the movement of National Guard forces in Title 32 status; once in state, they are commanded by the governor." (**Commission on the National Guard and Reserves**, *Transitioning*, 2008, B-2 (387 of 448)

National Guard CBRNE Enhanced Response Force Package (CERFP): "regional capability to locate and extract victims from a contaminated environment, perform medical triage and treatment, and conduct personnel decontamination in a WMD event. Each CERFP task force works in coordination with other military forces and commands as part of the overall national response of local, State and Federal assets and has a regional responsibility as well as the capability to respond to major CBRNE incidents anywhere within the US or worldwide. This capability augments the WMD CST and provides a task force-oriented structure that can respond on short notice." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, p. 12)

National Guard Reaction Force (NGRF): "NGRF's provide every state with a combat ready arms force capable of delivering, at the request of the governor or resident, a unit of 50-75 personnel within 4-8 hours and a follow-on force of up to 400 personnel within 24-36 hours. NGRFs are a critical element of the first line of counter-terrorism defense and are designed to respond to an incident well ahead of Federal assets. They deploy with the capability to be logistically self-sustaining for 48 hours. NGRFs are formed from current unit and personnel resources and are organized as temporary task forces. As such, their mission primarily falls under the command and control of the governors of their home states. They will be, first and foremost, state assets, operationally falling under the command and control of the State Adjutant General. Missions include, but are not limited to (a) providing site security, (b) providing presence patrols and shows of force, (c) establishing roadblocks, check points, or both, (d) controlling civil disturbances and (e) protecting DoD selected critical infrastructure." (**Blum**, July 19, 2007, p. 6)

National Guard Reaction Force (NGRF): "units that are pre-designated for quick response and available to the Governors to support State and local response." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, p. 12)

National Guard WMD Civil Support Teams (CST): "55 highly skilled, full-time teams, established to provide specialized WMD expertise and technical assistance to an incident commander to assess, assist, advise, and facilitate follow-on forces. Governors have operational command and control of the teams and NGB provides logistical support, standardized operational procedures, and operational coordination to facilitate the employment of the teams." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, p. 12)

National Health Security Strategy: "Beginning in 2009 and every four years thereafter, the Secretary shall prepare and submit to the relevant committees of Congress a coordinated strategy (to be known as the National Health Security Strategy) and any revisions thereof, and an accompanying implementation plan for public health emergency preparedness and response. Such National Health Security Strategy shall identify the process for achieving the preparedness goals described in subsection (b) and shall be consistent with the National Preparedness Goal, the National Incident Management System, and the National Response Plan developed pursuant to section 502(6) of the Homeland Security Act of 2002, or any successor plan." (**Pandemic and All-Hazards Preparedness Act**, January 3, 2006, Sec. 2802 (a) (1).)

National Homeland Defense Foundation (NHDF): "The National Homeland Defense Foundation (NHDF) exists for the purpose of Securing the Future of Liberty™ through sharing of innovation, research, and education. In addition to conducting an annual Symposium, the…. NHDF projects serve to preserve liberty through humanitarian, security and preparedness programs, and educational efforts. Particular focus will be given to those programs and projects that support, educate, and inform moderate Muslim communities and nations on the concepts of tolerance, human co-existence, and compassion for all mankind. Education Initiatives in HD/HS: Support, encourage, and advocate educational programs and curricula that are constructed for the purpose of teaching homeland defense/security disciplines to all levels of study." (**NHDF**, 2008)

National Homeland Security Agency. The entity proposed by **Hart-Rudman Commission** (United States Commission on National Security/21st Century) "to consolidate and refine the missions of the nearly two dozen disparate departments and agencies that have a role in U.S. homeland security today." (Hart-Rudman, *Road Map for National Security: Imperative for Change (Phase III Report)* 15 Feb 2001, p. vi)

National Homeland Security Consortium: "The National Homeland Security Consortium is a unique, one-of-a- kind group of key state and local organizations, elected officials, the private sector and others with roles and responsibilities for homeland security prevention, preparedness, response and recovery activities. Participating organizations began meeting together in 2002 at the invitation of the National Emergency Management Association (NEMA). The National Homeland Security Consortium is an outgrowth of those initial discussions regarding the need for enhanced communication and coordination between disciplines and levels of government. The Consortium is now a recognized entity by the U.S. Department of Homeland Security and works in partnership with other federal agencies such as the Department of Health and Human Services Centers for Disease Control.

"The Consortium meets at least two times annually and shares information on a regular basis on issues of common interest. Subject matter experts within the Consortium are available as needed to provide input on national strategies, plans and policies impacting state and local governments.

Vision: Enhanced homeland security to prevent, prepare for, respond to and recover from emergencies, disasters and catastrophes through strategic partnerships, collaborative strategies and information sharing.

Mission: Provide a forum of key national organizations through effective communication, collaboration, and coordination that positively promotes national policies, strategies, practices and guidelines to preserve the public health, safety and security of the nation.

Objectives:
1. Provide a broad-based resource and sounding board on homeland security issues for all national stakeholders.
2. Share information, knowledge, experiences, and practices.
3. Contribute to the homeland security debate and discussion.
4. Focus efforts to resolve issues.
5. Develop recommendations in identified areas of common interest.

Participating Members of the National Homeland Security Consortium

- Adjutants General Association of the United States
- American Public Works Association
- Association of Public Safety Communications Officials
- Association of State & Territorial Health Officials
- The Council of State Governments
- International Association of Emergency Managers
- International Association of Chiefs of Police
- International Association of Fire Chiefs
- International City/County Management Association
- National Association of Counties
- National Association of County & City Health Officials
- National Association of State Departments of Agriculture
- National Association of State Emergency Medical Service Directors
- National Conference of State Legislatures
- National Emergency Management Association
- National Governors' Association
- National League of Cities
- National Sheriffs' Association
- State Homeland Security Advisors
- Urban Area Security Initiative Cities
- U.S. Chamber of Commerce
- Private Sector." (**NEMA**, *National Homeland Security Consortium*, 2007)

National Homeland Security Consortium Priority Issues (July 11-12, 2007 Meeting):

#1 Communication and Collaboration
· There is no local, state, federal partnership.
· What partnership exists is becoming adversarial. Examples include the private National Response Plan rewrite and mischaracterization with the media of unspent homeland security funds.
· Coordination between federal agencies is vital but it is not happening enough. The federal government may need a Cabinet level official(s) or lead agency charged with this responsibility.
· Communication and collaboration is time consuming, but must be done and it's more effectively done at the front end of planning processes. Stakeholders should be engaged early and often.
· DHS collaboration must be with associations and not with individuals when seeking people to speak on behalf of a discipline. Associations must be able to appoint their own representatives to DHS working groups or meetings. Quality and quantity of representation is important. Development of the Target Capabilities List is an example – hundreds of people included in the process but the input did not meet quality standards for individual associations. When DHS requests representation, Associations will be responsive and pledge to work collaboratively. Stakeholders want the system to work. State and local governments are the ones who have to implement federal strategies, plans and programs.
· Why doesn't Office of State and Local Coordination function out of the Secretary's office if it is importance to DHS? Sends negative message and this is one of the reasons that communication and collaboration isn't working right now. There is no single coordination point within DHS for state and local stakeholders that can reach back within the agency on their behalf.
· The Consortium has the ability to easily and effectively provide input to DHS.
· Performance measurement for collaboration is different for DHS than associations. DHS looks at quantity and stakeholders look at quality.
· The relationship with DHS is getting worse, not better
· The priority issues identified by the Consortium are important for this and the next Administration. They will not go away. Could be the basis for a National Strategy the Consortium should develop and deliver in a non-partisan approach.
· Federal agencies are not communicating or working together which leads to a fragmented national approach.

#2 National Guard Capabilities and Use of the Military
· White House is opposed to the repeal of the Insurrection Act amendments.
· Many Consortium members strongly support the repeal and want the governors' authority over use of the National Guard reinstated.
· DHS needs to become better informed on National Guard issues. DHS should consider this an issue of importance to them because it's much broader than they have indicated in their response letter to the Consortium priority issues.
· NHSC wants collaboration on important national issues that can make the emergency response system better. Use of the military is of interest to Consortium members and we will monitor. We expect to be engaged on this issue.

#3 Intelligence and Information Sharing

· Private sector still not recognized.
· Information stovepipes exist for private sector engagement and information sharing.
· A true national strategy is lacking and a policy level discussion is needed. Need to focus on system design and information gathering/sharing process. What does DHS know and who else needs to know it, and what's the process for sharing that information?
· Regulatory and policy issues are not being addressed on a national level.
· More work to be done on actionable intelligence being given to state/local governments.
· Unsure of what is being done with HSIN/HSDN and where it's going.
· Security clearances are road blocks, but can be solved at little cost.

#4 Mutual Aid/Resource Typing/Credentialing and Disaster Response
· DHS continues to focus on their defined "regions" and not "networks" that may be more effective for state and local governments. Regions are not necessarily bound by geography or political boundaries. "Networks" cross traditional boundaries.
· DHS shouldn't constrain initiatives because of administrative rules or grant guidance.
· FEMA needs a private sector office/liaison. Policy and program focus for private sector is missing. Private sector owns most of the nation's infrastructure so they must be included. Major industry is also important.
· DHS/FEMA should financially support state and local governments in the identification and packaging of mutual aid response assets.
· Federal agencies are not coordinating on credentialing.
· All partner organizations/associations need to be included in the resource typing and credentialing process.
· These issues go beyond FEMA and include all federal agencies involved.

#5 Surge Capacity
· There is little activity to address this issue at the federal level. Medical surge is a huge problem for the nation.
· Consortium can't give a "pass" to DHS to defer the issue to other agencies or to state/local government. There is NO surge capacity at state/local level.
· Consortium needs to look beyond DHS to address this issue. We can work together on this issue and the Consortium can bring all partners together to address. No single entity can solve on their own.

#6 Interoperability
· Good work being done; however, states and locals are not exactly sure what we're trying to achieve.
· All levels of government need to agree where we're going and what success means. What does interoperability look like nationally?
· Greater collaboration is needed to address human aspect of interoperability. Technology solutions can't solve everything.
· Adjustments need to be made in the way we think and talk about interoperability. There needs to be the desire to have the right people communicating followed by the ability to make it happen.
· Planning for the future and additional spectrum allocation is key. Consortium members support additional spectrum for public safety. This is an issue of near term relevance.

· Unsure of what the $1B grant program is supposed to achieve. Requirements and expectations not known.
· Public safety communications needs to be a priority for the nation.

#7 Self Determination/All Hazards
· DHS must adopt an all hazards approach and maintain a balance between terrorism and natural disaster preparedness.
· Federal government should set broad goals and let states/locals determine the path to achieve the goals.

#8 Implementation of FEMA Reform Act
· NHSC is monitoring implementation. Differing disciplines have differing concerns.
· No Congressional oversight and DHS is not implementing according to the law. Examples: TSA grants, location of Office of State and Local Coordination.
· Customers not included in planning for implementation, but should have been to help ensure the way changes are implemented is beneficial to the customer.

#9 Real ID/Border Security/Immigration
· Implementation dates are difficult to meet.
· DHS takes up all the time coming up with rules and then states have little time to implement.
· These issues represent significant long-term financial commitments by states. Customer service is a concern. Example: passports backlog.
· DHS is not helping with the way they are putting forth administrative rules. They are hurting and not helping states.

#10 Five-Year Strategic Plan
· DHS needs a multi-year strategic plan, as is being required of the states.
· "Long Term Fiscal Planning for Sustainable Programs"
· Example: DoD has a 5 year budget cycle and DHS does not. This is what is needed." (**NHSC**, *National Homeland Security Consortium Meeting,* July 11-12, 2007, pp. 1-4)

National Homeland Security Plan: "The *National Homeland Security Plan* facilitates Federal homeland security coordination, establishes priorities, and defines roles and responsibilities for preventing, protecting against, responding to, and recovering from man-made or natural disasters. The Secretary, through the Office of Operations Coordination (OPS) and the Federal Emergency Management Agency (FEMA), in coordination with Federal agencies with a role in homeland security, will develop the *National Homeland Security Plan*. The *National Homeland Security Plan* will be released not later than June 2008 and will be revised after the release of the Quadrennial Homeland Security Review and any new *National Strategy for Homeland Security* and Presidential directives." (**DHS**, *IPS Description Draft*, January 3, 2008)

National Homeland Security Plan: "By 30 June 2007, the Assistant Secretary of Defense for Homeland Defense, in partnership with the Department of Homeland Security, and in coordination with the Chairman, and all relevant DOD components, shall provide the Deputy Secretary with a plan of action for establishing a ***National Homeland Security Plan (NHSP)***. The *NHSP* is envisioned to be a detailed pre-event counterpart to the *National Response Plan*,

focused on the deterrence and prevention of attacks aimed at the United States. The plan of action shall be based in part on the following elements:

- A comprehensive interagency review of the *National Response Plan*
- The effect of the new *National Implementation Plan* for the war on terrorism
- The Homeland Security Council-led comprehensive homeland security review." (**DoD**, *Building Partnership* Capacity, 2006, p. 10)

National Hurricane Program: "The National Hurricane Program (NHP) helps protect communities and residents from hurricane hazards through various projects and activities. Established in 1985, the NHP also conducts assessments and provides tools and technical assistance to State and local agencies in developing hurricane evacuation plans. The program is a multi-agency partnership involving numerous Federal agencies, including:

- Federal Emergency Management Agency (FEMA)
- National Oceanic & Atmospheric Association (NOAA)
- National Weather Service (NWS)
- U.S. Department of Transportation (USDOT)
- U.S. Army Corps of Engineers (USACE) (**FEMA**, *NHP*, Dec 3, 2007)

National Hurricane Program Task Force: "In March 1994 the National Hurricane Program Task Force was established to assist the Federal Emergency Management Agency (FEMA) with planning an enhanced Hurricane Program. Several work groups were formed within the Task Force to address proposed components of that program. Since, for several years, the preexisting Interagency Coordinating Committee on Hurricanes (ICCOH) had managed hazards analysis, population preparedness, and post-storm analysis issues related to the Population Preparedness Project (Hurricane Evacuation Study) phase of FEMA's Hurricane Program, that committee was asked to function as a Task Force work group for those topics. To support the work of the ICCOH, Headquarters, U.S. Army Corps of Engineers (USACE) subsequently organized the Hurricane Evacuation Studies Technical Guidelines Working Group." (**USACE**, *Info on HES*)

National Implementation Plan for The War on Terrorism (NIP-WOT): "Early this summer [2006], a new strategy for combating terrorism, described by its authors as "revolutionary" in concept, arrived on President Bush's desk. The highly classified National Implementation Plan for the first time set government-wide goals and assigned responsibility for achieving them to specific departments and agencies. Written by officials at the National Counterterrorism Center, under a directive signed by the president last winter, the 160-page plan aspires to achieve what has eluded the Bush administration in the five years since the Sept. 11, 2001, attacks: bringing order and direction to the fight against terrorism….

New initiatives such as the National Implementation Plan were launched to eliminate overlap and set priorities for what the administration now calls the "long war." Beyond drawing sharper lines of responsibility, officials said, the plan is designed to drag the nation's counterterrorism strategy back from military dominance, better balancing the military "whack" with diplomacy and the "hearts and minds" campaigns that are now seen as critical to long-term victory. [President] Bush was briefed on the plan on June 26. A White House official said the plan reflects [President] Bush's feeling that the terrorism fight is "all-encompassing," including military attacks but also "the war of ideas and the softer side, the long-term battle."

Within half a dozen broad objectives, the document designates lead and subordinate agencies to carry out more than 500 discrete counterterrorism tasks, among them vanquishing al-Qaeda, protecting the homeland, wooing allies, training experts in other languages and cultures, and understanding and influencing the Islamic psyche." (**DeYoung**, *Washington Post*, Aug. 9, 2007)

National Incident Communications Conference Line (NICCL): A "pre-identified incident communications protocols are established and ready for use during large scale incidents and incidents requiring a coordinated Federal response… The NICCL was created to be a single source of coordination for DHS with all other Federal agencies. It can work as a call-in conference or as an open line that can be monitored 24 hours a day for the exchange of information and updates. It is primarily for Federal-to-Federal information sharing but can also include communicators from the primarily impacted State and local community. Specifically, the NICCL:

- is used for transmission and exchange of information primarily targeted to support senior State and local officials;
- originates with DHS Public Affairs and is an executive call to discuss happening events and their agencies' roles, activities, and response; and
- is typically conducted twice daily, but it could be staffed 24 hours a day and used as an open line for information dissemination if required by an incident." (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, pp. 24-25)

National Incident Management Planning/National Domestic Incident Response Planning: "National incident management planning occurs in a networked, collaborative environment, which requires iterative dialogue among senior leaders, concurrent and parallel plan development, and collaboration across multiple planning levels. Clear strategic guidance and frequent interaction between senior leaders and planners promote early understanding of, and agreement on, planning assumptions, considerations, risks, and other key factors. A good plan identifies key decision points and provides senior leaders with options. Plans should be responsive, flexible and evolving. As they are developed, the iterative nature of good planning promotes greater involvement within the interagency planning communities of interest (COI) and our multinational partners." (**DHS**, 2007)

National Incident Management Priorities. "The NRP sets national incident management priorities. These priorities include

- saving lives and protecting the health and safety of the public, responders, and recovery workers;
- preventing an imminent incident, including acts of terrorism, from occurring;
- protecting and restoring critical infrastructure and key resources; and
- facilitating recovery of individuals, families, businesses, governments, and the environment." (**DHS**, 2007)

National Incident Management System (NIMS): "HSPD-5 requires all Federal departments and agencies to adopt the NIMS and to use it in their individual domestic incident management and emergency prevention, preparedness, response, recovery, and mitigation programs and activities, as well as in support of those actions taken to assist State, local, or tribal entities. The directive also

requires Federal departments and agencies to make adoption of the NIMS by State, tribal and local organizations a condition for Federal preparedness assistance beginning in FY 2005. Compliance with certain aspects of the NIMS will be possible in the short-term, such as adopting the basic tenets of the Incident Command System… Other aspects of the NIMS, however, will require further development and refinement to enable compliance at future dates." (**DHS**, *NIMS*, 2004, DHS Secretary Tom Ridge Memorandum for Distribution)

National Incident Management System (NIMS): Released in March 2004 by the Department of Homeland Security, *NIMS* "provides a consistent nationwide template to enable all levels of government, the private sector and nongovernmental organizations (NGOs) to work together during an incident." (**DHS**, *NRF Comment Draft*, September 2007, 45)

National Incident Management System (NIMS): "The *NIMS* identifies multiple elements of unified command in support of incident response. These elements include: (1) developing a single set of objectives; (2) using a collective, strategic approach; (3) improving information flow and coordination; (4) creating common understanding of joint priorities and restrictions; (5) ensuring that no agency's legal authorities are compromised or neglected; and (6) optimizing the combined efforts of all agencies under a single plan." (**DHS**, *NRF Comment Draft*, Sep 2007, 10)

National Incident Management System (NIMS): "*NIMS* provides a core set of common concepts, principles, terminology and technologies in the following areas:

Incident Command System (ICS). Much of *NIMS* is built upon the ICS, which was developed by the Federal, State and local wildland fire agencies during the 1970s. ICS is normally structured to facilitate activities in five major functional areas: command, operations, planning, logistics and finance/ administration. In some circumstances, intelligence and investigations may be added as a sixth functional area.

Multi-agency coordination systems. Examples of multi-agency coordination systems include a county emergency operations center, a State intelligence fusion center, the DHS National Operations Center, the DHS/Federal Emergency Management Agency (FEMA) National Response Coordination Center, the Department of Justice/Federal Bureau of Investigation (FBI) Strategic Information and Operations Center and the National Counterterrorism Center.

Unified command. Unified command provides the basis from which multiple agencies can work together effectively with a common objective of effectively managing an incident. Unified command ensures that regardless of the number of agencies or jurisdictions involved, all decisions will be based on mutually specified objectives.

Training. Leaders and staff require initial training on incident management and incident response principles, as well as ongoing training to provide updates on current concepts and procedures.

Identification and management of resources. Classifying types of resources is essential to ensure that multiple agencies can effectively communicate and provide resources during a crisis.

Situational awareness. Situational awareness is the provision of timely and accurate information during an incident. Situational awareness is the lifeblood of incident management and effective response operations. Without it, decisions will not be informed by information on the ground and actions will be inefficient and ineffective. Situational

awareness requires continuous monitoring, verification and integration of key information needed to assess and respond effectively to threats, potential threats, disasters or emergencies.

Qualifications and certification. Competent staff is a requirement for any leader managing an incident. During a crisis there will not be time to determine staff qualifications, if such information has not yet been compiled and available for review by leaders. To identify the appropriate staff to support a leader during a crisis, qualifications based on training and expertise of staff should be pre-identified and evidenced by certification, if appropriate.

Collection, tracking and reporting of incident information. Information today is transmitted instantly via the Internet and the 24/7 news channels. While timely information is valuable, it also can be overwhelming. For an effective response, we must leverage expertise and experience to identify what information is needed to support decision-makers and be able to rapidly summarize and prioritize this information. Information must be gathered accurately at the scene and effectively communicated to those who need it. To be successful, clear lines of information flow and a common operating picture are essential….

Crisis action planning. Deliberative planning during non-incident periods should quickly transition to crisis action planning when an incident occurs. Crisis action planning is the process for rapidly adapting existing deliberative plans and procedures during an incident based on the actual circumstances of an event. Crisis action planning should also include the provision of decision tools for senior leaders to guide their decision-making.

Exercises. Consistent with the National Exercise Program, all stakeholders should regularly exercise their incident management and response capabilities and procedures to ensure that they are fully capable of executing their incident response responsibilities." (**DHS**, *NRF Comment Draft*, September 2007, pp. 46-47)

National Incident Management System (NIMS): "…provides standard command and management structures that apply to response activities. This system provides a consistent, nationwide template to enable Federal, State, tribal, and local governments, the private sector, and NGOs to work together to prepare for, prevent, respond to, recover from, and mitigate the effects of incidents regardless of cause, size, location, or complexity. This consistency provides the foundation for utilization of the *NIMS* for all incidents, ranging from daily occurrences to incidents requiring a coordinated Federal response." (**DHS,** *NRF*, Jan 2008, 4)

National Incident Management System (NIMS): "NIMS is not an operational incident management or resource allocation plan. NIMS represents a core set of doctrine, concepts, principles, terminology, and organizational processes that enables effective, efficient, and collaborative incident management." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p.3)

National Incident Management System (NIMS): "Provides a systematic, proactive approach guiding government agencies at all levels, the private sector, and nongovernmental organizations to work seamlessly to prepare for, prevent, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life or property and harm to the environment." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p. 155) [See, by way of comparison, the *Public Law* definition of NIMS noted below, as well as the NGA definition of Comprehensive Emergency Management, and FEMA's definitions of EM.]

National Incident Management System (NIMS): "…the term 'National Incident Management System' means a system to enable effective, efficient, and collaborative incident management…" (**Public Law 109-295**, *Department of Homeland Security Appropriations Act, 2007*, p. 41).

National Incident Management System (NIMS): Called for in Homeland Security Presidential Directive 5: "This system will provide a consistent nationwide approach for Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multi-agency coordination systems; unified command; training; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources." (**White House,** *HSPD-5***,** February 28, 2003)

National Incident Management System (NIMS): "NIMS focuses largely on stakeholders in the discipline of response." (**White House**, *National Strategy for Homeland Security*, Oct 2007, p46)

National Incident Management System (NIMS) Capability Assessment Support Tool (NIMSCAST): "A web-based self-assessment tool designed to aid State, Territorial, local, and tribal organizations and jurisdictions in determining their capabilities and compliance against the requirements." (**FEMA**, *NIMS Compliance Metrics Terms of Reference*, October 2006, p. 6)

National Incident Management System (NIMS) Command and Coordination Authority: "NIMS distinguishes between command authority and coordination authority. Command authority is vested in the incident commander, whether a single incident commander or an area commander, and is exercised through the ICS. Coordination authority is vested in coordinating officers such as the FCO and DCO. Each coordinating officer has the authority to make coordinating decisions within his or her jurisdiction, whether federal, state, or local." (**JCS/DoD**, *Civil Support*, 2007, p. D-16)

National Incident Management System (NIMS) Compliance Assistance Support Tool. NIMSCAST: "Federal Emergency Management Agency's National Integration Center - Incident Management Systems Division developed the NIMSCAST to help State, territorial, tribal, and local jurisdictions to maintain their national baseline compliance, as established in FYs 2005-2006, compliance with the NIMS…. The NIMS Compliance Assistance Support Tool (NIMSCAST) is designed as the premier, web-based self-assessment instrument for State, territorial, tribal, local governments to evaluate and report their jurisdiction's achievement of all NIMS implementation activities released since 2004. The NIMSCAST is designed for the emergency management community as a comprehensive self-assessment support tool. Using the NIMSCAST will assist the nation's emergency management community to comply with NIMS requirements, as determined by the National Integration Center. Additionally, HSPD-5 requires Federal Departments and agencies to make adoption of the NIMS by State and local organizations a condition for Federal preparedness assistance. The NIMSCAST facilitates the

adoption of the NIMS by State, local, and tribal governments in order to meet the requirement established in HSPD-5." (FEMA, *About NIMSCAST*)

National Incident Management System (NIMS) Components: "Five major components make up…[the] systems approach [to NIMS]:

Preparedness,
Communications and Information Management,
Resource Management,
Command and Management, and
Ongoing Management and Maintenance." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, 7)

National Incident Management System (NIMS) Concepts and Principles: "To provide this framework for interoperability and compatibility, the NIMS is based on an appropriated balance of flexibility and standardization.

1. Flexibility.

   The NIMS provides a consistent, flexible, and adjustable national framework within which government and private entities at all levels can work together to manage domestic incidents, regardless of their cause, size, location, or complexity. This flexibility applies across all phases of incident management: prevention, preparedness, response, recovery, and mitigation.

2. Standardization

   The NIMS provides a set of standardized organizational structures – such as the Incident Command System (ICS), multiagency coordination systems, and public information systems – as well as requirements for processes, procedures, and systems designed to improve interoperability among jurisdictions and disciplines in various areas, including: training, resource management; personnel qualification and certification; equipment certification; communications and information management; technology support; and continuous system improvement." (**DHS**, *NIMS*, March 2004, p. 2)

National Incident Management System (NIMS) Concepts: "NIMS is based upon the concepts of

interoperability,
reliability,
scalability,
portability, and
the resiliency and redundancy of communication and information systems."
(**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p. 7)

National Incident Management System (NIMS) History: "…NIMS, the nation's first ever multi-discipline, intergovernmental standardized incident management plan, was based on the highly successful Incident Command System pioneered and used for more than 30 years by America's fire services." (**DHS**, *Remarks by Secretary Michael Chertoff, U.S. Department of Homeland Security at the International Association of Fire Chiefs Leadership Summit*, 4Nov05)

National Incident Management System (NIMS) History: "NIMS is based in large part on SEMS [CA Standardized Emergency Management System] and the Incident Command Structure."[87] (**Little Hoover Commission**, *Safeguarding the Golden State*, 2006, 11)

National Incident Management System (NIMS History): "The creation of NIMS stemmed from an earlier system called the National Interagency Incident Management System (NIIMS) first adopted in 1982 by the National Wildfire Coordinating Group based upon its successes during the 1970s. (**Perkins**, *Shaping DHS Doctrine for Operational Success*, July 2007, p. 22)

National Incident Management System (NIMS) Integration Center: Promulgated by Department of Homeland Security Management Directive System Directive, MD Number 9500. Responsibilities:

1. Developing a national program for NIMS education and awareness, including specific instruction on the purpose of NIMS and responsibilities of the NIC as set forth in this directive and in strategic or other plans;
2. Promoting compatibility between national-level standards for the NIMS and those developed by other public, private, and/or professional groups;
3. Facilitating the development and publication of materials (such as supplementary documentation and desk guides) and standardized templates to support implementation and continuous refinement of the NIMS;
4. Developing assessment criteria for the various components of the NIMS, as well as compliance requirements and compliance timelines for Federal, State, local, and tribal entities regarding NIMS standards and guidelines;
5. Facilitating the definition of general training requirements and the development of national-level training standards and course curricula associated with the NIMS, including the following:
    a. The use of modeling and simulation capabilities for training and exercise programs;
    b. Field-based training, specification of mission-essential tasks, requirements for specialized instruction and instructor training, and course completion documentation for all NIMS users; and
    c. The review and recommendation (in coordination with national professional organizations and Federal, State, local, tribal, private-sector, and nongovernmental entities) of discipline-specific NIMS training courses
6. Facilitating the development of national standards, guidelines, and protocols for incident management training and exercises, including consideration of existing exercise and training programs at all jurisdictional levels;
7. Facilitating the establishment and maintenance of a publication management system for documents supporting the NIMS and other NIMS-related publications and materials, including the development or coordination of general publications for all NIMS users, as well as their issuance via a NIMS publication management system;
8. Reviewing (in coordination with appropriate national professional standards-making, certifying, and accrediting organizations and with input from Federal, State, local, tribal,

[87] Cited: Guna Selvaduray, Professor and Executive Director, Collaborative for Disaster Mitigation, San Jose State University. January 26, 2006. Testimony to the Commission.

private-sector and nongovernmental entities) of the discipline-specific publication management requirements submitted by professional organizations and associations;

9. Facilitating the development and publication of national standards, guidelines, and protocols for the qualification and certification of emergency responder and incident management personnel, as appropriate;
10. Reviewing and approving (with the assistance of national professional organizations and with input from Federal, State, local, tribal, private-sector, and nongovernmental entities), as appropriate, the discipline-specific qualification and certification requirements submitted by emergency responder and incident management organizations and associations;
11. Facilitating the establishment and maintenance of a documentation and database system related to qualification, certification, and credentialing of incident management personnel and organizations, including reviewing and approving (in coordination with national professional organizations and with input from the Federal, State, local, tribal, private-sector and nongovernmental entities), as appropriate, of the discipline-specific requirements submitted by functionally oriented incident management organizations and associations;
12. Establishing a data maintenance system to provide incident managers with the detailed qualification, experience, and training information needed to credential personnel for prescribed "national" incident management positions;
13. Coordinating minimum professional certification standards and facilitation of the design and implementation of a credentialing system that can be used nationwide;
14. Facilitating the establishment of standards for the performance, compatibility, and interoperability of incident management equipment and communications systems, including the following:
    a. Facilitating, in coordination with appropriate Federal agencies, standards-making, certifying, and accrediting organizations, and appropriate State, local, tribal, private-sector, and nongovernmental organizations, the development and/or publication of national standards, guidelines, and protocols for equipment certification (including the incorporation of standards and certification programs already in existence and used by incident management and emergency response organizations nationwide)
    b. Reviewing and approving (in coordination with national professional organizations and with input from Federal, State, local, tribal, private-sector, and nongovernmental entities) lists of equipment that meet these established equipment certification requirements
    c. Collaborating with organizations responsible for emergency responder equipment evaluation and testing
15. Facilitating the development and issuance of national standards for the typing of resources;
16. Facilitating the definition and maintenance of the information framework required to guide the development of NIMS information systems, including the development of data standards for the following: incident notification and situation reports, status reporting, analytical data, geospatial information, wireless communications, identification and authentication, and incident reports, including "lessons learned" reports;

17. Coordinating the establishment of technical and technology standards for NIMS users in concert with the Under Secretary for Science and Technology of the Department of Homeland Security and recognized SDOs;
18. Integrating into the national R&D agenda, in coordination with the Under Secretary for Science and Technology of the Department of Homeland Security, the incident management science and technology needs of departments, agencies, disciplines, private-sector, and nongovernmental organizations operating within the NIMS at all levels; and
19. Establishing and maintaining a repository and clearinghouse for reports and lessons learned from actual incidents, training, and exercises, as well as for best practices, model structures, and model processes for NIMS-related functions." (**DHS**, *Management Directive 9500, NIMS Integration Center*, 2004, pp. 2-3) [Note: In April 2007 the NIC (NIMS Integration Center became the Incident Management Systems Division within the new National Integration Center.][88]

National Incident Management System (NIMS) Planning Process: "The NIMS planning process described below represents a template for strategic, operational, and tactical planning that includes all steps an IC and other members of the Command and General Staffs should take to develop and disseminate an Incident Action Plan (IAP). The planning process may begin with the scheduling of a planned event, the identification of a credible threat, or with the initial response to an actual or impending event. The process continues with the implementation of the formalized steps and staffing required to develop a written IAP…. The planning process should provide the following:

- current information that accurately describes the incident situation and resource status;
- predictions of the probable course of events;
- alternative strategies to attain critical incident objectives; and
- an accurate, realistic, IAP for the next operational period.

"Five primary phases must be followed, in sequence, to ensure a comprehensive IAP. These phases are designed to enable the accomplishment of incident objectives within a specified time…. The five primary phases in the planning process are:

1. Understand the Situation.

…gathering, recording, analyzing, and displaying situation and resource information in a manner that will ensure a clear picture of the magnitude, complexity, and potential impact of the incident; and the ability to determine the resources required to develop and implement an effective IAP.

2. Establish Incident Objectives and Strategy.

…formulating and prioritizing incident objectives and identifying an appropriate strategy. The incident objectives and strategy must conform to the legal obligations and management objectives of all affected agencies. Reasonable alternative strategies that will accomplish overall incident objectives are identified, analyzed, and evaluated to determine the most appropriate strategy for the situation at hand. Evaluation criteria include public health and safety factors; estimated costs; and various environmental, legal, and political considerations.

3. Develop the Plan.

[88] See FEMA, *NIMS Alert*, April 27, 2007, footnote 1.

> [Determine] the tactical direction and the specific resource, reserves, and support requirements for implementing the selected strategy for one operational period. This phase is usually the responsibility of the IC, who bases decisions on resources allocated to enable a sustained response. After determining the availability of resources, the IC develops a plan that makes the best use of these resources….

4. Prepare and Disseminate the Plan.

> [Prepare] the plan in a format that is appropriate for the level of complexity of the incident. For the initial response, the format is a well-prepared outline for an oral briefing….

5. Evaluate and Revise the Plan.

> The planning process includes the requirement to evaluate planned events and check the accuracy of information to be used in planning for subsequent operational periods. The General Staff should regularly compare planned progress with actual progress. When deviations occur and when new information emerges, that information should be included in the first step of the process used for modifying the current plan or developing the plan for the subsequent operational period." *(***DHS**, *NIMS*, 2004, pp. 97-98)

National Incident Management System (NIMS) Premise: "NIMS is based on the premise that the utilization of a common incident management framework will give emergency management/response personnel a flexible yet standardized system for emergency management and incident response activities." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p. 6)

National Incident Management System (NIMS) Preparedness Concepts and Principles:

- Levels of Capability.

  Preparedness is implemented through a continuous cycle of planning, training, equipping, exercising, evaluating, and taking action to correct and mitigate. Within the NIMS, preparedness focuses on guidelines, protocols, and standards for planning, training, personnel qualification and certification, equipment certification, and publication management.
- A Unified Approach.

  Preparedness requires a unified approach. A major objective of preparedness efforts is to ensure mission integration and interoperability in response to emergency crises across functional and jurisdictional lines, as well as between public and private organizations.
- NIMS Publications.

  The NIMS provides or established processes for providing guidelines; protocols; standards for planning, training, qualifications and certification; and publication management…
- Mitigation.

  Examples of key mitigation activities include the following:
  - Ongoing public education and outreach activities designed to reduce loss of life and destruction of property;
  - Structural retrofitting to deter or lessen the effects of incidents and reduce loss of life, destruction of property, and effects on the environment;
  - Code enforcement through such activities as zoning regulation, land management, and building codes; and

- Flood insurance and the buy-out of properties subjected to frequent flooding, etc. (**DHS**, *NIMS*, 2004, pp. 33-34)

National Incident Management System (NIMS) Preparedness Programs:

- Preparedness Planning.
  - Emergency Operations Plan (EOP).
  - Procedures
  - Preparedness Plans.
  - Corrective Action Plans
  - Mitigation Plans.
  - Recovery Plans.
- Training and Exercises.
- Personnel Qualification and Certification.
- Equipment Certification.
- Mutual-Aid Agreements.
- Publication Management. (**DHS**, *NIMS*, 2004, pp. 35-41)

National Incident Management System (NIMS) Resource Management Principles:

- Individual Resources
- Emergency Support Functions
- Pre-Scripted Mission Assignments
- Advanced Readiness Contracting
- Pre-Positioned Resources (**DHS**, *National Response Framework*, Jan 2008, 30)

National Incident Management System (NIMS) Resource Typing System: "The resource typing protocol provided by the NIMS describes resources using category, kind, components, metrics, and type data. The following data definitions will be used:

1. Resource: For purposes of typing, *resources* consist of personnel, teams, facilities, supplies, and major items of equipment available for assignment to or use during incidents. Such resources may be used in tactical support or supervisory capacities at an incident site or EOC. Their descriptions include category, kind, components, metrics, and type.

2. Category: A *category* is the function for which a resource would be most useful….

3. Kind: *Kind* refers to broad classes that characterize like resources, such as teams, personnel, equipment, supplies, vehicles, and aircraft. For example…urban search and rescue (US&R) teams consist of two 31- person teams, four canines, and a comprehensive equipment cache. The cache is divided into five separate, color-coded elements and is stored in containers that meet specific requirements.

5. Metrics: *Metrics* are measurement standards. The metrics used will differ depending on the kind of resource being typed. The mission envisioned determines the specific metric selected. The metric must be useful in describing a resource's capability to support the mission. As an example, one metric for a disaster medical assistance team is the number of patients it can care

for per day. Likewise, an appropriate metric for a hose might be the number of gallons of water per hour that can flow through it. Metrics should identify capability and/or capacity.

6. Type: *Type* refers to the level of resource capability. Assigning the Type I label to a resource implies that it has a greater level of capability than a Type II of the same resource (for example, due to its power, size, or capacity), and so on to Type IV. Typing provides managers with additional information to aid the selection and best use of resources. In some cases, a resource may have less than or more than four types; in such cases, either additional types will be identified, or the type will be described as "not applicable." The type assigned to a resource or a component is based on a minimum level of capability described by the identified metric(s) for that resource…" (**DHS**, *NIMS*, 2004, pp.121-124)

National Incident Management System (NIMS) Systems Approach Six Major Components:

- Command and Management
- Preparedness
- Resource Management
- Communications and Information Management
- Supporting Technologies
- Ongoing Management

(**DHS**, *NIMS*, March 2004, p. 3) [Note, compare to 2007 NIMS Five Components, noted above, wherein "Supporting Technologies" is no longer included.]

National Incident Management System (NIMS) Unity of Effort/Unity of Command (DOD): "Joint forces performing CBRNE CM [Consequence Management] supporting civil authorities are part of domestic incident management and operate in accordance with the NRP. The NIMS forms the foundation for conducting domestic response operations. This framework provides a consistent approach for Federal, state, local, and tribal governments to work effectively and efficiently together to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. Joint forces conduct CBRNE CM in accordance with NIMS but maintain a distinct, independent chain of command. However, military personnel can and frequently will receive tactical direction from the on-scene commander and subordinates, especially in circumstances where small numbers of military personnel augment civilian response functions. Installation forces operating under immediate response authority stay under the control of the Service branch of the chain of command unless committed to the Federal response effort by the Secretary of Defense. Under NIMS, installation and joint forces may find themselves getting task direction from a civilian firefighter, law enforcement officer, or emergency medical technician, but this functional working relationship does not replace or circumvent the military chain of command. Key to success for joint forces conducting CBRNE CM is to establish and maintain unity of effort within the framework of NIMS while maintaining unity of command within DOD." (**JCS/DOD**, *CBRNE Consequence Management*, 2006, II-14)

National Information Exchange Model (NIEM): "The development of NIEM is a joint effort among DOJ, DHS, and subject-matter experts from the justice, public safety, law enforcement, homeland security, and private sectors. Designed by experienced practitioners, governed by

participating stakeholders, and driven by leadership from DOJ and DHS, NIEM is developing, disseminating, and supporting enterprise-wide information exchange standards and processes that enable jurisdictions to effectively share critical information in emergency situations, as well as support the day-to-day operations of agencies throughout the nation.

"To ensure the longevity and continued relevance of the HSEEP Data Exchange Standards, NED [National Exercise Division] has aligned its efforts in this area with work currently underway at NIEM. As mentioned above, NIEM evolved from a DHS and Department of Justice (DOJ) partnership. Its development was predicated on the need for these two agencies to share information quickly and accurately in areas where their business practices crossed paths, such as in cases of immigration and person screening. NIEM has since expanded to encompass seven domains, including *emergency management, infrastructure protection and intelligence,* each containing resources useful for any party needing to conduct information exchanges in these areas. Currently, a coordinated NIEM adoption process is underway throughout most DHS component agencies, with the DHS Enterprise Data Management Office (EDMO) guiding the effort. NED believes that leveraging existing NIEM products and resources, as well as participating as a stakeholder in the overarching DHS NIEM adoption process, provides value both by reducing expenditures that would be incurred by developing a proprietary data exchange standard and by providing stakeholders with access to a number of useful data exchange standard-related resources and tools. Because the HSEEP Data Exchange Standards are NIEM-conformant, stakeholders are free to reuse any of its components, as well as any other component in any of the NIEM domains, to create unique data exchanges for purposes not directly related to HSEEP and that best serve their own needs. The overall concept, therefore, is to provide flexibility and utility while saving time and effort. The NIEM website contains a number of useful, non-technical, education and outreach resources for parties interested in understanding and applying NIEM and NIEM-conformant data exchange standards, such as the HSEEP Data Exchange Standard." (**FEMA**, *NIEM Overview*, Accessed March 27)

National Information Sharing Privacy Guidelines and Principles: "The Privacy Guidelines build on a set of core principles that Federal departments and agencies must follow. Those principles require specific, uniform action and reflect basic privacy protections and best practices. Agencies must:

- Share protected information only to the extent it is terrorism information, homeland security information, or law enforcement information related to terrorism;
- Identify and review the protected information to be shared within the ISE [Information Sharing Environment];
- Enable ISE participants to determine the nature of the protected information to be shared and its legal restrictions (e.g., "this record contains individually identifiable information about a U.S. citizen");
- Assess, document, and comply with all applicable laws and policies;
- Establish data accuracy, quality, and retention procedures;
- Deploy adequate security measures to safeguard protected information;
- Implement adequate accountability, enforcement, and audit mechanisms to verify compliance;
- Establish a redress process consistent with legal authorities and mission requirements;

- Implement the guidelines through appropriate changes to business processes and systems, training, and technology;
- Make the public aware of the agency's policies and procedures as appropriate;
- Ensure agencies disclose protected information to non-Federal entities—including State, local, tribal, and foreign governments—only if the non-Federal entities provide comparable protections; and
- State, local, and tribal governments are required to designate a senior official accountable for implementation." (**White House**, *National Strategy for Information Sharing*, 2007, pp. 27-28)

National Infrastructure: "Those infrastructures essential to the functioning of the nation and whose incapacity or destruction would have a debilitating regional or national impact. National infrastructures include telecommunications, electrical power systems, gas and oil transportation and storage, water supply systems, banking and finance, transportation, emergency services, and continuity of government operations." (**DoD**, *CAAP*, 1998)

National Infrastructure Coordinating Center (NICC) DHS: "Managed by the DHS Information Analysis and Infrastructure Protection Directorate, the NICC monitors the Nation's critical infrastructure and key resources on an ongoing basis. In the event of an incident, the NICC provides a coordinating vehicle to share information with critical infrastructure and key resources information-sharing entities." (**USCG**, *IM Handbook*, 2006, Glossary 25-16)

National Infrastructure Inventory: "The inventory addresses the physical, cyber, and human elements of each asset, system, network, or function under consideration. The compilation process relies on the substantial body of previous assessments that have been completed for natural disasters, industrial accidents, and other incidents. The inventory includes basic information on the relationships, dependencies, and interdependencies between various assets, systems, networks, and functions; on service providers, such as schools and businesses, that may be of relevance to more than one sector; and on the foreign assets, systems, networks, and functions on which U.S. CI/KR may rely. The inventory also includes a cyber data framework that is used to characterize each sector's unique cyber assets, systems, networks, or functions." (**DHS,** *NIPP* 2006, pp. 31-32)

National Infrastructure Protection Plan (NIPP): "The National Infrastructure Protection Plan (NIPP) and supporting Sector-Specific Plans (SSPs) provide a coordinated approach to critical infrastructure and key resources (CI/KR) protection roles and responsibilities for federal, state, local, tribal, and private sector security partners. The NIPP sets national priorities, goals, and requirements for effective distribution of funding and resources which will help ensure that our government, economy, and public services continue in the event of a terrorist attack or other disaster. The plan is based on the following:

> Strong public-private partnerships which will foster relationships and facilitate coordination within and across CI/KR sectors.
>
> Robust multi-directional information sharing which will enhance the ability to assess risks, make prudent security investments, and take protective action.

> Risk management framework establishing processes for combining consequence, vulnerability, and threat information to produce a comprehensive, systematic, and rational assessment of national or sector risk." (**DHS,** *NIPP* 2006)

National Infrastructure Protection Plan (NIPP): "Protecting and ensuring the continuity of the critical infrastructure and key resources (CI/KR) of the United States is essential to the Nation's security, public health and safety, economic vitality, and way of life. CI/KR includes physical or virtual assets, systems, and networks so vital to the United States that the incapacity or destruction of such assets, systems, or networks would have a debilitating impact on security, national economic security, public health or safety, or any combination of those matters." (**DHS**, *National infrastructure protection Plan: Sector Overview*, May 2007)

National Infrastructure Protection Plan (NIPP) Goal: "The goal of the *NIPP* is to build a safer, more secure, and more resilient America by enhancing protection of the Nation's critical infrastructure and key resources (CIKR)." (**DHS**, *NRF*, Jan 2008, 19, fn. 15)

National Infrastructure Protection Plan (NIPP) Purpose: "The purpose of the NIPP is to "build a safer, more secure, and more resilient America by enhancing protection of the Nation's CI/KR to prevent, deter, neutralize, or mitigate the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit them; and to strengthen national preparedness, timely response, and rapid recovery in the event of an attack, natural disaster, or other emergency." (**DHS**, *National Preparedness Guidelines*, 2006, p. 14)

National Infrastructure Protection Plan (NIPP) 17 Sector-Specific Plans: "**The *NIPP* and its 17 sector-specific plans create a system for protection of critical infrastructure and key resources that includes both the public and private sectors.** It establishes protection standards and objectives developed in partnership with each of the 17 sectors, and creates consultative mechanisms, including those for sharing key threat information, with the private sector which owns or operates most of the Nation's critical infrastructure." (**DHS**, *NRF*, 2008, 72; emphasis in original) The 17 Sectors are:

- Agriculture and Food
- Defense Industrial Base
- Energy
- Public Health and Healthcare
- National Monuments and Icons
- Banking and Finance
- Drinking Water and Water Treatment Systems
- Chemical
- Commercial Facilities
- Dams
- Emergency Services
- Nuclear Reactors, Materials, and Waste
- Information Technology
- Communications
- Postal and Shipping

- Transportation Systems
- Government Facilities (**DHS**, *NIPP Sector Overview*, 2007, 2)

National Infrastructure Protection Plan (NIPP) Senior Leadership Council: "NIPP Senior Leadership Council: The NIPP Leadership Council will bring together the leadership of the federal agencies engaged in critical infrastructure protection, critical infrastructure owners and operators and Homeland Security Advisors to lead, integrate, and coordinate implementation and enhancement of the NIPP through the following activities: forging consensus on critical infrastructure protection actions, evaluating and promoting implementation of risk management-based infrastructure protection programs, information sharing, advancing collaboration within and across sectors, and evaluating and reporting on progress. The NIPP Senior Leadership Council is supported by the Cross-Government Coordinating Council and Cross-Sector Coordinating Council." (**DHS**, *ODP Information Bulletin*, No. 172, June 01, 2005)

National Infrastructure Protection Program: "The National Infrastructure Protection Plan (NIPP) provides the unifying structure for the integration of critical infrastructure and key resources (CI/KR) protection into a single national program. The NIPP provides an overall framework for programs and activities that are currently underway in the various sectors, as well as new and developing CI/KR protection efforts. This collaborative effort between the private sector; State, Territorial, local, and tribal governments; nongovernmental organizations; and the Federal Government will result in the prioritization of protection initiatives and investments across sectors. It also will ensure that resources are applied where they offer the most benefit for mitigating risk by lowering vulnerabilities, deterring threats, and minimizing the consequences of terrorist attacks and other incidents." (**DHS**, *National Infrastructure Protection Plan* (Letter of Agreement), June 30, 2006; and **DHS**, "Fact Sheet: National Infrastructure Protection Program Sector-Specific Plans," May 21, 2007)

National Infrastructure Simulation and Analysis Center (NISAC): "The National Infrastructure Simulation and Analysis Center (NISAC) is a modeling, simulation, and analysis program that prepares and shares analyses of critical infrastructure and key resources including their interdependencies, vulnerabilities, consequences of disruption, and other complexities. NISAC is under the direction of the Department of Homeland Security's (DHS) Office of Infrastructure Protection (OIP). Sandia National Laboratories (SNL) and Los Alamos National Laboratory (LANL) are the prime contractors for NISAC, integrating the two laboratories' expertise in the modeling and simulation of complex systems for evaluating national preparedness and security issues. NISAC activities include:

- Infrastructure modeling and analysis
- Decision support tools
- Knowledge management
- Fast turnaround analyses." (**Sandia National Laboratories**, *National Infrastructure Simulation and Analysis Center*, 2008)

National Institute of Allergy and Infectious Diseases: "The National Institute of Allergy and Infectious Diseases (NIAID) conducts and supports basic and applied research to better understand, treat, and ultimately prevent infectious, immunologic, and allergic diseases. For

more than 50 years, NIAID research has led to new therapies, vaccines, diagnostic tests, and other technologies that have improved the health of millions of people in the United States and around the world." (**NIAID**, *Overview*, March 1, 2005 update)

National Institute of Standards and Technology (NIST), DOC, National Earthquake Hazards Reduction Program (NEHRP) Mission: "NIST serves as NEHRP lead agency and conducts applied research 1 and development (R&D) in earthquake engineering to improve building codes and standards for new and existing buildings and infrastructure lifelines, advance seismic-resistant construction practices, develop measurement and prediction tools supporting performance-based standards, and evaluate advanced technologies. Consistent with its broader research mission, NIST research focuses on removing technical barriers, evaluating advanced technologies, and enabling innovation and competitiveness in the U.S. design and construction industry. As lead agency, NIST provides the overall direction, coordination, and support of NEHRP joint activities. The NIST Director chairs the Interagency Coordinating Committee (ICC). The NEHRP Director, a NIST employee, directs the NEHRP Secretariat, chairs a working-level Program Coordination Working Group, and serves as NEHRP point of contact with non-government groups and interests." *Strategic Plan for the National Earthquake Hazards Reduction Program Fiscal Years 2008-2012* (Draft for Public Review and Comment). NEHRP, April 2008,

National Integration Center (NIC): "Homeland Security Presidential Directive-5 (HSPD-5) required the Secretary of Homeland Security to establish a mechanism for ensuring the ongoing management and maintenance of NIMS including regular consultation with other Federal departments and agencies, State, tribal, and local stakeholders, and with the private sector and NGOs. The NIC provides strategic direction, oversight, and coordination of NIMS and supports both routine maintenance and the continuous refinement of NIMS and its components. The NIC oversees and coordinates all aspects of NIMS, including the development of compliance criteria and implementation activities at Federal, State, tribal, and local levels. It provides guidance and support to jurisdictions and emergency management/response personnel and their affiliated organizations as they adopt or, consistent with their status, are encouraged to adopt the system. The NIC also oversees and coordinates the publication of NIMS and its related products. This oversight includes the review and certification of training courses and exercise information." (**FEMA**, *NIMS* (FEMA 501/Draft), 2007, p. 8)

National Integration Center (NIC): "Over the course of the last year, the National Integration Center (NIC) has made substantial progress in its mission to integrate FEMA's goals and objectives. More importantly, the NIC in conjunction with NPD is establishing its ability to provide high-quality support to the agency and the emergency response community at large."

National Integration Center (NIC) Mission: "The National Integration Center (NIC) is responsible for developing, managing, and coordinating all homeland security training, education (external), and exercise programs, as required, to ensure the Nation is prepared to prevent, protect against, respond to, recover from, and mitigate against all hazards, natural or manmade." (**FEMA**, *National Preparedness Directorate/National Integration Center (NPD-NIC)*, slide 1)

National Interagency Civil-Military Institute (NICI): The National Interagency Civil-Military Institute (NICI), San Luis Obispo, CA, is an educational institute—funded by the Department of Defense (DOD) through the National Guard Bureau—with the mission of improving the efficiency and effectiveness of joint civilian and military initiatives. To this end, it provides education to middle- and upper-level managers from the military, law enforcement agencies, emergency management and public safety organizations, and community groups.

National Interoperability Field Operations Guide (NIFOG): "The National Interoperability Field Operations Guide (NIFOG) is a collection of technical reference material for radio technicians responsible for radios that will be used in disaster response applications. The NIFOG includes information from the National Interoperability Frequency Guide (NIFG), the instructions for use of the NIFG, and other reference material; formatted as a pocket-sized guide for radio technicians to carry with them." (**DHS**, **NIFOG** (Version 1.0), September, 2007, p. 3)

National Joint Information Center (JIC) "A national JIC is established when an incident requires Federal coordination and is expected to be of long duration (weeks or months) or when the incident affects a large area of the country. A national JIC is staffed by numerous Federal departments and/or agencies. (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, p. 16)

National Joint Terrorism Task Force (NJTTF): "…we bring together people from every U.S. agency that collects and processes terrorist intelligence; we put them in one room and hook them into their own and into our FBI intelligence databases; and all of a sudden we have the universe of terrorist intelligence on the table--to share, to query, to coordinate, to answer questions, and to give direction and support to the 84 Joint Terrorism Task Forces (JTTFs) around the country that function under us. "Fusion" means that terrorist intelligence is instantly shared vertically from HQ to our JTTFs and horizontally to all NJTTF agencies." (**FBI**, *Meet the NJTTF*, July 2004)

National Levee Challenge: Levees and the FEMA Flood Map Modernization Initiative: "This report, prepared by the Interagency Levee Policy Review Committee, contains a series of recommended actions for the Federal Emergency Management Agency (FEMA) Mitigation Directorate to consider as a means of addressing the challenge of assessing the flood protection capabilities of levees and levee systems and accurately assessing the flood risk posed to citizens and property located behind those levees and levee systems. In this report, the Committee: examines and recommends changes to current FEMA levee policies, as stated in the National Flood Insurance Program regulations and FEMA guidance documents; identifies outreach and public awareness challenges related to the remapping of levee-affected areas and proposes approaches to deal with these challenges; and proposes cooperative development by FEMA and the U.S. Army Corps of Engineers of a Geographic Information System-based levee inventory." (**Interagency Levee Policy Review Committee**. *The National Levee Challenge: Levees and the FEMA Flood Map Modernization Initiative*, September 2006)

National Level Exercises (NLEs): NLEs reflect US government-wide priorities, rather than department or agency priorities or programs. Departmental and Agency exercise programs should fit into the NLE framework not the other way around.

National Levee Safety Program: "The Corps' Levee Safety Program emphasizes the role of levees in flood damage reduction to avoid loss of life and property damage. The program will help achieve three goals:
1) Reduce risk and increase public safety through an informed public, empowered to take responsibility for its safety;
2) Develop a clear national levee safety policy and standards; and
3) Maintain a sustainable flood damage reduction system that meets public safety needs.
(**USACE**, *Fact Sheet: National Levee Safety Program*. February 1, 2007, 1)

National Level Exercises (NLEs): (**FEMA**, *Statement of D. Schrader*, Oct. 3, 2007, 4)

National Logistics Coordination Forum: "This effort focuses on developing policy and operating doctrine for the national disaster logistics community in coordination with the Department of Defense (DoD) US Northern Command (USNORTHCOM). This will be a high level, transparent effort with participants including DoD, and other federal agencies, non-governmental organizations, the private sector, FEMA Regions and state and local governments. The National Logistics Coordination Forum will serve as an umbrella organization to discuss ongoing high level logistics challenges; integrated working groups will be formed to identify and develop solutions." (**FEMA**, *Logistics Management Directorate Fact Sheet*, 31Jan2008 mod.)

National Logistics Coordinator Concept: "This concept allows FEMA to tap into the resources of its partners, minimizing the need for FEMA to maintain large inventory levels of its own and thus minimizes the need to dispose of excess supplies." (**FEMA**, *Statements of William Eric Smith and Carlos J. Castillo,* July 31, 2008, p. 8)

National Military Command Center (NMCC): "The NMCC is the Nation's focal point for continuous monitoring and coordination of worldwide military operations. It directly supports combatant commanders, the Chairman of the Joint Chiefs of Staff, the Secretary of Defense, and the President in the command of U.S. Armed Forces in peacetime contingencies and war. Structured to support the President and Secretary of Defense effectively and efficiently, the Center participates in a wide variety of activities, ranging from missile warning and attack assessment to management of peacetime contingencies such as Defense Support of Civil Authorities (DSCA) activities. In conjunction with monitoring the current worldwide situation, the Center alerts the Joint Staff and other national agencies to developing crises and will initially coordinate any military response required." (**DHS**, *NRF*, 2008, 56)

National Military Strategy: "The National Military Strategy (NMS) supports the aims of the National Security Strategy (NSS) and implements the National Defense Strategy (NDS). It describes the Armed Forces' plan to achieve military objectives in the near term and provides the vision for ensuring they remain decisive in the future." (**DOD/JCS**, *The NMS of USA*, 2004, 1)

National Military Strategy of the USA in Relation to Domestic Consequence Management: "During emergencies the Armed Forces may provide military support to civil authorities in mitigating the consequences of an attack or other catastrophic event when the civilian responders are overwhelmed. Military responses under these conditions require a streamlined chain-of-

command that integrates the unique capabilities of active and reserve military components and civilian responders." (Cited in *JCS.DOD*, *CBRNE Consequence Management*, 2006, p. II-1)

National Mitigation Goal: In 1997 "FEMA established a National Mitigation Goal to be accomplished by the year 2010. The two components of the goal are (1) to substantially increase public awareness of natural hazard risk so that the public demands safer communities in which to live and work, and (2) to significantly reduce the risk of loss of life, injuries, economic costs, and destruction of natural and cultural resources that result from natural hazards. To meet the National Strategy Goal, FEMA set specific objectives for five major 'elements' of the Strategy:

- Hazard identification and risk assessment;
- Applied research and technology transfer;
- Public awareness, training, and education;
- Incentives and resources; and
- Leadership and coordination." (**FEMA**, *Multi Hazard Identification and Risk Assessment*, 1997, p. xxv) [Note: The National Mitigation Goal was discontinued shortly after FEMA was incorporated into the DHS.]

National Mitigation Strategy: "As a direct result of the disasters of the early 1990s, in particular the Midwest Floods of 1993, the U.S. Congress directed FEMA to place its highest priority on working with State and local agencies to mitigate the impacts of future natural hazard events. This marked a fundamental shift in policy: rather than placing primary emphasis on response and recovery, FEMA's focus broadened to incorporate mitigation as the foundation of emergency management…In keeping with congressional directive…FEMA…led the development of the National Mitigation Strategy. FEMA derived 10 fundamental principles for the framework and objectives of the National Mitigation Strategy.

1. Risk reduction measures ensure long-term economic success for the community as a whole rather than short-term benefits for special interests.
2. Risk reduction measures for one natural hazard must be compatible with risk reduction measures for other natural hazards.
3. Risk reduction measures must be evaluated to achieve the best mix for a given location.
4. Risk reduction measures for natural hazards must be compatible with risk reduction measures for technological hazards and vice versa.
5. All mitigation is local.
6. Disaster costs and the impacts of natural hazards can be reduced by emphasizing pro-active mitigation before emergency response; both pre-disaster (preventive) and post-disaster (corrective) mitigation is needed.
7. Hazard identification and risk assessment are the cornerstones of mitigation.
8. Building new Federal-State-local partnerships and public-private partnerships is the most effective means of implementing measures to reduce the impacts of natural hazards.
9. Those who knowingly choose to assume greater risk must accept responsibility for that choice.
10. Risk reduction measures for natural hazards must be compatible with the protection of natural and cultural resources." (**FEMA**, *Multi Hazard Identification and Risk Assessment: A Cornerstone of the National Mitigation Strategy*, 1997, pp. xxii and xxv)

[The National Mitigation Strategy was discontinued shortly after the incorporation of FEMA into the DHS]

National Mutual Aid and Resource Management Initiative: "The National Mutual Aid and Resource Management Initiative supports the National Incident Management System (NIMS) by establishing a comprehensive, integrated national mutual aid and resource management system that provides the basis to type, order, and track all (Federal, State, and local) response assets." (**FEMA**, *Resource Definitions: 120 Resources*, September 2004, p. 6)

National Nuclear Detection Policy: "It is the policy of the United States to continue to…

- Develop, deploy and enhance national nuclear and radiological detection capabilities to prevent illicit use of nuclear devices or materials
- Enhance the effective integration of nuclear and radiological detection capabilities across Federal, State, local and tribal governments, and the private sector, for a well-managed, coordinated response
- Advance the science of nuclear and radiological detection through an aggressive, evolutionary and transformational program of research and development in detection technologies." (**DHS/DNDO**, *DNDO Overview*, April 20, 2006, slide 5)

National Nuclear Security Administration (NNSA): "Established by Congress in 2000, NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science. NNSA maintains and enhances the safety, security, reliability and performance of the U.S. nuclear weapons stockpile without nuclear testing; works to reduce global danger from weapons of mass destruction; provides the U.S. Navy with safe and effective nuclear propulsion; and responds to nuclear and radiological emergencies in the United States and abroad." (**DOE**, *About NNSA*)

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): "…40 C.F.R. § 300 (2006), provides for the coordinated and integrated response by the Federal Government, as well as State and local governments, to prevent, minimize, or mitigate a threat to public health or welfare posed by discharges of oil and releases of hazardous substances, pollutants, and contaminants." (**DHS**, *National Response Framework List of Authorities and References* (Draft), September 10, 2007, p. 8)

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): Commonly referred to as the National Contingency Plan, or NCP. "The first National Contingency Plan was developed and published in 1968 in response to a massive oil spill from the oil tanker *Torrey Canyon* off the coast of England the year before…. To avoid the problems faced by response officials involved in this incident, U.S. officials developed a coordinated approach to cope with potential spills in U.S. waters. The 1968 plan provided the first comprehensive system of accident reporting, spill containment, and cleanup, and established a response headquarters, a national reaction team, and regional reaction teams… Congress has broadened the scope of the National Contingency Plan over the years. As required by the Clean Water Act of 1972, the NCP was revised the following year to include a framework for responding to hazardous substance spills as well as oil discharges. Following the passage of Superfund legislation in 1980, the NCP

was broadened to cover releases at hazardous waste sites requiring emergency removal actions. Over the years, additional revisions have been made to the NCP to keep pace with the enactment of legislation. The latest revisions to the NCP were finalized in 1994 to reflect the oil spill provisions of the Oil Pollution Act of 1990." (**EPA**, *Overview of the National Contingency Plan*. March 6, 2006 update)

National Operations Center (NOC). See Department of Homeland Security, NOC.

National Plan For Civil Defense Against Enemy Attack: A national plan for catastrophic disaster, preceding the National Catastrophic Earthquake Plan, the Federal Response Plan, National Response Plan, and National Response Framework. "Expansion of the Federal part of the *National Plan For Civil Defense Against Enemy Attack* was begun with particular emphasis on use of Federal resources and incorporation of the principles of *Basic Responsibililities Paper* [outlined roles of DOD, ODM, and FCDA in national emergency] as the basis for a Federal operations plan." (**FCDA**, *1957 Annual Report*, 1958, p. 1)

National Plan For Civil Defense and Defense Mobilization (1958): Replaced the National Plan for Civil Defense and was promulgated by President Eisenhower in October 1958. "The National Plan established nonmilitary courses of action to deter aggression, and in the event of aggression, to enable the Nation to survive, recover, and win. It defined the role required of the Federal Government, the States and their political subdivisions, and of families and individuals to attain this objective…. The 40 elements of the National Plan are being implemented by developing appropriate operational annexes providing for its detailed application by governments, families, and individuals. Some annexes have been completed and are in effect, e.g., Planning Basis, Individual Actin, Organization for Civil Defense Mobilization, National Shelter Plan, Role of the Military, Preparations for Continuity of Government, and Disaster Services. The remaining annexes are in the final stages of development." (**OCDM**, *Annual Report 1959*, 3)

"The National Plan states that the Federal Government will continuously assess the ability of the national economy to meet all mobilization and civil defense requirements, aned will develop programs for the emergency control of the economy." (Ibid, p. 35)

"The National Plan for Civil Defense and Defense Mobilization – With its supporting annexes, the National Plan has guided the coordinated planning by governments at all levels, industry, families and individuals. Each State, 240 metropolitan areas within the States, and approximately 50 percent of the counties have plans supporting it." (**OCDM**, *Annual Report 1960*, 1)

National Plan For Civil Defense and Defense Mobilization Annexes:

- Annex 1 – Planning Basis (OCDM, *National Plan*, 1958, p. vii)
- Annex 2 – Individual Action (Ibid)
- Annex 3 – Organization for Civil Defense and Defense Mobilization (Ibid)
- Annex 4 – Authorities for Civil Defense and Defense Mobilization (Ibid)
- Annex 5 – Federal Delegations and Assignments (Ibid)
- Annex 6 – Federal Emergency Plans and Procedures ((OCDM, *Annual Report 1961*, 5)

- Annex 7 – Role of the Military (OCDM, *National Plan*, 1958, p. vii)
- Annex 8 – Preparations for Continuity of Government (Ibid)
- Annex 9 – Public Information (Ibid)
- Annex 10 – National Shelter Plan (Ibid)
- Annex 11 – Protection of Essential Facilities (Ibid)
- Annex 12 – Controlled Movement [Later changed to "Directed"] (Ibid)
- Annex 13 – Warning (Ibid)
- Annex 14 – Damage Assessment (Ibid)
- Annex 15 – Communications (OCDM, *Annual Report 1960*, p. 44)
- Annex 16 – Maintenace of Law and Order (Ibid)
- Annex 17 – Disaster Services (Ibid)
- Annex 18 – National Health Plan (OCDM, *Annual Report 1960*, p. 26)
- Annex 19 – Emergency Welfare Annex (OCDM, *Annual Report 1961*, 28)
- Annex 20 – Registration and Information (OCDM, *National Plan*, 1958, p. vii)
- Annex 21 – National Fire Protection [Defense] Plan (OCDM, *Annual Report 1961*, 31)
- Annex 22 – Clandestine and Unexploded Ordnance Defense (OCDM, *National Plan*, 1959, vii)
- Annex 23 – National Radiological Defense Plan (OCDM, *Annual Report 1961*, 39)
- Annex 24 – National Biological and Chemical Warfare Defense Plan (OCDM, *Annual Report 1961*, 42)
- Annex 25 – Management of Essential Resources (OCDM, *National Plan*, 1959, vii)
- Annex 26 – Protection and Continuity of the National Industrial Plant. (Ibid)
- Annex 27 – Emergency Economic Stabilization Plan (OCDM, *Annual Report 1960*, 43)
- Annex 28 – Management of Emergency Production. (OCDM, *National Plan*, p. vii)
- Annex 29 – Emergency Distribution and Consumption Controls. (Ibid)
- Annex 30 – National Manpower Plan (OCDM, *Annual Report 1959*, 37)
- Annex 31 – National Food Plan (OCDM, *Annual Report 1959*, 31)
- Annex 32 – National Water Plan (OCDM, *Annual Report 1960*, p. 39)
- Annex 33 – National Energy and Minerals Plan (OCDM, *Annual Report 1959*, 38)
- Annex 34 – National Transportation Plan (OCDM, *Annual Report 1959*, 40)
- Annex 35 – Emergency Administration of Essential Facililties (OCDM, *National Plan*, vii)
- Annex 36 – Research and Development. (Ibid)
- Annex 37 – Training and Education (Ibid)
- Annex 38 – Federal Assistance (Ibid)
- Annex 39 – Review, Tests and Inspection (Ibid)
- Annex 40 – Natural Disaster Manual (Ibid)
- Annex 41 – Summary of Annexes (Ibid)
- Annex 42 – National Emergency Housing Plan (OCDM, *Annual Report 1960*, p. 42)

National Plan For Civil Defense and Defense Mobilization Appendixes:

- Procedures for Warning Points (NP-13-1)
- Frequency Allocation Plan for RACES (NP-15-1)
- Preparation for Explosive Ordnance Reconnaisance (NP-22-1)

- Health Manpower (NP-18-1)
- Radiological Defense Requirements for Monitoring Stations and Personnel (NP-23-1)
- Guidance on Priority Emergency Use of Resources (NP-25-1)

National Plan for Telecommunications Support in Non-Wartime Emergencies: "The National Plan for Telecommunications Support in Non-Wartime Emergencies provides procedures for planning and using National telecommunications assets and resources in support of non-wartime emergencies, including those covered by the Disaster Relief Act of 1974, in Presidentially declared Emergencies and Major Disasters, Extraordinary Situations, and other emergencies." (**47 CFR Ch. II (10–1–05 Edition,** at 202.1)

National Plan Review: (See "Nationwide Plan Review")

National Planning and Execution System (NPES): "Effective planning is the '*center of gravity*' for executing a coordinated Federal response to a national domestic incident. Homeland Security Presidential Directive (HSPD)-5, directed the development of a National Incident Management System (NIMS) and a National Response Plan (NRP) to align Federal coordination structures, capabilities, and resources into a unified, all-discipline, and all-hazards approach to domestic incident management. Subsequently, the Homeland Security Council published *The Federal Response to Hurricane Katrina: Lessons Learned* in February 2006.[89] This publication provided a series of recommendations, including the requirement to develop and resource a national planning and execution system. The Department of Homeland Security National Planning and Execution System (NPES) is the first step toward satisfying that requirement."[90]

"The NPES is similar to the Department of Defense (DOD) Joint Operations Planning and Execution System (JOPES) and emerging Adaptive Planning Process (AP). It is designed to facilitate intra-Departmental and interagency planning to support current and emerging DHS mission requirements. (**DHS**, 2007)

[Note: By early January 2008 the NPES had morphed into the IPS (Integrated Planning System)]

National Planning and Execution System (NPES): "The second recommendation [White House Katrina lessons learned report] identified the need for a federal planning process to unify the planning efforts that occur across the interagency. DHS addressed this recommendation through its development of the National Planning and Execution System (NPES) which is a formal curriculum based planning process used by the IMPT to build interagency contingency plans. OPS leadership recognized that the success or failure of the IMPT would hinge largely on its ability to develop a planning process that could coordinate the efforts of this interagency group and facilitate the development of a shared planning culture across the federal government. Prior to NPES, few federal departments and agencies adhered to a formal planning process that

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[89] P. 89, White House. *The Federal Response to Hurricane Katrina – Lessons Learned*. Washington, DC: The White House, Townsend, Francis Fragos, Assistant to the President for Homeland Security and Counterterrorism, February. 2006. At: http://www.whitehouse.gov/reports/katrina-lessons-learned/

[90] According to a November 29, 2007 "Interagency Planning Workshop" slide presentation (#16) the Incident Management Planning Team "publishes" the NPES in September 2006.

organized the operational planning efforts within their respective departments. To achieve this goal, OPS created NPES, which integrates current and emerging interagency planning "best practices," is consistent with the NRP, and adheres to the core concepts and terminology addressed in NIMS. (**DHS**, *Statement of Frank DiFalco, Director of the National Operations Center, OOC*, June 20, 2007, pp. 5-6)

National Planning and Execution System (NPES): NPES "…is a five phase National level planning process developed to support the Secretary of Homeland Security in his role as the principal Federal official for domestic incident management." (DHS, *Statement of Roger Rufe, Director of the Office of Operations Coordination*, September 11, 2007, p. 5)

National Planning and Execution System (NPES): "DHS addressed the need for a federal planning process through its development of the National Planning and Execution System (NPES) – a formal curriculum-based process used by the IMPT [Interagency Incident Management Planning Team, DHS] to build its national level interagency contingency plans. DHS leadership recognized that the success or failure of the IMPT would hinge largely on its ability to develop a planning process that could coordinate the efforts of this interagency group and facilitate the development of a shared planning methodology across the federal government. In order to achieve this goal, the planning process development team within OPS [Office of Operations Coordination, DHS] sought to develop a process that was consistent with the core concepts and terminology established in the National Incident Management System (NIMS) and the National Response Plan (NRP). In addition, DHS OPS personnel recognized that the planning process they developed would be most effective if it integrated current and emerging planning 'best practices.' This effort required synchronization with our partners at DoD.

"Prior to the development of NPES, few federal departments and agencies adhered to a formal planning process that organized the operational planning efforts within their respective departments. One significant exception was DoD, which had long used formal planning processes to conduct operations within the branches of the military. For that reason, NPES was designed to be specifically compatible with the Joint Planning and Execution System (JOPES) that DoD uses to create military plans for circumstances requiring different branches of the Armed Forces to conduct joint operations.

"NPES was converted to a curriculum that was taught to each member of the IMPT. The feedback from this training has been overwhelmingly positive and has resulted in numerous requests by interagency members that OPS offer this training to others within their departments and agencies. In addition, many State and local governments have requested copies of the NPES and related training. As a result of this response, DHS has actively engaged in promoting and sharing NPES throughout the interagency. Over the past 10 months, the IMPT has trained over 500 interagency planners on the NPES process… The DHS Office of the Chief Learning Officer and the Center for Domestic Preparedness are currently working with the IMPT to develop an accredited NPES Program of Instruction. By formalizing the instruction and subsequently offering it at various accredited institutions, the NPES training will become available to a greater number of planners, thereby advancing its adoption throughout the interagency. DoD has been a particularly vocal supporter of DHS's effort to develop NPES as a means to advance a shared planning culture throughout the interagency. Indicative of this support are efforts by DHS's

Chief Learning Officer and DoD's National Defense University to offer an NPES course to military personnel through DoD's vast university network." (**DHS**, *Statement of Rufe*, 2007)

National Planning and Execution System Planning Process: NPES uses the Incident Decision Making Process (IDMP), a five phase – nine step process:

- Phase 1 – Understand the Situation
  - Step 1: Mission Identification
    - Staff Alert Notification; Staff Preparation; Initial Mission Assessment
    - Issue Initial Planning Guidance; Issue Alert Notification
- Phase 2 – Determine Objectives and Strategies
  - Step 2: Mission Analysis
    - Analyze Higher Echelon Guidance/Direction
    - Conduct Information Preparation of the Incident
    - Determine Specified, Implied, and Essential tasks; Review Available Assets
    - Determine Constraints; Identify Critical Facts and Assumptions
    - Conduct Risk Assessment
    - Determine Initial Senior Leader's Critical Information Requirements (CIRs)
    - Determine Initial Reconnaissance Requirements; Plan Use of Available Time
    - Write the restated mission; Conduct the Mission Analysis Briefing
    - Approve the Restated Mission; Issue the Senior Leader's Intent
    - Issue the Senior Leader's Guidance (COA/Priority, CIRs, Recon, Risk, & LE)
    - Issue a Planning Order; Review Facts and Assumptions
  - Step 3: Course of Action Development
    - Analyze Threat/Friendly Capabilities; Generate Options
    - Array Incident Response Capabilities; Develop Sequence of Response
    - Task Organize Capabilities (Resources); Prepare COA Statement & Sketches
- Phase 3 – Plan Development
  - Step 4: Course of Action Analysis (War-game)
    - Gather the Tools; List all Friendly Forces; List Assumptions
    - List Known Critical Events and Decision Points
    - Determine Evaluation Criteria; Select War-game Method (four basic types)
    - Select Method to Record & Display Results
    - War-game COA and Display Results -- IMPT members utilize 'Action-Reaction-Counteraction' cycle for each sequence
  - Step 5: Course of Action Comparison
    - Staff Analysis; Incident COA Decision Matrix;
    - Incident COA Decision Briefing
  - Step 6: Course of Action Approval
    - Senior leader approves COA, directs publication of plan, or directs staff to start over -- Product: Synchronization Matrix
    - After senior leader approval – the designated planning lead will organize the staff to publish the order -- Draft CONPLAN or OPLAN; Planning Order
- Phase 4 – Plan Preparation
  - Step 7: Plans and Orders Preparation
    - Senior Leader Review of Plan; DHS Component Confirmation Briefings

    - Step 8: Rehearsal/Training
        - Organization conducts rehearsal of CONPLAN or OPLAN
- Phase 5 – Plan Refinement
    - Step 9: Plan Refinement/Revision
        - Execution – When Directed or Periodic Update; Assessment

(**DHS**, *Interagency Planning Workshop*, November 29, 2007, slides 4, 8, 34-42)

National Planning Scenario: 'The term 'National Planning Scenario' means an event or threat scenario appropriate for national planning by and among all levels and jurisdictions of government, and in coordination with private, non-profit, and volunteer organizations." (**White House**, *Annex I "National Planning" to HSPD-8*, December 2007, p. 1)

National Planning Scenarios (15): "The Federal interagency community has developed 15 all-hazards planning scenarios (the National Planning Scenarios or Scenarios) for use in national, Federal, State, and local homeland security preparedness activities. The Scenarios are planning tools and are representative of the range of potential terrorist attacks and natural disasters and the related impacts that face our nation. The objective was to develop a *minimum number* of *credible* scenarios in order to establish the *range of response requirements* to facilitate preparedness planning." (**White House**, *National Planning Scenarios* (21.3 Final Draft), March 2006, p. ii)

National Planning Scenarios (15): "While preparedness applies across the all-hazards spectrum, the 2002 National Strategy for Homeland Security attaches special emphasis to preparing for catastrophic threats with "the greatest risk of mass casualties, massive property loss, and immense social disruption." To illustrate the potential scope, magnitude, and complexity of a range of major events, the Homeland Security Council—in partnership with the Department of Homeland Security (DHS), other Federal departments and agencies, and State, local, tribal, and territorial governments—developed the National Planning Scenarios. The 15 Scenarios include terrorist attacks, major disasters, and other emergencies…. Planners are not precluded from developing their own scenarios to supplement the National Planning Scenarios." (**DHS**, *National Preparedness Guidelines, Appendix B*, 2007, p. 31)

National Planning Scenarios (15): (**DHS,** *National Preparedness Guidelines, Appendix* B, 2007, p. 31)

Improvised Nuclear Devise	Aerosol Anthrax	Pandemic Influenza
Toxic Industrial Chemicals	Blister Agent	Chlorine Tank Explosion
Radiological Dispersal Device	Nerve Agent	Improvised Explosive Device
Foreign Animal Disease	Food Contamination	Cyber attack
Plague	Major Hurricane	Major Earthquake

National Planning Scenarios (Sets):

1) **Explosives Attack**
2) **Nuclear Attack**
3) **Radiological Attack**
4) **Biological Attack**
5) **Chemical Attack**

6) **Natural Disaster**
7) **Cyber Attack**
8) **Pandemic Influenza** (**DHS**, *NRF*, 2008, 75)

National Planning Scenarios (15): "The *15 National Planning Scenarios*…collectively depict a diverse set of high-consequence threat scenarios regarding both potential terrorist attacks and natural disasters. Collectively, these scenarios are designed to focus contingency planning for homeland security preparedness work at all levels of government and with the private sector. The 15 scenarios form the basis for coordinated Federal planning, training and exercises." (**DHS**, *National Response Framework Comment Draft*, 2007, p. 58)

National Planning Scenarios (15): "…the Federal planning structure calls for three types of plans for each of the 15 National Planning Scenarios: (1) a *DHS Strategic Guidance Statement* and *Strategic Capabilities Plan* that together define the broad national priorities and capabilities required to prevent, protect against, respond to and recover from domestic incidents; (2) a *National-Level Interagency Concept Plan* (CONPLAN) that integrates the operational activities of the Federal interagency into a single strategic scenario plan to achieve the objectives described in the strategic guidance statement and strategic capabilities plan; and (3) *Federal Department and Agency Operations Plans* (OPLANs) developed by and for each Federal department or agency depicting specifically how the organization will fulfill the requirements of the pertinent CONPLAN." (**DHS**, *National Response Framework Draft*, 2007, 71; **DHS**, *NRF*, 2008, 73))

National Planning Scenarios: "**The National Planning Scenarios are the focus of Federal planning efforts.** They represent examples of the gravest dangers facing the United States **and have been accorded the highest priority for Federal planning**." (**DHS**, *NRF*, 2008, 73; emphasis in original)

National Planning Scenarios: "**SEC. 645. NATIONAL PLANNING SCENARIOS.** (a) IN GENERAL.—The Administrator, in coordination with the heads of appropriate Federal agencies and the National Advisory Council, may develop planning scenarios to reflect the relative risk requirements presented by all hazards, including natural disasters, acts of terrorism, and other man-made disasters, in order to provide the foundation for the flexible and adaptive development of target capabilities and the identification of target capability levels to meet the national preparedness goal. (b) DEVELOPMENT.—In developing, revising, and replacing national planning scenarios, the Administrator shall ensure that the scenarios— (1) reflect the relative risk of all hazards and illustrate the potential scope, magnitude, and complexity of a broad range of representative hazards; and (2) provide the minimum number of representative scenarios necessary to identify and define the tasks and target capabilities required to respond to all hazards." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1425)

National Policy on Shelters (1958): "A 5-point National Policy on Shelters was announced by the Administrator on May 7, 1958. The policy, which directly supported the Radiological Defense Porgram, placed joint responsibility for fallout protection on the Federal Government and the American people. The policy was based on the recognitionn that, in the event of nuclear attack, 'fallout shelters offer the best single nonmilitary defense measure for the protection of the greatest number of our people." (**FCDA**, *Annual Report 1958*, p. 7)

National Preparedness: "National Preparedness involves a continuous cycle of activity to develop the elements (e.g., plans, procedures, policies, training, and equipment) necessary to maximize the capability to prevent, protect against, respond to, and recover from domestic incidents, especially major events that require coordination among an appropriate combination of Federal, State, local, tribal, private sector, and non-governmental entities, in order to minimize the impact on lives, property, and the economy." (**DHS**, *Interim National Preparedness Goal -- Homeland Security Presidential Directive 8: "National Preparedness."* March 2005)

National Preparedness and Response Authority: The entity Senators Collins and Lieberman proposed in 2006 to replace FEMA within DHS through combining FEMA response responsibilities with the preparedness responsibilities removed from FEMA in 2005. (**Collins**, "Opening Statement, Hearing on 'National Emergency Management: Where Does FEMA Belong?'" 8 June 2006, p. 2)

National Preparedness Architecture: "A great deal has been accomplished in developing a rigorous national preparedness architecture that enables all levels of government to successfully plan for response operations. These efforts have yielded

- the *National Preparedness Guidelines*;
- the *National Infrastructure Protection Plan (NIPP)* and 17 sector-specific plans to protect critical infrastructure;
- the *National Incident Management System (NIMS)*;
- National Continuity policies and directives;
- a coordinated National Exercise Schedule; and
- support through an extensive portfolio of grant programs." (**DHS**, *NRF*, 2008, 72)

National Preparedness Framework Four Mission Areas: "The Goal [NPG] provides a common framework for a systems-based approach to build, sustain and improve national preparedness for a broad range of threats and hazards. The Goal and other source documents define the mission areas of this framework as follows:

> **Prevent:** Actions to avoid an incident or to intervene or stop an incident from occurring. Prevention involves actions taken to protect lives and property. It involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice (Source—NIMS, March 2004).
>
> **Protect:** Actions to reduce the vulnerability of critical infrastructure or key resources in order to deter, mitigate, or neutralize terrorist attacks, major disasters, and other emergencies (Source—HSPD 7, December 2003). It requires coordinated action on the part of federal, state, and local governments; the private

sector; and concerned citizens across the country. Protection also includes: continuity of government and operations planning; awareness elevation and understanding of threats and vulnerabilities to their critical facilities, systems, and functions; identification and promotion of effective sector-specific protection practices and methodologies; and expansion of voluntary security-related information sharing among private entities within the sector, as well as between government and private entities. (Source – The National Strategy For The Physical Protection of Critical Infrastructures and Key Assets, February 2003)

Respond: Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice (Source—NIMS, March 2004).

Recover: Activities that include the development, coordination, and execution of service- and site-restoration plans; the reconstitution of government operations and services; individual, private- sector, nongovernmental, and public-assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental, and economic restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents (Source—NIMS, March 2004)." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidelines on Aligning Strategies with the NPG*, 2005, pp. 3-4)

National Preparedness Goal (NPG): The President directed the development of a National Preparedness Goal (or Goal) in Homeland Security Presidential Directive (HSPD)-8. The Goal reorients how the Federal government proposes to strengthen the preparedness of the United States to prevent, protect against, respond to, and recover from terrorist attacks, major disasters, and other emergencies. The Goal establishes a vision, capabilities, and priorities for national preparedness. It should be utilized in conjunction with the three capabilities-based planning tools referenced in the Goal: the National Planning Scenarios, Universal Task List (UTL), and Target Capabilities List (TCL). Collectively, they identify key requirements that can help guide domestic all-hazards preparedness efforts. (**DHS**, *NPG*, December 2005 Draft, Preface)

National Preparedness Goal (NPG): "A requirement of HSPD-8 to define "standards for preparedness assessments and strategies, and a system for assessing the Nation's overall preparedness to respond to major events, especially those involving acts of terrorism." The Goal establishes measurable priorities, targets, and a common approach to developing needed capabilities. The Goal includes seven priorities for national preparedness: two overarching

priorities and five priorities to build specific capabilities. The overarching priorities of the National Preparedness Goal are to:

Implement the National Incident Management System and National Response Plan
Expand regional collaboration, and
Implement the Interim National Infrastructure Protection Plan.

The priorities for specific capabilities are to:

Strengthen information sharing and collaboration capabilities;
Strengthen interoperable communications capabilities;
Strengthen chemical, biological, radiation, nuclear, and explosive weapons (CBRNE) detection, response, and decontamination capabilities; and
Strengthen medical surge and mass prophylaxis capabilities."
(**HSC**, *NCPIP*, 2007, 66; See also, **DHS**, *Interim NPG*, 2005)

National Preparedness Goal Vision: "To engage Federal, State, local, and tribal entities, their private and non-governmental partners, and the general public to achieve and sustain risk-based target levels of capability to prevent, protect against, respond to, and recover from major events in order to minimize the impact on lives, property, and the economy." (**DHS**, *NPG*, December 2005 Draft, p. 1)

National Preparedness Goal – Change to National Preparedness Guidelines: "*Has the National Preparedness Goal been changed to the National Preparedness Guidelines?*
Yes. This is a change in title is intended to more accurately describe this important guidance. The National Preparedness Guidelines, released in September 2007, support the requirements of Homeland Security Presidential Directive - 8 and replace the interim National Preparedness Goal. The Guidelines maintain the following preparedness tools: 1) National Preparedness Vision; 2) National Planning Scenarios; 3) Universal Task List; and 4) Target Capabilities List." (**DHS**, *NRF FAQs*, Jan 2008, 6)

National Preparedness Guidelines: "The National Preparedness Guidelines (*Guidelines*) are formally established upon issuance and supersede the Interim National Preparedness Goal issued on March 31, 2005. The *Guidelines* provide an overarching vision, tools, and priorities to shape national preparedness. The *Guidelines* do not include an implementation plan; implementation will occur over time through a wide range of Federal, State, local, tribal, and territorial preparedness programs and activities. For example, Federal program offices will develop detailed plans that describe how their programs support *Guidelines* implementation in consultation with their stakeholders. Those details must be reflected in annual program guidance, in the form of measurable objectives and requirements. DHS will monitor those efforts and advise program offices and DHS leadership on progress and opportunities to improve synchronization. Implementation and feedback will inform future refinement of the *Guidelines*." (**DHS**, *National Preparedness Guidelines, Appendix A, Letter of Instruction*, p. 25)

National Preparedness Guidelines, Four Critical Elements: "The *National Preparedness Guidelines* package…is comprised of four critical elements:

• The ***National Preparedness Vision***, which provides a concise statement of the core preparedness goal for the nation.

• The ***15 National Planning Scenarios***, which collectively depict a diverse set of high-consequence threat scenarios regarding both potential terrorist attacks and natural disasters. Collectively, these scenarios are designed to focus contingency planning for homeland security preparedness work at all levels of government and with the private sector. The 15 scenarios form the basis for coordinated Federal planning, training and exercises.

• The ***Universal Task List***, which is a menu of some 1,600 unique tasks that can facilitate efforts to prevent, protect against, respond to and recover from the major events that are represented by the National Planning Scenarios. It presents a common vocabulary and identifies key tasks that support development of essential capabilities among organizations at all levels. Of course, no entity will perform every task. Instead, this task list was used to assist in creating the Target Capabilities List. It is included in the *Guidelines* package as a reference for interested jurisdictions.

• The ***Target Capabilities List***, which defines 37 specific capabilities that communities, the private sector and all levels of government should possess in order to respond effectively to disasters." (**DHS**, *NRF Comment Draft*, 2007, p. 68; note that *2008 NRF* drops specified numbers such as 15 scenarios, 1,600 tasks, and 37 TCL capabilities (72))

National Preparedness Guidelines, Lead Agency Implementation Requirements: "The National Preparedness Guidelines (*Guidelines*) are formally established upon issuance and supersede the Interim National Preparedness Goal issued on March 31, 2005. The *Guidelines* provide an overarching vision, tools, and priorities to shape national preparedness. The *Guidelines* do not include an implementation plan; implementation will occur over time through a wide range of Federal, State, local, tribal, and territorial preparedness programs and activities. For example, Federal program offices will develop detailed plans that describe how their programs support *Guidelines* implementation in consultation with their stakeholders. Those details must be reflected in annual program guidance, in the form of measurable objectives and requirements. DHS will monitor those efforts and advise program offices and DHS leadership on progress and opportunities to improve synchronization. Implementation and feedback will inform future refinement of the *Guidelines*." (**DHS**, *National Preparedness Guidelines, Appendix A, Letter of Instruction*, 2007, pp. 25-26)

National Preparedness Guidelines, Purposes:

- "Organize and synchronize national (including Federal, State, local, tribal, and territorial) efforts to strengthen national preparedness;
- Guide national investments in national preparedness;
- Incorporate lessons learned from past disasters into national preparedness priorities;
- Facilitate a capability-based and risk-based investment planning process; and
  Establish readiness metrics to measure progress and a system for assessing the Nation's overall preparedness capability to respond to major events, especially those involving acts of terrorism. (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p.1)

National Preparedness Guidelines Vision: "The vision for the *National Preparedness Guidelines* is:

> **A NATION PREPARED with coordinated capabilities to prevent, protect against, respond to, and recover from all hazards in a way that balances risk with resources and need.**

This vision is far-reaching. It recognizes that preparedness requires a coordinated national effort involving every level of government, as well as the private sector, nongovernmental organizations, and individual citizens. It addresses capabilities-based preparedness for the full range of homeland security missions, from prevention through recovery. States, communities, and the Federal Government have worked together for decades to manage natural disasters and technological emergencies, particularly with regard to response and recovery. However, they have far less experience with terrorist attacks, particularly with regard to prevention and protection. The *Guidelines* address all hazards and place heavy emphasis on events at the catastrophic end of the risk continuum, especially terrorist attacks, which would require rapid

> and coordinated national action. The vision acknowledges that the Nation cannot achieve total preparedness for every possible contingency and that no two jurisdictions possess identical capability needs. We must weigh the relative risk of catastrophic events when determining the resources available to address each contingency and the unique needs of each community, determine how to best address needs in light of the risks, and thereby achieve optimal and reasonable levels of preparedness." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p.1-2)

National Preparedness Integration Program (NPIP): "Through the NPIP, FEMA will integrate and synchronize strategic tools, including the National Incident Management System, National Response Plan, National Infrastructure Plan and the National Preparedness Goal into a national operational capability. The NPIP will ensure development of preparedness processes that foster harmonized day-to-day routine interaction of disciplines, organizations, levels of government and our citizens. NPIP's capability requires partnerships at the headquarters level, among those in the field and on the front line." (**FEMA**, *Vision for New FEMA*, 12Dec06, p. 24)

National Preparedness Network (PREPnet): "The Preparedness Network (PREPnet) is a satellite-based distance learning system used by…[FEMA/National Emergency Training Center] to bring interactive training programs into virtually any community nationwide." (**FEMA,** *About the National Preparedness Network*)

National Preparedness Planning, Standardized Process: "It is the policy of the United States Government to enhance the preparedness of the Nation by developing and maintaining a standardized approach to national planning to integrate and effect policy and operationalized objectives to prevent, protect against, respond to, and recover from all hazards, and comprises: (a) a standardized Federal planning process; (b) national planning doctrine; (c) resourced operational and tactical planning capabilities at each Federal department and agency with a role in homeland security; (d) strategic guidance, strategic plans, concepts of operations, and

operations plans and as appropriate, tactical plans; and (e) a system for integrating plans among all levels of government." (**White House**, *Annex I "National Planning" to HSPD-8*, 2007, p. 2)

National Preparedness Priorities (Eight) and Associated Capabilities:

National Priority	Associated Capabilities
Expand Regional Collaboration	Multiple capabilities
Implement the National Incident Management System and National Response Plan	Multiple capabilities
Implement the National Infrastructure Protection Plan	Multiple capabilities
Strengthen Information Sharing and Collaboration Capabilities	Intelligence/Information Sharing and Dissemination Counter-Terror Investigations and Law Enforcement
Strengthen Interoperable and Operable Communications Capabilities	Communications Emergency Public Information and Warning
Strengthen CBRNE Detection, Response, and Decontamination Capabilities	CBRNE Detection Explosive Device Response Operations WMD/Hazardous Materials Response and Decontamination
Strengthen Medical Surge and Mass Prophylaxis Capabilities	Medical Surge Mass Prophylaxis
Strengthen Planning and Citizen Preparedness Capabilities	Planning Citizen Evacuation and Shelter-in-Place Mass Care (Sheltering, Feeding, and Related Services) Community Preparedness and Participation

(**DHS**, *National Preparedness Guidelines*, September 2007, p. 11)

National Preparedness System (NPS): "Implementing a common, shared approach to achieving National preparedness requires the Nation to align its programs and efforts in support of the Goal [NPG]. Alignment can best be achieved through the application of a systems-based approach, utilizing capabilities based planning as a common, all-hazard, major events planning process. This will support the establishment of a true National Preparedness System, which will provide a mechanism for measuring preparedness and informing future preparedness investments.

"The National Preparedness System is a system of systems. As stated in the National Preparedness Goal, "a system is a combination of facilities, equipment, personnel, procedures, and communications integrated into a common organizational structure to achieve a mission or outcome." Many processes, programs, and capabilities already in place within State, local, tribal, and private sector homeland security programs and across disciplines will support the National

Preparedness System. The emerging National Preparedness System provides a way to enhance these existing resources by networking them together more effectively.

"The National Preparedness System provides a means for the Nation to answer three fundamental questions: "*How prepared do we need to be*?", "*How prepared are we*?", and "*How do we prioritize efforts to close the gap*?" The system helps enable all levels of government to collaborate seamlessly in order to identify critical gaps and deficiencies, develop strategies to address those gaps and deficiencies, track and report on progress toward resolution, and aggregate this information to better understand our level of preparedness nationally. The system also helps enable leaders at all levels to allocate resources systematically to close capability gaps, thereby enhancing the effectiveness of preparedness efforts.

"The implications of moving to an integrated and adaptive National Preparedness System are significant. This shift will require organizational and operational change across agencies, disciplines and jurisdictions – and across State lines. Mutual aid agreements, inter-organizational linkages, information sharing, and collaboration become critical elements of the new homeland security landscape." (**DHS/ODP**, 2005, *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, p. 5)

National Preparedness System (NPS): "The National Preparedness System provides a way to organize preparedness activities and programs pursuant to the *National Preparedness Guidelines*…The desired end-state of our National Preparedness System is to achieve and sustain coordinated capabilities to prevent, protect against, respond to, and recover from all hazards in a way that balances risk with resources…. The National Preparedness System provides opportunities for all levels of government, the private sector, nongovernmental organizations, and individual citizens to work together to achieve priorities and capabilities outlined in the *Guidelines*." (**DHS**, 2007, *National Preparedness Guidelines*, p.22)

National Preparedness System (NPS): "DHS will coordinate the establishment of a national-level structure and process for the ongoing management and maintenance of the *Guidelines*. This will be closely coordinated with similar structures and processes for the NIMS, NRP, NIPP, and other elements of the National Preparedness System in order to help ensure national policy and planning for operations and preparedness are mutually supportive.

DHS is committed to working with its homeland security partners in updating and maintaining the *Guidelines* and related documents as part of a unified National Preparedness System, which will help ensure coordinated strategies, plans, procedures, policies, training, and capabilities at all levels of government. Implementation of the National Preparedness System is well under way. It is building on assessments of risk, development of management policies and strategies, identification of specific missions and supporting tasks in comprehensive plans, and matching of capabilities against requirements to execute these policies, strategies, and plans. Federal, State, local, tribal, and territorial governments will participate in assessments of readiness on a regular basis. The National Preparedness System will emphasize feedback and periodic reassessment to ensure the current state of preparedness is based on readiness metrics and is used as the basis for policy and programmatic decisions." (**DHS**, 2007, *National Preparedness Guidelines*, p.23)

National Preparedness System (NPS): "The National Preparedness System (NPS) provides a tool to assist jurisdictions, agencies, and organizations at all levels to plan for, assess, and track capabilities in a shared environment. It integrates various efforts to provide the comprehensive picture of preparedness and progress toward achieving the Goal [National Preparedness Goal]. (**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 3)

National Preparedness System (NPS): "A prototype is under development to meet requirements identified in HSPD-8 and Post-Katrina Emergency Management Reform Act (PKEMRA) by:

- Supporting capabilities-based planning and assessment
- Facilitating intergovernmental, inter-jurisdictional, interdisciplinary, and public/private sector coordination
- Providing a comprehensive picture of National preparedness
- Creating a tool to meet Federal and State reporting requirements established by HSPD-8 and PKEMRA. (**FEMA**, *NPS: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 18)

National Preparedness System (NPS): "The President, acting through the [FEMA] Administrator, shall develop a national preparedness system to enable the Nation to meet the national preparedness goal. (b) COMPONENTS.—The national preparedness system shall include the following components:
(1) Target capabilities and preparedness priorities.
(2) Equipment and training standards.
(3) Training and exercises.
(4) Comprehensive assessment system.
(5) Remedial action management program.
(6) Federal response capability inventory.
(7) Reporting requirements.
(8) Federal preparedness." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1425)

National Preparedness System (NPS) Building Blocks:

- National Planning Scenarios
- Universal Task List (UTL)
- Target Capabilities List (TCL)
- Seven National Priorities. (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, 2005, p. 2)

National Preparedness System Purpose: "The National Preparedness System (NPS) is being developed as a tool that:

- Supports capabilities-based planning and assessment
- Uses the Target Capabilities List (TCL) as the basis for planning and assessment

- Facilitates intergovernmental, interjurisdictional, interdisciplinary, and public/private sector coordination
- Addresses multiple reporting requirements
- Provides a comprehensive picture of National preparedness." (**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 13)

National Preparedness System Requirements:

- HSPD-8 and Post Katrina Emergency Management Reform Act (PKEMRA) require a comprehensive system to assess, on an on-going basis, the Nation's capabilities and overall preparedness, including operational readiness.

- PKEMRA: "Within 12 months, and annually thereafter, submit to Congress a report on the Nation's level of preparedness for all-hazards." It also requires that State submit an annual preparedness report.

- The Target Capabilities List (TCL) provides a framework and guide for all-hazards preparedness. Stakeholders have indicated that while it contains useful information, they are not sure how to use it.

- A tool with wide utility is needed to meet national preparedness requirements, and facilitate use of a capabilities-based approach to planning and preparedness." (**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 14)

National Preparedness System (NPS) Stakeholders: "Effective implementation of NPS will require participation by all stakeholders:

- Federal agencies with homeland security responsibilities
- Regional interagency planning groups
- State homeland security and other agencies
- Local jurisdictions and agencies
- Tribes

Non-government organizations." (**FEMA**, *NPS: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 19)

National Preparedness System Stakeholder User Groups (NPS): "Stakeholder User Groups will guide development

- **Two Groups**
  - State/Local/Federal Stakeholder Group
  - Federal Stakeholder Group

- **The User Groups will**
  - Identify information needed by policy makers and managers
  - Identify desired functionality

- Identify desired report capabilities
- Identify relationship with other existing systems
- Test the system
- Encourage use" (**FEMA**, *NPS: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 20)

National Principal Federal Official (PFO): "In the event of a single incident with national implications or in the case of multiple incidents, a national-level PFO may be designated to provide overall coordination of Federal incident management activities. The PFO may further delegate duties to a Deputy PFO, the FCO or other designated Federal official as appropriate to facilitate incident management span of control or after an event transitions to long-term recovery and/or cleanup operations." (**DHS**, *Notice of Change to the National Response Plan* (Version 5.0), May 25, 2006, p. 5)

National Priorities (Seven), National Preparedness Goal: "These seven priorities reflect a limited number of the cross-cutting initiatives and critical capabilities that should drive near-term planning and resource allocation efforts. The National Priorities are intended to guide the Nation's preparedness efforts to meet its most urgent needs, and fall into two categories: (1) overarching priorities that contribute to the development of multiple capabilities, and (2) capability-specific priorities that build selected capabilities for which the nation has the greatest need:

National Priorities Overarching Priorities
• Implement the National Incident Management System and National Response Plan
• Expanded Regional Collaboration
• Implement the Interim National Infrastructure Protection Plan

Capability-Specific Priorities
• Strengthen Information Sharing and Collaboration capabilities
• Strengthen Interoperable Communications capabilities
• Strengthen CBRNE Detection, Response, and Decontamination capabilities
• Strengthen Medical Surge and Mass Prophylaxis capabilities." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, 2005, p. 6)

National Processing Services Center (NPSC): "The National Processing Services Center (NPSC) is responsible for processing registrations for assistance that have been filed by individuals affected by a disaster. This includes:

- Gathering and reviewing information in order to consider the eligibility of applicants who have been referred to the Disaster Housing Assistance program.

- Responding to the questions, concerns, and issues of those who have been referred to the Disaster Housing Assistance program.

- Maintaining records for individuals who have been referred to the SBA.

- Maintaining records for applicants who have been referred to the Individual and Households Program along with various other Federal, State, local, and voluntary agencies engaged in providing assistance to those individuals affected by a disaster. (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. A-8, Glossary)

National Public Health Information Coalition (NPHIC): "The National Public Health Information Coalition is an independent organization of professionals sought after to improve America's health through public health communications. NPHIC senior public health information officers: Participate with the Centers for Disease Control and Prevention (CDC) and other public and private agencies to promote health and prevent disease; Identify methods to improve communications among members; Communicate with and through the news media to promote greater understanding and awareness of public health issues." (http://www.nphic.org)

National Radiological Defense Plan (1958): The first national radiological defense plan was developed in 1958 as an annex to the *National Plan for Civil Defense*, shortly thereafter renamed *The National Plan for Civil Defense and Defense Mobilization*. "The plan assigned radiologtical defense responsibilities to Federal, State, and local governments, and provided the guidelines for the development of State and local radiological defense plans." This was followed shortly by the development of a *Radiological Defense Planning Guide*. (**FCDA**, *Annual Report 1958*, p. 7)

National Rapid Support and Response Team (N-RSRT). (**DHS**, *Budget-in-Brief FY 08*, p. 68)

National Response Center (USCG): "The primary function of the National Response Center is to serve as the sole national point of contact for reporting all oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. In addition to gathering and distributing spill data for Federal On-Scene Coordinators and serving as the communications and operations center for the National Response Team, the NRC maintains agreements with a variety of federal entities to make additional notifications regarding incidents meeting established trigger criteria. The NRC also takes Terrorist/Suspicious Activity Reports and Maritime Security Breach Reports." (**NRC**, *NRC Background*, 2002, p. 1)

National Response Center (NRC): "A national communications center for activities related to oil and hazardous substance response actions. The NRC, located at DHS/USCG Headquarters in Washington, DC, receives and relays notices of oil and hazardous substances releases to the appropriate Federal OSC." (**USCG**, *IM Handbook*, 2006, Glossary 25-17)

National Response Coordination Center (NRCC): FEMA Headquarters Emergency Operations Center (2007). "The NRCC, a component of the NOC, is FEMA's primary operations management center for most, but not all, national incident response and recovery incidents, as well as the focal point for national resource coordination. As a 24/7 operations center, the NRCC monitors potential or developing incidents and supports the efforts of regional and field components. The NRCC has well-tested capabilities within DHS to connect directly by video teleconference to all State EOCs and to FEMA regional emergency response support structures. The NRCC also has the capacity to surge staffing immediately in anticipation of or in response to a national incident by activating the full range of ESF teams and other personnel as needed to provide resources and policy guidance to a JFO or other local incident management

structures, as needed for incident response. The NRCC provides overall incident management coordination, conducts operational planning, deploys national-level entities and collects and disseminates incident information as it builds and maintains a common operating picture." (**DHS**, *NRF Comment Draft,* 2007, p. 54)

National Response Coordination Center (NRCC): "The FEMA NRCC, the operational component of the DHS National Operations Center (NOC)… provide[s] operational support to field-deployed resources to ensure synchronized federal response and recovery operations and to resolve national resource requirements." (**FEMA**, *DHS/FEMA Draft 2008 Hurricane CONPLAN*, October 31, 2007, p. 6)

National Response Coordination Center (NRCC): "The NRCC is the national-level interagency coordination center at FEMA Headquarters. The NRCC issues mission assignments at the national level as needed. The NRCC works closely with the Regional Response Coordination Center(s) (RRCC) or the Joint Field Office(s) (JFO) to ensure that mission assignments are not duplicated. The NRCC is responsible for adjudicating conflicts with requests for national resources." (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 4; also 56)

National Response Framework (NRF): "Also, consider the National Response Plan, excuse me, the now called National Response Framework, which will be released by DHS in the near future. You will be told this is a national document, developed over many hours of collaboration between all levels of government and all disciplines. Let me be the first to say you should have a shovel nearby when you hear this. I've queried my colleagues at both the state and local level and realize that no one knows what information this document contains and we won't until we read it like everyone else in this room." (**Ashwood**, *Testimony on FEMA in 2007*, 2007, p. 2)

National Response Framework (NRF): "The purpose of the National Response Framework is to establish a comprehensive, national, all-hazards approach to domestic incident response. The Framework presents an overview of key response principles, roles and structures that guide the national response. It describes how communities, States, the Federal Government and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. And, it describes special circumstances where the Federal Government exercises a larger role, including incidents where Federal interests are involved and catastrophic incidents where a State would require significant support. Its real value, however, is in how these elements come together and are implemented by first responders, decision-makers and supporting entities to provide a unified national response….The *Framework* is written for senior elected and appointed leaders, such as Federal agency heads, State Governors, tribal leaders, mayors or city managers – those who have a responsibility to provide for effective incident management. At the same time, it informs emergency management practitioners, explaining the operating structures and tools used routinely by first responders and emergency managers at all levels of government. The *Framework* document is richly augmented with online access to supporting documents, further training and a source for exchanging lessons learned." (**DHS**, *Introducing the NRP*, Sep. 2007 Draft, p. 2)

National Response Framework (NRF): "The *National Response Framework* presents the guiding principles that enable all response partners to prepare for and provide a unified national

response to disasters and emergencies – from the smallest incident to the largest catastrophe…. The *Framework* defines the key principles, roles, and structures that organize the way we respond as a Nation. It describes how communities, tribes, States, the Federal Government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. It also identifies special circumstances where the Federal Government exercises a larger role, including incidents where Federal interests are involved and catastrophic incidents where a State would require significant support. The *Framework* enables first responders, decisionmakers, and supporting entities to provide a unified national response." (**DHS**, *Introducing the NRP*, Jan. 2008, p. 1)

National Response Framework (NRF): "Decentralization, disciplined initiative and freedom of action are the greatest strengths of our *National Response Framework*." (**DHS**, *NRF Comment Draft*, Sep 2007, p. 67)

National Response Framework (NRF): "A guide to how the nation conducts all-hazards incident management." (**FEMA**, *National Incident Management System* /Draft, 2007, 155)

National Response Framework (NRF): "Ultimately, our National Response Framework must help us strengthen the foundation for an effective national response, rapidly assess emerging incidents, take initial actions, expand operations as needed, and commence recovery actions to stabilize the area. This framework must be clearly written, easy to understand, and designed to be truly national in scope, meeting the needs of State, local, and Tribal governments and the private and non-profit sectors, as well as the Federal Government." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 31)

National Response Framework (NRF) Advance Readiness Activities: "There are times when we are able to anticipate impending or emergent events that will require a national response, such as an upcoming hurricane season, a potential pandemic, or a period of heightened terrorist threat. We must capitalize on this critical window of opportunity to increase readiness activities. For example, we can pre-identify needs and fill gaps in our current capabilities or resources that will be required to address the specific nature of the forthcoming incident. We also will pre-position commodities such as water, ice, emergency meals, tarps, and other disaster supplies so they will be readily available for use. Additional advance readiness activities include establishing contracts with the private sector prior to an incident and developing pre-negotiated agreements with Federal departments and agencies to ensure that appropriate Federal resources are available during a crisis." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 34)

National Response Framework (NRF) Applicability: "As with its predecessor, the *National Response Plan*, the *National Response Framework* applies to both Stafford Act and non-Stafford Act incidents." (**DHS**, *NRF FAQs*, Jan 2008, 2)

National Response Framework (NRF) Audiences: "The NRF is written especially for government executives, private-sector business, and nongovernmental leaders and emergency management practitioners." (DHS, *NRF Fact Sheet*, Jan 2008)

National Response Framework (NRF) Catastrophic Incident Annex Purpose and Scope: "Purpose: The Catastrophic Incident Annex to the National Response Framework (NRF-CIA) establishes the context and overarching strategy for implementing and coordinating an accelerated, proactive national response to a catastrophic incident. A more detailed and operationally specific National Response Framework Catastrophic Incident Supplement (NRF-CIS) is published independently of the NRF and annexes.

"Scope…. Recognizing that Federal and/or national resources are required to augment overwhelmed State, tribal, and local response efforts, the NRF-CIA establishes protocols to preidentify and rapidly deploy key essential resources (e.g., medical teams, urban search and rescue teams, transportable shelters, medical and equipment caches, etc.) that are expected to be urgently needed/required to save lives and contain incidents. Accordingly, upon designation by the Secretary of Homeland Security of a catastrophic incident, Federal resources, organized into incident-specific "packages," deploy in accordance with the NRF-CIS and in coordination with the affected State and incident command structure.

"Where State, tribal, or local authorities are unable to establish or maintain an effective incident command structure due to catastrophic conditions, the Federal Government, at the direction of the Secretary of Homeland Security may establish a unified command structure to save lives, protect property, secure critical infrastructure/key resources, contain the event, and protect national security. The Federal Government shall transition to its normal role supporting incident command through State, tribal, or local authorities when their command is reestablished." (**DHS**, *National Response Framework, Catastrophic Incident Annex*, Sep.10, 2007 Draft, p. 1)

National Response Framework (NRF) Components: "The *Framework* is structured as follows:
Chapter I: Roles and Responsibilities. Sharpens the focus on who is involved with emergency management activities at the local, tribal, State, and Federal levels and with the private sector and NGOs.

Chapter II: Response Actions. Describes what we as a Nation collectively do to respond to incidents.

Chapter III: Response Organization. Explains how we as a Nation are organized to implement response actions.

Chapter IV: Planning. Emphasizes the importance of planning and summarizes the elements of national planning structures.

Chapter V: Additional Resources. Summarizes the content and plan for the online NRF Resource Center." (**DHS**, *Introducing… NRF*, Jan 2008, p. 4)

National Response Framework Criteria For Measuring Key Aspects of Response Planning: "The *Framework* employs common criteria to measure key aspects of response planning:

Acceptability. A plan is acceptable if it can meet the requirements of anticipated scenarios, can be implemented within the costs and timeframes that senior officials and the public can support, and is consistent with applicable laws.

Adequacy. A plan is adequate if it complies with applicable planning guidance, planning assumptions are valid and relevant, and the concept of operations identifies and addresses critical tasks specific to the plan's objectives.

Completeness. A plan is complete if it incorporates major actions, objectives, and tasks to be accomplished. The complete plan addresses the personnel and resources required and sound concepts for how those will be deployed, employed, sustained, and demobilized. It also addresses timelines and criteria for measuring success in achieving objectives, and the desired end state. Completeness of a plan can be greatly enhanced by including in the planning process all those who could be affected.

Consistency and Standardization of Products. Standardized planning processes and products foster consistency, interoperability, and collaboration.

Feasibility. A plan is considered feasible if the critical tasks can be accomplished with the resources available internally or through mutual aid, immediate need for additional resources from other sources (in the case of a local plan, from State or Federal partners) are identified in detail and coordinated in advance, and procedures are in place to integrate and employ resources effectively from all potential providers.

Flexibility. Flexibility and adaptability are promoted by decentralized decisionmaking and by accommodating all hazards ranging from smaller-scale incidents to wider national contingencies.

Interoperability and Collaboration. A plan is interoperable and collaborative if it identifies other plan holders with similar and complementary plans and objectives, and supports regular collaboration focused on integrating with those plans to optimize achievement of individual and collective goals and objectives in an incident." (**DHS**, *NR*F, 2008, 74-75)

National Response Framework -- DHS Implementation of Coordinating Mechanisms: "The following four HSPD-5 criteria define situations for which DHS shall assume overall Federal incident management coordination responsibilities within the Framework and implement the Framework's coordinating mechanisms:

(1) a Federal department or agency acting under its own authority has requested DHS assistance,

(2) the resources of State and local authorities are overwhelmed and Federal assistance has been requested,

(3) more than one Federal department or agency has become substantially involved in responding to the incident, or

(4) the Secretary has been directed by the President to assume incident management responsibilities." (**DHS**, *NRP*, Jan 2008, 25)

National Response Framework (NRF) Doctrine: "Incidents that begin with a single response discipline within one jurisdiction may quickly expand to multi-disciplinary, multi-jurisdictional incidents that require additional resources and capabilities. In order to ensure high-level

organization and efficiency among multiple actors in these challenging and complex environments, the response community must rely on fundamental principles that guide the full range of response activities. NIMS forms the backbone of this doctrine and includes, among other things, an Incident Command System as the overall management structure for responding to an incident as well as the concept of Unified Command, which provides for and enables joint decisions and action based on mutually agreed-upon objectives, priorities, and plans among all homeland partners involved in the response effort without affecting individual agency authority, responsibility, or accountability. We will continue to expand and refine the full set of fundamental doctrinal principles underlying our National Response Framework. For example, we will incorporate and further emphasize the concept of readiness to act that is imperative for no-notice incidents as well as incidents that have the potential to expand rapidly in size, scope, or complexity. Through the framework, we will encourage engaged partnerships in which all organizations establish shared objectives, assess their capabilities, identify gaps, and work collaboratively to fill those gaps well in advance of an incident. We also will underscore that our national response must be scalable, flexible, and adaptable to respond to the full range of potential incidents that our Nation could confront." (**White House**, *National Strategy for Homeland Security*, October 2007, pp. 32-33)

National Response Framework (NRF) Doctrine/Key Principles/Key Concepts: "Key Principles of the *Framework*

1. Engaged partnership
2. Tiered response
3. Scalable, flexible and adaptable operational capabilities
4. Unity of effort through unified command
5. Readiness to act" (**DHS**, *National Response Framework* (Comment Draft), September 10, 2007, p. 2; **DHS**, *NRF FAQs*, Jan 2008, 1)

National Response Framework – Edits Incorporated From 2007 Comment Period: "State and local officials provided input on the narrative style, readability, specific word use and tone of the draft NRF document, and numerous changes were made to the final document based on those comments. Input from state partners during the comment period also pointed out some inconsistencies in the draft document between the NRF language and the Post-Katrina Emergency Management Reform Act which were addressed. Stakeholder groups during the comment period also sought specific language addressing the unique challenges faced by special needs populations. Based on stakeholder comments, special needs language was added to the document. State and tribal representatives requested that clarifications be made in the core document to reflect that states and tribes do not have to exhaust all resources (including mutual aid) before requesting Federal assistance following disasters."

"The "Incident of National Significance" term utilized in the *NRP* caused significant confusion. Many readers understood that a declaration of an Incident of National Significance by the Secretary of Homeland Security was a requirement for the *NRP* to be invoked or Federal assistance or interagency incident management support to be provided. This was not true, but efforts to clarify the Incident of National Significance term were not completely successful. And since the actual declaration of an Incident of National Significance brought no new authorities to the incident response, the decision was made to eliminate the term. (**DHS**, *NRF FAQs*, Jan 08, 5)

National Response Framework (NRF) Evolution: "This *Framework* was preceded 15 years earlier by a *Federal Response Plan* (1992) that focused largely on Federal roles and responsibilities. Following the 9/11 attacks, more urgent efforts were made to understand and implement common incident management and response principles and to develop common planning frameworks. The 2004 *NRP* was an early outgrowth of those discussions, replacing the *Federal Response Plan*. It was published one year after creation of the Department of Homeland Security (DHS). The *NRP* broke new ground in integrating all levels of government in a common incident management framework. It incorporated incident coordination roles for Federal agencies2 as defined by several new laws and Presidential directives. Nine months after Katrina's landfall, a notice of change to the *NRP* was released, incorporating preliminary lessons learned from the 2005 hurricane season…. Stakeholders have advised that both the initial *NRP* and its 2006 iteration were bureaucratic and internally repetitive. Users also suggested the *NRP* was still insufficiently *national* in its focus, which is to say that it should speak more clearly to the roles and responsibilities of all parties involved in response. Moreover, it was evident that the *NRP* and its supporting documents did not constitute a true operational *plan* in the sense understood by emergency managers. Its content was inconsistent with the promise of its title. In the last several years, operational planning on a national basis for specific types of incidents has matured. Both public and private sectors are making significant homeland security investments to strengthen the Nation's response capability…. Effective response to an incident is a shared responsibility of governments at all levels, the private sector and NGOs, and individual citizens. This *Framework* commits the Federal Government, in partnership with local, tribal, and State governments and the private sector, to complete both strategic and operational plans for the incident scenarios specified in the *National Preparedness Guidelines*.3 These plans will ultimately improve significantly the Incident Annexes to this *Framework*, which have been carried forward from the *NRP*." (**DHS**, *NRF*, Jan 2008, 2)

National Response Framework (NRF) Governmental Responsibilities: "It is important that each level of government adapt and apply the general roles outlined in the *Framework*. To do this, organizations should define key leadership and staff functions, adopt capabilities-based planning as the method to build response capabilities, and impose the discipline needed to plan and operate effectively." (**DHS**, *NRF*, Jan 2008, 5)

National Response Framework (NRF) Organization:

- *Core Document* (National Response Framework)
- *Emergency Support Function Annexes* -- group Federal resources and capabilities into functional areas that are most frequently needed in a national response (e.g., Transportation, Firefighting, Mass Care).
- *Support Annexes* -- describe essential supporting aspects that are common to all incidents (e.g., Financial Management, Volunteer and Donations Management, Private-Sector Coordination).
- *Incident Annexes* -- address the unique aspects of how we respond to seven broad incident categories (e.g., Biological, Nuclear/Radiological, Cyber, Mass Evacuation).
- *Partner Guides* -- provide ready references describing key roles and actions for local, tribal, State, Federal, and private-sector response partners. (**DHS**, *NRF*, Jan 2008, 4)

National Response Framework (NRF) Purpose: "The purpose of the *National Response Framework* is to establish a comprehensive, national, all-hazards approach to domestic incident response.

"The *Framework* presents an overview of key response principles, roles and structures that guide the national response. It describes how communities, States, the Federal Government and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. And, it describes special circumstances where the Federal Government exercises a larger role, including incidents where Federal interests are involved and catastrophic incidents where a State would require significant support. Its real value, however, is in how these elements come together and are implemented by first responders, decision-makers and supporting entities to provide a unified national response." (**DHS**, *Introducing…NRP*, September 2007, p. 2)

National Response Framework (NRF) Purpose: "To ensure that government executives, private-sector and nongovernmental organization (NGO) leaders, and emergency management practitioners across the nation understand the domestic incident response roles, responsibilities and relationships in order to respond more effectively to any type of incident." (**DHS,** *National Response Framework: Frequently Asked Questions*, Jan 2008, p. 1)

National Response Framework NRF Resource Center: "To assist readers in implementing the *Framework*, the Resource Center is an online repository of supporting documents, resources, and educational materials. It is intended especially to assist emergency management practitioners. This repository provides a single, Web-based portal for documents, information, training materials, and other tools needed for response partners to understand and execute their roles under the *Framework*. Formally cleared annexes, resources, and other reference material associated with the *Framework* are posted on this portal. In addition, the Resource Center portal will be dynamic, providing links to additional preparedness resources and updating the *Framework*'s formal supporting documents as necessary. The online Resource Center's home page may be found at http://www.fema.gov/NRF. As all Resource Center postings will be routinely evaluated, updated, and augmented, the remainder of this chapter contains a roadmap of what initially conveys from the *National Response Plan* (*NRP*) and an outline of work to come.

"The Resource Center contains multiple supporting documents, including ESF, Support, and Incident Annexes and several informational documents, such as an overview of the main Stafford Act provisions, a guide to authorities and references, and an acronym list. As noted in Chapter IV, ongoing planning activities will result in the development of additional strategic guidance and plans, which will be added to the Resource Center upon approval and as necessary." (**DHS**, *NRF*, 2008, 77)

National Response Framework (NRF) Scenario Concepts: The NRF Incident annexes describe the concept of operations to address specific contingency or hazard situations or an element of an incident requiring specialized application of the NRF for the following incidents:

- Biological
- Catastrophic

- Cyber
- Food and Agricultural
- Mass Evacuation
- Nuclear/Radiological
- Terrorism Incident Law Enforcement and Investigation (**FEMA**, NRF Resource Center)

National Response Framework (NRF) Scope: "The *Framework* provides structures for implementing national-level policy and operational coordination for domestic incident response. In this document, incidents include actual or potential emergencies or all-hazard events that range from accidents and natural disasters to actual or potential terrorist attacks. Such incidents range modest events wholly contained within a single community to others that are catastrophic in nature and national in their scope of consequences." (**DHS**, *NRF FAQs*, Jan 2008, 1)

National Response Framework (NRF) Special Circumstances: "*There are special circumstances where the Federal Government exercises a larger, more proactive role* [in disaster response]. This includes catastrophic incidents when local and State governments require significant support, and incidents where Federal interests are directly implicated, such as those involving primary Federal jurisdiction or authorities. For example, the Federal Government will lead response efforts to render safe weapons of mass destruction and coordinate related activities with State and local partners, as appropriate." (**White House**, *National Strategy for Homeland Security*, October 2007, p. 33)

National Response Framework (NRF) Support Functions: The NRF Support annexes describe coordination and execution of common functional processes and administrative requirements necessary to ensure efficient and effective incident management. During an incident, numerous procedures and administrative functions are required to support incident management. The 8 Support Annexes are:

- Critical Infrastructure and Key Resources
- Financial Management
- International Coordination
- Private-Sector Coordination
- Public Affairs
- Tribal Relations
- Volunteer and Donations Management
- Worker Safety and Health (**FEMA**, NRF Support Center, 2008)

National Response Plan (NRP): "Homeland Security Presidential Directive (HSPD)-5, *Management of Domestic Incidents*, requires the creation of a National Response Plan (NRP) to integrate Federal Government prevention, preparedness, response, recovery and mitigation plans into one all-discipline, all-hazard approach to domestic incident management. The NRP, using the National Incident Management System (NIMS), is intended to provide the core organizational structure and operational mechanisms for Federal support to State and local authorities, implementation of direct Federal incident management authorities and responsibilities under the law, and full coordination of resources among Federal departments and agencies. This plan was developed through an inclusive interagency, inter-jurisdictional process

incorporating the expertise and recommendations of Federal, State, local, tribal, and private sector stakeholders." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 1, Secretary of Homeland Security Tom Ridge Transmittal Letter)

National Response Plan (NRP): "The NRP supercedes the Federal Response Plan (FRP), United States Government Interagency Domestic Terrorism Concept of Operations Plan (CONPLAN), and the Initial National Response Plan (INRP). The NRP, as the core plan for national incident management, is linked to an array of incident or hazard-specific Federal contingency plans, such as National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and Federal Radiological Emergency Response Plan (FRERP) that are designed to implement the specific statutory authorities and responsibilities of various departments and agencies. These plans establish protocols for the management of hazard-specific contingencies and provide the vital mechanisms for managing thousands of incidents annually. The plans are fully incorporated as key components of the NRP when implemented for incidents of national significance." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 2)

National Response Plan (NRP): "The NRP establishes a national framework for domestic incident management and applies to Incidents of National Significance. Federal, State, local, and tribal agencies respond to the vast majority of incidents acting under their authorities or through existing agency or interagency contingency plans." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, pp. 3-4)

National Response Plan (NRP): "Domestic incident management activities addressed in the NRP span the event including prevention, preparedness, response, recovery, and mitigation. As shown in Figure 2, an incident typically begins with notification of a potential or actual situation setting in motion mechanisms to activate and deploy resources to interdict and prevent the incident from happening, to mitigate its effects, and to respond and recover from the impacts of the incident." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 15)

National Response Plan (NRP): "A plan mandated by HSPD-5 that integrates Federal domestic prevention, preparedness, response, and recovery plans into one all-discipline, all-hazards plan." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 57)

National Response Plan (NRP): "The NRP framework provides the following to guide a response to incidents of national significance:

(a) Best practices and procedures from various incident management disciplines — homeland security, emergency management, law enforcement, fire-fighting, hazardous materials response, public works, public health, emergency medical services, and responder and recovery worker health and safety — and integrates them into a unified coordinating structure.

(b) The framework for Federal interaction with State, local, and tribal governments; the private sector; and NGOs in the context of domestic incident prevention, preparedness, response, and recovery activities.

(c) The foundation for the development of detailed supplemental plans and procedures to effectively and efficiently implement Federal incident management activities and assistance in the context of specific types of incidents.

(d) Integration of the capabilities and resources of governmental jurisdictions, incident management and emergency response disciplines, NGOs, and the private sector into a cohesive, coordinated, and seamless national framework for domestic incident management.

(e) Separate incident annexes for biological events, catastrophic events, oil and HAZMAT, terrorism, and nuclear/radiological events. The joint force has a CBRNE CM role with specified and implied tasks in each of the CBRNE areas as well as in many of the ESF annexes (see the NRP for details).

(f) The NRP Catastrophic Incident Supplement provides the operational framework for implementing the strategy contained in the NRP Catastrophic Incident Annex." (**JCS/DOD**, *CBRNE Consequence Management* (JP 3-41), 2006, pp. II-13 and II-14)

National Response Plan (NRP): HSPD-5 directed the Secretary of Homeland Security to develop and administer an NRP to integrate the current family of federal domestic prevention, preparedness, response and recovery plans into a single all-discipline, all-hazards plan in an attempt to unify domestic incident management. The NRP has superseded other emergency response plans (e.g., US Government Interagency Domestic Terrorism Concept of Operations Plan, Federal Radiological Emergency Response Plan, Mass Migration Emergency Plan, and the National Oil and Hazardous Substances Pollution Contingency Plan). In addition to consolidating federal plans, other modifications within the NRP that impact DOD are the establishment of a Homeland Security Operations Center, the establishment of an interagency incident management group, and the creation of a principal federal official who may be appointed to represent the Secretary of Homeland Security at the incident site." (**JCS/DoD**, *Homeland Security*, 2005, p. IV-13)

National Response Plan (NRP): "A document that describes the structure and processes comprising a national approach to domestic incident management designed to integrate the efforts and resources of Federal, State, local, tribal, private-sector, and nongovernmental organizations." (**USCG**, *IM Handbook*, 2006, Glossary 25-17)

National Response Plan (NRP) Purpose: "The purpose of the NRP is to establish a comprehensive, national, all-hazards approach to domestic incident management across a spectrum of activities including prevention, preparedness, response, and recovery.

The NRP incorporates best practices and procedures from various incident management disciplines—homeland security, emergency management, law enforcement, firefighting, hazardous materials response, public works, public health, emergency medical services, and responder and recovery worker health and safety—and integrates them into a unified coordinating structure." (**DHS**, *National Response Plan*, 2004, p. 2P

National Response System (NRS): "Our National Response System routinely and effectively responds to a wide range of oil and hazardous substance releases. It is a multi-layered system of individuals and teams from local, state, and federal agencies, industry, and other organizations that share expertise and resources to ensure that oil spill control and cleanup activities are timely and efficient, and that they minimize threats to human health and the environment.
At the heart of the system is the National Contingency Plan (NCP)…a regulation developed to ensure that the resources and expertise of the federal government are available immediately for oil or hazardous substance releases that are beyond the capabilities of local and state responders. The NCP provides the framework for the National Response System and establishes how it works." (**EPA**, *National Response System*, September 17, 2007)

National Response Team (NRT): "The NRT, comprised of the 16 Federal agencies with major environmental and public health responsibilities, is the primary vehicle for coordinating Federal agency activities under the NCP. The NRT carries out national planning and response coordination and is the head of a highly organized Federal oil and hazardous substance emergency response network. EPA serves as the NRT Chair, and DHS/USCG serves as Vice Chair." (**USCG**, *IM Handbook*, 2006, Glossary 25-17)

National Risk Assessment: "**The National Risk Assessment (NRA)** is a classified cross-government document which incorporates expertise from a wide range of departments and agencies. It assesses the impact and likelihood of the major risks, both hazards and threats, that the country could face over a five year period, enabling prioritisation of the UK's planning for emergencies…. Understanding the risks and determining their relative significance in terms of potential impact is the starting point for emergency planning. The key to turning this into useful planning information is remembering that it is not the risks themselves that people have to deal with when things go wrong, but their consequences." (**UK Cabinet Office**. *The Risk Register*, 2008, 4)

National Search and Rescue Plan (NSP): "Objectives:

a. Provide a United States Plan for coordinating civil SAR services to meet domestic needs, international commitments, and to document related national policies;

b. Support lifesaving provisions of IMO's International Convention on Maritime Search and Rescue, ICAO's Convention on International Civil Aviation (Annex 12), certain international agreements to which the United States is Party, and similar international instruments;

c. Provide an overall Plan for coordination of civil SAR operations, effective use of available resources, mutual assistance, and efforts to improve such cooperation and services;

d. Integrate available civil SAR resources into a cooperative network for greater protection of life and property and to ensure greater efficiency and economy; and

e. Enable the United States to satisfy its humanitarian, and national and international legal obligations." (**National Search and Rescue Committee** (US GOV). *National Search and Rescue Plan of the United States*, 2007, p. 3)

"This Plan does *not* cover operations such as:

a. Air ambulance services which did not result from a rescue or recovery operation;
b. Rescues from space (although rescue of persons returned from space can be included);
c. Military operations, such as combat SAR or other types of recovery by military operations to remove military or civilian personnel from harm's way;
d. Salvage operations;
e. Assistance in cases of civil disturbance, insurrection or other emergencies which endanger life or property or disrupt the usual process of government; and
f. Operations and coordination in addition to those covered by this Plan that might be carried out concurrently with civil SAR operations on scene, such as could occur during a disaster or terrorism response situation, or an Incident of National Significance." (**National Search and Rescue Committee** (US GOV). *National SAR Plan of the US*, 2007, p. 11)

National Search and Rescue Committee (NSARC): "The interagency Committee that oversees the NSP and serves as a federal coordinating forum for national civil SAR matters." (**National Search and Rescue Committee**, *National Search & Rescue Plan of the US*, 2007, 2)

National Security: "Definition: a comprehensive program of integrated policies and procedures for the Departments, agencies, and functions of the United States Government aimed at protecting the territory, population, infrastructure, institutions, values, and global interests of the Nation." (**DHS**, *Lexicon; Terms and Definitions*, October 23, 2007, pp. 18-19)

National Security: "The concept of national security has broadened, but that is where agreement ends. The evolution of the concept of national security has been underway for some time. In the 1980s a debate raged about whether the environment was a security issue. A similar argument emerged with respect to health in the late 1990s. Today those debates are over; the pressure of today's constantly changing and highly unpredictable security landscape has caused policy makers and analysts to generally accept that the concept of national security has broadened well beyond the one used by decision makers for most of the Cold War era.

But its borders remain fuzzy, and it is unlikely that the concept of national security will become more precisely bounded in the near future. Increasingly, new issues will push their way onto the national security agenda, and they will not arrive with neat labels. They will become national security issues through the interaction of popular opinion, the course of events at home and abroad, and the actions of presidents and their administrations. For example, the Clinton administration identified HIV/AIDS as not simply a domestic public health concern, but an international security challenge. The concern and programs to deal with it were continued by the Bush administration." (**Project on National Security Reform**, *Ensuring Security*…, 2008 p. 9)

National Security: "…our understanding of national security has changed. In the past, the state was the traditional focus of foreign, defence and security policies, and national security was understood as dealing with the protection of the state and its vital interests from attacks by other states. Over recent decades, our view of national security has broadened to include threats to individual citizens and to our way of life, as well as to the integrity and interests of the state.

That is why this strategy deals with transnational crime, pandemics and flooding – not part of the traditional idea of national security, but clearly challenges that can affect large numbers of our citizens, and which demand some of the same responses as more traditional security threats, including terrorism. (**UK Cabinet Office**, *The National Security Strategy of the* UK, 2008, 3)

National Security Act of 1947: "The National Security Act of 1947, as amended, established the NSC to advise the President with respect to the integration of domestic, foreign, and military policies relating to national security." (**JCS/DoD**, *Homeland Security*, 2005, p. II-15)

National Security and Homeland Security Strategy: "The *National Security Strategy of the United States* aims to guarantee the sovereignty and independence of the United States, with our fundamental values and institutions intact. It provides a framework for creating and seizing opportunities that strengthen our security and prosperity.

The *National Strategy for Homeland Security* complements the *National Security Strategy of the United States* by addressing a very specific and uniquely challenging threat – terrorism in the United States – and by providing a comprehensive framework for organizing the efforts of federal, state, local and private organizations whose primary functions are often unrelated to national security." (**White House**, *National Strategy for Homeland Security*, July 2002, p. 5)

National Security and Homeland Security Strategy: Our understanding of homeland security continued to evolve after September 11, adapting to new realities and threats. As we waged the War on Terror both at home and abroad, our Nation endured Hurricane Katrina, the most destructive natural disaster in U.S. history. The human suffering and staggering physical destruction caused by Katrina were a reminder that threats come not only from terrorism, but also from nature. Indeed, certain non-terrorist events that reach catastrophic levels can have significant implications for homeland security. The resulting national consequences and possible cascading effects from these events might present potential or perceived vulnerabilities that could be exploited, possibly eroding citizens' confidence in our Nation's government and ultimately increasing our vulnerability to attack. This *Strategy* therefore recognizes that effective preparation for catastrophic natural disasters and man-made disasters, while not homeland security *per se*, can nevertheless increase the security of the Homeland. (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 3)

National Security and Natural Disasters: "*Natural disasters are not national security issues.* The new strategy [NSHS 2007] places undue emphasis on responding to natural disasters. The federal government does have responsibilities in this area, and use of homeland security instruments like the Coast Guard and the National Guard is appropriate in disaster response efforts. However, hurricanes are not national security threats. Treating them as such threatens to cede greater power and authority to the executive branch. The expanded emphasis on natural disasters in the revised strategy was a knee-jerk reaction to criticism over the response to Katrina rather than a necessary change in strategic focus. The original homeland security strategy stressed that national disaster systems should be structured to respond to "all hazards," both natural and manmade. That strategic guidance was sufficient." (**Carafano**, 10 Oct. 2007, p. 1)

[BWB Note: The words "Disaster," "Natural," and "Catastrophe" do not appear in *The National Security Strategy of the United States.*]

National Security and Terrorism Prevention: "The National Security and Terrorism Prevention program provides competitive grants that will support both capital projects and operational staffing proposals. Rather than rely on formulaic allocation and pass-through mechanisms, this program provides competitive grants to specific state and local agencies to support proposals which address national vulnerabilities identified by the Secretary as priorities. In 2009, the Secretary will invite states to submit project proposals to support REAL ID implementation and buffer zone protection for critical infrastructure. Final grant allocations will be determined competitively by the Secretary on the basis of how well proposals address these identified national vulnerabilities." (FEMA, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*, March 11, 2008, p. 4)

National Security Decision Directive (NSDD) 26, US Civil Defense Policy, 1982: "It is the policy of the United States to enhance the deterrence of strategic nuclear war through a strong and balanced program of strategic forces, including effective capabilities for strategic defense. Civil Defense, along with an effective Continuity of Government program, emergency mobilization, and secure and reconstitutable telecommunications systems, is an essential ingredient of our nuclear deterrent forces. It is a matter of national priority that the US have a Civil Defense program which provides for the survival of the US population… Accordingly, I direct that the US Civil Defense program provide an improved basis for dealing with crises and carrying out eventual national recovery. The US Civil Defense program will:

- Enhance deterrence and stability in conjunction with our strategic offensive and other strategic defensive forces. Civil Defense, as an element of the strategic balance, should assist in maintaining perceptions that this balance is favorable to the US.
- Reduce the possibility that the US could be coerced in time of crisis.
- Provide for survival of a substantial portion of the US population in the event of nuclear attack preceded by strategic warning and for continuity of government, should deterrence and escalation control fail.
- Provide an improved ability to deal with natural disasters and other large-scale domestic emergencies….

The Federal Emergency Management Agency will have overall operational supervision of this program. Funds for the program will be contained in the FEMA budget. In order to ensure interagency cooperation and support in the program, the Civil Defense Working Group of the Emergency Mobilization Preparedness Board will be responsible for, among other things, assuring coordination between the Civil Defense program and mobilization preparedness actions and programs, and the preparation of semi-annual reports to the President." (**White House**, *NSDD 26: US Civil Defense Policy*, March 16, 1982, pp. 1-2)

National Security Decision Directive 47 (Emergency Mobilization Preparedness), 1982: "It is the policy of the United States to have an emergency mobilization preparedness capability that will ensure that government at all levels, in partnership with the private sector and the American people, can respond decisively and effectively to any major national emergency with defense of

the United States as the first priority." (**White House**. *Emergency Mobilization Preparedness [NSDD-47] (U)*, July 22, 1982, p. 1)

National Security Decision Directive 259, U.S. Civil Defense (President Reagan, 1987): "It is the policy of the United States to have a civil defense capability as an element of our overall national security posture.

Principles, Concepts, and Objectives

"The civil defense program will continue to support all-hazard integrated emergency management at State and local levels, to the extent that this is consistent with and contributes to preparedness of the Nation in the event of an attack, whether by nuclear or non-nuclear means….

"The program will emphasize development of a civil defense infrastructure capable of rapid expansion in a national security emergency. The objective of the…program will include:

1. Population protection capabilities with the Federal Government providing guidance and assistance to enable State and Local governments to develop the requisite plans, systems, and capabilities.
2. State and local government crisis management capabilities to effectively support the population in national security emergencies.
3. Information to promote a clear understanding by the public of threats, including nuclear attack, which may affect their localities, and on actions they should take to increase their chances of survival.
4. Information to assist U.S. business and industry in taking measures to protect their work forces and physical assets in national security emergencies." (**White House**, *NSDD 259*, February 4, 1987, p. 1 of 3)

Implementation

The Federal Civil Defense Act of 1950, as amended (50 U.S.C. App. 2251 et seq.) provides that responsibility for civil defense is vested jointly in the Federal Government and the States and their political subdivisions. Accordingly, the U.S. Civil Defense program will be based on the following:

1. The Federal Government will focus on guidance to the public and to State and local governments to improve preparedness for national security emergencies. Financial assistance will be provided in cooperation with State and local governments.
2. ….
3. The States have the primary responsibility for developing their capabilities for peacetime emergencies and share responsibility for attack preparedness. They should support development of civil defense plans, systems, and capabilities for themselves and their political subdivisions. States will assure that where Federal civil defense funds and assistance are applied to natural and technological disaster preparedness, such use is consistent with, contributes to, and does not detract from attack preparedness…." (**White House**, *NSDD 259*, February 4, 1987, p. 3 of 3)

National Security Emergency: "Any occurrence, including natural disaster, military attack, technological emergency, or other emergency, that seriously degrades or seriously threatens the

national security of the United States." (**FEMA**, *Disaster Dictionary* 2001, 84; cites Executive Order 12656; **DoD**, *MACDIS*, 1994, p. 19)

National Security Integration Center: "In April 2006, ICE created the National Security Integration Center (NSIC), which partners investigators and intelligence analysts to "operationalize" intelligence reporting." (**DHS**, *Fact Sheet: ICE Accomplishments FY 2006*)

National Security Planning Guidance (NSPG): The 2006 Quadrennial Defense Review (QDR) recommended the creation of a National Security Planning Guidance (NSPG), aimed at directing the development of both military and nonmilitary plans and institutional capabilities. The QDR advocates an NSPG that would set priorities and clarify national security roles and responsibilities to reduce capability gaps and eliminate redundancies. (**DoD**, *Building Partnership Capacity: Quadrennial Defense Review Execution Roadmap*, May 22, 2006, p. 7)

National Security Presidential Directive 51 (NSPD-51/HSPD-20): National Continuity Policy, April 4, 2007, Released May 9, 2007. *Purpose*: "This directive establishes a comprehensive national policy on the continuity of Federal Government structures and operations and a single National Continuity Coordinator responsible for coordinating the development and implementation of Federal continuity policies. This policy establishes "National Essential Functions," prescribes continuity requirements for all executive departments and agencies, and provides guidance for State, local, territorial, and tribal governments, and private sector organizations in order to ensure a comprehensive and integrated national continuity program that will enhance the credibility of our national security posture and enable a more rapid and effective response to and recovery from a national emergency." (**White House**, *NSPD-51*, May 9, 2007) [Supercedes PDD 67, 21Oct1998]

National Security Professional Development: "By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to enhance the national security, it is hereby ordered as follows: Section 1. Policy. In order to enhance the national security of the United States, including preventing, protecting against, responding to, and recovering from natural and manmade disasters, such as acts of terrorism, it is the policy of the United States to promote the education, training, and experience of current and future professionals in national security positions (security professionals) in executive departments and agencies (agencies)." (**White House**, *Executive Order 13434: National Security Professional Development*, May 17, 2007)

National Security Strategy (NSS): "A document approved by the Presidnet of the United States for developing, applying, and coordinating the instruments of national power to achieve objectives that contribute to national security." (**DOD/Joint Chiefs of Staff**, *DOD Dictionary of Military and Associated Terms* (Joint Publication (JP) 1-02), 2006)

National Security Strategy (NSS) of the United States: "The NSS establishes homeland security as the first priority of the Nation. The Armed Forces' role in homeland security is complex, combining actions overseas and at home to **protect the United States**. Our first line of defense is abroad and includes mutually supporting activities with US allies to counter threats close to their source. Closer to home, the Armed Forces use their capabilities to secure strategic

air, land, sea and space approaches to the United States and its territory. When directed, the Armed Forces employ military capabilities at home to protect the nation, the domestic population and critical infrastructure from direct attack." (**DOD/JCS**, *The NMS of the USA*, 2004, 2)

National Security Strategy (NSS) of the United States: "The U.S. national security strategy will be based on a distinctly American internationalism that reflects the union of our values and our national interests. The aim of this strategy is to help make the world not just safer but better. Our goals on the path to progress are clear: political and economic freedom, peaceful relations with other states, and respect for human dignity….To achieve these goals, the United States will:

• champion aspirations for human dignity;
• strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends;
• work with others to defuse regional conflicts;
• prevent our enemies from threatening us, our allies, and our friends, with weapons of mass destruction;
• ignite a new era of global economic growth through free markets and free trade;
• expand the circle of development by opening societies and building the infrastructure of democracy;
• develop agendas for cooperative action with other main centers of global power; and
• transform America's national security institutions to meet the challenges and opportunities of the twenty-first century." (**White House**, *The National Security Strategy of the United States of America*, September 2002, pp. 7-8)

National Security Strategy (NSS) of the United States: "Our national security strategy is founded upon two pillars:

"The first pillar is promoting freedom, justice, and human dignity – working to end tyranny, to promote effective democracies, and to extend prosperity through free and fair trade and wise development policies. Free governments are accountable to their people, govern their territory effectively, and pursue economic and political policies that benefit their citizens. Free governments do not oppress their people or attack other free nations. Peace and international stability are most reliably built on a foundation of freedom.

"The second pillar of our strategy is confronting the challenges of our time by leading a growing community of democracies. Many of the problems we face – from the threat of pandemic disease, to proliferation of weapons of mass destruction, to terrorism, to human trafficking, to natural disasters – reach across borders. Effective multinational efforts are essential to solve these problems. Yet history has shown that only when we do our part will others do theirs. America must continue to lead. (**President George W. Bush**, Introduction, *The National Security Strategy of the United States of America*, White House: March 2006)

National Security Telecommunications Advisory Committee (NSTAC): "The NSTAC provides industry-based advice and expertise to the President on issues and problems related to implementing National Security and Emergency Preparedness (NS/EP) communications policy. The NSTAC is comprised of up to 30 industry chief executives representing the major communications and

network service providers and information technology, finance, and aerospace companies. It was created under Executive Order 12382." (**DHS**, *NIPP*, 2006, p. 28).

National Security University (NSU): "Challenges of the 21st Century require a seamless response by the USG, and because emerging threats stretch outside of traditional military and diplomatic response mechanisms, educating the interagency community in strategic thinking, planning, and coordination is essential in building USG capabilities to meet the demands of a changing world. This Requires:

- An educated federal executive branch who understands the competencies and capabilities of others in the interagency community
- An understanding of how effective plans are developed and carried to fruition
- The ability to think strategically in order to adapt to an ever-changing global landscape." (**Blank/ITEA**, *National Security University: Concept and Progress*, NDU, 8 Nov 06, 2)

National Security University (NSU): "By 30 June 2006, the Under Secretary of Defense for Policy, in coordination with the Chairman, shall present to the Deputy Secretary a concept brief for establishing an expanded **National Security University (NSU)**, to include:

> A progress report on the congressionally mandated study outlined in section 583 of the 2006 National Defense Authorization Act
> Professional military education and curriculum design considerations; language and cultural awareness education
> Relationships among NSU and other educational and outreach institutions, both US Government-operated and private
> Factors relating to student matriculation, retention, and placement
> Efforts to ensure cost-sharing among sponsoring and participating organizations
> DOD command and control relationships and arrangements."
> (**DoD**, *Building Partnership Capacity: Quadrennial Defense Review Execution Roadmap*, May 22, 2006, p. 9)

National Security University (NSU): ". . . The Department will also transform the National Defense University, the Department's premier educational institution, into a true National Security University. Acknowledging the complexity of the 21st century security environment, this new institution will be tailored to support the educational needs of the broader U.S. national security profession. Participation from interagency partners will be reshaped in ways that are consistent with a unified U.S. Government approach to national security missions, and greater interagency participation will be encouraged." (**DOD**, *QDR* 2006, p.79)

National Security University (NSU) Audience: "Federal employees initially; State and local, private industry, and USG contractors in the future." (**Blank/ITEA**, *NSU: Concept and Progress*, NDU, 8 Nov 06, 7)

National Security University (NSU) Mission Concept: "Prepare military and civilian national security professionals from the U.S. and other countries to evaluate national, homeland, and international security challenges through multidisciplinary education and research programs,

professional exchanges and outreach." (**Blank/ITEA**, *NSU: Concept and Progress*, NDU, 8 Nov 06, 6)

National Security University (NSU)Vision Concept: "The National Security University will be the pre-eminent institution and/or consortium for learning, research, and outreach in national, homeland, and international security." (**Blank/ITEA**, *NSU: Concept and Progress*, NDU, 8 Nov 06, 6)

National Shelter System: "The National Shelter System (NSS) is a comprehensive database that provides relevant information for all shelters operated and reported through the NSS during response to disasters and emergencies. The information in the NSS is provided by the State, tribal, local, and nongovernmental entities that are operating these shelters." (**DHS**, *National Response Framework Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex* (Comment Draft), September 10, 2007, p. 6)

National Shelter System: "In an effort to improve shelter management and accountability, FEMA and the American Red Cross developed the National Shelter System (NSS). The NSS is a web-based data system that supports shelter management, reporting, and facility identification activities. The system is intended for use by all agencies that provide shelter services during disasters to ensure a comprehensive understanding of the shelter populations and available shelter capacity. In addition, the system provides visibility on large shelter populations and positions FEMA to deliver targeted registration assistance to disaster victims." (**FEMA**, *Statement of Glenn Cannon*, December 4, 2007, p. 6)

National Shelter System Policy (1952): "…the policy of the Federal Civil Defense Administration…briefly…is this:

First, that a survey be made, block by block, house by house, in all the more critical target areas, particularly within a community in those subareas which are industrial, institutinal, or commercial in nature. In other words where there is the greatest density of population during certain hours of the day. That survey will bring about an understanding of how many places, how many actual structures, can be used without any modification in order to afford at least fairly adequate shelter.

Second, it will show those shelters which with some modification can be considered as fairly adequate. After we have discovered those areas and how many people can be sheltered, based on a rule of thumb of six square feet per person, we will arrive at our deficit; e will then recommed that new shelters be built for those people." (**Wadsworth**, *The National Civil Defense Plan*, 1952, 13)

National Simulation Exercise Center: Component of FEMA's National Preparedness Directorate, National Integration Center, National Exercise Division, 2007.

National Special Security Event (NSSE): "When an event is designated a National Special Security Event, the Secret Service assumes its mandated role as the lead federal agency for the design and implementation of the operational security plan and Federal resources are deployed to maintain the level of security needed for the event and the area. The goal of such an operation is

to prevent terrorist attacks and criminal acts…. A number of factors are taken into consideration when designating an event as a National Special Security Event including a few outlined below:

1. Anticipated attendance by dignitaries - Events which are attended by officials of the United States Government and/or foreign dignitaries also may create an independent federal interest in ensuring that the event transpires without incident and that sufficient resources are brought to bear in the event of an incident.

2. Size of the event - A large number of attendees and participants generally increases the security requirements. In addition, larger events are more likely to draw the attention of terrorists or other criminals, particularly those interested in employing weapons of mass destruction.

3. Significance of the event - Some events have historical, political and/or symbolic significance that may heighten concern about possible terrorist acts or other criminal activity. (**DHS**, *National Special Security Events Fact Sheet*, July 9, 2003)

National Special Security Event Support (NSSE): "A designated event that, by virtue of its political, economic, social, or religious significance, may be the target of terrorism or other criminal activity."

- An event of great magnitude and enormous national and/or international importance
- Designated by the Secretary of Homeland Security (at the request of a Governor and recommendation of the NSSE Working Group)
- USSS [US Secret Service] leads the development and implementation of the comprehensive security planning for the event
- FBI serves as the lead for intelligence, criminal investigation of terrorist acts and threats, hostage rescue, and counterterrorism
- Other Federal Departments and Agencies will usually provide (pre-deployed and on standby) a full range of resources to support USSS, FBI and FEMA to achieve the highest level of readiness during the event
- A Principal Federal Official (PFO) is pre-designated for all NSSEs
- Integrated Federal Support Plan (IFSP) is required for all SEAR [Special Event Assessment Report] Level 1 & 2 events." (**DHS**, *Office of Operations Coordination Interagency Planning Workshop*, November 29, 2007, slide # 25)

National Special Security Event Support (NSSE): "NSSEs are events of national significance that require greater federal visibility. NSSE is a designation that was established by PDD 62 and HSPD-7 (which supersedes the language in the PDD) and provides for additional federal resources in Historical examples of NSSEs include the State of the Union Address, Salt Lake City Olympics, and Democratic and Republican National Conventions. support of state and local authorities. If DOD assistance is required, military forces will remain in a supporting role to the LFA. The Secretary of Homeland Security, in consultation with the HSC, shall be responsible for designating events as NSSEs. The USSS, an element of the DHS, is the LFA for NSSE-designated events. Special events, including NSSEs, are ranked in importance by the FBI." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, pp. IV-6 and IV-7)

National Special Security Event (NSSE): "A designated event that, by virtue of it's political,

economic, social, or religious significance, may be the target of terrorism or other criminal activity." (**USCG**, *IM Handbook*, 2006, Glossary 25-17)

National Standard Exercise Curriculum (NSEC): "The National Standard Exercise Curriculum (NSEC) is working to unify exercise curriculum for coursework in exercise program management, design, development, conduct, evaluation, and improvement planning among Federal, State, Territorial, Tribal, and local partners. The National Standard Exercise Curriculum will reflect the broad collaboration and consistency within and across Departments, agencies, and levels of government espoused by the National Preparedness Goal, related Presidential Directives and the National Exercise Plan (NEP). Additionally, the curriculum will provide guidance to State and local jurisdictions concerning exercise training and ensure established policy is reinforced, corroborated, and institutionalized through education and training.
The following major objectives of the curriculum development process will be accomplished with the advice of the working group and the consent of the policy development committee:

- Establish planning guidance to align coursework into a national standardized exercise curriculum
- Ensure consistency across all exercise training curricula in accordance with the National Incident Management System (NIMS) and National Preparedness Goal
- Shape future efforts in exercise training and course development
- Integrate the Homeland Security Exercise and Evaluation Program (HSEEP) into the Master Exercise Practitioner (MEP) Program." (**FEMA**, *National Exercise Division, HSEEP*, *Quarterly Newsletter*, Spring 2008, p. 4)

National Standardized Exercise Curriculum (NSEC): "The National Standardized Exercise Curriculum (NSEC) is a current effort to unify curriculum in exercise program management, design, development, conduct, evaluation and improvement planning across the country. The NSEC strategy involves providing guidance to State and local jurisdictions concerning the exercise and training curricula, workshops and briefings." (**FEMA**, *NSEC*, 2008.)

National Strategy for Combating Terrorism: "As laid out in this strategy, to win the War on Terror, we will:

- Advance effective democracies as the long–term antidote to the ideology of terrorism;
- Prevent attacks by terrorist networks;
- Deny terrorists the support and sanctuary of rogue states;
- Deny weapons of mass destruction to rogue states and terrorist allies who seek to use them;
- Deny terrorists control of any nation they would use as a base and launching pad for terror; and
- Lay the foundations and build the institutions and structures we need to carry the fight forward against terror and help ensure our ultimate success." (**White House**, *National Strategy for Combating Terrorism*, 2006, p. 1)

National Strategy for Homeland Security (2002): "The *National Strategy for Homeland Security*… creates a comprehensive plan…to enhance our protection and reduce our vulnerability to terrorist attacks…. The strategic objectives of homeland security in order of priority are to:

• Prevent terrorist attacks within the United States;
• Reduce America's vulnerability to terrorism; and
• Minimize the damage and recover from attacks that do occur."
(**White House**, *National Strategy for Homeland Security*, 2002, pp. vi-vii)

National Strategy for Homeland Security (2002) Critical Mission Areas: "The *National Strategy for Homeland Security* aligns and focuses homeland security functions into six critical mission areas:

- intelligence and warning,
- border and transportation security,
- domestic counterterrorism,
- protecting critical infrastructure,
- defending against catastrophic terrorism, and
- emergency preparedness and response.

The first three mission areas focus primarily on preventing terrorist attacks; the next two on reducing our Nation's vulnerabilities; and the final one on minimizing the damage and recovering from attacks that do occur. The *Strategy* provides a framework to align the resources of the federal budget directly to the task of securing the homeland." (**White House**, *National Strategy for Homeland Security*, 2002, pp. viii)

National Strategy for Homeland Security (Emergency Preparedness and Support) 2002: The *National Strategy for Homeland Security* identifies twelve major initiatives in [Emergency Preparedness and Support]:
• Integrate separate federal response plans into a single all-discipline incident management plan;
• Create a national incident management system;
• Improve tactical counterterrorist capabilities;
• Enable seamless communication among all responders;
• Prepare health care providers for catastrophic terrorism;
• Augment America's pharmaceutical and vaccine stockpiles;
• Prepare for chemical, biological, radiological, and nuclear decontamination;
• Plan for military support to civil authorities;
• Build the Citizen Corps;
• Implement the First Responder Initiative of the Fiscal Year 2003 Budget;
• Build a national training and evaluation system; and
• Enhance the victim support system." (**White House**, *National Strategy for HS*, **2002**, p. x.)

National Strategy for Homeland Security -- Goal (2007): "The United States, through a concerted national effort that galvanizes the strengths and capabilities of Federal, State, local, and Tribal governments; the private and non-profit sectors; and regions, communities, and individual citizens – along with our partners in the international community – will work to achieve a secure Homeland that sustains our way of life as a free, prosperous, and welcoming America.

In order to realize this vision, the United States will use all instruments of national power and influence – diplomatic, information, military, economic, financial, intelligence, and law enforcement – to achieve our goals to prevent and disrupt terrorist attacks; protect the American people, critical infrastructure, and key resources; and respond to and recover from incidents that do occur. We also will continue to create, strengthen, and transform the principles, systems, structures, and institutions we need to secure our Nation over the long term. This is our strategy for homeland security." (**White House**, *National Strategy for Homeland Security*, 2007, page 13)

National Strategy for Homeland Security -- Purpose (2007): "The purpose of our *Strategy* is to guide, organize, and unify our Nation's homeland security efforts. It provides a common framework by which our entire Nation should focus its efforts on the following four goals:

• Prevent and disrupt terrorist attacks;
• Protect the American people, our critical infrastructure, and key resources;
• Respond to and recover from incidents that do occur; and
• Continue to strengthen the foundation to ensure our long-term success.

While the first three goals help to organize our national efforts, the last goal entails creating and transforming our homeland security principles, systems, structures, and institutions. This includes applying a comprehensive approach to risk management, building a culture of preparedness, developing a comprehensive Homeland Security Management System, improving incident management, better utilizing science and technology, and leveraging all instruments of national power and influence." (**White House**, *National Strategy for Homeland Security*, 2007,1)

National Strategy for Homeland Security – Shared Responsibility (2007): "To best protect the American people, homeland security must be a responsibility shared across our entire Nation. As we further develop a national culture of preparedness, our local, Tribal, State, and Federal governments, faith-based and community organizations, and businesses must be partners in securing the Homeland." (President George W. Bush, in **White House**, *National Strategy for Homeland Security*, 2007, p. 5, web copy)

National Strategy for Information Sharing: "Improving information sharing in the post–September 11 world requires an environment that supports the sharing of information across all levels of government, disciplines, and security domains. As with our achievements to date, an improved information sharing environment will not be constructed overnight, but rather will evolve over time and will be the fruit of careful cultivation. An improved information sharing environment also will be constructed upon a foundation of trusted partnerships among all levels of government, the private sector, and our foreign allies—partnerships based on a shared commitment to detect, prevent, disrupt, preempt, and mitigate the effects of terrorism. This Strategy sets forth the Administration's vision of what improvements are needed and how they can be achieved.

"The Strategy was developed with the understanding that homeland security information, terrorism information, and law enforcement information related to terrorism can come from multiple sources, all levels of government, as well as from private sector organizations and foreign sources. Federal, State, local, and tribal government organizations use such information

for multiple purposes. In addition to traditional law enforcement uses, such information is used to (1) support efforts to prevent terrorist attacks, (2) develop critical infrastructure protection and resilience plans, (3) prioritize emergency management, response, and recovery planning activities, (4) devise training and exercise programs, and (5) determine the allocation of funding and other resources for homeland security-related purposes." (**White House**, *National Strategy for Information* Sharing, October 2007, p. 1)

National Strategy for Information Sharing, Core Principles and Understandings: "The *Strategy* is founded on the following core principles and understandings:

- Effective information sharing comes through strong partnerships among Federal, State, local, and tribal authorities, private sector organizations, and our foreign partners and allies;
- Information acquired for one purpose, or under one set of authorities, might provide unique insights when combined, in accordance with applicable law, with unrelated information from other sources, and therefore we must foster a culture of awareness in which people at all levels of government remain cognizant of the functions and needs of others and use knowledge and information from all sources to support counterterrorism efforts;
- Information sharing must be woven into all aspects of counterterrorism activity, including preventive and protective actions, actionable responses, criminal and counterterrorism investigative activities, event preparedness, and response to and recovery from catastrophic events;
- The procedures, processes, and systems that support information sharing must draw upon and integrate existing technical capabilities and must respect established authorities and responsibilities; and
- State and major urban area fusion centers represent a valuable information sharing resource and should be incorporated into the national information sharing framework, which will require that fusion centers achieve a baseline level of capability to gather, process, share, and utilize information and operate in a manner that respects individuals' privacy rights and other legal rights protected by U.S. laws." (**White House**, *National Strategy for Information Sharing*, 2007, pp. 2-3)

National Strategy for Information Sharing, Foundational Elements: "This Strategy is focused on improving the sharing of homeland security, terrorism, and law enforcement information related to terrorism within and among all levels of governments and the private sector.

- Information Sharing at the Federal level….
- Information Sharing with State, local, and Tribal Entities….
- Information Sharing with the private Sector….
- Sharing Information with Foreign Partners….
- Protecting information Privacy and other Legal Rights…." (**White House**, *National Strategy for Information* Sharing, October 2007, pp. 3-4)

National Strategy for Information Sharing, Guiding Principles: "Those responsible for combating terrorism must have access to timely and accurate information regarding those who

want to attack us, their plans and activities, and the targets that they intend to attack. That information guides our efforts to:

- Identify rapidly both immediate and long-term threats;
- Identify persons involved in terrorism-related activities; and
- Implement information-driven and risk-based detection, prevention, deterrence, • response, protection, and emergency management efforts." (**White House**, *National Strategy for Information* Sharing, October 2007, p. 2)

National Strategy for Maritime Security: "Designed to integrate and synchronize existing department-level strategies to ensure their effective and efficient implementation, as well as align all federal government maritime security programs and initiatives into a comprehensive and cohesive national effort." (**GAO**, *Maritime Security*, December 2007, p. 56)

National Strategy for Pandemic Influenza (NSPI): "The ***National Strategy for Pandemic Influenza*** guides our preparedness and response to an influenza pandemic, with the intent of (1) stopping, slowing or otherwise limiting the spread of a pandemic to the United States; (2) limiting the domestic spread of a pandemic, and mitigating disease, suffering and death; and (3) sustaining infrastructure and mitigating impact to the economy and the functioning of society." (**White House,** *National Strategy for Pandemic Influenza.* November 1, 2005)

National Strategy for Public Health and Medical Preparedness: "This directive [HSPD 21] establishes a National Strategy for Public Health and Medical Preparedness (Strategy), which builds upon principles set forth in *Biodefense for the 21st Century* (April 2004) and will transform our national approach to protecting the health of the American people against all disasters….

(5) This Strategy draws key principles from the *National Strategy for Homeland Security* (October 2007), the *National Strategy to Combat Weapons of Mass Destruction* (December 2002), and *Biodefense for the 21st Century* (April 2004) that can be generally applied to public health and medical preparedness. Those key principles are the following: (1) preparedness for all potential catastrophic health events; (2) vertical and horizontal coordination across levels of government, jurisdictions, and disciplines; (3) a regional approach to health preparedness; (4) engagement of the private sector, academia, and other nongovernmental entities in preparedness and response efforts; and (5) the important roles of individuals, families, and communities.

(6) Present public health and medical preparedness plans incorporate the concept of "surging" existing medical and public health capabilities in response to an event that threatens a large number of lives. The assumption that conventional public health and medical systems can function effectively in catastrophic health events has, however, proved to be incorrect in real-world situations. Therefore, it is necessary to transform the national approach to health care in the context of a catastrophic health event in order to enable U.S. public health and medical systems to respond effectively to a broad range of incidents.

(7) The most effective complex service delivery systems result from rigorous end-to-end system design. A critical and formal process by which the functions of public health and medical

preparedness and response are designed to integrate all vertical (through all levels of government) and horizontal (across all sectors in communities) components can achieve a much greater capability than we currently have.

(8) The United States has tremendous resources in both public and private sectors that could be used to prepare for and respond to a catastrophic health event. To exploit those resources fully, they must be organized in a rationally designed system that is incorporated into pre-event planning, deployed in a coordinated manner in response to an event, and guided by a constant and timely flow of relevant information during an event. This Strategy establishes principles and objectives to improve our ability to respond comprehensively to catastrophic health events. It also identifies critical antecedent components of this capability and directs the development of an implementation plan that will delineate further specific actions and guide the process to fruition." (**White House**, *Homeland Security Presidential Directive (HSPD-21), Subject: Public Health and Medical Preparedness*, October 18, 2007)

National Strategy for The Physical Protection of Critical Infrastructure and Key Assets: "Consistent with the *National Strategy for Homeland Security*, this document identifies a clear set of goals and objectives and outlines the guiding principles that will underpin our efforts to secure the infrastructures and assets vital to our public health and safety, national security, governance, economy, and public confidence. It provides a unifying structure, defines roles and responsibilities, and identifies major initiatives that will drive our near-term protection priorities. Most importantly, it establishes a foundation for building and fostering a cooperative environment in which government, industry, and private citizens can work together to protect our critical infrastructures and key assets.' (**White House**, *The National Strategy for The Physical Protection of Critical Infrastructure and Key Assets.*, Feb. 2003, p. 2, Letter from the President)

National Strategy to Combat Weapons of Mass Destruction: "Our National Strategy to Combat Weapons of Mass Destruction has three principal pillars:

> *Counterproliferation to Combat WMD Use*
> *Strengthened Nonproliferation to Combat WMD Proliferation*
> *Consequence Management to Respond to WMD Use*" (**WH**, *HSPD-4*, December 2002)

National Strategy to Combat Weapons of Mass Destruction: "The three pillars of the U.S. national strategy to combat WMD are seamless elements of a comprehensive approach. Serving to integrate the pillars are four cross-cutting enabling functions that need to be pursued on a priority basis: intelligence collection and analysis on WMD, delivery systems, and related technologies; research and development to improve our ability to respond to evolving threats; bilateral and multilateral cooperation; and targeted strategies against hostile states and terrorists." (**White House**, *National Strategy to Combat Weapons of Mass Destruction*, Dec. 2002, p. 2)

National Strategy to Secure Cyberspace: "The *National Strategy to Secure Cyberspace* is part of our overall effort to protect the Nation. It is an implementing component of the *National Strategy for Homeland Security* and is complemented by a *National Strategy for the Physical Protection of Critical Infrastructures and Key Assets*. The purpose of this document is to engage and empower Americans to secure the portions of cyberspace that they own, operate, control, or

with which they interact. Securing cyberspace is a difficult strategic challenge that requires coordinated and focused effort from our entire society, the federal government, state and local governments, the private sector, and the American people." (**White House**, *National Strategy to Secure Cyberspace*, February 2003)

National Strike Force (NSF): "The NSF consists of three strike teams established by DHS/USCG on the Pacific, Atlantic, and Gulf coasts. The strike teams can provide advice and technical assistance for oil and hazardous substances removal, communications support, special equipment, and services." (**USCG**, *IM Handbook*, 2006, Glossary 25-18)

National Targeting Center (NTS) (Customs and Border Protection, DHS): "…a 24/7 operational center that brings together personnel from numerous government agencies to detect and respond to persons arriving at U.S. ports of entry who are matches or potential matches on national terrorist watch lists." (**DHS**, *Fact Sheet: ICE Accomplishments in Fiscal Year 2006*, 30Oct06; **DHS**, *Statement by Secretary Tom Ridge, Port of Portland*, 4 May 2004)

National Technical Nuclear Forensics Center (Domestic Nuclear Detection Office, DHS): "Provides national-level stewardship, centralized planning and integration for an enduring national technical nuclear forensics capability." (**DHS**, *DNDO Organization*, October 2007)

National Teleregistration Center (NTC): "Promotes a nationwide toll-free telephone number (1-800-621-FEMA) or (1-800-621-3362) that applicants can use to apply for disaster assistance." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. A-8 Glossary)

National Threat: "The absolute gravest threat is the struggle that we're in against radical Islamic extremism which can affect - if they prevail - our very existence." (**CNNMoney.com**, June 25, 2008)

National Tsunami Hazard Mitigation Program: "A coordinated national effort to assess tsunami threat, prepare community response, issue timely and effective warnings, and mitigate damage." "Primary goals of NTHMP are to: 1) raise awareness of the affected population; 2) develop integrated tsunami maps and models that can be used to develop improved warning guidance and evacuation maps; 3) improve tsunami warning systems; 4) incorporate tsunami planning into state and federal multi-hazard programs. Because tsunami mitigation is applicable beyond tsunamis and is integral to the nation's overall effort to reduce coastal losses and improve resilience, the mitigation capability takes a multi-hazards physical, commercial and ecological approach that responds to socio-economic and disaster management priorities." (Executive Office of the President. *About the National Tsunami Hazard Mitigation Program (NTHMP)*

National Urban Search & Rescue Response System: "As a result of a number of major emergencies including structural collapse both here and abroad over the last decade, the concept of urban search and rescue (USAR) has become increasingly recognized as an important element n integrated emergency response. These incidents include catastrophic earthquakes in California, the Philippines, and Soviet Armenia and structural collapses in Brownsville, Texas, and New York City. Following Hurricane Hugo the California Earthquake in 1989, both of which served to draw attention to the need for improved urban search and rescue capabilities and resources, the

Federal Emergency Management Agency (FEMA) undertook a major initiative to establish a National Urban Search and Rescue System.

"The initial goal of the FEMA program has been to establish 25 qualified USAR task forces placed strategically throughout the nation. These task forces provide the ability to respond to major incidents within a few hours of activation and offer a full range of capabilities in incident management; search; rescue; specialty medical care for entrapped patients; and technical disciplines including structural engineering, heavy equipment operation, hazardous materials and communications.

"In addition, au Advisory Committee on the National USAR System has been formed consisting of federal government experts, state and local officials, and the private sector to guide further development of the System and to serve as a forum for discussing issues and exchanging information related to urban search and rescue.

"To complement the efforts of the Federal Emergency Management Agency in Urban search and Rescue, the United States Fire Administration (USFA) has also initiated research and development and information dissemination efforts on USAR. Study reports are being produced for USFA under its "Investigation of Urban search and Rescue Incidents" program that will broaden the base of information available about USAR tactics, management and technology, and contribute to reducing the number and severity of casualties by highlighting the lessons learned, both the successes and the failures, from such operations in the past. The investigation reports, such as this one, provide detailed information about the magnitude and the incidents themselves; how the response to the incidents was carried out and managed; and the impact of these incidents on emergency responders and the emergency response systems in the community. The United States Fire Administration greatly appreciates the cooperation and information it is receiving from the fire service, county and state officials, and other emergency responders as this research progresses." (**FEMA**, *Urban Search and Rescue in the Santa Cruz Area Following the Loma Prieta Earthquake* (FA-124), November 1992, p. ii)

National Urban Search & Rescue Response System: "The National US&R Response System is a framework for structuring local emergency services personnel into integrated disaster response task forces. The 28 National US&R Task Forces, complete with the necessary tools, equipment, skills and techniques, can be deployed by FEMA to assist State and local governments in rescuing victims of structural collapse incidents or to assist in other search and rescue missions. Each task force must have all its personnel and equipment at the embarkation point within six hours of activation."

National Voluntary Organizations Active in Disasters (NVOAD): "NVOAD is a consortium of more than 30 recognized national organizations[91] active in disaster relief. Their organizations provide capabilities to support response efforts at all levels. During major incidents, NVOAD typically sends representatives to the DHS/Federal Emergency Management Agency's National Response Coordination Center to represent the voluntary organizations and assist in response coordination." (**DHS**, *NRF Comment Draft*, 2007, p. 17)

[91] Changed to "approximately 50 national organizations in Jan 2008 NRF, p. 21)

National Voluntary Organizations Active in Disasters (NVOAD): An umbrella organization of established and experienced voluntary organizations that serve disaster-affected communities. (**FEMA** 1995)

National Voluntary Organizations Active in Disasters (NVOAD): "NVOAD coordinates planning efforts by many voluntary organizations responding to disaster. Member organizations provide more effective and less duplication in service by getting together before disasters strike. Once disasters occur, NVOAD or an affiliated state VOAD encourages members and other voluntary agencies to convene on site. This cooperative effort has proven to be the most effective way for a wide variety of volunteers and organizations to work together in a crisis.

NVOAD serves member organizations through:

- Communication - disseminating information through electronic mechanisms, its Newsletter, the directory, research and demonstration, case studies, and critique.
- Cooperation - creating a climate for cooperation at all levels (including grass roots) and providing information.
- Coordination - coordinating policy among member organizations and serving as a liaison, advocate, and national voice.
- Education - providing training and increasing awareness and preparedness in each organization.
- Leadership Development - giving volunteer leaders training and support so as to build effective state VOAD organizations.
- Mitigation - supporting the efforts of federal, state, and local agencies and governments and supporting appropriate legislation.
- Convening Mechanisms - putting on seminars, meetings, board meetings, regional conferences, training programs, and local conferences.
- Outreach - encouraging the formation of and giving guidance to state and regional voluntary organizations active in disaster relief." (**National Voluntary Organizations Active in Disaster**, *About NOVAD*)

National Warning Control System (NAWAC): "Within the past few months, FCDA installed the National Warning Control System (NAWAC), for intercommunication or warning and tactical information through full-period telephone circuits connecting the FCDA Attack Warning Officers, Liaison Officers at CONAD and at the Air Defense Forces, FCDA regional offices, and the Administrator's office." (**FCDA,** *1955 Annual Report*, 1956, p. 4)

National Warning System (NAWAS):

- FEMA funds, operates, and controls
- Dedicated party-line voice system for emergency managers and military use
- NAWAS Regional Circuits
    - About 300 special telephone terminals in 10 FEMA regions
    - FEMA Operations Centers can call one or more regions
- NAWAS State Circuits:
    - About 1,700 telephone terminals
    - State Warning Point (SWP) serves as bridge to regional circuits. (**FEMA**, *IPAWS Update*, 2007, slide 19)

National Wildfire Coordinating Group (NWCG): "The National Wildfire Coordinating Group (NWCG) is made up of the USDA Forest Service; four Department of the Interior agencies: Bureau of Land Management (BLM), National Park Service (NPS), Bureau of Indian Affairs (BIA), and the Fish and Wildlife Service (FWS);and State forestry agencies through the National Association of State Foresters. The purpose of NWCG is to coordinate programs of the participating wildfire management agencies so as to avoid wasteful duplication and to provide a means of constructively working together. Its goal is to provide more effective execution of each agency's fire management program. The group provides a formalized system to agree upon standards of training, equipment, qualifications, and other operational functions." (NWCG, *About the NWCG – NWCG Organization*)

Nationwide Plan Review: "I believe all current issues can be summarized in one topic – communication. In my 19 years in emergency management, I have never experienced a more polarized environment between state and federal government. It seems that the Katrina federal legacy is one of minimizing exposure for the next event and ensuring future focus is centered on state and local preparedness efforts. A perfect example of this attitude is illustrated in the National Plan Review, which was conducted in 2006. The states were told that this was an opportunity for all levels of government to sit together, review plans, identify shortfalls, and develop a strategy to address those shortfalls, both operationally and financially in the future. This seemed like a wonderful concept, right up until the time the national planning report card was published for each state. The entire exercise seemed to be little more than an opportunity for the federal government to tell the press, "we told you states weren't prepared". (**Ashwood**, *Testimony… on "FEMA Preparedness in 2007 and Beyond,"* July 31, 2007, p. 2)

Nationwide Plan Review: "I am pleased to submit the Nationwide Plan Review Phase 2 report to Congress, as directed by the DHS FY 2006 Appropriations Act and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This report meets Congressional requirements to review and assess the status of catastrophic and evacuation planning in all States and 75 of the Nation's largest urban areas. It also addresses the President's directive to review emergency operations plans (EOPs) for the Nation's major cities.

The Nationwide Plan Review consisted of two phases. The first phase involved selfassessment, in which each State and urban area certified the status of its EOP and identified when the plan was last updated and exercised. The findings from the selfassessment phase were provided to Congress on February 10, 2006. The second phase involved peer review, in which teams made up of former State and local homeland security and emergency management officials visited 131 States and urban areas. Over the course of 62 business days, these reviewers validated the self-assessments, determined requirements for Federal planning assistance, and drew initial conclusions for strengthening plans and planning processes at the Federal, State, and local levels of government for catastrophic events. (**DHS**, *NPR Phase 2 Report* (DHS Secretary Chertoff Introduction), 2006, p. v)

Nationwide Plan Review Key Findings and Initial Conclusions: "While the Review found exemplary planners, renewed emphasis on planning, and many initiatives that are on the right trajectory, the current status of plans and planning gives grounds for significant national concern.

Current catastrophic planning is unsystematic and not linked within a national planning system. This is incompatible with 21st century homeland security challenges, and reflects a systemic problem: outmoded planning processes, products, and tools are primary contributors to the inadequacy of catastrophic planning. The results of the Review support the need for a fundamental modernization of our Nation's planning processes." (**DHS**, *NPR* 2, 2006, p. viii) "The Nationwide Plan Review provided a rapid assessment of the status of catastrophic planning for States and 75 of the Nation's largest urban areas… the initial conclusions are summarized below. They are numbered for ease of reference, not prioritization….

For States and Urban Areas:

1. The majority of the Nation's current emergency operations plans and planning processes cannot be characterized as fully adequate, feasible, or acceptable to manage catastrophic events as defined in the National Response Plan (NRP).
2. States and urban areas are not conducting adequate collaborative planning as a part of "steady state" preparedness.
3. Assumptions in Basic Plans do not adequately address catastrophic events.
4. Basic Plans do not adequately address continuity of operations and continuity of government.
5. The most common deficiency among State and urban area Direction and Control Annexes is the absence of a clearly defined command structure.
6. Many States and urban areas need to improve systems and procedures for communications among all operational components.
7. All Functional Annexes did not adequately address special needs populations.
8. States should designate a specific State agency that is responsible for providing oversight and ensuring accountability for including people with disabilities in the shelter operations process.
9. Timely warnings requiring emergency actions are not adequately disseminated to custodial institutions, appropriate government officials, and the public.
10. The ability to give the public accurate, timely, and useful information and instructions through the emergency period should be strengthened.
11. Significant weaknesses in evacuation planning are an area of profound concern.
12. Capabilities to manage reception and care for large numbers of evacuees are inadequate.
13. Capabilities to track patients under emergency or disaster conditions and license of out-of-State medical personnel are limited.
14. Resource management is the "Achilles heel" of emergency planning. Resource Management Annexes do not adequately describe in detail the means, organization, and process by which States and urban areas will find, obtain, allocate, track, and distribute resources to meet operational needs.
15. Plans should clearly define resource requirements, conduct resource inventories, match available resources to requirements, and identify and resolve shortfalls."
(**DHS**, *NPR* 2, 2006, p. ix-x; see also, **DHS**, "Fact Sheet: Nationwide Plan Review Initial Conclusions," June 16, 2006.)

For the Federal Government:

1. Planning products, processes, tools, and technologies should be developed to facilitate a common nationwide approach to catastrophic planning in accordance with the National

Preparedness Goal's National Priority to Strengthen Planning and Citizen Preparedness Capabilities.
2. Planning modernization should be fully integrated with other key homeland security initiatives.
3. Clear guidance should be developed on how State and local governments plan for coordinated operations with Federal partners under the NRP.
4. Existing Federal technical assistance should be used to help States and urban areas address the specific issues identified during the Nationwide Plan Review.
5. Critical tasks, target capabilities, and associated performance measures, such as those identified in the National Preparedness Goal should serve as the common reference system for planning and the language of synchronization.
6. Detailed planning assumptions and planning magnitudes for catastrophic incidents should be defined, such as has been initiated through the National Planning Scenarios.
7. Current preparedness data should be readily accessible to planners.
8. Regional planning capabilities, processes, and resources should be strengthened in accordance with the National Preparedness Goal's National Priorities to Expand Regional Collaboration and Strengthen Planning and Citizen Preparedness Capabilities.
9. Collaboration between government and non-governmental entities should be strengthened at all levels, as outlined in the National Preparedness Goal's National Priority to Expand Regional Collaboration.
10. The Federal Government should develop a consistent definition of the term "special needs".
11. The Federal Government should provide guidance to States and local governments on incorporation of disability-related demographic analysis into emergency planning.
12. Federal, State, and local governments should work with the private sector to identify and coordinate effective means of transporting individuals with disabilities before, during, and after an emergency.
13. Improvements in public preparedness and emergency public information should be implemented in accordance with the National Preparedness Goal's National Priority to Strengthen Planning and Citizen Preparedness Capabilities.
14. Federal, State, and local governments should take action to better integrate nongovernmental resources to meet surge capacity.
15. The Federal Government should provide the leadership, doctrine, policies, guidance, standards, and resources necessary to build a shared national homeland security planning system.
16. Identification of desired technologies, tools, and architecture(s) for the national homeland security planning community should be included in the National Priority to Strengthen Planning and Citizen Preparedness Capabilities.
17. Comprehensive national guidance on the potential consequences associated with catastrophic risks and hazards should be developed to drive risk management and operational planning.
18. Development of focused training, education, and professional development programs for homeland security planners should be included in the National Priority to Strengthen Planning and Citizen Preparedness Capabilities.
19. Collaborative planning and planning excellence should be incentivized. Funding and projects should be linked to operational readiness through a specific task or capability in a plan or plan annex.

20. Federal, State, and local governments should increase the participation of people with disabilities and disability subject-matter experts in the development and execution of plans, training, and exercises.
21. The Federal Government should provide technical assistance to clarify the extent to which emergency communications, including public information associated with emergencies, must be in accessible formats for persons with disabilities. This assistance should address all aspects of communication, including, for example, televised and other types of emergency notification and instructions, shelter announcements, and applications and forms for government and private disaster benefits.
22. The status of the Nation's plans should be a central focus of the annual report to the President on the Nation's preparedness required by Homeland Security Presidential Directive 8 (HSPD-8)
23. Emergency Operations Plans should be a focal point for resource allocation, accountability, and assessments of operational readiness.
24. Performance management frameworks to support the National Preparedness Goal should measure the ability to:

- Integrate a multi-jurisdictional and multi-agency response based on the intersection of tasks and capabilities in combined plans; and
- Maintain operations in the face of disruptions of service, damage to the environment in which operations occur, or loss of critical resources."

(**DHS**, *NPR* 2, 2006, pp. x-xi; see, also, **DHS**, "Fact Sheet: Nationwide Plan Review Initial Conclusions," June 16, 2006.)

Natural Disaster: "Definitions - For purposes of this title only…. The term 'natural disaster' means any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, or other catastrophe in any part of the United States which causes, or which may cause, substantial damage or injury to civilian property or persons." (**Stafford Act**, Title VI, Sec 602. Definitions (42 U.S.C. 5195a), June 2007 (FEMA 592), p. 54)

Natural Disaster: "Strictly speaking, there is no such thing as a natural disaster, but there are natural hazards, such as cyclones and earthquakes … A disaster takes place when a community is affected by a hazard … In other words, the impact of the disaster is determined by the extent of a community's vulnerability to the hazard. This vulnerability is not natural. It is the human dimension of disasters, the result of the whole range of economic, social, cultural, institutional, political and even psychological factors that shape people's lives and create the environment that they live in." (**ISDR** *Living with Risk: A global review of disaster reduction initiatives*, 2004)

Natural Disaster: See "Disaster, Natural"

Natural Disasters and National Security Threats (1953): "Civil Defense as a Peacetime Disaster Agency: Dramatic examples of the value of civil defense in peacetime deisasters continued to accumulate during 1953. As civil defensse participation in recovery efforts after natural catastrophies increased, more and more people began to see that this new partner in national defense, essential as it woulde be in war, could also pay its way in peacetime.

At the Federal level, Executive Order 10427 issued on January 16, 1953, gave FCDA [Federal Civil Defense Administration] responsibility for providing assistance to localities stricken by major disasters. This responsibility involved investigating and evaluating natural disasters in the States and recommending to the President whether or not the disaster was of sufficient magnitude to warrant Federal aid. The order named FCDA the coordinating agency for all Federal assistance, when authorized, to stricken areas.

Tornadoes, floods, explosions, fires, and countless other emergency situatins across the Nation became the proving grounds for civil defense preparedness. In every case where civil defense workers were at the scene, their contribution to alleviation of the situation, whether of minor or major nature, was indisputable. In many cases civil defense's organization and ability to act quickly and constructively provided the impetus needed to start remedial action in the local disaster involved" (**FCDA**, *1953 Annual Report*, p. 15)

"The disasters of 1953 demonstrated that, although in an emergency people are willing and anxious to offer their help, they must have leadership, training, and organization to be of benefit. Civil defense can provide that leadership, training, and organization. The catastrophes of 1953 clearly showed that the same mena nd women who are organized, equipped, and trained to counteract an atomic blast can be effective on the homefrot in times of flood, earthquakes, tornadoes, and other natural disasters." (**FCDA**, *1953 Annual Report*, p. 17)

Natural Hazards: See "Hazard, Natural"

Natural Hazards Support System (NHSS): A hazards mapping system "designed to provide a comprehensive overview of current natural hazards events for the public as well as USGS Federal, State and local partners." (**DOI**, *Emergency Management*, 2008)

Naturalistic Decision Making (NDM): "Naturalistic Decision Making (NDM) is emerging as a field of research providing a descriptive view of how people make decisions in actual settings that often feature unstructured problems imbedded within complex and dynamic systems. Decision making in these settings tends to differ significantly from the analytic style inferred from structured laboratory decision tasks that form the basis for traditional decision theory research. A growing body of research indicates that under realistic conditions experts make decisions using a holistic process involving situation recognition and pattern matching to memory structures to make rapid decisions (Dreyfus, 1981; Klein, 1989, 1993; Klein, Calderwood, & Clinton-Cirocco, 1986). Within this framework, a person's situation awareness (SA), an internal conceptualization of the current situation, becomes the driving factor in the decision-making process. For novices as well, who may operate using very different decision strategies, understanding the situation frequently poses the major portion of their task. In most settings effective decision making largely depends on having a good understanding of the situation at hand." (**Endsley**, "The Role of Situation Awareness in Naturalistic Decision Making," Chapter 26, p. 269 in Zsambok, Caroline E., and Gary Klein (Eds.). *Naturalistic Decision Making*. Lawrence Erlbaum Associates, 1997, 414 pages.

Naturalistic Decision Making (NDM): "Naturalistic decision making is an attempt to understand how humans actually make decisions in complex real-world settings, such as fire fighting… This work has focused on situations marked by key features…These include dynamic

and continually changing conditions, real-time reactions to these changes, ill-defined tasks, time pressure, significant personal consequences for mistakes, and experienced decision makers. (**Klein and Klinger**, "Naturalistic Decision Making," 1991, p. 16)

Naturalistic Decision Making (NDM): "NDM is the way people use their experience to make decisions in field settings…. the processes and strategies of 'naturalistic' decision making differ from those revealed in traditional decision research. For example…in NDM, the focus in the decision event is more front-loaded, so that decision makers are more concerned about sizing up the situation and refreshing their situation awareness through feedback, rather than developing multiple options to compare to one another. In contrast, most traditional decision research has involved inexperienced people who are engaged in laboratory tasks where contextual or situational factors play a limited role. The traditional paradigm emphasizes understanding the back end of the decision event – choosing among options (Beach & Lipshitz, 1993)…. The study of NDM asks how experienced people, working as individuals or groups in dynamic, undertain, and often fast-paced environments, identify and assess their situation, make decisions and take actions whose consequences are meaningful to them and to the larger organization in which they operate." (**Zsambok**, "Naturalistic Decision Making…, 1997, p. 4)

[Note: See, also, Situation Awareness and Situational Awareness.]

NAWAS: National Warning System**.** (**OCD**, *Abbreviations*, 1971, p. 3)

NBC: Nuclear, Biological, and Chemical. (**DA**, *WMD-CST Operations*, 2007, Glossary-5)

NBHPP: National Bioterrorism Hospital Preparedness Program.

NBIC: National Biosurveillance Integration Center.

NBIS: National Biosurveillance Integration System. (**DHS**, Exhibit 300, Feb. 12, 2007, p. 1)

NCA: National Capabilities Assessment. (**DHS**, *Development of the CAPS*, 2006)

NCA: National Command Authorities. (**DA**, *WMD-CST Operations*, 2007, Glossary-5)

NCAP: National Civil Applications Program. (**USGS**, *NCAP USCG Fact Sheet 121-02*, 2002)

NCBRT-ACE; National Center for Biomedical Research and Training, Academy of Counter-Terrorist Education, Louisiana State University. (**FEMA**, *TEI/TO*, 2008, 4)

NCC: National Command Capability.

NCC: National Continuity Coordinator. (**DHS**, *FCD* 1, Nov 2007, p.12)

NCC: National Coordinating Center for Telecommunications. (**DHS,** *NIPP* 2006, p. 101)

NCCC: National Command and Control Capability. (**DHS**, *Budget-in-Brief FY 2008*, 2007, 82)

NCE: National Cyber Exercise. (**DHS**, *Cyber Storm Exercise Report*, September 11, 2006, p. 1)

NCH: Natural and Cultural Resources and Historic Properties.

NCIHC: National Council on Interpreting in Health Care. (**CDC**, *Reaching At Risk Populations*, 2007)

NCIP: National Continuity Implementation Plan.

NCIP: National Critical Infrastructure Protection.

NCIP R&D: National Critical Infrastructure Protection Research & Development. (**DHS,** *NIPP* 2006, p. 102)

NCOP: National Common Operating Picture.

NCP: National Continuity Program. (**DHS**, *FCD 1*, Nov. 2007, p. O-2)

NCP: National Oil and Hazardous Substances Contingency Plan (40 CFR Part 300).

NCP: Nuclear Civil Protection. (**DCPA**, *Standards for Local Preparedness Planning*, 1978, 1)

NCPC: National Counterproliferation Center. (**HSAC**, *WME Task Force*, Jan.10, 2006, p. 4)

NCPD: National Continuity Programs Directorate, FEMA. (FEMA, *Statement of R. David Paulison*…, April 3, 2008, p. 9)

NCPDCID: National Center for Preparedness, Detection, Control of Infectious Diseases, CDC,

NCPIP: National Continuity Policy Implementation Plan. (**FEMA**, *MEF/PMEF*, 2008)

NCR: National Capital Region. (**DHS**, *FCD 1*, Nov. 2007, p. O-2)

NCR IMT: National Capital Region Incident Management Team. (**USFA**, January 1, 2008)

NCRC: National Capital Region Coordination.

NCRCG: National Cyber Response Coordination Group. (**DHS,** *NIPP* 2006, p. 102)

NCRP: National Council on Radiation Protection and Measurement.

NCS: National Communications System. (**DHS,** *NIPP* 2006, p. 102)

NCSA: National Cyber Security Alliance. (**DHS,** *NIPP* 2006, p. 102)

NCSC: National Cyber Security Center, DHS. (**DHS**, *Statement by Homeland Security Secretary Michael Chertoff on the Appointment of the Director of the NCSC,* March 20, 2008)

NCSD: National Cyber Security Division, DHS. (**DHS**, *Cyber Storm Exercise Report*, 2006, 1)

NCSL: National Conference of State Legislatures.

NCTC: National Counterterrorism Center. (**DHS,** *NIPP* 2006, p. 102)

NDER: National Defense Executive Reserve [defunct]. (**OCD**, *Abbreviations*, 1971, p. 3)

NDM: Naturalistic Decision Making. (Zsambok and Klein (Eds.). *Naturalistic Decision Making*, 1997)

NDMS: National Disaster Medical System. (**HSGAC**, *A Nation Still Unprepared*, 2006, p. 633)

NDP: National Defense Panel, Department of Defense.

NDPC: National Domestic Preparedness Consortium. (**DHS**, *The NDPC*, April 3, 2007 update)

NDRF: National Defense Reserve Fleet. (**Robinson**, *Proceedings…*, Dec. 2007, p. 3)

NDS: National Defense Strategy. (**DOD/JCS**, *The NMS of the USA*, 2004, 1)

NDSP: National Dam Safety Program. (**FEMA**, *Dam Safety and Security in the US*, 2006)

NECP: National Emergency Communications Plan. (**NSTAC**, *Report to President on Emergency Communications*…, 2007, p. ES-2)

NECS: National Emergency Communications Strategy. (**NSTAC**, *Report to President on Emergency Communications*…, 2007, p. ES-2)

NED: National Exercise Division. (**FEMA**, *NIEM Overview*, 2008)

NEDSS: National Electronic Disease Surveillance System. (**CDC**, *NEDSS*)

Need to Know: "A determination made by an authorized holder of classified information that disclosure/dissemination of the information to an appropriately cleared individual is required in order to permit that individual to perform their official duties. The determination is not made solely by virtue of an individual's office, position, or security clearance level." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 38)

Need to Know vs. Need to Share: "… What all these stories have in common is a system that requires a demonstrated "need to know" before sharing. This approach assumes it is possible to know, in advance, who will need the information. Such a system implicitly assumes that the risk of inadvertent disclosure outweighs the benefits of wider sharing. Those Cold War assumptions

are no longer appropriate. The culture of agencies feeling they own the information they gathered at taxpayer expense must be replaced by a culture in which the agencies instead feel they have a duty to the information—to repay the taxpayers' investment by making that information available... Current security requirements nurture over-classification and excessive compartmentalization of information among agencies. Each agency's incentive structure opposes sharing, with risks (criminal, civil, and internal administrative sanctions) but few rewards for sharing information. No one has to pay the long-term costs of over-classifying information, though these costs—even in literal financial terms— are substantial. There are no punishments for *not* sharing information. Agencies uphold a "need-to-know" culture of information protection rather than promoting a "need-to-share" culture of integration." (*The 9/11 Commission Final Report on Terrorist Attacks upon the United States*, p.417' quoted in: ." (**DHS**, *Capstone Doctrine Pub 1 Version 2.1 Draft*, Chapter 8, Information Operations, 2008, p. 8-3)

Need to Share: "DHS was created to facilitate information sharing across governments and the private sector. It is a function of both operating practices and technologies that enable information to be shared quickly and securely, as well as a culture that supports information sharing. The Nation's intelligence and information sharing systems must go from being closed, mission-centric loops utilized only within government agencies to a new nation-wide culture and network of information sharing, fusion, and interagency collaboration. This requires replacing the Nation's old "Need to Know" way of sharing information with a new "Need to Share" culture."(**DHS**, *Capstone Doctrine Pub 1 Version 2.1 Draft*, Chapter 8, Information Operations, 2008, p. 8-3)

NEEP: National Exercise and Evaluation Program. **(HSC**, *NCPIP*, August 2007, p. 65)

NEER: National Emergency Resource Registry**.** (**FedCenter.gov**, *The NEER*, Sep 19, 2005)

NEES: Network for Earthquake Engineering Simulation.

NEFs: National Essential Functions. (**White House,** *HSPD-20*, May 9, 2007)

NEHC: Neighborhood Emergency Health Center. (**AHRQHHS**, *Mass Medical Care*, 2007, 77)

NEHRP: National Earthquake Hazard Reduction Program.

NEHRP Goals (From Strategic Plan): "…strategic goals are:
• Goal A. Develop effective practices and policies for earthquake loss-reduction and accelerate their implementation.
• Goal B. Improve techniques to reduce vulnerability of facilities and systems.
• Goal C. Improve seismic hazards and risk assessment methods.
• Goal D. Improve understanding of earthquakes and their effects." (**NEHRP**, *Annual Report*, 2007, p. 3)

NEHRP Program Coordination Working Group (PCWG): "NIST has established the PCWG, which is composed of the working-level program managers from each of the NEHRP agencies. The PCWG meets approximately once a month to coordinate agency activities, review

reporting and planning documents, discuss problems and opportunities, and exchange relevant information. The PCWG members are responsible for keeping their agencies' Directors apprised of significant activities, and the Secretariat informs working-level counterparts at OSTP and OMB of these activities." (**NEHRP**, *Annual Report*, 2007, p. 3)

NEHRP Secretariat: "In early 2006, NIST hired a full-time government employee as NEHRP Director and head of the office of the NEHRP Secretariat. This individual is a qualified engineer with experience in earthquake research, design, and construction practices, and in the management of complex programs and organizations. The office of the NEHRP Secretariat is charged with providing overall program management and coordination for NEHRP, strengthening program effectiveness by facilitating implementation of earthquake risk mitigation measures, ensuring that NEHRP statutory and reporting requirements are met, supporting the development and implementation of NEHRP strategic and management plans and coordinated interagency budgets, and building and maintaining effective liaison with NEHRP program agencies, industry stakeholders, academia, state and local government, and the general public." (**NEHRP**, *Annual Report*, 2007, p. 3)

NEMA: National Emergency Management Association. (**HSGP**, *Nation Unprepared*, 2006)

NEMB-CAP: National Emergency Mgmt. Baseline Capability Assessment Program, FEMA.

NEMS: National Emergency Management System. (**HSGPC**, A *Nation Unprepared*, 2006, 633)

NEP: National Exercise Program. (**DHS**, *FCD 1*, Nov. 2007, p. O-2)

NEP I-Plan: National Exercise Program Implementation Plan. (FEMA, *Homeland Security Exercise and Evaluation Program HSEEP Newsletter* (Winter 2008, Issue 7), 5 Feb 2008, p. 2)

NEPA: National Environmental Policy Act.

NEPLO: Navy Emergency Preparedness Liaison Officer.

NEPP: National Emergency Preparedness Program, United States Army Corps of Engineers. (**USACE**, *NEPP*)

NERRTC: National Emergency Response and Rescue Training Center. (**FEMA**, *TEI/TO Course Catalog*, 2008, 5)

Nerve Agents: "Substances that interfere with the central nervous system. Exposure is primarily through contact with the liquid (via skin and eyes) and secondarily through inhalation of the vapor. Tabun (GA), Sarin (GB), Soman (GD) and VX are nerve agents. Symptoms: Pinpoint pupils, extreme headache, severe tightness in the chest, dyspnea, runny nose, coughing, salivation, unresponsiveness, seizures." (**DOT**, *Emergency Response Guidebook*, 2004, p. 362)

NEST: Nuclear Emergency Search Team, DOE.

Net Guard: National Emergency Technology Guard. (**FEMA** *News Release HQ-08-112*, 2008)

NETC: National Emergency Training Center, FEMA/DHS, Emmitsburg, MD.

Net-Centricity: "People, processes, and technology working together to enable timely and trusted:

- Access to information
- Sharing of information
- Collaboration among those who need it.

Can only be done on the Net!" (**DOD**, *Enabling Net-Centric Operations*, Sep 21, 2006, slide 6)

New FEMA: "The Post-Katrina Emergency Management Reform Act reorganizes DHS by reconfiguring FEMA with consolidated emergency management functions, including national preparedness functions. The newly-constituted FEMA will be established as a distinct entity, yet integral to DHS, similar to the U.S. Coast Guard and U.S. Secret Service. As required by the Act, the New FEMA will include the functions existing within FEMA as of June 1, 2006 and those elements of the Preparedness Directorate that were in the Preparedness Directorate as of June 1, 2006 and not specifically excluded by the Act. The New FEMA will be headed by an Administrator, I have been asked to serve in the newly titled position of Administrator. As required by the Post-Katrina Act, the organizational changes required for New FEMA will be effective on March 31, 2007." (**FEMA**, *Statement for the Record R. David Paulison*, February 28, 2007, pp. 2-3)

New FEMA: "FEMA's vision sets a future path to building a dynamic and innovative New FEMA using the building blocks of strengthened core competencies, regions, and partnerships; investments in FEMA employees; a business approach that achieves desired results; and, the professionalization of the national emergency management system." (**FEMA**, *Strategic Plan*, 2007, p. 43)

New Madrid Seismic Zone (NMSZ): "The New Madrid Seismic Zone (NMSZ) is a fault system in the Central U.S. that is located roughly between St. Louis, Missouri and Memphis, Tennessee. The geology in the Central U.S. is conducive to movement, and potential damage is more widespread than other earthquake-prone areas of the U.S. The series of earthquakes with the greatest magnitude in the area was in 1811-12 (4 major quakes within 3 months, ranging from approximately 7.0 to 8.0 in magnitude.) There appears to be a 400-500 year cycle of earthquakes in the region – some debate on this – but a serious consideration (we are at 195 years since last significant series)…. The Central United States Earthquake Consortium (CUSEC), the Mid-America Earthquake Center (MAEC), the United States Geological Survey (USGS) and FEMA have completed preliminary modeling of potential impacts of an earthquake in the NMSZ. The estimated total building loss alone in the area from one quake today could exceed $70 Billion." (**FEMA**, *New Madrid Seismic Zone Catastrophic Planning*, 2007)

New Madrid Seismic Zone (NMSZ) Catastrophic Response Planning Initiative: "The New Madrid Seismic Zone Catastrophic Response Planning Initiative is well underway throughout the eight CUSEC Member States…the initiative will enable local, state, and federal agencies to create and adopt comprehensive plans that address responding to a catastrophic event along the

New Madrid Seismic Zone. CUSEC, along with Member States, FEMA, Innovative Emergency Management, and the Mid America Earthquake Center, is helping to coordinate a series of local and state workshops that bring together key players in the planning process. The workshops are scenario-driven and inspire planners and responders to work together to come up with the plans. Arkansas is the first state holding the scenario-driven workshops, and all Member States will have completed their workshops by April 1, 2008. At the end of this multi-year initiative, there will be a series of exercises, at the state and regional levels, that will help validate the work that has been done. In most terms, this is the single, largest disaster planning initiative that has been undertaken in the United States." (**CUSEC**, "Catastrophic Planning Initiative Underway." Memphis, TN: *CUSEC News*, July 2007)

New Madrid Seismic Zone (NMSZ) Catastrophic Response Planning Initiative: "The NMSZ Catastrophic Disaster Response Planning Initiative was selected as a venue to address one of the 15 National Planning Scenarios, "natural disasters-major earthquake" as identified in the National Preparedness Guidelines dated September 2007. The NMSZ Catastrophic Disaster Response Planning Initiative focuses on a "no-notice" major earthquake along the NMSZ. The NMSZ Initiative uses a bottoms-up, grass-roots planning approach with broad stakeholder participation that will help ensure comprehensive plan development, plan enhancements, and a sustainable planning process." (**FEMA**, *Statement of Glenn Cannon*, December 4, 2007, p. 2)

"Project briefed to President, Secretary DHS, Capital Hill Senate and House Members and Staff, US Chamber of Commerce, Delta Regional Authority, International Development Group, National Hurricane Conference…" (**FEMA**, *Catastrophic Disaster Planning IAEM Presentation*, November 12, 2007, slide 43)

New Madrid Seismic Zone (NMSZ) Catastrophic Planning Initiative Mission: "…the mission of the New Madrid Seismic Zone Catastrophic Planning Project is to create a comprehensive preparedness plan for a catastrophic earthquake in the NMSZ based on the most advanced impact assessment techniques and new response and recovery methodologies. Another mission of the project is to identify any issues that can not be resolved based on current capabilities and propose recommended courses of action for decision makers." (**CUSEC**, "FEMA & CUSEC Launch New Madrid Catastrophic Planning Initiative," January 2007, 1 & 3)

New Madrid Seismic Zone (NMSZ) Catastrophic Planning Project Mission: "The mission of the New Madrid Seismic Zone Catastrophic Planning Project is to increase national readiness for a catastrophic earthquake in the NMSZ. Specifically, this will be accomplished by developing a series of annexes or supplements to existing base plans for response and recovery to a series of major earthquakes in the NMSZ and integrating them into a single document with federal, regional, tribal, state, and local components. Additionally, the mission is to identify any issues that can not be resolved based on current capabilities and to propose recommended courses of action for decision makers involved in this project. The NMSZ Catastrophic Planning project will serve to accomplish the following three main objectives:
1. Improve response to a catastrophic earthquake and related hazards in the NMSZ
2. Plan for a coordinated response and recovery effort among Federal, State, and local agencies
3. Incorporate lessons from the Hurricane Katrina response, Southeast Louisiana Catastrophic Hurricane Plan, and previous earthquakes." (**FEMA**, *NMSZ Catastrophic Planning*, 2007)

NEXS: National Exercise Schedule, National Exercise Program. (**FEMA,** *Statement of Schrader*, 2007, p. 7)

NEXS System: "The NEXS System is the Nation's online comprehensive tool that facilitates scheduling, de-confliction, and synchronization of all exercises in a centralized location. The NEXS System allows users to schedule exercises online, in addition to de-conflicting and synchronizing with exercises that are similar in date and location, scope, scenario, or participants. Exercise synchronization, the coordination and possible linking or combining of exercises, facilitates better allocation of resources and limits potential exercise fatigue. **(DHS,** *Homeland Security Exercise and Evaluation Program Toolkit -- The NEXS*, Sep. 13, 2007)

NFA: National Fire Academy, U.S. Fire Administration, FEMA/DHS, Emmitsburg, MD.

NFC: National Fusion Center, DHS/NOC. (**DHS**, *Notice of Change to the NRP*, May 22, 2006, pp. 11-12)

NFG: Non-Federal Governments. (**DHS**, *FCD 1*, November 2007, p. O-2)

NFIF: National Flood Insurance Fund.

NFIP: National Flood Insurance Program, FEMA.

NFIRA: National Flood Insurance Reform Act of 1994. (**FEMA**, *Call for Issues*…, 2000, xxiii)

NFIRS: National Fire Incident Reporting System, United States Fire Administration, FEMA.

NFP: National Fire Programs, United States Fire Administration, FEMA.

NFPA: National Fire Protection Association.

NFPA 471: Recommended Practice for Responding to Hazardous Materials Incidents 1997 Ed.

NFPA 472: Standard for Professional Competence of Responders to Hazardous Materials Incidents.

NFPA 1201: Standard for Providing Emergency Services to the Public.

NFPA 1500: Standard on Fire Department Occupational Safety and Health Program.

NFPA 1521: Standard for Fire Department Safety Officer. National Fire Protection Association.

NFPA 1561: Standard on Emergency Services Incident Management Systems, 2002. "There were several efforts to "blend" the various incident command systems. One early effort was in 1987 when the National Fire Protection Association (NFPA) undertook the development of NFPA 1561, then called Standard on Fire Department Incident Management System. The NFPA

committee quickly recognized that the majority of the incident command systems in existence at the time were similar. The differences among the systems were mostly due to variations in terminology for similar components. That NFPA standard, later revised to its present title: Standard on Emergency Services Incident Management, provides for organizations to adopt or modify existing systems to suit local requirements or preferences as long as they meet specific performance measurements." (**FEMA**, *NIMS and ICS*, 2004)

NFPA 1581: Standard on Fire Department Infection Control Program.

NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments.

NFPA 1600: "NFPA 1600, *Standard on Disaster/Emergency Management and Business Continuity Programs***,** was originally published in 1995 as a recommended practice, then in 2000, it was published as a standard…. The 9/11 Commission asked the American National Standards Institute (ANSI) to develop a consensus on a 'National Standard for Preparedness' for the private sector. ANSI's Homeland Security Standards Panel recommended the use of NFPA 1600. The recognition of NFPA 1600 by the 9/11 Commission led to the recognition of NFPA 1600 in Title VII, Section 7305 of the 'National Intelligence Reform Act of 2004'." (**NFPA**, *Implementing NFPA 1600 National Preparedness Standard*, 2007, p. xiii)

NFPA 1600: *Standard on Disaster/Emergency Management and Business Continuity Programs***,** 2007 Edition. National Fire Protection Association. NFPA 1600 "was prepared by the Technical Committee on Emergency Management and Business Continuity. It was issued by the Standards Council on December 1, 2006, with an effective date of December 20, 2006, and supersedes all previous editions. This edition of NFPA 1600 was approved as an American National Standard on December 20, 2006. (**NFPA**, *NFPA 1600*, 2007, p. 4)

1.1 Scope. This standard shall establish a common set of criteria for disaster/emergency management and business continuity programs hereinafter referred to as the program.
1.2 Purpose. This standard shall provide disaster and emergency management and business continuity programs, the criteria to assess current programs or to develop, implement, and maintain aspects for prevention, mitigation, preparation, response, and recovery from emergencies.
1.3 Application. This document shall apply to public, not-for-profit, and private entities. (**NFPA 1600**, 2007, p. 7)

NFPA 1600 Background: "The NFPA Standards Council originally established a "Disaster Management" Committee in 1991 to develop preparedness, response and recovery guidelines for disasters…. The NFPA 1600 development process closely paralleled the development of the Federal Emergency Management Agency's (FEMA) "Capabilities Assessment for Readiness" (CAR) document. ERI International's "Blueprint for Community Emergency Management" was a source document for this original version of the standard. ERI President, Rick LaValla was instrumental in both the development of the first NFPA 1600 standard and the "Operational Readiness and Capability Assessment" which later became known as CAR. In preparation for issuing the 2000 edition of NFPA 1600, the committee took a much broader "total program approach" and incorporated elements of three related fields: disaster management, emergency

management, and business continuity programs. The committee expanded the standard to include activities both before and after a disaster, so that mitigation activities are included as part of the effort to protect life and property. In addition, business continuity and disaster recovery practitioners were involved.

"Mr. LaValla stated that he was engaged by FEMA in 1996 to assist with the development of a national preparedness survey of state emergency management agencies that would result in a report to Congress. Mr. LaValla says "ERI was selected because of a long history with developing emergency management program "blueprints," and assessment methodologies. ERI had also just completed writing the "New State Director's" training program and text for NEMA which contained a comprehensive local government emergency management program design and assessment questionnaire."

"In 1996, the DRI International and the Business Continuity Institute were asked to participate in the standards-making process. As a result, the standard includes elements of the Professional Practices that both DRII and BCI developed and is consistent with DRII's Business Continuity Planning Model….

"NFPA 1600 has now been adopted as a standard by a significant part of our industry. The Federal Emergency Management Agency, DRI International, the National Emergency Managers Association (NEMA), and the International Association of Emergency Managers (IAEM) have endorsed the most recent edition of NFPA 1600. FEMA's Local Capability Assessment for Readiness (LCAR) program, which is used as a benchmark for state and local governments, is based on NFPA 1600. NEMA adopted 1600 as the basis for their Emergency Management Accreditation Program (EMAP). In addition, the American National Standards Institute (ANSI) has adopted NFPA 1600." (**Davis**, *NFPA 1600*, 2005)

NFPA 1600 Program Elements:

- 5.2. Laws and Authorities
- 5.3. Risk Assessment
- 5.4. Incident Prevention
- 5.5. Mitigation
- 5.6. Resource Management and Logistics
- 5.7. Mutual Aid/Assistance
- 5.8. Planning
- 5.9. Incident Management
- 5.10. Communications and Warning
- 5.11. Operational Procedures
- 5.12. Facilities
- 5.13. Training
- 5.14. Exercises, Evaluations, and Corrective Actions
- 5.15. Crisis Communication and Public Information
- 5.16. Finance and Administration (**NFPA**, *NFPA 1600*, 2007)

NFSS: National Fallout Shelter Survey. (**OCD**, *Abbreviations*, 1971, p. 3) [Defunct]

NG: National Guard.

NGA: National Governors Association.

NGA: National Guard Association

NGB: National Guard Bureau, DOD.

NGB Form 500: Request for National Guard Assistance. (**DA**, *WMD-CST Ops.*, 2007, 2-4)

NGO: Nongovernmental Organization. (**UNDHA**, *DM Glossary*, 1992, 54)

NGR: National Guard Regulation. (**DA**, *WMD-CST Operations*, 2007, Glossary-5)

NGRF: National Guard Reaction Force. (**FEMA**, *Statement of Cannon*, November 2007, 12)

NH: Natural Hazards. (**FEMA**, *Federal Interim CONPLAN NMSZ*, December 2007, p. B-2)

NHC: National Hurricane Center, National Weather Service, NOAA.

NHDF: National Homeland Defense Foundation.

N-Hour: Notification Hour. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2006, p. 4-4)

NHP: National Hurricane Program. (**FEMA**, *NHC*, Dec 2007)

NHPA: National Historic Preservation Act of 1966.

NHSP: National Homeland Security Plan. (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008, p. iv)

NIAC: National Infrastructure Advisory Council. (**DHS,** *NIPP* 2006, p. 102)

NIAID: National Institute of Allergy and Infectious Diseases.

NIAP: National Information Assurance Partnership. (**DHS,** *NIPP* 2006, p. 102)

NIBS: National Institute of Building Sciences.

NIC: National Intelligence Community. (**DHS**, *Capstone Doctrine Pub 1 Version 2.1 Draft*, Chapter 8, Information Operations, 2008, p. 8-4)

NIC: National Integration Center. (**FEMA/NPD**, *Welcome to the NIC.*…, Sep. 11, 2007 update.

NICC: National Infrastructure Coordinating Center. (**DHS,** *NIPP* 2006, p. 102)

NICCL: National Incident Communications Conference Line. (**FEM**A, IS 250, *Emergency Support Function 15 (ESF15) External Affairs*, p. 6, Acronyms and Abbreviations)

NICI: National Interagency Civil-Military Institute (**DOD**, San Louis Obispo, CA).

NIEM: National Information Exchange Model. (**DHS/HSEEP**, *NIEM Overview*)

NIFOG: National Interoperability Field Operations Guide. (**DHS**, *NIFOG*, 2007)

NIICL: DHS National Interagency Incident Conference Line. (**FEMA**, *Devolution of Operations Plan Template*)

NIIMS: National Interagency Incident Management System. (**NWCG**, *History of ICS*, 1994)

NIMS: National Incident Management System. (**HSGPC**, A *Nation Unprepared*, 2006,, 633)

NIMS Adoption: "The establishment of a legal authority (e.g. executive order, proclamation, resolution, legislation, or other legal mandate) that requires all departments and agencies operating within the jurisdiction to use NIMS principles and methodologies in their all-hazards incident management system." (**FEMA**, *NIMS Compliance Metrics Terms of Reference*, 2006, 7)

NIMS Baseline: "An initial assessment of NIMS compliance conducted in 2005 and/or 2006 by participating jurisdictions at State, Territorial, local, and tribal levels." (**FEMA**, *NIMS Compliance Metrics Terms of Reference*, October 2006, 7)

NIMS Compliance: "All State, territory, local and tribal jurisdictions that receive Federal preparedness assistance awards in the form of grants, cooperative agreements and direct contracts have, as a condition of receiving this funding, the requirement to be in compliance with the NIMS" (**FEMA** *National Incident Management System FY 2008 NIMS Compliance*, March 2008, slide 2; cites HSPD-5)

NIMS Compliance (FY 2007):

- DHS/FEMA required to monitor compliance of NIMS at state level.
- States no longer could self-certify NIMS compliance.
- All jurisdictions had to answer compliance metrics to assess…implementation of NIMS.
- NIMS Compliance Assistance Support Tool (NIMSCAST) made available to track and report compliance for all jurisdictions." " (**FEMA** *National Incident Management System FY 2008 NIMS Compliance*, March 2008, slide 3)

NIMS Compliance Metrics (FY 2005-2006):

- Command and Management
- Preparedness
- Resource Management
- Communication and Information Management

- Supporting Technologies. (**FEMA**, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 26)

NIMS Compliance Metrics (FY 2007):

- State Adoption and Infrastructure
- Command and Management
- Preparedness Planning
- Preparedness Training
- Preparedness Exercises
- Resource Management
- Communication and Information. (**FEMA**, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 26)

NIMS Compliance Metrics (New FY 2008 Metrics):

- Initiate development of a State/Territory-wide system to credential emergency management/response personnel to ensure proper authorization and access to an incident including those involving mutual aid agreements and/or assistance agreements. (**FEMA**, *FY 2008… NIMS Compliance Objectives and Metrics For States…*, Feb 2008, p. 7)

NIMS Compliance Metrics (Projected FY 2009 Metrics):

- Preparedness Planning
- Preparedness Training
- Preparedness Exercises
- Communication and Information Management
- Resource Management
- Command and Management. (**FEMA**, *FY 2008… NIMS Compliance Objectives and Metrics For States…*, Feb 2008, p. 8)

NIMS Implementation: "All activities necessary for adopting and institutionalizing NIMS. Implementation includes the formal adoption of NIMS, the use of a NIMS-compliant approach to all incident management operations, etc." (**FEMA**, *NIMS Compliance Metrics Terms of Reference*, October 2006, 7)

NIMS Integration Center: "The Office of the Director and five functional branches will provide direct oversight for the ongoing management and maintenance of the NIMS and its major components utilizing an integrated approach. The five functional branches of the NIC include the following:

· Publications Management Branch;
· Standards and Resource Branch;
· Training and Exercises Branch;
· System Evaluation and Compliance Branch; and
· Technology/R&D Branch." (**DHS**, *National Incident Management System Integration Center*, DHS Mgmt. Directive System, NIMS NIC Directive 3, MD Number 9500, March 2004)

[Note: The NIMS Integration Center, was renamed the "Incident Management Systems Integration (IMSI) Division within FEMA's Preparedness Directorate in 2007.]

NIMS National Standard Curriculum: "A curriculum designed to provide training on the NIMS. This curriculum will be built around available federal training opportunities and course offerings that support NIMS implementation. The curriculum also will serve to clarify training that is necessary for NIMS-compliance and streamline the training approval process for courses recognized by the curriculum. Initially, the curriculum will be made up of NIMS awareness training and training to support the Incident Command System (ICS). Eventually it will expand to include all NIMS training requirements including training established to meet national credentialing standards." (**FEMA**, *NIMS Compliance Metrics Terms of Reference*, October 2006, 7; See: http://www.fema.gov/pdf/emergency/nims/nsctd.pdf

NIMSCAST: National Incident Management System Compliance Assistance Support Tool. (**FEMA**, *NIMS Compliance Metrics Terms of Reference*, October 2006, p. 6)

NIMSCAST: "The NIMS Compliance Assistance Support Tool (NIMSCAST) is designed as a free, web-based self-assessment tool for State, territorial, tribal, and local governments to evaluate and report their jurisdiction's achievement of all NIMS implementation activities released since fiscal year (FY) 2005 by the National Integration Center. In addition, the NIMSCAST will provide a method for States, territories, tribal, and local jurisdictions to document their Corrective Action Plans for Tier 1 metrics which a jurisdiction is not compliant. The NIMS Capability Assessment Support Tool (NIMCAST) was released in January 2005. With the release of FY2007 NIMS Implementation Activities and Compliance Metrics, the NIMCAST name has been modified to better reflect the overall use of the tool. The NIMSCAST is designed for jurisdictions to complete a comprehensive self-assessment based on FY2007 Compliance Metrics. By using the NIMSCAST, jurisdictions will be able to assess their compliance and implementation with NIMS requirements and identify successes and shortfalls. At the end of FY2007, the Incident Management Systems Division of the National Integration Center will have the ability to assess NIMS implementation at the National, FEMA region, State, territory, tribal, and local jurisdictions. This information will allow the National Integration Center to provide information to Congress, identify best practices, and shortfalls so that appropriate technical assistance can be provided." (FEMA, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 3)

NIP-WOT: National Implementation Plan—War on Terror. (**FEMA**, *Interim IPS for HLS* (Draft 2.3), July 3, 2008 copy, p. 4-1)

NIPP: National Infrastructure Protection Plan. (**DHS,** *NIPP* 2006, p. 1)

NIPP Risk Management Framework: (**DHS,** *NIPP* 2006, pp. 29-50)

Set Security Goals
Identify Assets, Systems, Networks and Functions
Assess Risks
Prioritize

Implement Protective Programs
Measure Effectiveness

NIRT: Nuclear Incident Response Team, DOE. (**DOE** *Order 0 153.1*, June 27, 2007)

NISAC: National Infrastructure Simulation and Analysis Center. (**DHS,** *NIPP* 2006, p. 102)

NIST: National Institute of Standards and Technology.

NJIC: National Joint Information Center. (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, p. 16)

NJTTF: National Joint Terrorism Task Force. (**DHS,** *NIPP* 2006, p. 102)

NLC: National League of Cities.

NLD DPP: Nunn-Lugar-Domenici Domestic Preparedness Program. (FEMA, HSEEP Glossary, 2008)

NLE: National-Level Exercise. (**FEMA**, *Statement of Dennis Schrader*, Oct. 3, 2007, p. 3)

NLIC: National Lenders Insurance Council. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

NMCC: National Military Command Center. (**OCD**, *Abbreviations*, 1971, p. 3)

NMS: National Military Strategy. (**DOD/JCS**, *The NMS of the USA*, 2004)

NMSO: Nuclear Medical Science Officer. (**DA**, *WMD-CST Operations*, 2007, Glossary-5)

NMSZ: New Madrid Seismic Zone.

NNE: Northern New England.

NNSA: National Nuclear Security Administration.

No Adverse Impact: Concept developed by the Association of State Floodplain Managers to promote in efforts to reduce growing flood losses. No Adverse Impact centers on "ensuring that the actions of one property owner do not adversely impact the rights and interests of other property owners, now and in the future." (**ASFPM** 2003, 45-46)

NOAA: National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

NOC: National Operations Center. (**DHS,** *NIPP* 2006, p. 102)

NOC: Negotiations Operations Center (**FBI**, *USG Interag. Dom. Ter. CONPLAN*, 2001, A-1)

NOFORN: Not Releasable to Foreign Nationals. (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 33)

Noncongregate Facilities: "Facilities that provide private or semiprivate accommodations, but are not considered temporary housing (e.g., cruise ships, tent cities, military installations, school dorm facilities, or modified nursing homes)." (**DHS**, *National Response Framework Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex* (Comment Draft), September 10, 2007, p. 7)

Non-Governmental Organization (NGO): "Non-profit making organization operating at the local, national or international levels. Distinct from a governmental organization, having no statutory ties with a national government." (**UNDHA**, *DM Glossary*, 1992, 54)

Nongovernmental Organizations: "An entity with an association that is based upon the interests of its member individuals or institutions; and, that is not created by a governmental agency, but may work cooperatively with any relevant governmental agencies. Non-governmental organizations serve a public purpose and not a private benefit. Examples of non-governmental organizations include faith based charity organizations, the Salvation Army and the American Red Cross." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 38)

Nonprofit Security Grant Program (NSGP): "The Federal grant funds must be used for target-hardening activities, which can be accomplished through training or the purchase or installation of security equipment on real property owned or leased by the nonprofit organization. Allowable equipment is limited to physical security enhancements (e.g. alarm systems, bulletproof doors or windows) or inspection and screening systems (e.g. walk-through magnetometers and conveyor-belt x-ray systems used to screen personnel and packages for hazardous materials/devices). Additionally, nonprofit organization security personnel may use NSGP funds to attend security-related training courses and programs. Allowable training-related costs under NSGP are limited to attendance fees for the training, and related expenses, such as materials, supplies, and/or equipment. Allowable training topics are limited to the protection of CI/KR, including physical and cyber security, target hardening, and terrorism awareness/employee preparedness. Not all eligible nonprofit organizations and UASI communities are guaranteed to receive funding under the FY 2007 NSGP. Allocation decisions will be made based on risk and how well applicants address program requirements through their investment justifications. (**DHS**, *DHS Announces $24 Million Available to Nonprofit Organizations to Strengthen Security Through UASI Program*, April 27, 2007)

Nonprofit Security Grant Program (NSGP): Grant program for "nonprofit organizations according to criteria that include:

- Prior identified and substantiated threats or attacks by a terrorist organization, corroborated by intelligence or law enforcement reporting, toward the nonprofit or closely-related organization, either within or outside the United States;
- Symbolic value of a site as a highly recognized national or historical institution that renders it a possible terrorist target;
- Organization's role in responding to or recovering from terrorist attacks; and
- Organization's credible threat or vulnerability, as well as the potential consequences of an attack, as determined by a previously conducted risk assessment.

NSGP grants seek to integrate nonprofit preparedness activities with broader state and local preparedness efforts. The program is also designed to promote coordination and collaboration in emergency preparedness activities among public and private community representatives, state and local government agencies, and Citizen Corps Councils." (**FEMA**, *DHS Announces $24 Million in NSGP Grants*. 28 Sep 2007)

Non-specific Threat (COOP): "A threat condition implemented for a national declaration." (**FEMA**, *Department/Agency HQ Devolution of Operations Plan Template*)

Non-Stafford Federal Support to State and Local Jurisdictions: "If a community requires resources beyond those available from the State, local agencies may request certain types of Federal assistance directly from Federal departments and agencies. For example, under the Comprehensive Environmental Response, Compensation, and Liability Act, local and tribal governments can request assistance directly from the Environmental Protection Agency and/or the U.S. Coast Guard." (**DHS**, *National Response Framework -- Federal Partner Guide* (Comment Draft), September 10, 2007, p. 19)

Non-Structural Flood Mitigation: "System for reduction of the effects of floods using non-structural means, e.g. land-use planning (flood plain zoning), advance warning systems, flood insurance." (**UNDHA**, *DM Glossary*, 1992, 54)

Non-Technical Canvasses: "Involve traditional canvasses for persons and vehicles in order to identify witnesses and sources of information. Non-technical canvasses may involve residential and commercial buildings, schools, recreational sites, mass transit facilities, crime scenes and investigative scenes." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 38)

NORAD: North American Defense Command. (**OCD**, *Abbreviations*, 1971, p. 3)

NORM: Normally Occurring Radioactive Material. (**DHA**, *Opening Statement*, Vayl Oxford, 3)

NORS: USNORTHCOM Operational Reporting System. (**DA**, *WMD-CST Operations*, 2007)

North Carolina Insurance Underwriting Association: "The North Carolina Insurance Underwriting Association (North Carolina Beach Plan) was created in 1969 to provide insurance coverage to people not able to buy it through the standard insurance market only on the barrier islands adjacent to the Atlantic Ocean. In 1998, the North Carolina General Assembly expanded the Beach Plan to include the state's 18 coastal counties for windstorm and hail only coverage." (**GAO**, *Natural Disasters: Public Policy Options*…, Nov 2007, p. 73)

NORTHCOM: U.S. Northern Command. See "USNORTHCOM"

Northern New England (NNE) Metropolitan Medical Response System (MMRS) Tri-State Collaborative: "The Northern New England MMRS (NNE MMRS) functions as a coordinating resource in responding to the health and medical consequences of a weapon of mass destruction attack impacting Maine, New Hampshire, or Vermont. The NNE MMRS also serves as a resource for other mass casualty events or significant outbreaks in the region, including serving

as a structure to help local communities take advantage of arriving federal assets." (**DHS**, *Expanded Regional Collaboration…FY 2004-2006*, 2006, p. 17)

NPD: National Preparedness Directorate, FEMA Headquarters.

NPD: National Preparedness Division, FEMA Regional Offices. (**FEMA**, *Regional CONOPS*, 08)

NPES: National Planning and Execution System. (**DHS**, 2007 forthcoming)

NPG: National Preparedness Goal.

NPG: National Preparedness Guidelines. (**DHS**, *National Preparedness Guidelines*, 13Sep2007)

NPHIC: National Public Health Information Coalition. (**CDC**, *CERC Course*, 2002, p. ix)

NPIP: National Preparedness Integration Program. (**FEMA**, *Vision for New FEMA*, 2006, p.24)

NPPs: Nuclear Power Plants. (**USCG**, *Port Security Assessment Program*)

NPPD: National Protection and Programs Directorate.

NPR: Nationwide Plan Review. (**DHS**, *Nationwide Plan Review, Phase 2 Report*, 2006)

NPRM: Notice of Proposed Rulemaking. (**FEMA**, *IPAWS Update*, 2007, 4)

NPS: National Park Service, Department of the Interior.

NPS: National Preparedness System.

NPS: Naval Postgraduate School, Monterey California.

NPSC: National Processing Service Center. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

NRC: National Research Council. (**OCD**, *Abbreviations and Definitions*, 1971, p. 3)

NRC: National Response Center.

NRC: Nuclear Regulatory Commission.

NRCC: National Response Coordination Center. (**DHS,** *NIPP* 2006, p. 102)

NRF: National Response Framework. (**DHS**, *NRF Comment Draft*, September 2007)

NRF CIA: National Response Framework Catastrophic Incident Annex. (**DHS**, NRF CIA, 2007)

NRF Resource Center: "The **NRF Resource Center** is intended to supply a nimble, state-of-the-art forum for sharing and encouraging…the operational planning and detailed work of developing stronger emergency management plans and capabilities…" It is "… an on-line repository of supporting documents, resources and educational materials… intended especially to assist emergency management practitioners. This repository provides a single, web-based portal for documents, information, training materials and other tools needed for incident response partners to understand and execute their roles under the *Framework*. (**DHS**, *NRF Comment Draft*, September 2007, p. 75)

NRP: National Response Plan (to be replaced by NRF in November 2007). (**DHS**, *NRF Comment Draft,* September 2007)

NRP CIA: National Response Plan, Critical Incident Annex. (**HSGAC**, *Nation Unprepared*, 2006)

NRP CIS: National Response Plan, Critical Incident Supplement. **(HSGAC**, *Unprepared*, 2006)

NRPSC: National Response Steering Committee. (**DHS**, *FEMA OMA FY 2009*, 2008, 13)

N-RSRT: National Rapid Support and Response Team. (**DHS**, *Budget-in-Brief FY 2008*, p. 68)

NS/EP: National Security and Emergency Preparedness. (**DHS,** *NIPP*, 2006, p. 28)

NSARC: National Search and Rescue Committee**.**

NSC: National Security Council. (**OCD**, *Abbreviations and Definitions*, 1971, p. 3)

NSCC: Nuclear Sector Coordinating Council.

NSDD: National Security Decision Directive.

NSF: National Science Foundation. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 633)

NSFCC: National Strike Force Coordination Center. (**GAO**, *Maritime Security*, Dec 2007, iv)

NSGP: Nonprofit Security Grant Program. (FEMA, *DHS Announces $24 Million in NSGP Grants*. 28 Sep 2007)

NSHS: National Strategy for Homeland Security.

NSIR: Office of Nuclear Security and Incident Response, Nuclear Regulatory Commission.

NSIS: National Strategy for Information Sharing. (**White House**, *NSIS*, October 2007)

NSPD: National Security Presidential Directive. (**DHS**, *FCD 1*, Nov. 2007, p. O-2)

NSPD-1: Organization of the National Security Council System, 13 February 2001.

NSPD-9: Defeating the Terrorist Threat to the United States (Combating Terrorism), October 25, 2001.

NSPD-33: Biodefense for the 21st Century, April 28, 2004.

NSPD-43/HSPD—14: Established the Domestic Nuclear Detection Office within DHS.

NSPD-51/HSPD-20: National Continuity Policy, April 4, 2007.

NSPI: National Strategy for Pandemic Influenza. (**White House,** *NSPI*, November 1, 2005)

NSPG: National Security Planning Guidance. (**DOD**, *Building Partnership Capacity*, 2006, 7)

NSPP: National Strategy for the Physical Protection of Critical Infrastructure and Key Assets.

NSRB: National Security Resources Board, 1947-1953.

NSS: National Security Strategy. (**McClelland**, *The US NSS: Grand Strategy or*…, 2006)

NSS: National Shelter System. Defunct.

NSSE: National Special Security Event. (**Dept. of the Army**, *WMD-CST Ops*, Dec. 2007, 5-1)

NSPD: National Security Presidential Directive.

NSTAC: National Security Telecommunications Advisory Committee. (**DHS,** *NIPP*, 2006, p. 102)

NSTS: National Strategy for Transportation Security.

NTC: National Targeting Center, DHS. (**DHS**, *Statement by Ridge, Port of Portland*, 4May2004)

NTC: "Net Tropical Cyclone Activity –Average seasonal percentage mean of NS, NSD, H, HD, IH, IHD. Gives overall indication of Atlantic basin seasonal hurricane activity. The 1950-2000 average value of this parameter is 100." (**Klotzbach and Gray**, *Extended Range Forecast of Atlantic Seasonal Hurricane Activity, U.S. Landfall Strike Probability for 2008*, April 08, p.6)

NTHMP: National Tsunami Hazard Mitigation Program.

NTNFC: National Technical Nuclear Forensics Center. (**FEMA** *Statement of Cannon*, 2007, 10)

NTS: Nevada Test Site. (**FEMA**, *TEI/TO Course Catalog*, 2008, 5)

NTSB: National Transportation Safety Board.

Nuclear Accident: "Accidental release of radiation occurring in civil nuclear facilities, exceeding the internationally established safety levels." (**European Environment Agency**, *EEA*

Environmental Glossary; cites: **United Nations**, *Internationally Agreed Glossary of Basic Terms Related to Disaster Management*, 1992, p. 55)

Nuclear Assessment Program, DHS: "Depending upon the circumstances of a detector alarm, DHS' Nuclear Assessment Program assets may also be activated to conduct a credibility assessment of a radiological or nuclear threat. For example, the Nuclear Assessment Program would conduct an assessment of a detector alarm if it involved the transport of illicit nuclear material. The Nuclear Assessment Program is coordinated through the Lawrence Livermore National Laboratory and provides a national capability to assess the credibility of communicated radiological and nuclear threats. It also monitors illicit nuclear material trafficking incidents worldwide. The Nuclear Assessment Program uses nuclear specialists and behavioral analysts to determine the credibility of a particular threat. The program is accessible to any federal or state agency and can be activated independently of a nuclear detector alarm. In FY 2006, the Nuclear Assessment Program performed 120 formal assessments." (**DHS/OIG**, *DHS' DNDO Progress*…, Dec 2007, p. 24)

Nuclear Blast: "A nuclear blast is an explosion with intense light and heat, a damaging pressure wave, and widespread radioactive material that can contaminate the air, water, and ground surfaces for miles around. A nuclear device can range from a weapon carried by an intercontinental missile launched by a hostile nation or terrorist organization, to a small portable nuclear devise transported by an individual. All nuclear devices cause deadly effects when exploded, including blinding light, intense heat (thermal radiation), initial nuclear radiation, blast, fires started by the heat pulse, and secondary fires caused by the destruction." (**FEMA**, *Are You Ready? Nuclear Blast*, 2006)

Nuclear Civil Protection (NCP): "The concept of Nuclear Civil Protection (NCP) has been added to Standard Three, on emergency planning. NCP plans provide for two options: (1) Protection of the population essentially in-place, at or near their places of residence. (2) Orderly relocation of people from high-risk areas to low-risk host jurisdictions during a period of severe international crisis, should time and circumstances permit implementation of relocation plans. NCP planning for the relocation option is expected to be conducted into the 1980's, with direct Federal support and the consent and participation of States and localities." (**DCPA**, *Standards for Local Civil Preparedness*, 1978, p. 1)

Nuclear Civil Protection (NCP) Planning: "The Federal government encourages and assists localities in full-spectrum emergency planning, including a range of potential peacetime hazards…However, it is also essential (and required as a condition of eligibility for Federal assistance) that each jurisdiction's emergency plan provide for civil defense operations during periods of severe international crisis and attack.

"The term Nuclear Civil Protection (NCP) planning refers to development of plans providing the following two options: (1) Protection of the population against nuclear attack effects essentially in-place, in jurisdictions throughout the U.S., at or near their places of residence. (2) Orderly relocation of people from areas of potential high risk from the direct effects of nuclear weapons, should national authorities elect to implement relocation plans during a severe crisis, and time and

circumstances permit relocation, as well as the reception, care, and protection of relocated people in low-risk host areas.

"NCP planning for the *in-place protection option* includes development or updating of both (1) a local community shelter plan (CSP) allocation, including standby information materials for the public; and (2) emergency plans, based on the CSP allocation, covering local government operations for sheltering the population. This type of NCP planning has been underway since 1966, and many localities will need to update in-place protection plans, as new shelter surveys provide a basis for revising CSP allocations….

"NCP planning for the *relocation option* includes both local and State-level planning for relocating people from high-risk areas, during a period of severe international crisis, to low-risk jurisdictions. High-risk jurisdictions thus require plans covering operations to relocate the people during a crisis, and then to maintain security in the risk area, to keep essential industry in operation by commuting key workers, and to shelter any persons still in the risk area in best-available shelter should an attack occur. Low-risk host jurisdictions, in contrast, require plans covering reception and care of relocated population, and provision of fallout protection for use in case of attack.

"NCP planning is risk-oriented, in that plans needed by high-risk and low-risk jurisdictions will differ…Also, most low-risk jurisdictions will need plans for the contingency of hosting risk-area population in case of crisis relocation." (**DCPA**, *Standards For Local Civil Protection*, 1978, 16-17)

Nuclear Detonation Effects and Injuries: "Nuclear detonations cause three types of injuries: blast, thermal and radiation, as well as electromagnetic pulse (EMP) effects described further in a later section.

(1) *Blast injuries* are caused by the overpressure wave traveling outwards from the center of the nuclear detonation. The types of injuries are the same as occur with conventional explosives and are further described in the next section.

(2) *Thermal injuries* present as flash burns (burns from direct exposure to the thermal radiation pulse, typically ultraviolet, visible, and infrared waves) or flame burns (burns from materials set afire by the infrared energy wave igniting flammable materials).

(3) *Radiation injuries* from a nuclear blast occur from two sources: prompt and residual. Prompt radiation effects occur due to the neutrons and high-energy gamma rays emitted immediately by the weapon. Severity depends on the weapon's yield, emission spectrum, and distance to the target. Residual radiation effects are due to emissions (typically alphas, betas, and low energy gammas) from fission fragments (the heavy atom products produced during fission) and activated environmental materials (when materials absorb radiation and become radioactive themselves). Collectively, these sources are called fallout. The amount of fallout depends on the weapon's yield, type, and height of burst, while the area affected depends heavily on the wind. The hazard to personnel depends on the level of radiation present and the duration of exposure." (**JCS/DOD**, *CBRNE, Consequence Management* (JP 3-41), 2006, p. I-8)

Nuclear Emergency Search Team (NEST): "The Nuclear Emergency Support Team (NEST) is the National Nuclear Security Administration's program for preparing and equipping specialized response teams to deal with the technical aspects of nuclear or radiological terrorism. NEST capabilities include search and identification of nuclear materials, diagnostics and assessment of suspected nuclear devices, technical operations in support of render safe procedures, and packaging for transport to final disposition.

"Their mission is to provide specialized technical expertise to the Federal response in resolving nuclear or radiological terrorist incidents. This expertise is provided by well trained personnel who form specialized response teams to work in coordination with teams from other Federal agencies to resolve a nuclear terrorist crisis. NEST experts include engineers, scientists, and other technical specialists from NNSA's nuclear weapons laboratories and facilities to include Los Alamos National Laboratory, Sandia National Laboratories, Lawrence Livermore National Laboratory, the Remote Sensing Laboratory and the Pantex Plant." (**DOE**, *NEST,* Nov. 6, 2007)

Nuclear Incident: "A nuclear incident is defined as an event or a series of events, either deliberate or accidental, leading to the release, or potential release, into the environment of radioactive materials in sufficient quantity to warrant consideration of protective actions." (**EPA,** *Manual of Protective Action Guides and Protective Actions For Nuclear Incidents*, 1991, p. 1-1; **Health Physics Society**, *Guidance for Protective Actions Following a Radiological Terrorist Event*, 2004, p. 3)

Nuclear Facility Incident (Fixed): "Any occurrence at a fixed nuclear power facility (i.e., commercial power plant or other reactor facility) resulting in a potential or actual release of radioactive material in sufficient quantity to constitute a threat to the health and safety of the off-site population." (**FEMA**, *Hazard Identification*… (CPG 1-34), 1985, p. A-3)

Nuclear Incident Response Phases: "The PAG Manual [EPA 1992] establishes protective actions based on the ability to control exposure to the radioactive material and the exposure pathways that are expected to exist as a nuclear incident progresses. This approach results in classifying the response to a nuclear incident into three phases, i.e., early, intermediate, and late (recovery) phase.

- The early phase of a nuclear incident is from the beginning of the incident until the release of radioactive material is under control and is characterized by the need to make immediate decisions for protective actions.
- The intermediate phase is the period beginning after the release of radioactive material has been brought under control or has stopped and is characterized by the ability to obtain reliable radiological measurements as a basis for decision making.
- The late (recovery) phase is the period in which recovery actions are conducted to bring radiation levels to levels acceptable for the area to be returned to unrestricted use." (Health Physics Society, *Background Information on "Guidance for Protective Actions Following a Radiological Terrorist Event" Position Statement of the Health Physics Society*, 2004, p. 4)

Nuclear Incident Response Team (NIRT): "NIRT teams are specialized teams managed day-to-day by the Department of Energy (DOE) / National Nuclear Security Administration (NNSA) and the Environmental Protection Agency (EPA). They are operationally controlled by DHS/FEMA when activated to provide expert technical advice and support in disaster response operations and other needs involving nuclear weapons accidents, radiological accidents, lost or stolen radioactive material incidents, and acts of nuclear terrorism." (**DHS**, *FEMA OMA FY 09 Budget Justification*, 2008, 21)

Nuclear Incident Response Team (NIRT): "Section 506 of the Homeland Security Act of 2002 includes in its definition of the NIRT those entities of the DOE that perform nuclear or radiological emergency support functions (including accident response, search response, advisory and technical operations functions), radiation exposure functions at the medical assistance facility known as the Radiation Emergency Assistance Center/Training Site (REAC/TS), radiological assistance functions, and related functions." (**DOE**, *Departmental Radiological Emergency Response Assets*, June 27, 2007, p. 2)

Nuclear Incident Response Team (NIRT): "Created by the Homeland Security Act to provide DHS with a nuclear/radiological response capability. When activated, the NIRT consists of specialized Federal response teams drawn from DOE and/or EPA." (**USCG**, *IM Handbook*, 2006, Glossary 25-18)

Nuclear Regulatory Commission (NRC): "The NRC regulates the civilian uses of nuclear materials in the United States to protect public health and safety, the environment and the common defense and security. This mission is accomplished through: licensing of nuclear facilities and the possession, use and disposal of nuclear materials; the development and implementation of requirements governing licensed activities; and inspection and enforcement activities to assure compliance with these requirements." (**NRC**, *Enforcement Program Annual Report, Calendar Year 2007,* May 9, 2008, page vii)

Nuclear Regulatory Commission (NRC) Performance Goals:

- **Safety**: ensuring protection of public health and safety and the environment.
- **Security**: ensuring the secure use and management of radioactive materials.
- **Openness**: ensuring openness in our regulatory process.
- **Effectiveness**: ensuring that NRC actions are effective, efficient, realistic, and timely.
- **Management**: ensuring excellence in agency management to carry out the NRC's strategic objective. (NRC, *Enforcement Program Annual Report, Calendar and Fiscal Years 2005,* August 15, 2006, page ix)

Nuclear Sector Coordinating Council (NSCC): Nuclear industry group formed in 2004 "made up of industry leaders representing nuclear power plants, university research reactors, fuel fabrication facilities and manufacturers of nuclear components. The coordinating council serves as the primary liaison between the commercial nuclear sector and federal agencies on security and emergency preparedness." (**Nuclear Energy Institute**, *Nuclear Power Plant Security Backgrounder*, Sep. 1, 2006, p. 1)

Nuclear Weapon Accident: "An unexpected event involving nuclear weapons that results in any of the following:

- Accidental or unauthorized launching, firing, or use by U.S. Forces
- U.S.-supported allied forces of a nuclear-capable weapons system.
- An accidental, unauthorized, or unexplained nuclear detonation.
- Non-nuclear detonation or burning of a nuclear weapon.
- Radioactive contamination.
- Jettisoning of a nuclear weapon.
- Public hazard, actual or perceived." (**DoD**, *DoD Response to Radiological Accidents*, 1996, p. 9)

Nuclear Weapon Significant Incident: "An unexpected event involving nuclear weapons, nuclear components, or a nuclear weapon transport or launch vehicle when a nuclear weapon is mated, loaded, or on board, that does not fall into the nuclear weapon accident category but that:

- Results in evident damage to a nuclear weapon or nuclear component to the extent that major rework, complete replacement, or examination or recertification by the DoE is required.
- Requires immediate action in the interest of safety or nuclear weapons security.
- May result in adverse public reaction (national or international).
- Could lead to a nuclear weapon accident and warrants that senior national officials or agencies be informed or take action." (**DoD**, *DoD Response to Radiological Accidents*, 1996, p. 9)

Nuclear Weapons Effects: "A nuclear weapon detonation causes an intense blast, intense light and heat, and direct radiation. The blast causes a damaging wave of air pressure. Detonation at or near ground level creates a large airborne cloud of radioactive particles that can contaminate the air, water, and ground surfaces for miles around as radioactive fallout. The heavier particles fall first, nearer the site of the explosion. A very high altitude burst can create an electromagnetic pulse (EMP) that can disable electrical and electronic equipment and systems of all kinds. A nuclear device can range from a weapon carried by an intercontinental ballistic missile launched by a hostile nation, to a small portable nuclear device transported by an individual or terrorist organization. All nuclear devices cause deadly effects when exploded, including blinding light, intense heat (thermal radiation), initial nuclear radiation, blast, fires started by the heat pulse, and secondary fires caused by damage to electrical and natural gas lines, stoves and furnaces, and fallout radiation." (**FEMA**, "Fact Sheet – Nuclear Blast," April 2007, p. 1)

NUDET: Nuclear Detonation. (**OCD**, *Abbreviations and Definitions*, 1971, p. 3)

Nunn-Lugar-Domenici Domestic Preparedness Act, Defense Against Weapons of Mass Destruction Act of 1996, Public Law 104-201, Title XIV**.**

Nunn-Lugar-Domenici Domestic Preparedness Program (NLD DPP): (**FEMA**, *HSEEP Glossary*, 2008)

Nunn-Lugar-Domenici Domestic Preparedness Program (NLD DPP): "The Defense Against Weapons of Mass Destruction Act of 1996, or Nunn-Lugar-Domenici amendment to the National Defense Authorization Act for FY97, stipulated the training of first responders to deal with WMD terrorist incidents. The Nunn-Lugar-Domenici Domestic Preparedness Program began in FY97 to train first responders -- fire, police, and emergency medical technicians -- in 120 of the largest cities in the country….the 120 cities that were designated recipients of Nunn-Lugar-Domenici Domestic Preparedness Program…[were later] expanded and amended to a mixture of 157 cities and counties to replace the original 120 cities. By the end of 1998, forty cities had received training, with the remaining cities scheduled to complete training in 2001. Each city received $300,000 from the Department of Defense for personal protection, decontamination, and detection equipment….the program…[was subsequently] transferred to the Department of Justice under the Office of Justice Programs…" (James Martin Center for Nonproliferation Studies. *Nunn-Lugar-Domenici Domestic Preparedness and WMD Civil Support Teams.* October 2001)

NVHUG: Nevada HAZUS Users Group. (**FEMA**, "HAZUS User Groups…NVHUG…" October 23, 2007)

NVOAD: National Voluntary Organizations Active in Disaster.

NWC: National Warning Center. (**OCD**, *Abbreviations and Definitions*, 1971, p. 3) [Defunct]

NWC: National Weather Center. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 633)

NWCG: National Wildfire Coordinating Group.

NWS: National Weather Service, National Oceanic and Atmospheric Administration, US DOC.

O&M: Operations and Maintenance. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 633)

OAEOC: Operational Area Emergency Operations Center. (**EG&G**, *San Diego County Firestorms After Action Report 2007*, Feb 2008, iv)

OAS: Organization of American States.

OASD: Office of the Secretary of Defense.

OASD (HD): Office of the Secretary of Defense for Homeland Defense

OASD (HD)/DCIP: Office of the Secretary of Defense for Homeland Defense/Defense Critical Infrastructure Protection. (**DSB**, Report of DSV TF on CHIP, 2007, p. 1)

Objective: "A purpose to be achieved, a result to be obtained, a product to be produced, or a service to be performed by the Investment." (**DHS**, *Fiscal Year 2007 Homeland Security Grant Program: Investment Justification Reference Guide*, January 2007, p. 53, Appendix A, Defs.)

Objective: "A series of related operations aimed at accomplishing a strategic mission within a give time and space." (**Homeland Security Inst**., *HS Strategic Planning MAA*, March 28, 2007, p. 63)

Objectives: "Objectives define strategies or implementation steps to attain the identified goals. Unlike goals, objectives are specific and measurable, such as:

- Protect structures in the historic downtown area from flood damage.
- Educate citizens about wildfire defensible space actions.
- Prepare plans and identify resources to facilitate reestablishing county operations after a disaster." (**FEMA**, *Developing the Mitigation Plan* (FEMA 386-3), 2003, p. 1-1)

OC: Operational Continuity. (**ISO 22399**, *Societal Security*, 2007, p. vi)

Occupant Emergency Plan(s) (OEP): "A short-term emergency response program that establishes procedures for safeguarding lives and property." (**DHS**, *FCD 1*, Nov. 2007, P-8)

OCD: Office of Civil Defense (**Department of Defense**, 1961-1964; Dept. of Army 1964-1972)

OCDM: Office of Civil and Defense Mobilization, Executive Office of the President, 1958-61.

OCE: Office of the Chief of Engineers, U.S. Army. (**OCD**, *Abbreviations*, 1971, p. 3)

OCFC: Office of the Chief Financial Officer, FEMA.

OCG: Operations Coordination Group, DHS. (**DHS**, *Statement of Frank DiFalco,* 20June07, 7)

OCHCO: Office of the Chief Human Capital Officer, DHS. (**DHS**, *Establishing a DHS University System*, 2007, 5)

OCM: Operational Continuity Management. (**ISO 22399**, *Societal Security.…*, 2007, 4)

OCP: Operational Continuity Plan. (**ISO 22399**, *Societal Security*…, 2007, 4)

ODCM: Office of Defense and Civilian Mobilization, Executive Office of the President, 1958.

ODM: Office of Defense Mobilization, Executive Office of the President, 1950-1958.

ODP: Office of Domestic Preparedness, DHS. [Defunct] Functions moved to FEMA in 2007.

OEC: Office of Emergency Communications, Department of Homeland Security. (OEC October 18, 2007 slide presentation)

OEP: Occupant Emergency Plan**.** (**DHS**, *FCD 1*, Nov. 2007, P-8)

OEP: Office of Emergency Planning, Executive Office of the President, 1961-1968.

OEP: Office of Emergency Preparedness. (**HSGAC**, A *Nation Still Unprepared*, 2006, 633)

OES: Office of Emergency Services (as in California Governor's Office of Emergency Services).

OES: Office of the Executive Secretariat, FEMA Office of the Administrator.

OFA: Other Federal Agencies. (**DHS**, *NRF Logistics Management Support Annex*, 2007, p. 3)

OFCM: Office of the Federal Coordinator for Meterological Service and Supporting Research, Department of Commerce.

Office for Civilian Defense (OCD, EOP): Created on May 20, 1941 by Executive Order 8757, within the Office for Emergency Management in the Executive Office of the President. Former New York City Mayor Piorello H. LaGuardia was named Director. Upon his resignation on February 10, 1942, James M. Landis, an Assistant to the President became Director (February 11). (**Gessert**, Federal *Civil Defense Organization*, 1965, p. 60) Abolished on June 30, 1945 by Executive Order 9562 shortly after Germany surrendered during World War II. (Ibid, p. 61)

Office for Domestic Preparedness (ODP, DOJ) 1998-2007: Established in 1998 within the Department of Justice, pursuant to Public Law 105-119, and made "responsible for developing and administering a domestic preparedness program to provide financial assistance to states, U.S. territories, and local governments for domestic preparedness training and equipment." On March 1, 2003 the ODP was transferred to DHS and later renamed the Office of Grants and Training. On April 1, 2007 OGT was transferred to FEMA's National Preparedness Directorate and renamed Grant Programs Directorate. (**DHS/OIG**, *Audit*, Dec 2007, 3)

Office for Domestic Preparedness (ODP, DOJ) (2000): "I want to take this opportunity to formally welcome your agency's participation in the U. S. Department of Justice's effort to enhance the nation's emergency response communities capabilities to respond to mass casualty terrorist incidents. The staff of the Office of State and Local Domestic Preparedness Support (ODP) look forward to working with you and your staff in the implementation of this important new initiative. This Bulletin is the first in a series of informational updates our office will distribute to the designated state agencies in an effort to keep you informed of information on ODP's and other related Federal programs and our efforts to assist your office as you develop and implement your statewide strategic plans.

"Through ODP, the Office of Justice Program has established a new program office whose primary goal is building capabilities at the state and local levels through a coordinated program of equipment support; training, from the awareness level to the incident command level; exercise planning and support; and specialized technical assistance. ODP is looking to the designated state agencies to provide the critical state-based plans which will help our office more effectively allocate program funding to the jurisdictions with the greatest need. ODP is committed to working with you and your staff to coordinate the implementation of an integrated national program working in partnership with state and local agencies within your state." (**C.H. "Butch" Straub II, Director**, *ODP Information Bulletin No. 1, Subject: Office for Domestic Preparedness Support*, March 6, 2000)

Office for Domestic Preparedness (ODP, DOJ) (2000): "ODP distributes grants to 56 states and territories, as well as to firefighters, ports, transit authorities, and other homeland security stakeholders. In FY04, ODP disbursed over $4 billion in grants for emergency preparedness personnel to protect and defend our nation's security against the threat posed by terrorism. Through its streamlined grant process, ODP awards funds under the Homeland Security Grant Program (HSGP), which consolidates applications and funding for six grant programs. These are:
• *State Homeland Security Grant Program (SHSGP)…*
• *Urban Area Security Initiative (UASI)….*
• *Law Enforcement Terrorism Prevention Program (LETPP)….*
• *Citizen Corps….*
• *Emergency Management Performance Grants (EMPG…*
• *Metropolitan Medical Response System (MMRS….*
Other ODP grant programs include:
• *Assistance to Firefighters Grant Program (AFGP)….*
• *Competitive Training Grants Program (CTGP….*
• *Commercial Equipment Direct Assistance Program (CEDAP….*
• *Port Security Grant Program (PSGP)….*
• *Operation Safe Commerce (OSC)….*
• *Highway Watch® Program (HWP)….*
• *Intercity Bus Security Program….*" (**DHS**, *Office of State and Local Government Coordination and Preparedness*, 25 July 2005, pp.1-2)

Office for Emergency Management (OEM, EOP): On May 25, 1940 "The Office for Emergency Management was established upon recommendation of the revived Council of National Defense, in the Executive Office of the President." (**Gessert**, *Federal CD Organization*, 1965, p. 60)

Functions: "Assisted the President in clearing information on defense measures. Maintained liaison with national defense agencies. Coordinated the national defense program." Starting in June 13, 1942 the OEM began to be dismantled when the Division of Information was terminated by Exec Order 9182, followed by "liaison functions terminated with resignation of Liaison Officer for Emergency Management (the OEM director), November 3, 1943; and Division of Central Administrative Affairs abolished, effective November 30, 1944, by EO 9471, August 25, 1944, with the Department of the Treasury named as liquidator." (**National Archives**, *Records of the OEM, 1940-44* (Record Group 214))

Office of Civil Defense: (Department of Defense, 1961-1964; Department of the Army 1964-1972)

Office of Civil Defense Planning: Established by Presidential Directive, dated March 27, 1948 in the National Military Establishment by Secretary of Defense Forrestal. Russell J. Hopley named as Director. (**OCDP** (Hopley Report**)**, 1948, p. v; **Gessert**, *Federal Civil Defense Planning*, 1965, 63)

Office of Civilian Defense: The Office of Civilian Defense was a World War II organization. President Truman informed Congress on May 2, 1945 that the OCD would soon be terminated and its proposed budget for the next fiscal year withdrawn. Noted were developments in the European

theater of operations. (See "Statement by the President Concerning the Termination of the Office of Civilian Defense," May 2, 1945, in **Public Papers of the Presidents of the United States, Harry S. Truman,** 1945, pp. 30-31)

Office of Emergency Communications, DHS. See Department of Homeland Security, OEC.

Office of Emergency Planning (OEP) 1961-1968: "In late September 1961, Congress renamed OCDM (the Office of Civil and Defense Mobilization) again, this time as the Office of Emergency Planning (OEP) [75 Stat. 630]. Neither the duties nor the mission of the agency were changed by Congress, but the new name reflected the responsibilities of the office in the wake of the changes initiated by the President." (**CRS**, *Federal Emergency Management and Homeland Security Organization: Historical Developments and Legislative Options*. June 1, 2006)

Office of Emergency Planning (OEP): "Executive Order 10952 assigned major civil defense responsibilities to the Department of Defense. It also provided that the Director, Office of Emergency Planning, would advise and assist the President in connection with the total civil defense program and would be responsible for the continuity of government programs at the Federal, State, and local level." (**OCD,** *Annual Report 1962*, p. 13) "On September 3, 1961m effective August 1, 1961, 1,106 OCDM personnel were transferred to the Office of Civil Defense, DOD." (**OCD,** *Annual Report 1962*, p. 9)

Office of Emergency Preparedness, 1951-1973 (Including Predecessor Organizations): "Emergency preparedness planning functions initially vested in National Security Resources Board (NSRB), established by the National Security Act of 1947 (61 Stat. 499), July 26, 1947, as an independent agency to advise the President on mobilization coordination. NSRB transferred to the Executive Office of the President by Reorganization Plan No. 4 of 1949, effective August 20, 1949, and abolished by Reorganization Plan No. 3 of 1953, effective June 12, 1953, with its functions transferred to the Office of Defense Mobilization (ODM). ODM had been established by EO 10193, December 16, 1950, to direct federal mobilization activities. ODM absorbed functions of the Defense Production Administration, established by EO 10200, January 3, 1951, to exercise general control of the defense production program, and abolished by EO 10433, February 4, 1953.

ODM consolidated with the Federal Civil Defense Administration (see RG 397) to form Office of Defense and Civilian Mobilization (ODCM), with responsibility for civil defense and emergency mobilization coordination, by Reorganization Plan No. 1 of 1958, effective July 1, 1958. ODCM renamed Office of Civil and Defense Mobilization (OCDM) by an act of August 26, 1958 (72 Stat. 861). Civil defense functions of OCDM transferred to the Office of the Secretary of Defense by EO 10952, July 20, 1961. OCDM redesignated Office of Emergency Planning (OEP) by an act of September 22, 1961 (75 Stat. 630). OEP coordinated emergency preparedness activities, principally in areas of resource utilization, civil defense, economic stabilization, postattack rehabilitation, and government organization and continuity. Redesignated Office of Emergency Preparedness, 1968." (**National Archives**, *Guide to Federal Records, Records of the Office of Emergency Preparedness*, 1995)

Office of Grants and Training (OGT): "In the 1998 Appropriations Act (Public Law 105-119) and accompanying report, the Congress expressed its concern regarding the real and potentially catastrophic effects of a chemical or biological act of terrorism. Congress stated that, while the Federal Government plays an important role in preventing and responding to these types of threats, state and local public safety personnel are typically first to respond to the scene when such incidents occur. As a result, Congress authorized the Attorney General to assist state and local public safety personnel in acquiring the specialized training and equipment necessary to safely respond to and manage terrorist incidents involving weapons of mass destruction (WMD).

"On April 30, 1998, the Attorney General delegated authority to the Justice Department's Office of Justice Programs (OJP) to develop and administer training and equipment assistance programs for state and local emergency response agencies to better prepare them against this threat. To execute this mission, the Office of Justice Programs established the Office for Domestic Preparedness (ODP) to develop and administer a national Domestic Preparedness Program.

"Upon passage of the Homeland Security Act of 2002 (Pub. L. 107-296), the Office for Domestic Preparedness was transferred to the Department of Homeland Security from OJP. In 2003, a number of grant programs and functions from other DHS components were consolidated with ODP under a new DHS agency, the Office of State and Local Government Coordination and Preparedness (SLGCP).

"In 2005, SLGCP was incorporated under the Preparedness Directorate as the Office of Grants and Training (G&T)." (**FEMA**, *About Grants & Training*, April 3, 2007)

Transferred to FEMA on April 1, 2007 and renamed the Grants Programs Directorate.

Office of Health Affairs (OHS/DHS). See Department of Homeland Security, OHS.

Office of Homeland Security: Established by Executive Order on March 8, 2001. "The mission of the Office shall be to develop and coordinate the implementation of a comprehensive national strategy to secure the United States from terrorist threats or attacks." (**White House**, EO 13228, October 8, 2001).

Office of Homeland Security: "The September 11 attacks shattered confidence in the Federal government's capability to prevent terrorism attacks on the homeland. There was widespread concern about the seeming ease with which the terrorists involved in the attacks entered and remained in the United States as well as the inability of Federal agencies to 'connect the dots' concerning the evidence of the upcoming attacks. In response, in October 2001, President Bush issued an Executive Order to establish the Office of Homeland Security within the White House to coordinate counterterrorism efforts…. The President selected Pennsylvania Governor Tom Ridge, who resigned his position as Governor to head the Office and lead the coordination efforts.

"The public response to Governor Ridge's appointment was generally favorable but there were concerns that this new position did not have the authority or resources needed to centralize the homeland security function, and that Ridge's advisory position gave him no control over many

agencies involved. The appointment also troubled some members of Congress because Congress' oversight role was minimized under this structure. Legislation based on the recommendations of the Commission on National Security/21st Century [Hart-Rudman] was soon introduced to establish a Cabinet-level Department of Homeland Security. The Bush Administration initially opposed such a step, but as support for a new cabinet Department grew, the White House began its own design work.

A small group of aides, meeting at the White House, devised a plan which was reviewed only by senior White House officials before being approved by President Bush. This plan, which came as a surprise to the Cabinet officials most affected by it was unveiled in June 2003 after six weeks of meetings. The lack of open debate by key players, which was designed to speed the process by limiting review, is seen by many as having set in motion some of the organizational problems which plague DHS to this day.

After several months of debate focusing primarily on a new personnel system proposed by the White House, Congress passed legislation establishing the new Department along the lines proposed by the White House and the earlier Congressional legislation. On November 25, 2002, the President signed into law the Homeland Security Act, setting in motion the largest Federal reorganization since the creation of the Department of Defense in 1947. Governor Ridge was named DHS's first Secretary." (NAPA, *Addressing the 2009 Presidential Transition at…DHS*, May 2008 Agency Review Draft, pp. 8-9)

Office of National Security Coordination (ONSC), FEMA: "The Office of National Security Coordination (ONSC) represents the Federal Emergency Management Agency (FEMA), Department of Homeland Security (DHS), as the Federal Executive Branch Lead Agent, to coordinate and ensure continuity of national essential functions, and minimize the disruption of essential operations to guarantee the survival of an Enduring Constitutional Government. ONSC is responsible for policy, test, training and exercise of Executive Branch activities involving Continuity of Operations, Continuity of Government, and Contingency Programs to ensure appropriate preparation and execution of operations, in response to a full threat spectrum of emergencies. ONSC is also responsible for management of the Mount Weather Emergency Operations Center in support of a wide variety of FEMA and DHS functions, as well as other federal departments and activities." (**FEMA**, *ONSC*, September 15, 2006)

Office of Nuclear Security and Incident Response (NSIR), US NRC: Created by NRC on April 11, 2002 "to improve NRC effectiveness in assuring protection of the public health and safety from security threats at licensed facilities. (**NRC**, *Emergency Preparedness in Response to Terrorism,* October 31, 2007 update)

Office of Nuclear Security and Incident Response (NSIR) US NRC, Mission: Develops overall agency policy and provides management direction for evaluation and assessment of technical issues involving security at nuclear facilities, and is the agency safeguards and security interface with the Department of Homeland Security (DHS), the Intelligence and Law Enforcement Communities, Department of Energy (DOE), and other agencies. Develops emergency preparedness policies, regulations, programs, and guidelines for both currently licensed nuclear reactors and potential new nuclear reactors. Provides technical expertise

regarding emergency preparedness issues and interpretations, conducts and directs the NRC program for response to incidents, and is the agency emergency preparedness and incident response interface with the DHS, Federal Emergency Management Agency (FEMA) and other Federal agencies." (**NRC**, *Office of Nuclear Security and Incident Response* (Web Site), 2008)

Office of Operations Coordination (OPS), DHS. See Department of Homeland Security, OPS.

Office of Preparedness and Emergency Operations (OPEO), ASPR, HHS: "OPEO is headed by a Director who is a Deputy Assistant Secretary (DAS), and is responsible for ensuring that ASPR has the systems and processes necessary to coordinate the Department's response to bioterrorism and other public health and medical threats and emergencies. OPEO leads the response activities required to fulfill HHS's responsibilities under Emergency Support Function (ESF) 8 of the National Response Plan (NRP). OPEO develops and directs the Secretary's Operations Center (SOC); trains and manages the Incident Response Coordination Team (IRCT); coordinates and executes the HHS Continuity of Operations (COOP) and Continuity of Government (COG) programs; plans, implements and evaluates Departmental and interagency response exercises; and develops security related policies establishing procedures to manage the Department's risks, threats and vulnerabilities. OPEO also is the primary operational liaison to emergency response entities within HHS (e.g., SAMHSA, CDC, FDA, and HRSA) and within the interagency community (e.g.; DHS, DOD, and Department of Veterans Affairs)." (**HHS**, Job Announcement HHS-OS-2008-0169, Program Specialist (Watch Officer), Dec 2007)

Office of Public Health Emergency Medical Countermeasures (OPHEMC), HHS.

Office of Public Health Emergency Preparedness (OPHEP), HHS. Now the Office of the Assistant Secretary for Preparedness and Response (ASPR).

Office of State and Local Government Coordination and Preparedness (SLGCP):
"The Department of Homeland Security's (DHS) Office of State and Local Government Coordination and Preparedness (SLGCP) is the federal government's lead agency responsible for preparing the nation against terrorism by assisting states, local and tribal jurisdictions, and regional authorities as they prevent, deter, and respond to terrorist acts. SLGCP provides a broad array of assistance to America's first responders through funding, coordinated training, exercises, equipment acquisition, and technical assistance.

One of SLGCP's major responsibilities is implementing Homeland Security Presidential Directive-8 (HSPD-8). Under HSPD-8, President George W. Bush directed DHS to establish a National Preparedness Goal. Spearheaded by SLGCP, this effort brings together experts from federal, state, and local government, as well as the private and non-profit sectors, to set National Preparedness Priorities and to integrate federal preparedness programs into a more coordinated system to achieve the goal of a better prepared America. The National Preparedness Goal will enable members of the homeland security community to compare current capabilities to national targets, identify needs, establish priorities and, ultimately, focus our collective efforts to ensure that our homeland is secure." (**DHS**. *Office of State and Local Government Coordination and Preparedness*, 25 July 2005, p. 1)

Office of the Assistant Secretary for Preparedness and Response (ASPR, HHS): "The Office of the Assistant Secretary for Preparedness and Response (formerly the Office of Public Health Emergency Preparedness) serves as the Secretary's principal advisory staff on matters related to bioterrorism and other public health emergencies. ASPR also coordinates interagency activities between HHS, other Federal departments, agencies, and offices, and State and local officials responsible for emergency preparedness and the protection of the civilian population from acts of bioterrorism and other public health emergencies." (**HHS**, *ASPR*)

Officer: "The ICS designation for the personnel responsible for the Command Staff positions of Liaison, Public Information and Safety." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 56)

OFRD: Office of Force Readiness and Deployment, US HHS.

OGT: Office of Grants and Training, DHS. Transferred to FEMA's Preparedness Directorate April 1, 2007 and renamed Grant Programs Directorate.

OHMS: Office of Hazardous Materials Safety, PHMSA, DOT.

OI&A: Office of Intelligence and Analysis (Division of DHS Preparedness Directorate). (**DHS,** *NIPP* 2006, p. 102)

OIG: Office of Inspector General.

OIP: Office of Infrastructure Protection (Division of DHS Preparedness Directorate). (**DHS,** *NIPP*, 2006, p. 102)

OM: Office of Management, FEMA.

OMA: Operations, Management, and Administration (**DHS**, *FEMA OMA FY 09…*, 2008, p. 3)

OMB: Office of Management and Budget, Executive Office of the White House.

On Scene Commander: "1. An individual in the immediate vicinity of an isolating event who temporarily assumes command of the incident. 2. The federal officer designated to direct federal crisis and consequence management efforts at the scene of a terrorist or weapons of mass destruction incident." (**DA**, *WMD-CST Operations*, December 2007, Glossary-14)

On Scene Coordinator: "The On-Scene Coordinator (OSC) is the federal official responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. The OSC coordinates all federal efforts with, and provides support and information to, local, state and regional response communities. The OSC is an agent of either EPA or the U.S. Coast Guard, depending on where the incident occurs. EPA OSCs have primary responsibility for spills and releases to inland areas and waters, while U.S. Coast Guard OSCs have responsibility for coastal waters and the Great Lakes. In general, the OSC has the following key responsibilities during and after a response to a hazardous substance release or an oil spill:

(1) assessment; (2) monitoring; (3) response assistance; and (4) evaluation." (**EPA**, *On Scene Coordinators*, September 17, 2007)

On-Site Assistance (OSA): "On-Site Assistance develops a program to attain required emergency preparedness objectives identified. The goal of OSA is to help local communities develop and maintain maximum capabilities in order to actually conduct coordinated life-saving operations in extraordinary emergencies." (**DCPA**, *On-Site Assistance* (MP-63), 1974, p. 1)

"While the goal of OSA can be expressed in a single sentence, helping a community achieve emergency operational readiness can be a complex process involving considerable effort and requiring that many determinations be made along the way. The following questions must be answered for each community if operational readiness assistance is to be applied in the most effective manner.

1. What is the status of civil preparedness in the local community?
2. What is the existing level of emergency operational readiness in the local community?
3. How can the level of emergency operational readiness be increased?
4. What realistically can be done to make civil preparedness a vital entity within the community and to increase the community's ability to respond to an emergency?
5. What course of action and program of assistance will be most effective within the community?" (Ibid, p. 2)

On-Site Assistance Action (Implementation) Plan: "The Action Plan represents a feasible program to eliminate deficiencies [noted during "The Survey"] and should identify and schedule specific work needed, and assign the responsibility (Regional, State, or local, or combination thereof). It should be approved and signed by representatives of each level, and represent a commitment on the part of each to do the work indicated." (**DCPA**, *On-Site Assistance* (MP-63), 1974, p. 11)

On-Site Assistance Definition: "A major effort to assist local government in improving their emergency operational capability to cope with natural disasters and other peacetime emergencies, in addition to the effects of nuclear attack. It involves direct on-site (at locality) Federal, State, and local effort; and consists of a number of specific steps, such as assessing existing capabilities, surveying local needs, and developing a program to meet requirements identified. The objective is to give concrete and, where, possible, timely assistance, in addition to comprehensive long-range help, taking maximum advantage of existing Federal, State, and local resources." (**DCPA**, *On-Site Assistance* (MP-63), 1974, p. 4)

On-Site Assistance (Local Government): "Building on studies of the status of local operational planning and readiness conducted in prior years, a technique and program were developed for providing on-site assistance in local communities during fiscal year 1972. On-Site Assistance is the top priority program of the Defense Civil Preparedness Agency. The program is designed to help local governments (counties, cities, towns) access their existing level or readiness to conduct coordinated operations in both peacetime and attack-caused emergencies, and then to take specific steps to improve their emergency readiness. The program involves

direct on-site effort by teams of State and DCPA Regional professionals working with local officials. The On-Site Assistance Program requires that civil preparedness be viewed as a total preparedness effort….on-site assistance is basically a people-oriented program, emphasizing planning, organizing, training, and exercising; and requiring some shift in approach and attitude from the more hardware-oriented programs of the 1960's." (**DCPA**, *Civil Preparedness – A New Dual* Mission, 1972, p. 7)

On Site Assistance (State Government): "During fiscal year 1973, a project was launched to ascertain the need for On-Site Assistance at the State level. Work was completed on a prototype basis in South Carolina, and in the Commonwealth of Pennsylvania, following Hurricane Agnes. The prototype work resulted in a detailed plan for joint State and Federal efforts to improve operational readiness in South Carolina. As a result, the South Carolina Legislature revised and updated the State Civil Defense Law." (**DCPA**, *Foresight, DCPA Annual Report FY 73*, p. 10)

On Site Incident Management: "Onsite Incident Management is the capability to effectively direct and control incident activities by using the Incident Command System (ICS) consistent with the National Incident Management System (NIMS)." (**DHS**, *TCL*, 2007, p. 197)

ONA: Other Needs Assistance. (**GAO**, *Natural Disasters: Public Policy Options*, Nov 2007, ii)

One-Hundred Year (100-Year) Flood: "A 100-year flood is that flood that has a 1% chance of occurrence in any given year; a 500-year flood has a 0.2% chance of occurrence in any given year. However, the occurrence of a 100-year flood in a given year does not mean that a similar or larger flood can not occur in the following year, or even later that same year. As a result of this yearly independence, there is a 26% chance that a 100-year flood will occur or be exceeded within a 30-year period (the life of a typical mortgage)."[92] (**Galloway**, *CA Challenge*, 2007, 15)

"One hundred year protection is not an acceptable level of protection for urban areas." (Ibid, 33)

One-Hundred Year (100-Year) Floodplain: The land area adjoining a river, stream, lake, or ocean which is inundated by the 100-year flood, also referred to as a flood having a 1 percent chance of occurring in any given year. The 100-year flood is the regulatory (base) flood under the NFIP. (**FEMA**, *Definitions of Terms*, 1990)

One-Percent Annual Chance Flood: A flood of the magnitude that has a one-percent chance of being equaled or exceeded in any given year. Often referred to as the "100-year" flood or base flood, the one-percent annual chance flood is the standard most commonly used for floodplain management and regulatory purposes in the United States.

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[92] Referenced: "A 2004 Report by the Association of State Floodplain Managers Foundation, *Reducing Flood Losses: Is the 1% Chance Flood Standard Sufficient?* concluded that "The prescriptive 1% chance standard oversimplifies complicated concepts. Much happens within the floodplain that cannot be captured in a simple "in or out" determination. Although such simplicity has its appeal, a broader, more flexible approach would allow for the reflection of more detail and more accuracy." Because of the standard, development has tended to cluster just outside of the 1% floodplain boundary, an area not free from flood risk and possibly subject to considerable risk where watersheds have been urbanized and runoff thereby increased."

ONS: Operation Neptune Shield. (**GAO**, *Maritime Security*, December 2007, p. iv)

ONSC: Office of National Security Coordination, FEMA.

OP: Office of Preparedness, General Services Administration, 1973-1975.

OPA: Office of Public Affairs. (**DHS**, *NRF ESF #15, External Affairs Annex*, 2008, 2)

OPA: Otherwise Protected Area. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

OPA 90: Oil Pollution Act of 1990. (**GAO**, *Maritime Security*, December 2007, p. 4)

OPCEN: Operations Center. (**Dept. Army**, *WMD-CST Operations*, December 2007, p. 1-3)

Open Source (OSINT): "Publicly available information and unclassified information that has limited public distribution or access." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 38)

OPEO: Office of Preparedness and Emergency Operations, Office of the Assistant Secretary for Preparedness and Response, Office of the Secretary of Health and Human Services, HHS.

Operable Communications: "Agencies must be "operable," meaning they must have sufficient public safety and service agency communications capabilities to meet their everyday internal requirements before they place value on being "interoperable," meaning being able to work with other disciplines and agencies. They need to improve those systems first but this improvement planning needs to include a vision for improved interoperability with other disciplines and agencies. At a time when more attention is being paid to interoperability among different disciplines and jurisdictions within the community, there still exists fundamental communication deficiencies within disciplines and jurisdictions as practitioners strive to perform the most routine and basic elements of their job functions." (**DHS**, *TCL*, 2007, p. 39)

Operation Alert, 1954: "The first national and international civil defense test exercise on the inter-American continent was held June 14 and 15, 1954. The 48 States, the District of Columbia, Alaska, Hawaii, Puerto Rico, and the Virgin Islands participated as did the Canadian Government and its provinces. Operation Alert 1954 gave valuable training to hundreds of thousands of civil defense workers and tested certain civil defense operational capabilities." (**FCDA**, *1954 Annual Report*, p. 1; see, also, p. 34-45, 73-74, 90-91)

"In addition to educating the public and training civil defensee organizations, the test pointed up the overall civil defense problem, the extent of national readiness, the Federal Government's responsibilities in a national emergency, and the need for improved organiztion and procdeures for emergency operations. As a result of the exercise, changes were made in the emergency communications system, requirement for operational data from the field, requirements for action by national headquarters, training of FCDA personnel, aande the method of holdidng civil defense exercises. Most far-reaching of the changes was that involving the communications system." (**FCDA**, *1954 Annual Report*, p. 74)

Operation Alert 1959: "In Operation Alert 1959, all commercial broadcasting and telecasting in the United States ceased for the first time in daylight hous to permit a 30-minute test of the Control of Electromagnetic Radiation (CONELRAD) system." (**OCDM**, *Annual Report 1959*, p. 12)

Operation Alert 1960: "Operation Alert 1960 was a 3-day nationwide exercise held from May 3 through May 5. Confined to the testing of immediate and short-term response of the people and their governments to a simulated nuclear Attack, the exercise was more realistic than any of its six predecessors. It especially emphasized action on the following fronts: (1) Warning action, including shelter-evacuation-dispersion of key resources and relocation of governments; (2) collection, evaluation, analysis, and presentation of attack data and weapons effects; (3) operational control and use of communications; (4) early post-attack decisions and staff-supported decisions; and (5) use of monitors at all levels to assure correct play of the exercise and to evaluate participation.

The President, the Secretary of Defense, and the Director of OCDM aderessed the public as part of a 30-minute test of the CONELRAD (Control of Electromagnetic Radiations) system at the beginning of the exercise…..

Forty-eight of the fifty State governments took part in the exercise, and local government activities were considerable even in two States not participating. In some States, the National Guard played a substantial role in the exercise…." (**OCDM**, *Annual Report 1960,* p. 60)

Operation Alert 1961: "OCDM's major test and exercise during the year was Operation Alert 1961, held nationwide over a 5-day period from April 26 through April 30 in two parts: (1) Increased readiness phase, April 26-28; and (2) attack phase, April 28-30…. The initial phase was the first nationwide testing of new plans and procedures for degrees of readiness. The experience was invaluable for future guidance in developing techniques for the purpose." (**OCDM**, *Annual Report 1961*, p. 87)

Operation Cue: "Early in the morning of May 5, 1955, millions of Americans viewed the awe-inspiring spectacle of a nuclear blast, Operation Cue, the join test pooject of FCDA, AEC, and private industry at the Atomic Energy Commission's Nevada Test Site.

"The purpose of Operation Cue was dual: to give the American public some conceptin of the tremendous destructive energy of an atomic explosion and to test materials and techniques necessary to divil defense preparedness….

In additon to the FCDA and AEC test staff, more than 200 civil defense personnel from State and local organizations participated. State and local observers helf field exercises in the exposed area when it was safe to enter, carrying out rescue, medical, warden, police, mass feeding, and other civil defense functions. As part of the exercise a selected group of civil defensee personnel experienced the blast in a trench 2 miles from ground zero.

Test homes and commercial buildings showing representative types of construction, communications and utilities installations, and shelters were built at different ranges from ground zero. Experts were able to observe the technical effects of an atomic detonation on the test items, and the public was given a general idea of the destructive power of the weapon. Vehicles, food, clothing materials, and other items exposed in the test represented hundreds of thousands of dollars in time and materials donated by private industry." (**FCDA**, *1955 Annual Report*, 44)

Operation Doorstep: Public test of an atomic device on March 17, 1953. "The dramatic story of typical American homes and cars subjected to an atomic blast was relayed to millions of Americans by newspapers, television, radio, newsreels, and magazines. 'Operation Doorstep' demonstrated that proper preparation could save lives at home." (**FCDA**, *1953 Annual Report*, 1)

Operation Intercept: A September 2006 "multi- jurisdictional RN prevention functional exercise [in NJ] that included CBRNE response assets, law enforcement, fire/hazmat, and intelligence analysts at the federal, state, and local levels." (**DHS**, *DNDO Exercises*, 2007)

Operation Ivy: "…the official film of a thermonuclear explosion at Eniwetok in 1952…. This film was publicly shown first in April 1954." (**FCDA**, *1954 Annual Report*, p. 1)

Operation LIBERTY SHIELD: "Operation LIBERTY SHIELD is a comprehensive national plan designed to increase protections for America's citizens and infrastructure while maintaining the free flow of goods and people across our border with minimal disruption to our economy and way of life. Operation LIBERTY SHIELD is a multi-department, multi-agency, national team effort. It includes:

- Increased security at borders
- Stronger transportation protections
- Ongoing measures to disrupt threats against our nation
- Greater protections for critical infrastructure and key assets
- Increased public health preparedness
- Federal response resources positioned and ready." (**White House**, *Operation Liberty Shield*, March 17, 2003, p. 1)

Operation Neptune Shield (ONS): "…a Coast Guard operations order…First issued in 2003 and revised periodically since, it contains a classified set of requirements establishing the Coast Guard's homeland security activity levels. As such, the order sets scalable performance minimums that escalate as the MARSEC level increases." (**GAO**, *Maritime Sec*., Dec 2007, 44)

Operation Sentinel: March 1957 Federal Civil Defense Administration ground postt exercise "involving officials from all levels of government was held at FCDA Headquarters… The exercise…tested staff procedures and considered major operational problems which could result from a nuclear war against this country." (**FCDA**, *1957 Annual Report*, 1)

Operation Stonegarden Grants (OPSG): "OPSG is an element of the FY 2008 State Homeland Security Grant Program. OPSG funds land border jurisdictions' efforts to improve border security, encourage local operational objectives and capabilities to enhance federal and state Homeland Security strategies, and improve capabilities required for border security and protection." (**DHS**, *Fact Sheet: Fiscal Year 2008 Preparedness Grants*, 1Feb2008)

Operational Continuity (OC): "…operational continuity is the more general term for business continuity and is used to emphasize relevance to all types of organizations in the public and private sectors." (**ISO 22399**, *Societal Security*, 2007, p. vi)

"Strategic and tactical capability, pre-approved by management, of an organization to plan for and respond to conditions, situations and events in order to continue operations at an acceptable predefined level." (**ISO 22399**, *Societal Security*…, 2007, 4)

Operational Continuity Management (OCM): "Holistic management process that identifies potential impacts that threaten an organization and provides a framework for building resilience with the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities. Note: Operational continuity management also involves the management of recovery or continuity in the event of an incident, as well as management of the overall program through training, rehearsals, and reviews, to ensure the operational continuity plan stays current and up-to-date." (**ISO 22399**, *Societal Security*, 2007, 4)

Operational Continuity Management Program: "Ongoing management and governance process supported by top management and resourced to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies and plans, and ensure continuity of functions/products/services through exercising, rehearsal, testing, training, maintenance and assurance." (**ISO 22399**, *Societal Security*…, 2007, 4)

Operational Continuity Management Team: "Group of individuals functionally responsible for directing the development and execution of the operational continuity pal, declaring an emergency/crisis situation and providing direction during the recovery process both pre-and post-disruptive incident. Note: The operational continuity management team may include individuals from the organizations as well as immediate and first responders, stakeholders, and other interested parties." (**ISO 22399**, *Societal Security*…, 2007, 4)

Operational Continuity Plan (OCP): "Documented collection of procedures and information that is developed, compiled and maintained in readiness for use in an incident." (**ISO 22399**, *Societal Security*…, 2007, 4)

Operational Continuity Strategy: "Approach by an organization that will ensure its recovery and continuity in the face of a disruptive event, crisis or other major outage." (**ISO 22399**, *Societal Security*…, 2007, 4)

Operational Continuity Team: "Group of individuals responsible for developing, executing, rehearsing, and maintaining the operational continuity plan, including the processes and procedures." (**ISO 22399**, *Societal Security*…, 2007, 4)

Operational Exposure Guidance: "A flexible system of radiation exposure control that allows the commander to calculate the maximum amount of nuclear radiation that he considers a unit may be permitted to receive while performing a particular mission or missions in order to reduce casualties in radioactive fallout areas, yet still be able to accomplish the mission." (**DA**, *WMD-CST Operations*, December 2007, Glossary-15)

Operational Period: "The time scheduled for executing a given set of operation actions, as specified in the Incident Action Plan. Operational periods can be of various lengths, although usually they last 12–24 hours." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 155)

Operational Period: "The period of time scheduled for execution of a given set of operation actions as specified in the IAP. Operational Periods can be various lengths, usually not over 24 hours. The Operational Period coincides with the completion of one planning "P" cycle (see Chapter 3 planning cycle)." (**USCG**, *IM Handbook*, 2006, Glossary 25-18)

Operational Phase System, DHS: "Notifications are a critical NOC function and as part of an ongoing review of its processes and procedures, OPS implemented the DHS Operational Phase System on March 1, 2007. The four operational phases under which the NOC now operates are: Steady-State; Phase 1 – Awareness; Phase 2 – Concern; and Phase 3 – Urgent. The new system enables recipients to quickly understand the conditions of the situation for which they receive a notification message, understand the corresponding severity of the event/threat, and provide key information in standardized formats." (**DHS**, *Statement of Frank DiFalco, Director of the National Operations Center, Office of Operations Coordination*, June 20, 2007, p. 8)

Operational Plans: "Operational plans identify and direct the agencies/organizations and resources required to execute the tasks and objectives necessary based on the strategic planning. Operational plans often include (but are not limited to) contingency and tactical plans." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 17)

Operational Planning: "There are two branches of operational planning under the IPS: [Integrated Planning System] (i) Federal prevention/protection operational planning; and (ii) Federal response/recovery operational planning." (**DHS**, *IPS Draft Description*, Jan 3, 2008)

[Note: In the draft NPS predecessor document, the National Planning and Execution System, these two types of plans were referred to in their original military language as Contingency Planning and Crisis Action Planning.]

Operational Planning: "Interagency Definition – The process by which specific resource, personnel, and asset applications are made to execute the objectives of the strategic plan. An operational plan contains a full description of the concept of operations with supporting annexes, as appropriate." (**DHS**, *Interagency Planning Workshop*, November 29, 2007, slide 22) [See "Strategic Planning: Interagency Definition," and "Tactical Planning: Interagency Definition".]

Operational Resilience: "Mitigating the vulnerability of government and private sector operations to man-made or natural disasters depends not only on the structural resilience of our assets, systems, and networks but also on operational resilience. First, we will continue to maintain comprehensive and effective continuity programs, including those that integrate continuity of operations and continuity of government programs, to ensure the preservation of our government under the Constitution and the continuing performance of national essential functions – those government roles that are necessary to lead and sustain the Nation during and following a catastrophic emergency. A national approach to continuity also requires that State, local, and Tribal governments work to ensure that they are able to maintain or rapidly resume effective functioning during and after catastrophic incidents and are able to interact effectively

with each other and the Federal Government. Likewise, we strongly encourage the private sector to conduct business continuity planning that recognizes interdependencies and complements governmental efforts – doing so not only helps secure the United States, but also makes good long-term business sense for individual companies. Such integrated and comprehensive planning is essential to protecting and preserving lives and livelihoods and maintaining our robust economy during crises." (**White House**, *National Strategy for Homeland Security*, October 2007, p. 29)

Operational Risk: "The risk of loss resulting from inadequate or failed procedures and controls. This includes loss from events related to technology and infrastructure, failure, business interruptions, staff related problems, and from external events such as regulatory changes." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, 60)

Operations-Based Exercise: "Operations-based exercises are a category of exercises characterized by actual response, mobilization of apparatus and resources, and commitment of personnel, usually held over an extended period of time. Operations-based exercises can be used to validate plans, policies, agreements, and procedures. They include *drills*, *FEs*, and *FSEs*. They can clarify roles and responsibilities, identify gaps in resources needed to implement plans and procedures, and improve individual and team performance. (Note: These exercises often follow after, and validate, the lessons learned from discussion-based exercises.)" (**FEMA**, *HSEEP Glossary*, 2008)

Operational Security: "The implementation of procedures and activities to protect sensitive or classified operations involving sources and methods of intelligence collection, investigative techniques, tactical actions, counter surveillance measures, counter intelligence methods, undercover officers, cooperating witnesses and informants." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 38)

Operations-based Exercises: "Operations-based Exercises validate plans, policies, agreements and procedures, clarify roles and responsibilities, and identify resource gaps in an operational environment. Types of Operations-based Exercises include:

- *Drill.* A drill is a coordinated, supervised activity usually employed to test a single, specific operation or function within a single entity (e.g., a fire department conducts a decontamination drill).

- *Functional Exercise (FE).* A functional exercise examines and/or validates the coordination, command, and control between various multi-agency coordination centers (e.g., emergency operation center, joint field office, etc.). A functional exercise does not involve any "boots on the ground" (i.e., first responders or emergency officials responding to an incident in real time).

- *Full-Scale Exercises (FSE).* A full-scale exercise is a multi-agency, multi-jurisdictional, multi-discipline exercise involving functional (e.g., joint field office, emergency operation centers, etc.) and "boots on the ground" response (e.g., firefighters decontaminating mock victims)." (**FEMA**, *About HSEEP*, 2008)

Operations Coordination Center (OCC): "The primary facility of the Multi-Agency Coordination System. It houses staff and equipment necessary to perform MAC functions." (**USCG**, *IM Handbook* 2006, Glossary 25-19)

Operations Coordination Group (OCG), DHS: "Another OPS [Office of Operations Coordination] led effort to enhance DHS and federal operations is DHS's Operations Coordination Group (OCG). This forum provides inter and intra departmental information sharing at the "strategic operations officer" level and includes representatives from DOD's Joint Director of Military Support, NORTHCOM Joint Staff J-3, National Guard Bureau J-3, FEMA, ICE, CBP, USCG, TSA, USSS, and CIS (additional members can be added at the discretion of the Group). This homeland security body enhances information flow and ensures that issues regarding planning, training, exercises, and incident management are properly coordinated in a timely manner. This semi-formal process with established agency and department representation helps foster needed interactions and feedback from peers on operational matters." (**DHS**, *Statement of Frank DiFalco, NOC Director, Office of Operations Coordination*, 20June07, 7-8)

Operations Order (OPORD): "A directive issued by a commander to subordinate commanders to effect the coordinated execution of an operation." (Army Trans School, *Crisis Action Planning*, slide 5)

Operations Plan: "The term 'operations plan' on "OPLAN" refers to a plan that identifies detailed resource, personnel and asset allocations in order to execute the objectives of the strategic plan and turn strategic priorities into operations, to include specific roles and responsibilities, tasks, integration, and actions required, with supporting support function annexes as appropriate." (**White House**, *Annex I "National Planning" to HSPD-8*, 2007, p. 2)

Operations Section (ICS): "The Section responsible for determining and implementing tactical objectives, conducting tactical operations and directing all resources. (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 56)

Operations Security (OPSEC): "A process to identify, control and protect information that is generally available to the public regarding sensitive or classified information and activities that could be used by a potential adversary to the disadvantage of a governmental agency, non-governmental organization or private entity/individual. Application of the OPSEC process promotes operational effectiveness by helping prevent the inadvertent compromise of sensitive or classified information regarding the activities, capabilities, or intentions of a governmental agency, non-governmental organization or private entity/individual. The operations security process involves five steps.

1. Identify critical information: what must be protected?

2. Analyze the threat: who is the potential adversary?

3. Analyze direct and indirect vulnerabilities: how might the adversary collect the information that must be protected?

4. Assess the risk: balance the cost of correcting the vulnerabilities as compared to the cost of losing the information that must be protected.

5. Implement appropriate countermeasures: eliminate or reduce vulnerabilities, and/or disrupt the adversary's collection capabilities and efforts and/or prevent the accurate interpretation of the information that must be protected." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, pp. 38-39)

Operations Section: "The Section responsible for all tactical incident operations and implementation of the Incident Action Plan. In ICS, it normally includes subordinate Branches, Divisions, and/or Groups." (**FEMA**, *National Incident Management System Draft*, 2007, p.155)

Operations Section: "The Section responsible for all operations directly applicable to the primary mission. Directs the preparation of Branch, Division, and/or Unit operational plans, requests or releases resources, makes expedient changes to the IAP as necessary and reports such to the IC." (**USCG** *IM Handbook* 2006 Glossary 25-19)

OPeriod: Operational Period. (**FEMA**, *Federal Interim CONPLAN: NMSZ*, Dec.15, 2007, 22)

OPEX (Operational Exercise) **1961:** "During the last half of FY 1961, OCDM began a series of quarterly operational exercises (OPEX-Series) principally to check emergency operational procedures and facilities more frequently and to test and exercise key emergency personnel in government more frequently and intensively. OPEX 1961-I, held on January 16, briefly covered the readiness preattack phase and the early stages of a nuclear attack phase. Only selected OCDM staff participated. OPEX 1961-II, held on April 6 and 7, was similar but included Federal agency headquarters and field staffs whose emergency plans require presence at OCDM facilities." (**OCDM**, *Annual Report 1961*, p. 88)

OPHEMC: Office of Public Health Emergency Medical Countermeasures, US HHS.

OPHEP: Office of Public Health Emergency Preparedness, US HHS.

OPLAN: Operations Plan. (**White House**, *Annex I "National Planning,"* HSPD-8, 2007)

OPM: Office of Personnel Management.

OPORD: Operations Order. (**Dept. of the Army**, *WMD CST Operations*, Dec. 2007, p. 2-3)

OPREP: Operations Report. (**Dept. of the Army**, *WMD CST Operations*, Dec. 2007, G-15)

OPS: Office of Operations Coordination, DHS.

OPSEC: Operations Security. (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 33)

OPSG: Operation Stonegarden Grants (**DHS**, *Fact Sheet: FY08 Preparedness Grants*, 1Feb08)

OPSUM: Operations Summary. (**DA**, *WMD-CST Operations*, December 2007, Glossary-5)

OPTEMPO: Operating Tempo. (**DA**, *WMD-CST Operations*, December 2007, Glossary-5)

ORC: Operational Readiness Cycle. (**Dept. of Army**, *WMD-CST Operations*, Dec. 2007, 4-9)

ORCON (Dissemination and Extraction of Information Controlled by Originator): "No further dissemination can occur without the prior approval of the originator." (**FEMA**, *IIFOG Ver 3 Draft*, 2008, p. 35)

Orders of Succession: "Provisions for the assumption of senior agency offices during an emergency in the event that any of those officials are unavailable to execute their legal duties." (**DHS**, *FCD 1*, Nov. 2007, P-8)

ORE: Operational Readiness Evaluation. (**DHS**, *FEMA OMA FY 2009*, 2008, 44)

Organization: "Group of people and facilities with an arrangement of responsibilities, authorities and relationships." (**ISO 22399**, *Societal Security*…, 2007, 5)

Organization and Leadership Capability Element: Collection and analysis of intelligence and information, and development of policies, plans, procedures, mutual aid agreements, strategies, and other publications that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks." (**DHS**, *TCL*, 2007, p. 9)

Organization of Federal Civil Defense, Civil Preparedness, and Emergency Management:

- Federal Civil Defense Administration (FCDA, Executive Office of President, 1950-1951)
- Federal Civil Defense Administration (FCDA, 1951-1958)
- Office of Defense and Civilian Mobilization (ODCM (EOP) 1958)
- Office of Civil and Defense Mobilization (OCDM, EOP, 1958-1961)
- Office of Civil Defense (OCD, Department of Defense, 1961-1964
- OCD (Department of the Army, DoD, 1964-1972)
- Defense Civil Preparedness Agency (DCPA, DoD (1972-1979)
- Federal Emergency Management Agency (FEMA, 1979-present)

(**National Archives**, *Guide to Federal Records*, Records of FEMA, Record Group 311, p. 2)

Organizational Culture: "Organizational culture is critical to understanding implementation outcomes for successful emergency management. Organizational culture is the set of symbols, norms, shared values and beliefs, as well as a pattern of basic assumptions that organizational members have developed in learning to cope with organizational problems of external adaptation and internal integration, thereby teaching new members to perceive, think, and feel in relation to their organizations (Ouichi, 1981; Schein, 1984).[93] In implementing emergency management plans, government agencies need to adopt or consider markedly different styles of thinking and values which are involved in organizational cultures of other organizations. In fact, emergency

[93] Ouichi, William (1981). *Theory Z*, MA: Addison-Wesley. Schein, Edgar (1984). "Coming to a New Awareness of Organizational Culture," *Sloan Management Review* (Winter):3-16.

management emphasizes effective communication patterns for effective interorganizational relationships among relevant organizations. This consensus building is emphasized in emergency management for establishing effective communication among participants." (**Choi**, "Emergency Management: Implications from a Strategic Management Perspective," *Journal of HLS and EM*, Vol. 5, Issue 1, Article 1, 2008, 9)

Organizational Culture: "Core values, a common sense of mission, and a shared philosophy are key elements of an organization's culture." (**PNSR**, *Ensuring Security*…, 2008, p. 80)

Organizational Development and Relationship to Crisis Management: "Organizational development (OD) can be defined as a process calling upon social and behavioural sciences to strengthen abilities and capacities of organizations over the long term to confront changes and to better attain their objectives (Cummings & Worley, 2005). OD is a field of practical application based on a process of accompaniment, initiated either internally or externally (Schein, 1999) and covering a vast panoply of activities (Church & al., 1994, Bazigos & Church, 1997; Worren & al., 1999; Carter & al., 2001, 2005; Rothwell & Sullivan, 2005; French & Bell, 1999): research action; organizational diagnosis at various levels (individual—group—organization); feedback mechanisms for members of the organization (such as "survey feedback," "search conferencing," "coaching," etc.); and the design of interventions at the level of human processes, technostructure, human resource management, global strategy, etc. These methods allow organizational actors to master new knowledge and ways of doing things. This idea of strengthening organizational abilities and capacities is also related to the notion of resilience put forward by Quarantelli (2001) and Rosenthal & Kouzmin (1996). Furthermore, OD may represent what Bourrier (2002) calls the "missing link" and thus address the concern about crisis management over a period of time through reconfiguring interventions and the support structures of these interventions. The field of OD seems to us particularly well-placed to effect this necessary transfer of theoretical knowledge into practice. The literature on organizational learning is vast but that which relates learning and crisis management is rather meagre. Indeed, we know a little more about the types and modes of learning but we do not know whether these apply to crisis management. Finally, the models described to date by researchers have remained rather theoretical and have seldom been applied." (**Lalonde**, "Crisis Management and Organizational Development…," 2007, p. 510)

Organizational Efficiency, Critical Elements Of:

- agreed vision, purpose, and principles;
- processes, procedures, and measurements;
- structure;
- core competencies and necessary capabilities;
- personnel attributes and necessary qualifications;
- leadership attitudes and behavior;
- organizational culture; and
- strategy. (**PNSR**, 2008, 69; cites Mckinsey & Company)

Organizational Response to Disaster, Typology: "…almost all groups that appear in a community emergency can be classified as being one of four possible types."

- Type I: Established – carries out regular tasks
- Type II: Expanding – expanding organization with regular tasks
- Type III: Extending – existing organization undertaking non-regular tasks
- Type IV: Emergent – new group, engages in non-regular tasks."

(**Dynes**, et al, *A Perspective on Disaster Planning* (3rd. Ed.), 1981, p. 58; see also, Warheit and Dynes, *The Functioning of Established Organizations in Community Disasters*, 1968, pp. 35-43)

"The major planning implication of this [is] the need for overall coordination. There are different elements and different groups involved in most community disasters. All of the elements and all of the groups have to be integrated together if there is to be any effective response to an emergency. This requires planning." (**Dynes**, *A Perspective on Disaster Planning* (3rd. Ed.), 1981, p. 67)

ORHUG: Oregon HAZUS Users Group. (**FEMA**, "HAZUS User Groups Success Story: ORHUG, Geologic Hazards and Future Earthquake Damage…." October 23, 2007.

ORISE: Oak Ridge Institute for Science and Education. (**ORISE**, *National Security & EM*)

ORNL: Oak Ridge National Laboratory.

OSA: On-Site Assistance Program (FEMA predecessor agencies). Defunct.

OSC: On-Scene Commander. (**Dept. of the Army**, *WMD CST Operations*, Dec. 2007, p. 2-3)

OSC: Federal On-Scene Coordinator. (**USG,** *Interagency Domestic Terrorism CONPLAN*, 2001, p. 10; see also National Contingency Plan)

OSC: Operations Support Center, HHS/ASPR/OPEO. 2008.

OSCG: On-Scene Control Group. (Arnold AFB, *"Centennial Flight Celebration" EOP*, 2003)

OSD: Office of Secretary of Defense. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

OSEM: Office of the Secretary and Executive Management, DHS

OSH Act: Occupational Safety and Health Act.

OSHA: Occupational Safety and Health Administration.

OSINT: Open Source Intelligence. (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, p. 38)

OSTP: Office of Science and Technology Policy. (**DHS**, *FCD 1*, Nov. 2007, p. O-2)

Other Needs Assistance (ONA): "Individual assistance program intended to meet the necessary expenses and serious needs of disaster victims. ONA operates within established grant limits

that are funded through a 75% Federal/25% State cost share." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. A-8 Glossary)

Other Needs Assistance (ONA): "FEMA may provide ONA grant funding for transportation expenses, medical and dental expenses, and funeral and burial expenses. ONA grant funding may also be available to replace personal property, repair and replace vehicles, and reimburse moving and storage expenses under certain circumstances." (**GAO**, *Natural Disasters: Public Policy Options…*, Nov 2007, p. 16)

Otherwise Protected Area (OPA): "Otherwise Protected Area's (OPA's) are generally used for activities such as fish and wildlife research and refuges." [Note: In 1990, Congress passed the Coastal Barrier Improvement Act (CBIA). The CBIA tripled the size of the System established by the Coastal Barrier Resource Act of 1982. The CBIA does not allow the issuance of new Federal flood insurance within "otherwise protected areas" on buildings constructed after November 16, 1991, unless the building is used in a manner related to the reason the area is protected.] (**FEMA**, *CBRS History*, 2006)

Out of Service Resources: "Resources assigned to an incident but unable to respond due to mechanical, rest or personnel reasons." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 56)

Outcome: "The impact an Investment's processes and outputs (direct goods and services produced by the Investment) has on the homeland security program and capabilities; e.g., as the result of 1,000 more firefighters being trained in mass casualty medical response (output), the jurisdiction can now address a potential incident population of 500,000, versus 25,000 prior to training (outcome)." (**DHS**, *Fiscal Year 2007 Homeland Security Grant Program: Investment Justification Reference Guide*, January 2007, p. 54, Appendix A, Definitions)

Output: "Direct products, goods and services produced…" (DHS, *Fiscal Year 2007 Homeland Security Grant Program: Investment Justification Reference Guide*, January 2007, p. 54, Appendix A, Definitions)

Over-the-Road Bus Security Grant Program: "…the purpose of this program is to create a sustainable program for the protection of intercity bus systems and the traveling public from terrorism, especially explosives and nonconventional threats that would cause major loss of life and severe disruption. Grants awarded under this program go directly to the owners and operators of fixed route intercity and/or charter bus services using over-the-road buses to address priorities identified in the NPG, NIPP, and NSTS. Grants are used to improve facility security in defined UASI jurisdictions, passenger and baggage screening, driver and vehicle security along with enhancing emergency communication technology, coordination with local police and emergency responders, and training and exercises. Each of these funding priorities seeks to further enhance prevention and protection against terrorist activities and will greatly serve to assist with response and recovery efforts in the event of an attack." (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*, March 11, 2008, pp. 5-6)

P & A: Personnel and Administrative. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

PA: Public Affairs.

PA&E: Program Analysis & Evaluation. (**DHS**, *FEMA OMA FY 2009 Budget*…, 2008, 32)

PA/FA: Program Allocations/Functional Areas. (**FEMA**, *IEMS MYDP*, 1984, p. I-1)

PAC: Public Assistance Coordinator.

PACER: Center for the Study of Preparedness and Catastrophic Event Response. Based at Johns Hopkins University.

Packaged Disaster Hospital (PDH): During the 1950s and 1960s the Federal civil defense program developed and deployed approximately 2,500 Packaged Disaster Hospitals which "These PDHs consisted of modularized, predeployed units for 50, 100, or 200 beds. In 1972, Congress discontinued its support funding for the PDH concept. The 2,500 deployed units were declared to be surplus and were discarded over the next decade. More than three decades later, however, we find ourselves in the interesting position of rediscovering, resurrecting, and refining the concept of ACSs [alternative care sites]." (**AHRQ/HHS**, *Mass Casualty Care*, 2007, 76-77)

Packaged Disaster Hospital (PDH): "The purchase and assembly of 731 200-bed improvised hospitals is currently under way and a considerable number of these will be delivered to storage locations during the current fiscal year. These improvised hospitals will be made available to target areas by automatic issue." (**FCDA**, *1954 Annual Report*, p. 70) "This total is only a modest start towards the 5,000 or more estimated to be needed." (Ibid, p. 106)

The "first public demonstrtion of FCDA's new 200-bed improvised hospital" was in 1954. (FCDA, 1954 Annual Report, p. 91) "FCDA's 200-bed improvised emergency hospital was erected at the national convention of the American Hospital Association, attended by some 7,000 hospital administrators." (**FCDA**, *1954 Annual Report*, p. 98)

"This 200-bed unit is intended to provide early hospitalization of seriously sick and injured casualties as close as possible to the stricken area for lifesaving, initial, and reparative treatment, and emergncy surgery. The improvised hospital can also be used in a natural disaster as well as after an enemy attack. The 200-bed improvised hsopital weighs about 13 ½ tons, occupies about 2,000 cubic feet, consists of about 45 separate packages, crates, and bundles, and is transportable in a single van….Approximately 15,000 square feet of space are required for the hospital. It may be set up in about 4 hours by some 30 professionals and semitrained auxiliaries, with untrained volunteers helping." (**FCDA**, *1954 Annual Report*, p. 107)

Packaged Disaster Hospital (PDH): "At the end of FY 1960, OCDM had 82 civil defense emergency hospitals on loan to States for training pruposes and had prepositioned approximately 1,400 hospital units in 46 States, Puerto Rico, and the Virgin Islands. No additional medical supplies were stockpiled in FY 1960… OCDM and DHEW jointly arranged for transferring

future management of the medical stockpile items to DHEW." (**OCDM**, *Annual Report 1960*, 27)

PACOM: Pacific Command. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 633)

PAG Manual: *Manual of Protective Action Guides and Protective Actions for Nuclear Incidents*, EPA, 1992.

PAHO: Pan American Health Organization.

PAHPA: Pandemic and All-Hazards Preparedness Act. (Public Law 109-417, December 2006)

Palanterra: "…a map-based common operating picture of the National Geospatial-Intelligence Agency…" (Lipowicz, *Washington Technology*, Vol. 21, No. 20, October 16, 2006)

Palliative Care: "Aggressive management of symptoms and relief of suffering is what generally have come to be called "palliative care." The World Health Organization defines palliative care as 'an approach which improves the quality of life of patients and their families facing life-threatening illness, through the prevention, assessment, and treatment of pain and other physical, psychosocial, and spiritual problems'." (**AHRQ**, *Mass Medical Care*, 2007, 104)

Palliative Care Potential Populations: "Most scenarios of catastrophic MCEs [Mass Casualty Events] would create sudden large numbers of fatally injured or critically ill short-term survivors that are at least a few orders of magnitude larger than the existing vulnerable populations. Depending on the event, some victims will last only a few weeks (e.g., pulmonary injury from airborne chemicals) and some may last for months (e.g., pandemic influenza). In many cases, those who survive the onset usually will live for some time – days to months – but will not be "expected to survive" due to the event itself or to the ensuring resource scarcities it creates. Initial identification of those who might fit into the "not expected to survive" category following a catastrophic MCE may include:

- Those exposed to the event who are expected to die over the course of weeks (e.g., those with radiation exposure)
- The "already existing" palliative care population (e.g., those already enrolled in hospice or receiving palliative care in acute care settings)
- Vulnerable patients (e.g., advanced illness patients in long-term care facilities) whose situation will be worsened due to scarcities associated with the event
- Patients who are triaged as a result of scarce resources." (**AHRQ/HHS**, *Mass Medical Care*..., 2007, p. 103)

Palmer Index: "A mathematical representation of drought conditions." (**UNDHA**, *DM Glossary*, 1992, 56)

Pandemic: "An epidemic (a sudden outbreak) that becomes very widespread and affects a whole region, a continent, or the world…. The word "pandemic" comes from the Greek "pan-", "all" + "demos", "people or population" = "pandemos" = "all the people." A pandemic affects all

(nearly all) of the people. By contrast, "epi-" means "upon." An epidemic is visited upon the people. And "en-" means "in." An endemic is in the people." (**MedicineNet.com**, *Definition of Pandemic*, 1998)

Pandemic and All-Hazards Preparedness Act: "In December 2006 Congress passed and the President signed the Pandemic and All-Hazards Preparedness Act (PAHPA), Public Law No. 109-417, which has broad implications for HHS's preparedness and response activities. The Act established within the Department a new Assistant Secretary for Preparedness and Response (ASPR); provided new authorities for a number of programs, including the advanced development and acquisition of medical countermeasures; and called for the establishment of a quadrennial National Health Security Strategy." (**HHS**, *Pandemic and All-Hazards Preparedness Act Progress Report*, November 2007, p. 1)

Pandemic Influenza: "Pandemic (from the Greek, meaning "of all of the people'') Influenza has the potential to pose a far greater threat to global health. It typically is a novel human flu that causes a worldwide outbreak of serious illness and death. Because there is little natural immunity, the disease can easily spread from person to person, one of the key characteristics that defines a pandemic. There have been at least 10 recorded flu pandemics during the past 300 years.4 Three of these occurred during the 20th Century.

1. *The 1918-1919 "Spanish Flu"* was the most devastating flu pandemic in recent history. It killed more than 500,000 Americans and as many as 50 million people globally, according to some estimates. It proved especially lethal to young adults.
2. *The 1957-1958 "Asian Flu"* was first identified in China and killed approximately 1 million people worldwide, including 68,000 Americans.
3. *The 1968-1969 "Hong Kong Flu"* caused about 34,000 deaths in the United States."[94]
(**American Academy of Pediatrics**, *Pandemic Influenza*, October 2007, p. 2)

Pandemic Influenza Containment Strategy: "Containment attempts would require stringent infection-control measures such as bans on large public gatherings, isolation of symptomatic individuals, prophylaxis of the entire community with antiviral drugs, and various forms of movement restrictions—possibly even including a quarantine…if a containment attempt is to have a chance of succeeding, the response must employ the assets of multiple partners in a well coordinated way." (HHS, Pandemic Influenza Plan, 2005, p. 17)

Pandemic Influenza Vaccination Program Goal: "The *goal* of the pandemic influenza vaccination program is to vaccinate all persons in the United States who choose to be vaccinated." (**HHS**, *Draft Guidance on Allocating and Targeting Pandemic Influenza* Vaccine, October 23, 2007)

Pandemic Countermeasure, Containment/Control Strategies:

- Isolation

[94] "Pandemic Influenza: Historical Perspective,'' Center for Infectious Disease Research Policy, Univ. of Minnesota. http://www.cidrap.umn.edu/cidrap/content/influenza/panflu/biofacts/panflu.html#Historical_Perspective_1 8 July 2007.

- Quarantine
- Social Distancing
- Closing Places of Assembly
- 'Snow Days/Weeks' and Furloughing Non-Essential Workers
- Changes in Movement Patterns (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p. 14)

Pandemic Countermeasure, Containment/Control Strategy, Social Distancing: "Within the workplace, social distancing measures could take the form of: modifying the frequency and type of face-to-face employee encounters (e.g., placing moratoriums on hand-shaking, substituting teleconferences for face-to-face meetings, staggering breaks, posting infection control guidelines); establishing flexible work hours or worksite, (e.g., telecommuting); promoting social distancing between employees and customers to maintain three-feet spatial separation between individuals; and implementing strategies that request and enable employees with influenza to stay home at the first sign of symptoms." (**DHS**, *Pandemic Influenza -- Preparedness, Response, and Recovery: Guide for CIKR*, 2006, p. 14)

Pandemic Influenza Phases:

- New Domestic Animal Outbreak in At-Risk Country
- Suspected Human Outbreak Overseas
- Confirmed Human Outbreak Overseas
- Widespread Human Outbreaks in Multiple Locations Overseas
- First Human Case in North America
- Spread Throughout United States
- Recovery and Preparation for Subsequent Waves. (**DHS**, *Pandemic Influenza CIKR Guide*, 2006, p. 17)

Pandemic Vaccine Prioritization:

Level -- Homeland & National Security (HNS)

A Deployed and mission critical personnel

B Essential support and sustainment personnel
Intelligence services; Border protection personnel
National Guard personnel (not already in Level A)
Other domestic national security personnel

C Remaining active duty military and essential support personnel

Level -- Health Care & Community Support Services (HC/CSS)

A Public health personnel
Inpatient, Outpatient, and home health care providers
Health care providers in long-term care facilities (LTCFs)

B Community support services and emergency management personnel

C Other important health care personnel

Level -- Critical Infrastructure (CI)

A Emergency Medical Services, Fire service and Law enforcement personnel
Manufacturers of pandemic vaccine, antiviral drugs, key pandemic response materials
Key government leaders

B Energy sector personnel (electricity and natural gas)
Communications personnel (telephony and IT)
Water sector personnel (potable and waste water)
Government personnel
C Transportation sector personnel
Food and agriculture sector personnel
Banking and finance sector personnel
Pharmaceutical sector personnel
Chemical and Oil sector personnel
Postal and shipping sector personnel
Other important government personnel

Level -- General Population (GP)

A Pregnant women
Infants and toddlers, 6 – 35 months old
B Household contacts of infants under 6 months old
Children 3 – 18 years old with high-risk medical conditions
Children 3 – 18 years old without high-risk medical conditions
C High risk persons 19 – 64 years old
Persons 65 years and older
D Healthy adults, 19 – 64 years old, not included in other categories.

(**HHS**, *Draft Guidance on Allocating and Targeting Pandemic Influenza Vaccine*, October 2007)

Panic: "Panic behavior is where the individual flees without any consideration for others." (**Dynes, Quarantelli and Kreps**, *A Perspective on Disaster Planning* (3rd Ed.), 1981, p. 19)

Panic: "The surest antidotes to panic are knowledge, training, and leadership. Knowledge of what the danger is. Knowledge of what to do about it—to the point where the proper reaction is instinctive. Knowledge that something is being done about it, by people who know their business. Knowleddge of what is happening, and why – right after it happens. Knowledge that the Nation's leaders are on the job – by seeing nhad hearing them on television and radio." (**FCDA**, *1953 Annual Report*, p. 67)

PAO: Public Affairs Officer.

Paper Plans: "A frequent major weakness [in emergency preparedness] concerns emergency planning. In many communities emergency plans are based upon an assumed capability, rather than on a real or existing capability. While many documented plans 'look good on paper,' it is the actual existing resources and capabilities which must be relied upon to save lives and property. Therefore, it is essential that the emergency plan accurately reflect existing resources and operational capabilities. It is also important to ensure that provisions have been made for making the best possible use of existing resources and capabilities, and where needed, to expand and improve them.

"Also, many written plans reflect more coordinated planning than has actually occurred within the community. Frequently the preparation of emergency plans did not include participation by representatives of appropriate emergency services. During a study of local community

emergency planning,[95] it was discovered that often the local civil preparedness director was, for all practical purposes, the sole author of the plan. For a plan to be workable, it is essential that the users understand what is required of them. This is accomplished best by their actual participation in the planning effort.

"In many cases local emergency operations plans have been produced to satisfy Federal and State requirements for participation in DCPA programs. A great many of these 'compliance plans' represent little or no real planning activity. Many are the result of adopting (mostly filling in blanks) model local plans produced by the States." (**DCPA**, *On-Site Assistance* (MP 63), 1974, pp. 2-3)

PAR: Pressure and Release Model. (**UNDAP**, *Techniques Used in Disaster Risk Asmt.*, 2008)

PAR: Protective Actions and Reentry (DOE).

Parallel Planning: "Parallel planning describes those rare situations when planning occurs concurrently across all Federal Planning levels for a specific scenario or threat. The higher planning level must still lead off the parallel planning effort to inform the next level's planning. The key distinction with parallel planning is that the lower planning level does not have to wait for the higher planning level's approved plan to begin planning. This is essential to speed up the process and allows participating organizations the maximum time to conduct their own planning. Parallel planning relies on accurate and timely notification from the higher planning level and a full sharing of information between planning levels as it becomes available." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, p. 2-9)

Participatory Analysis: "A risk analysis which includes the affected people in defining problems and needs, deciding solutions to them, implementing agreed activities to achieve those solutions and/or evaluating the results. The benefits of the technique are the growth of capacity, the creation of disaster risk management attitudes and behavior, and a greater insight into the communities enabling better results. In addition participatory analysis may be more cost-effective in the long term, than externally-driven initiatives, partly because they are more likely to be sustainable and because the process allows ideas to be tested and refined before adoption. The limitations of the technique are a poor fit within rigid timetables; impact will be limited at best if only some parts of the community are involved and where participation involves real social change it leads to the possibility of confrontation and conflict with those who traditionally hold power and influence." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Partner: "Any individual, group, or organization that might be affected by, or perceive itself to be affected by an emergency." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 56)

Partnership: "The concept of partnership…is understood here to encompass ongoing communication and sharing of knowledge, which, in turn, relies on relations of trust and common commitments." (**Fagen and Martin** 2005, 11)

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[95] Cited is System Development Corporation, *Final Report: Local Planning Project*, April 30, 1970.

Partnership Building: *Joint Forces Quarterly* question*:* You recently commented that you enjoy success coordinating and cooperating with interagency partners. What advice can you offer to commanders and staff officers to achieve similar success?

General Victor Renuart: "The last place in the world to make a new friend is at the scene of a disaster. You have to build a relationship over time. You need to plan together for the events that you may have to practice. And so my first recommendation is to reach out to those other agencies that you may have to deal with. You want to understand how *they* view the world, what *their* culture is. You need to understand what capabilities they bring. By the way, they need to understand what capabilities you bring, so it's a two-way discussion. My experience has been, whether it's building a coalition of 70 nations during OEF [Operation *Enduring Freedom*], or a coalition of 45 agencies at NORTHCOM today, everyone needs to feel as if they are a partner. Each will bring a different capability, some large, some small, but each has to feel like they are integrated into the planning as well as the execution. And so, if you don't make the first move, if the Defense Department doesn't say, "Let us be part of your team," or "Come be part of our team," then it's likely that it won't happen because, often, we're seen as kind of the big dog in the pack, and that can be intimidating to smaller agencies, so we have to make the first move." (***Joint Force Quarterly***, "An Interview with Victor E. Renuart, Jr," Is. 48, 1st Qtr. 2008, p. 42)

Partnership for a Safer Future: "The first Strategic Plan in the history of the Federal Emergency Management Agency (FEMA) was published in 1994. As part of FEMA's renewal, 'Partnership for a Safer Future' laid out the agency's mission and vision. We recognized that FEMA's role in making a safer future would require us to lay a solid foundation on which to build an effective organization of emergency management. We recognized that the organization would need to lead and support the Nation in a comprehensive, risk-based emergency management program. We also recognized that our mission to reduce the loss of life and property included protecting the Nation's institutions from all natural and man-made hazards. FEMA consequently began to direct efforts towards creating an agency that would restore the confidence of the American people and fulfill President Clinton's promise to 'be there' when America needed us." (**FEMA** (Director James L. Witt Foreword) *Strategic Plan FY 1998-2002*)

"Many challenges must be overcome before the vision of a 'Partnership for a Safer Future' becomes a reality. The first challenge is the effectiveness of the emergency management partnership. How well the entire emergency management community functions will affect FEMA's ability to meet the goals and objectives stated in the Plan. Although FEMA provides leadership and coordination, State and local governments are ultimately responsible for protecting their citizens from harm." (**FEMA**, *Strategic Plan FY 1998 – FY 2002*, 1997, p. 37)

Partnership for Public Warning (PPW): "The Partnership for Public Warning is a not-for-profit, public-private partnership established to save the lives and property of people at risk from natural disasters, accidents and terrorism by improving the nation's alert and warning capabilities. PPW provides a collaborative, consensus-based forum where all interested stakeholders – public and private – are working together to develop processes, standards, systems and strategies to ensure that the right people have the right information at the right time. PPW's objectives include, but are not limited to:

• Fostering communication, cooperation and consensus among key stakeholders:
• Promoting and conducting research and studies into alert and warning issues:
• Assisting and advising government officials on the development, implementation and operation of public warning systems, technologies, policies and procedures:
• Supporting the timely generation of standards, specifications, and protocols:
• Encouraging private sector investment in the development of new warning technologies and promoting the existence of such technologies to government decision makers;
• Fostering a knowledgeable public and informed decision making by establishing, maintaining and providing educational materials and other information on warning technologies and programs.

The Partnership is governed by an elected Board of Trustees representing local and state governments, private industry and the non-profit community. Federal agencies participating in PPW include the Department of Homeland Security, Department of Commerce and Federal Communications Commission." (**PPA**, *Protecting America's Communities*, 2004, p. iii)

Partnership Model: "The Partnership Model includes the following steps:

- Identify public and private sector stakeholders to co-share leadership.
- Ask leaders to bring others to the table.
- Identify common issues on emergency preparedness for collaboration.
- Identify new resources in the community to mitigate the impact of critical incidents.
- Determine the challenges that participating organizations encounter.
- Create sustainability in the partnership by conducting a needs assessment, setting goals, and task performance." (**Critical Incident Protocol**, *Partnership Model*)

Pathogens: "Pathogens are disease-causing bacteria, viruses, and rickettsiae. These agents could be used to target food supplies, port facilities, or population centers. Of particular concern is the threat of contagious diseases such as smallpox. Agents that have a long incubation period can infect a large number of people in a short period of time without immediate symptoms or warning signs." (**Dept. of the Army**, *WMD-CST Operations*, December 2007, p. 3-5)

Patriot Reports: "The partnership between the NOC and FBI is growing at a steady pace. For example, the NOC provides Patriot Reports to the FBI which have been useful in developing case leads. These reports often contain unique information provided to the NOC by private citizens." (**DHS**, *Statement of Frank DiFalco, Director of the National Ops. Center*, 20Jun07, 8)

PBL: Problem-Based Learning. (**FEMA**, *TEI/TO Course Catalog*, 2008, 76)

PBSE: Performance-Based Seismic Engineering.

PCA: Posse Comitatus Act.

PCCIP: President's Commission on Critical Infrastructure Protection.

PCI: Property/Casualty Insurers Association of America. (**III**, *Catastrophes: Insurance...*, 2008)

PCII: Protected Critical Infrastructure Information. (**DHS**, *PCIIP Frequently Asked Questions*)

PCIIP: Protected Critical Infrastructure Information Program. (**DHS,** *NIPP* 2006, p. 5)

PCIS: Partnership for Critical Infrastructure Security. "The PCIS membership is comprised of one or more members and their alternates from each of the SCCs [Sector Coordinating Councils]." (**DHS,** *NIPP* 2006, p. 5)

PDA: Preliminary Damage Assessment.

PDD: Presidential Decision Directive.

PDD-39: *US Policy on Counterterrorism*, 21 June 1995.

PDD-62: *Combating Terrorism,* May 22, 1998.

PDD-63: *Critical Infrastructure Protection*, May 22, 1998, The White House. "No later than the year 2000, the United States shall have achieved an initial operating capability and no later than five years from today the United States shall have achieved and shall maintain the ability to protect the nation's critical infrastructures from intentional acts that would significantly diminish the abilities of:

–The Federal Government to perform essential national security missions and to ensure the general public health and safety;

–State and local governments to maintain order and to deliver minimum essential public services;

–The private sector to ensure the orderly functioning of the economy and the delivery of essential telecommunications, energy, financial and transportation services.

Any interruptions or manipulations of these critical functions must be brief, infrequent, manageable, geographically isolated and minimally detrimental to the welfare of the United States." (**DHS**, *Critical Infrastructure Task Force Presentation to HSAC,* January 10, 2006)

PDD-67, *Enduring Constitutional Government and Continuity of government Operations*, 1998.

PDF: Portable Document Format.

PDH: Packaged Disaster Hospital. (**DCPA**, *On-Site Assistance Appendices*, 1974, p.C-14)

PDM: Pre-Disaster Mitigation.

Peacetime Benefits of Civil Defense (1953): "Communities, Cities and States throughout the Nation learned that an organized, trained Civil Defense was an important asset whenever and

wherever natural disaster struck. In 1953 Civil Defense truly became a recognized community service – a new dimension of peacetime citizenship." (**FCDA**, *1953 Annual Report*, p. 1)

"Our local Civil Defense organizations even now are gaining much needed experience – and paying their way – by serving in rescue and relief capacities in time of fire, flood, drought, or tornado damage. I count the dedication of the Federal Civil Defense Administration to these worthy emergency causes as one of the most practicable and forward-looking acts of the new administration." (**FCDA**, *1953 Annual Report*, p. 6)

Peacetime Benefits of Civil Defense (1954): "Increasingly in 1954 civil defense gave effective assistance in natural disasters. The contribution of civil defense was particularly evident in the hurricanes which struck the east coast in the early fall." (**FCDA**, *1954 Annual Report*, p. 1)

"Information on natural disasters such as floods, tornadoes, and cyclones is given over the CADW [Civil Aid Defense Warning] networks. In one instance last year CADW provided the first reports of 'Hurricane Hazel' hitting an area and in another was the only remaining source of communication with an area which had been hit…. Matching funds under FCDA Federal Contributions program have been made available to help States and localities pay the cost of public warning systems equipment. The program also provides matching funds for the installation of warning systems inside schools, hospitals, and public buildings." (**FCDA**, *1954 Annual Report*, pp. 58, 60)

Peacetime Benefits of Civil Defense (1955): "The advantages of having natural and enemy-caused disaster functions combined in the same forces have been demonstrated many times within the past few years. Natural disaster operations have afforded excellent training in organization, leadership, and use of technical skills to those in civil defense whose responsibility it would be to act in an enemy-caused disaster. On the other hand, previous organization and training in civil defense has resulted in increased capability to provide assistance in natural disasters." (**FCDA**, *1955 Annual Report*, p. 39)

PEP: Pre-positioned Equipment Program. **(FEMA**, Statement of Cannon, Nov/ 15, 2007. p. 9)

PEP: Prevention Exercise Program. (**DHS**, *HSEEP*, Vol. V, 2005, p. 5)

PEPAC: Primary Entry Point Advisory Committee. (**FEMA**, *IPAWS Update*, June 2007, 3)

PEP: Primary Entry Point System. (**FEMA**, *IPAWS Update*, June 2007, slide 2)

Performance Activities and Tasks: "Performance activities and tasks are the actions taken to prevent, protect against, respond to, or recover from an actual event or are demonstrated during an exercise." (**DHS**, *TCL*, 2007, p. 8)

Performance Based Seismic Design (PBSD): "The goal of PBSD is to develop practical assessment and design criteria that enable building owners and regulators to select desired performance and/or reliability levels for new construction or for upgrades of existing buildings

that differ from the current building code-based life safety level." (**NEHRP**, *Annual Report*, 2007, p. viii)

Performance Measures: "Performance measures are quantitative or qualitative levels against which achievement of a task or capability outcome can be assessed. They describe how much, how well, or how quickly an action should be performed and are typically expressed in ways that can be observed during an exercise or real event. *The measures and metrics are not standards. They serve as guides and evaluation tools for planning, training, and exercise activities.*" (**DHS**, *TCL*, 2007, p. 8)

Performance Measures, Emergency/Disaster Response:

1) Capability – what can we do?
2) Capacity – how much can we do?
3) Proficiency – how well can we perform?
4) Deployment – how quickly can we deploy capabilities? (**GAO**, *Maritime Security*, Dec. 2007, p. 76, citing NYFD Chief of Counterterrorism and Emer. Prep., Sep 2006)

Peril: " The cause of risk. Perils include such things as fire, flood, earthquake, bad weather, etc." (**Risky Thinking**, *Risk Glossary*, 2007)

Personnel and Administration Expenses (P&E): "Assistance under Public Law 85-606 [1958]… No Federal funds were available during FY 1960 to help pay essential personnel and administrative costs of State and local civil defense organizations as authorized by Public Law 85-606. However, $6 million appropriated for this purpose will be available on Jan. 1, 1961. OCDM has prepared guidance material and standards to ensure effective use of these funds and will implement the program on the effective date." (OCDM, *Annual Report 1960*, p. 59)

Personnel and Administration Expenses [EMPG] (Sec. 613. Contributions for Personnel and Administrative Expenses (42 U.S.C. 5196b): "(a) General authority - To further assist in carrying out the purposes of this title, the Director may make financial contributions to the States (including interstate emergency preparedness authorities established pursuant to section 5196(h) of this title) for necessary and essential State and local emergency preparedness personnel and administrative expenses, on the basis of approved plans (which shall be consistent with the federal emergency response plans for emergency preparedness) for the emergency preparedness of the States. The financial contributions to the States under this section may not exceed one-half of the total cost of such necessary and essential State and local emergency preparedness personnel and administrative expenses." (**Stafford Act**, June 2007 (FEMA 592), p. 61)

Personnel Capability Element (TCL): "Paid and volunteer staff who meet relevant qualification and certification standards necessary to perform assigned missions and tasks." (**DHS**, *TCL*, 2007, p. 9)

Pets Evacuation and Transportation Standards Act 2007 (PETS Act), Public Law 109-308: "On October 6, 2006, the PETS Act was signed into law amending Section 403 of the Stafford Act. Section 403, as amended by the PETS Act, authorizes FEMA to provide rescue, care,

shelter, and essential needs for individuals with household pets and service animals, and to the household pets and animals themselves following a major disaster or emergency." (**FEMA**, *Eligible Costs Relating to Pet Evacuations and Sheltering*, December 27, 2007 update)

This Act requires FEMA to ensure that state and local emergency plans address the needs of individuals with household pets and service animals prior to, during, and following an emergency or major disaster declaration. The Act also authorizes FEMA to study and develop plans that take into account the needs of individuals with pets and service animals prior to, during, and following disasters.

PF: Protection Factor. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B-9)

PFO: Principle Federal Official. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 633)

PFS: Personal and Family Survival. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B-38)

PH: Public Health. (**FEMA**, *TIE/TO Course Catalog*, 2008, p. 3)

Phases of Business Continuity/Emergency Management Program Development Process:

- Program Management
  - Obtain Management Support
    - Issue Executive Policy
  - Establish Advisory Committee
    - Appoint Program Coordinator
  - Evaluate Current Program and Capabilities
    - Review Laws and Authorities
  - Establish Goals and Objectives
    - Establish Project Budget, Schedule and Milestones
- Risk Assessment
  - Identify Hazards
  - Determine Likelihood of Occurrence
  - Assess Vulnerability
  - Conduct Impact Analysis
- Prevention & Mitigation
  - Develop Hazard Prevention Strategy
  - Develop Prevention Plan
  - Develop Hazard Mitigation Strategy
  - Develop Mitigation Plan
- Resource Management
  - Establish Resource Objectives
  - Conduct Gap Analysis to Identify Shortfalls
    - Develop Strategy to Overcome Shortfalls
      - Determine Need for Mutual Aid
        - Establish Agreements, if Mutual Aid Needed
  - Maintain Resource Inventory
- Plan Development

    - Emergency Operations/Response
    - Business Continuity and Business Recovery
        - Develop Communications and Warning Capability
        - Implement Incident Management System
        - Establish Emergency Operations Centers
        - Establish Logistics Capability
        - Establish Finance and Administration Procedures
    - Crisis Communications
- Training
    - Assess Training Needs
    - Develop Training and Education Curriculum
    - Implement Training and Education Program
- Exercises, Evaluations, and Corrective Actions
    - Conduct Drills
    - Conduct Exercises
    - Test IT Recovery Plans
    - Conduct Periodic Reviews and Evaluations
    - Conduct Post Incident Critiques
    - Implement Corrective Action Process
- Program Revision
    - Revise Program as Needed. (**Larson**[96], *Implementing NFPA 1600*, 2007, p. 12)

Phases of Business Continuity Planning:

- Project Initiation
- Business Analysis
- Design and Development (Designing the Plan
- Implementation (Creating the Plan)
- Testing
- Maintenance (Updating the Plan) (**DigitalCare**, *State of Oregon BC Workshop*, 2006, 20)

Phases of Civil Defense (Nuclear Attack):

- Pre-event
- Trans-event
- Post-event

Phases of Continuity Implementation Process:

- Readiness and Preparedness
- Activation and Relocation
- Continuity of Operations
- Reconstitution (**DHS**, *FCD 1*, November 2007, p. 12)

Phases of Continuity of Operations (Nuclear Attack):

a. *Pre-attack*:

[96] Cites Donald L. Schmidt, Preparedness, LLC.

That phase that includes all planning and testing of existing facilities, plans and Emergency Action Procedures.

b. *Trans-attack period.*

From initial attack until civil defense personnel determine that radiation levels permit leaving shelters. Essential functions during this period would include at a minimum all FOA generated Essential War Functions…

c. *Post-attack period*.

(1) Immediate phase. Emphasis on recovery, would include:
(a) Continuing survival activities and military operations.
(b) Mobilizing military and civilian resources.
(c) Restoring essential communications and transportation.
(d) Increasing procurement and production of essential items.

d. Long-term phase.

Activities related to rehabilitation, rejuvenation and restructuring from remaining resources." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-1)

Phases of Counterterrorism Information Sharing:

- Detection
- Prevention
- Disruption
- Preemption
- Mitigation (**White House**, *EO 13356*, 2004, p. 1)

Phases of Domestic [National] Incident Management (2003): "Policy: (3) To prevent, prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies, the United States Government shall establish a single, comprehensive approach to domestic incident management. The objective of the United States Government is to ensure that all levels of government across the Nation have the capability to work efficiently and effectively together, using a national approach to domestic incident management. In these efforts, with regard to domestic incidents, the United States Government treats crisis management and consequence management as a single, integrated function, rather than as two separate functions." (**White House**, *Homeland Security Presidential Directive/HSPD-5, Subject: Management of Domestic Incidents*, February 28, 2003, p. 1)

Thus: **Prevent (Prevention)**
Prepare for (Preparedness)
Respond to (Response)
Recover from (Recovery)

Annex I, "National Preparedness," to HSPD-5, promulgated in December 2007, struck the "phases" noted above and inserted:

Prevent
Protect against
Respond to
Recover from

Phases of Domestic [National] Incident Management (2007): "The National Incident Management System provides a systematic, proactive approach guiding departments and agencies at all levels of government, the private sector, and nongovernmental organizations to work seamlessly to prepare for, prevent, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life, property, and harm to the environment." (**FEMA**, *NIMS*, August 2007 Draft, p. 1)

Thus:

Prepare for	**(Preparedness)**
Prevent	**(Prevention)**
Respond to	**(Response)**
Recover from	**(Recovery)**
Mitigate	**(Mitigation)**

Phases of Emergency Management (1978/79), Original "Four Phases" (**NGA**, 1978, p. 106):

- **Mitigation,**
- **Preparedness,**
- **Response, and**
- **Recovery.**

Phases of Emergency Management (1993): "Disasters do not just appear one day. Rather they exist throughout time and have a lifecycle of occurrence which must be matched by a series of management phases that include strategies to mitigate hazards, prepare for and respond to emergencies, and recover from their effects.: (**FEMA**, *The Emergency Pgm Mgr*, 1993, 1-5) Thus:

- To mitigate (mitigation)
- Prepare for (preparedness)
- Respond to (response)
- Recover from (recovery)

Phases of Emergency Management (2006): "In support of the primary mission of the Agency, the Administrator shall…lead the Nation's efforts to **prepare for**, **protect against**, **respond to**, **recover from**, and **mitigate against** the risk of natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents…" (FEMA 592, June 2007, pp. 94-95; passage from Title V (National Emergency Management) Sec. 503. Federal Emergency Management Agency (6 U.S.C. 313), **Department of Homeland Security Appropriations Act, 2007** (Pub. L. No. 109-295) amending the Homeland Security Act of 2002; pp. 1396-1397 of DHS Appropriations Act.) Thus:

- Prepare for (Preparedness)
- Protect against (Protection)
- Respond to (Response)
- Recover from (Recovery)
- Mitigate against (Mitigation)

Phases of Emergency Management (2006): "…the mission of the Agency [FEMA] is to reduce the loss of life and property and protect the Nation from all hazards by leading and supporting the Nation in a risk-based, comprehensive emergency management system of (A) **mitigation**, by taking sustained actions to reduce or eliminate long-term risks to people and property from hazards and their effects; (B) **preparedness**, by planning, training, and building the emergency

management profession to prepare effectively for, mitigate against, respond to, and recover from any hazard; (C) **response**, by conducting emergency operations to save lives and property through positioning emergency equipment, personnel, and supplies, through evacuating potential victims, through providing food, water, shelter, and medical care to those in need, and through restoring critical public services; and (D) **recovery**, by rebuilding communities so individuals, businesses, and governments can function on their own, return to normal life, and protect against future hazards…" (**Post-Katrina Emergency Management Reform Act of 2006**, Title VI-National Emergency Management (Sec. 503., Federal Emergency Management Agency, para. (c) Administrator, (9) carrying out …), pp. 1398-1399 of DHS Appropriations Act, 2007' emphasis added) Thus:

- **Mitigation**
- **Preparedness**
- **Response**
- **Recovery**

Phases of Emergency Management (2007): "The Federal Emergency Management Agency (FEMA) is the federal agency responsible for leading America's efforts to **prepare for, protect and mitigate against**, **respond to**, and **recover from** the impacts of natural disasters and man-made incidents or terrorist events. (**FEMA**, *Strategic Plan*, 2007, p. 3; emphasis added) Thus:

- Prepare for (**Preparedness**)
- Protect against (**Protection**)
- Mitigate against (**Mitigation**)
- Respond to (**Response**)
- Recover from (**Recovery**)

Phases of Emergency Management (2007): "Our mandate is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of **preparedness**, **protection**, **response**, **recovery**, and **mitigation**." (**FEMA**, *Strategic Plan*, November 2007, p. 5) Thus:

- **Preparedness**
- **Protection**
- **Response**
- **Recovery**
- **Mitigation**

Phases of Emergency Management (2007): "Provide guidance and federal resources to states, territories, tribal nations, and local governments across the Nation to build and sustain the capability **to prevent**, **protect against**, **respond to**, and **recover from** natural disasters, acts of terrorism, and other man-made events or incidents." (**FEMA**, *Strategic Plan*, 2007, p. 13; see, also, p. 18) Thus:

- To Prevent (**Prevention**)
- Protect against (**Protection**)
- Respond to (**Response**)
- Recover from (**Recovery**)

Phases of Emergency Management (2008): "Building on the improvements of 2007 and lessons learned, the Federal Emergency Management Agency (FEMA) moves into 2008 better positioned to help the American people prepare for, mitigate against, respond to and recover from a natural or man-made disaster." Thus:

- **Preparedness**
- **Mitigation**
- **Response**
- **Recovery** (FEMA, *New FEMA 2008 – Moving The Vision Forward*, Jan 2008)

Phases of Emergency Management (2007): "The future of homeland security depends on preparedness initiatives at the local level. In this collection of contributions from public safety professionals, new measures fall into one or more of the **four phases of emergency management,**

- **mitigation,**
- **preparedness,**
- **response and**
- **recovery**." (From 2007 **ICMA** Press brochure description of *Homeland Security: Best Practices for Local Government.*) [Emphasis added.]

Phases of Emergency Management (2004):

- **Reduction**
- **Readiness**
- **Response**
- **Recovery**
  (**New Zealand Ministry of Civil Defense & Emergency Management**, Personal email, 14Jan2004)

Phases of Emergency Management and Business Continuity (2004):

- **Mitigation**
- **Preparedness**
- **Response**
- **Recovery** (**NFPA**, *NFPA 1600*, 2004)

Phases of Emergency Management and Business Continuity (2007):

- **Prevention**
- **Mitigation**
- **Preparedness**
- **Response**
- **Recovery** (**NFPA**, *NFPA 1600*, 2007)[97]

[97] The NFPA explains the addition of "Prevention" to the "Phases" in the last paragraph of the section, "Origin and Development of NFPA 1600" -- "The 2007 edition incorporates changes to the 2004 edition, expanding the conceptual framework for disaster/emergency management and business continuity programs. Previous editions of the standard focused on the four aspects of mitigation, preparedness, response, and recovery. This edition identifies prevention as a distinct aspect of the program, in addition

Phases of Homeland Defense (2005): "DOD primarily focuses on "detect, deter, preempt, and defend" when they conduct HD missions.

- "*Prepare.* Emergency preparedness is a shared responsibility and a partnership that includes the Federal government, state and local agencies, the private sector, and individual citizens.
- *Detect.* Early detection of threats is essential. Detection is a national effort, which involves maintaining a common operational picture and the sharing and fusing of information/intelligence through a network of federal, state, and local agencies.
- *Deter.* An effective deterrence requires the adversary leadership to believe the United States has both the ability and will to preempt or retaliate promptly with responses that are credible and effective.
- *Preempt.* Preemption consists of proactive measures taken to prevent or neutralize a perceived or imminent attack. Preemption may include offensive actions such as air strikes, maritime interception, or direct action.
- *Defend.* HD missions are those that protect the Nation's sovereignty.
- *Respond.* Response, as it relates to HS activities, spans both HD and CS mission areas." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. vi) Thus:
  - **Prepare**
  - **Detect**
  - **Deter**
  - **Preempt**
  - **Defend**
  - **Respond**

Phases of Homeland Defense (2007):

- **Prepare**
- **Detect**
- **Deter**
- **Prevent**
- **Defense**
- **Defeat**
- **Recover** (**JCS/DOD**, *Homeland Defense*, 2007, p. I-7 (24))

Phases of Homeland Security (2001): "The Office [Homeland Security] shall work with executive departments and agencies, State and local governments, and private entities to ensure the adequacy of the national strategy for detecting, preparing for, preventing, protecting against, responding to, and recovering from terrorist threats or attacks within the United States and shall periodically review and coordinate revisions to that strategy as necessary." (**White House**, *EO 13228*, October 8, 2001). Thus:

- **Detection**

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to the other four. Doing so brings the standard into alignment with related disciplines and practices of risk management, security, and loss prevention."

- **Preparedness**
- **Prevention**
- **Protection**
- **Response**
- **Recovery**

Phases of Homeland Security (2002): "The *National Strategy for Homeland Security*… creates a comprehensive plan…to enhance our protection and reduce our vulnerability to terrorist attacks…. The strategic objectives of homeland security in order of priority are to:

• Prevent terrorist attacks within the United States;
• Reduce America's vulnerability to terrorism; and
• Minimize the damage and recover from attacks that do occur."
(**White House**, *National Strategy for Homeland Security*, 2002, pp. vi-vii) Thus:

- **Pre-event** -- Prevent **terrorist** attacks Prevention
- **Pre-event** -- Reduce vulnerability to **terrorism** Mitigation & Preparedness
- **Trans-event** -- Respond to **terrorist** attacks Response
- **Post-event** -- Recover from **terrorist** attacks Recovery

Phases of Homeland Security (2004): "We will lead the unified national effort to secure America. We will prevent and deter terrorist attacks and protect against and respond to threats and hazards to the nation. We will ensure safe and secure borders, welcome lawful immigrants and visitors, and promote the free-flow of commerce." (**DHS**, *Strategic Plan* (Mission Statement) 2004) Thus:

- Prevent and deter terrorist attacks (**Prevention**)
- Protect against threats and hazards (**Protection)**
- Respond to threats and hazards (**Response**)

Phases of Homeland Security (2004):
"*Awareness*--Identify and understand threats, assess vulnerabilities, determine potential impacts and disseminate timely information to our homeland security partners and the American public.
Prevention — Detect, deter and mitigate threats to our homeland.
Protection — Safeguard our people and their freedoms, critical infrastructure, property and the economy of our Nation from acts of terrorism, natural disasters, or other emergencies.
Response — Lead, manage and coordinate the national response to acts of terrorism, natural disasters, or other emergencies.
Recovery — Lead national, state, local and private sector efforts to restore services and rebuild communities after acts of terrorism, natural disasters, or other emergencies. (**DHS**, *Securing Our Homeland: U.S. Department of Homeland Security Strategic Plan 2004*.)
Thus: **Awareness**
Prevention
Protection
Response
Recovery

Phases of Homeland Security (2005): "This document summarizes the initial results of significant work completed since December 17, 2003, when President Bush issued Homeland Security Presidential Directive 8: *National Preparedness* (HSPD-8). This approach transforms how the Federal government proposes to strengthen the preparedness of the United States to prevent, protect against, respond to, and recover from terrorist attacks, major disasters, and other emergencies and how the Federal government proposes to invest homeland security resources in order to achieve the greatest return on investment for our Nation's homeland security. It is animated by a sense of urgency and by a commitment to risk-based priorities." (**DHS**, *Interim National Preparedness Goal*, March 2005, Preface)

[Thus: **Prevent (Prevention)**
Protect against (Protection)
Respond to (Response)
Recover from (Recovery)]

Phases of Homeland Security (2007): "Homeland Security is a concerted national effort to prevent and disrupt terrorist attacks, protect against man-made and natural hazards, and respond to and recover from incidents that do occur." (**DHS**, *NRF Comment Draft*, September 2007, p. 6)

Thus:

- Prevent and disrupt terrorist attacks (**Prevention**)
- Protect against man-made and natural hazards (**Protection**)
- Respond to incidents that do occur (**Response**)
- Recover from incidents that do occur (**Recovery**)

Phases of Incident Management: "…phases of incident management:

- prevention,
- preparedness,
- response,
- recovery, and
- mitigation." (**DHS**, *NIMS*, March 2004, p. 2)

Phases of Incident Management: "Incident phases are based on the National Response Framework (NRF) and National Planning and Execution System (NPES) of incident management: prepare, respond and recover aligned with the National Operations Center (NOC) and National Response Coordination Center (NRCC) Operational Phases." (**FEMA**, *DHS/FEMA 2008 Federal Interagency Hurricane Contingency Plan* (Draft). Oct. 31, 2007, p. 2)

Thus: **Preparedness**
Response
Recovery

Phases of Incidents:

- **Awareness**
- **Readiness**
- **Response**
- **Recovery**

(**FEMA**, *IS 250, Emergency Support Function 15 (ESF15) External Affairs: A New Approach to Emergency Communication and Information Distribution*, 2007, p. 46 and Test Question 23)

Phases of Incidents of National Significance: "The *National Response Plan* (NRP) establishes three operational phases: Pre-Incident, Incident, and Post-Incident for all Incidents of National Significance. These phases and their associated steps are driven by events that occur and resultant decisions and not specifically by time." (**DHS**, 2007 forthcoming) Thus:

- Pre- Incident
- Incident
- Post-Incident [See Phases of Civil Defense (Nuclear Attack)]

Phases of National Incident Management: "Common approach to national incident management:

Prevention
Protection
Response
Recovery
Preparedness" (**DHS**, *Interim National Preparedness Goal*, March 2005, p. 2 (Figure 1)

Phases of National Preparedness for All-Hazards (2007):

- **To Prevent**
- **Protect Against**
- **Respond To**
- **Recover From (White House**, *Annex I, "National Preparedness," HSPD-8*, 2007, 2)

Phases of Response: This chapter [II, Response Actions] describes and outlines key tasks related to the **three phases of effective response:**

- **Prepare**
- **Respond**
- **Recover** (**DHS**, *NRF*, Jan 2008, 27)

Phases of Weapons of Mass Effect Prevention of U.W. Border Penetration System:

- **Dissuasion**
- **Deterrence**
- **Detection**
- **Denial**
- **Disruption**
- **Interdiction**
- **Elimination (HSAC,** *WME Task Force*, January 10, 2006, pp. 14-17**)**

PHEMC: Public Health Emergency Medical Countermeasures Enterprise, HHS.

PHEP: Public Health Emergency Preparedness, CDC, HHS.

PHIN: Public Health Information Network, CDC, HHS.

PHMSA: Pipeline and Hazardous Materials Safety Administration, DOT.

PHS: Public Health Service. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 633)

PHSAC: President's Homeland Security Advisory Council.

PI: Pandemic Influenza. (**FEMA**, *FEMA Pandemic Influenza Contingency Plan*, 2007)

PI: Public Information. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

PIA: Professional Insurance Agents (association). (**FEMA**, *Call for Issues…Report*, 2000, xxiii)

PID: Photo Ionization Detector. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, B-3)

PIF: Policies in Force. (**FEMA.NFIP**, *Call for Issues Status Report*, 2000, xxiii)

PII: Personally Identifiable Medical Information. (**ACLU**, *Pandemic Preparedness*, 2008, 28)

Pinnacle 05 Exercise: Federal continuity of operations (COOP) exercise, June 20-24, 2005, designed "to test and improve our ability to perform essential governmental functions during threats and emergencies. (**DHS**, *DHS Announces Pinnacle Exercise to Test COOP*, June 2005) Generally, Pinnacle Exercises, as the name might imply, are high level exercise involving the White House Military Office. (**DHS**, *DNDO Exercises*, 2007)

Pinnacle 07 Exercise: May 2007 Continuity of Operations Exercise. (**DOE OIG**, *Inspection Report: DOE's Pandemic Influenza Planning*, Dec 2007, p. 7)

PIO: Public Information Officer. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

PIR(s): Priority Intelligence Requirement(s): (**DA**, *WMD-CST Operations*, Dec. 2007, p. 4-6)

PITAC: President's Information Technology Advisory Committee. (February 2005)

PKEMRA: Post-Katrina Emergency Management Reform Act. (**Stafford Act**, 2007, p. 75)

PKEMRA Requirements -- Assessment:

- **"Comprehensive Assessment System:** Assess, on an on-going basis, the Nation's prevention capabilities and overall preparedness, including operational readiness.

- *Shall assess:*
    - Compliance with national preparedness system, NIMS, NRP, other plans

- Capability levels at the time of assessment against target capability levels defined by the TCL
- Resource needs to meet the desired target capability levels defined by the TCL
- Performance of training, exercises, and operations." (**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 15)

PKEMRA Requirements -- National Preparedness Report: "National Preparedness Report: By Oct 4, 07 and annually, submit to Congress a report on the Nation's level of preparedness for all hazards.

Report shall include:

- Assessment of how Federal assistance supports the national preparedness system
- Results of the comprehensive assessment
- Review of the Federal Response Capability Inventory
- Assessment of resource needs to meet preparedness priorities established by Administrator in TCL, including
- Estimate of the amount of Federal, State, local, and tribal expenditures required to attain the preparedness priorities
- The extent to which the use of Federal assistance during the preceding fiscal year achieved the preparedness priorities

(**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 16)

PKEMRA Requirements – State Preparedness Reports: "By January 4, 2008 and annually, a State receiving Federal preparedness assistance from DHS shall submit a report to the Administrator on the State's level of preparedness.

Report shall include:

- An assessment of State compliance with the national preparedness system, NIMS, NRP, and other related plans and strategies
- An assessment of current capability levels and a description of target capabilities levels
- An assessment of resource needs to meet the preparedness priorities established by Administrator in the TCL, including:
- An estimate of the amount of expenditure required to attain the preparedness priorities
- The extent to which the use of Federal assistance during the preceding fiscal year achieved the preparedness priorities

(**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 17)

PKI: Public Key Infrastructure. (**DHS**, *NCR First Responder Partnership Initiative*, 2005, 14)

PL: Public Law. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

Places of Mass Gathering: "`Places of mass gathering' …comprise a very diverse group of commercial assets and facilities, typically privately owned and operated, which may include sports venues, amusement parks, concert halls, retail malls, office buildings, residential apartment buildings, and hotelsa nd resorts. These facilities, which make up the Commercial Facilities Sector under the National Infrastructure Protection Plan (NIPP) framework, may be generally characterized by one of four common traits: business activities, personal commercial transactions, recreational pastimes, and accomodations.: (**DHS**, *Statement for the Record, Robert B. Stephan, Assistant Secretary, Infrastructure Protection, National Protection and Programs Directorate…[DHS] before the Committee on Homeland Security*, July 9, 2008, p. 1)

Plan: "A proposed or intended method of getting from one set of circumstances to another. A plan is often used to move from the present situation towards the achievement of one or more objectives or goals." (**DHS**, *FCD 1*, Nov. 2007, P-8)

Plan: "A plan is a continuous, evolving instrument of anticipated actions that maximize opportunities and guide response operations. Since planning is an ongoing process, a plan is an interim product based on information and understanding at the moment, and is subject to revision. That is why plans are best described as "living" documents." (**DHS**, *NRF*, 2008, 71)

Plan, Common Communication Plan – See Common Communication Plan.

Plan, Concept -- See Concept Plan.

Plan, Concept of Operations (CONOPS) – See Concept of Operations Plan.

Plan, Contingency – See Contingency Planning.

Plan, Continuity of Operations (COOP Plan) – See Continuity of Operations Plan

Plan, Continuity of Operations-Essential (COP-E) – See Continuity of Ops Plan-Essential.

Plan, Crisis Action – See Crisis Action Planning

Plan, Crisis Management – See Crisis Management Planning.

Plan, Operational/Operations -- -- See Operations Plan.

Plan, Strategic – See Strategic Plan.

Plan, Tactical – See Tactical Plan.

Planning: "Plans describe how personnel, equipment, and other resources are used to support incident management response activities. Plans provide mechanisms and systems for setting priorities, integrating multiple entities and functions, and ensuring that communications and

other systems are available and integrated in support of a full spectrum of incident management requirements." (**DHS**, *National Incident Management System*, March 2004, p. 4)

Planning: "Outcome: Plans incorporate an accurate threat analysis and risk assessment and ensure that capabilities required to prevent, protect against, respond to, and recover from all-hazards events are available when and where they are needed. Plans are vertically and horizontally integrated with appropriate departments, agencies, and jurisdictions. Where appropriate, emergency plans incorporate a mechanism for requesting State and Federal assistance and include a clearly delineated process for seeking and requesting assistance from appropriate agency(ies)." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 6)

Planning: "Planning is a methodical way to think through the entire life-cycle of a potential crisis. Good planning repays the investment of time and effort in development and rehearsal by shortening the time required to gain control over an incident and by providing favorable conditions for rapid and effective exchange of information about a situation, its analysis, and alternative responses. Planning helps Federal, State, local, tribal, and territorial governments reorient capabilities and resources to be more agile and ensures organizational structures, processes, and procedures effectively support the intended strategic direction. As stakeholders learn and practice their roles, they can reduce uncertainty, expedite response, and improve effectiveness during the critical initial stages after an event. This effort is a key to success in protecting people and property in crises." (**DHS**, *National Preparedness Guidelines*, 2007, 20-21)

Planning: "Planning makes it possible to manage the entire life cycle of a potential crisis, determine capability requirements, and help stakeholders learn their roles. It includes the collection and analysis of intelligence and information, as well as the development of policies, plans, procedures, mutual aid and assistance agreements, strategies, and other arrangements to perform missions and tasks. Planning also improves effectiveness by clearly defining required capabilities, shortening the time required to gain control of an incident, and facilitating the rapid exchange of information about a situation." (**DHS**, *National Response Framework*, 2008, 28)

Planning: "Planning provides three principal benefits: (1) it allows jurisdictions to influence the course of events in an emergency by determining in advance the actions, policies, and processes that will be followed; (2) it guides other preparedness activities; and (3) it contributes to unity of effort by providing a common blueprint for activity in the event of an emergency. Planning is a foundational element of both preparedness and response and thus is an essential homeland security activity. Emergency planning is a national priority, as reflected in the *National Preparedness Guidelines*." (**DHS**, *National Response Framework*, 2008, 71)

Planning: "Planning is the mechanism through which Federal, State, local and tribal governments, non-governmental organizations (NGOs), and the private sector develop, validate, and maintain plans, policies, and procedures describing how they will prioritize, coordinate, manage, and support personnel, information, equipment, and resources to prevent, protect and mitigate against, respond to, and recover from Catastrophic events. Preparedness plans are drafted by a litany of organizations, agencies, and/or departments at all levels of government and within the private sector. Preparedness plans are not limited to those plans drafted by emergency

management planners. The planning capability sets forth many of the activities and tasks undertaken by an Emergency Management planner when drafting (or updating) emergency management (preparedness) plans." (**DHS**, *Target Capabilities List*, 2007, p. 21)

Planning: "Planning should be an orderly, analytical process consisting of logical steps to identify a mission or requirement, develop, analyze, and compare alternate courses of action, select the best course of action, and produce a plan. Planning should also be flexible and responsive to dynamic conditions (e.g. time constraints, varied planning expertise, etc.). Homeland security operations demand the interagency be able to gather, review, integrate, and act upon information rapidly in a knowledge-based, collaborative environment. Collaborative planning allows all levels of government to plan together to synchronize their efforts." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-1)

Planning: "The plan is important, but of greater importance is the planning, and the experience gained by the planners who may later find themselves in charge. This is why the Guide stresses the importance, where practicable, of placing planning responsibility on the shoulders of those who will actually operate in an emergency." (**OEP**, *Organization and Planning Guide for State & Local Emergency Management of Resources*, Sep 1962, p. 13)

Planning, Adaptive (AP): See "Planning, Adaptive."

Planning, Business Continuity – See Business Continuity Planning

Planning, Capabilities-Based -- See Capabilities-Based Planning Process.

Planning, Catastrophic Disaster Response – See Catastrophic Disaster Response Planning.

Planning, Catastrophic Incident – See Catastrophic Incident Planning.

Planning, Concept – See Concept Plan.

Planning, Concept of Operations– See Concept of Operations Planning.

Planning, Contingency – See Contingency Planning.

Planning, Continuity – See Continuity Planning.

Planning, Crisis Action – See Crisis Action Planning.

Planning, Crisis Relocation – See Crisis Relocation Planning.

Planning, Deliberate – See Deliberate Planning. Also referred to as contingency planning.

Planning, Devolution of Operations – See Devolution of Operations Plan/Plan.

Planning, Disaster – See Disaster Plans and Planning.

Planning, Disaster Recovery – See Disaster Recovery Planning.

Planning, Domestic Incident Response – See DHS, National Domestic IR Planning.

Planning, Emergency – See Emergency Planning.

Planning, Emergency Operations – See Emergency Operations Plan.

Planning, Federated: (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-2)

Planning, Homeland Security: (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-1)

Planning, Implementation – See, for example, National Implementation Plan.

Planning, Incident – See Department of Homeland Security Incident Planning.

Planning, Incident Action – See Incident Action Plan.

Planning, Incident Management – See Incident Management Planning Team (DHS), National Incident Management Planning, National Incident Management System Planning.

Planning, Integrated Federal Support – See Integrated Federal Support Plan.

Planning, Multi-Year Development – See Multi-Year Development Plan/Planning.

Planning, Multiple Direction: (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-2)

Planning, Operational/Operations – See Operational/Operations Plan.

Planning, Response – See National Response Framework, DHS.

Planning, Strategic – See Strategic Plan.

Planning, Tactical – See Tactical Plan.

Planning Approaches: "There are different approaches to planning, each focusing on different requirements, authorities, levels of operation and specific organizational missions within the homeland security spectrum of operations.

Capability-Based. This planning approach focuses on available personnel and resources that can be applied to address significant incidents. Requirements and capabilities are derived from the

National Planning Scenarios, the *National Homeland Security Plan,* strategic planning, risk assessments, concepts of operations, and threat information. This capabilities-based planning approach and the *National Preparedness Guidelines* foster vertical and horizontal integration of Federal, State, local, and Tribal plans allowing State, local and Tribal capability assessments to inform Federal requirements and capabilities planning.

Functional. A functional planning approach identifies a list of common tasks an organization must perform during an incident, an emergency, a specific event/activity or a directed requirement. They are created at all operational levels and formatted in accordance with the standards of the parent organization. They may be developed in response to HSPD/NSPD requirements, at the organization's senior leadership initiative, or in response to either national policy or a guidance document requirement.

Scenario-Based. A scenario-based plan is developed from a National Planning Scenario; there are currently 15 National Planning Scenarios. These scenarios have been grouped into eight sets. National Planning Scenarios will be developed, updated, or amended as necessary at least every two years. This process will be informed by a risk-based analysis intended to focus planning efforts on the most likely or most dangerous threats to the homeland. Annex I to HSPD-8 specifically addresses this planning approach." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, pp. 2-10, 2-11)

Planning Capability: "The TCL includes a Planning Capability designed to establish and maintain the ability to develop, update, and test plans. In addition, each capability contains both preparedness and performance tasks and measures that support the capability outcome and serve as a guide for preparedness planning. The preparedness tasks and measures describe major elements or issues that should be addressed in plans, procedures, and systems, as well as authorities, relationships, and agreements that need to be in place to prepare to use the capability. The performance tasks and measures also inform the planning process." (**DHS**, *TCL*, 2006, viii)

Planning Capability Element: "Collection and analysis of intelligence and information, and development of policies, plans, procedures, mutual aid agreements, strategies, and other publications that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks." (**DHS**, *TCL*, 2007, p. 9)

Planning Categories/Typologies: "The two basic types of planning are: contingency planning (also known as deliberate planning), and crisis action planning (CAP). Contingency planning is the cornerstone of homeland security planning. It supports crisis action planning by anticipating potential crises and developing plans that facilitate timely selection of courses of action and execution planning during a crisis. Crisis action planning provides the means to transition from normal circumstances to heightened threats, emergency response, and recovery." (**FEMA**, *Interim Integrated Planning System for HLS* (Draft Version 2.3), 3 July 2008 copy p. 2-8)

Planning Criteria For Measuring Key Aspects For Success: "The *Framework* [NRF] employs common criteria to measure key aspects of response planning:

Acceptability. A plan is acceptable if it can meet the requirements of anticipated scenarios, can be implemented within the costs and timeframes that senior officials and the public can support, and is consistent with applicable laws.

Adequacy. A plan is adequate if it complies with applicable planning guidance, planning assumptions are valid and relevant, and the concept of operations identifies and addresses critical tasks specific to the plan's objectives.

Completeness. A plan is complete if it incorporates major actions, objectives, and tasks to be accomplished. The complete plan addresses the personnel and resources required and sound concepts for how those will be deployed, employed, sustained, and demobilized. It also addresses timelines and criteria for measuring success in achieving objectives, and the desired end state. Completeness of a plan can be greatly enhanced by including in the planning process all those who could be affected.

Consistency and Standardization of Products. Standardized planning processes and products foster consistency, interoperability, and collaboration.

Feasibility. A plan is considered feasible if the critical tasks can be accomplished with the resources available internally or through mutual aid, immediate need for additional resources from other sources (in the case of a local plan, from State or Federal partners) are identified in detail and coordinated in advance, and procedures are in place to integrate and employ resources effectively from all potential providers.

Flexibility. Flexibility and adaptability are promoted by decentralized decisionmaking and by accommodating all hazards ranging from smaller-scale incidents to wider national contingencies.

Interoperability and Collaboration. A plan is interoperable and collaborative if it identifies other plan holders with similar and complementary plans and objectives, and supports regular collaboration focused on integrating with those plans to optimize achievement of individual and collective goals and objectives in an incident." (**DHS**, *NR*F, 2008, 74-75)

Planning Fundamentals: "The challenge of planning for protecting lives, property, and the environment within is made easier if the planners apply these common characteristics to the planning process:

- **Planning is an orderly, analytical, problem-solving process.** It follows logical steps from plan initiation to analysis of objectives, to development and comparison of ways to achieve the objectives, and to selection of the best solution. While using a prescribed planning process cannot guarantee success, inadequate plans and planning are proven contributors to failure.

- **Planning guides preparedness activities.** It provides a common framework to guide preparedness by establishing the desired end state and the tasks required to accomplish it. This process identifies the capabilities required. Capabilities provide the means to accomplish a mission and achieve desired outcomes by performing critical tasks, under specified conditions, to target levels of performance. Exercises provide opportunities to demonstrate and evaluate performance, while periodic assessments of plans identify lessons learned and provide the means to share best products and practices.

- **Planning helps deal with complexity.** Homeland security problems are most often complex and interrelated. The National Strategy for Homeland Security attaches special emphasis to planning for catastrophic events that embody the greatest risk of mass casualties, massive property loss and immense social disruption. Planning provides the opportunity for a jurisdiction or regional response structure to work through these very complex situations and their unique associated problems. Planning helps decision makers understand how their decisions might affect the ability of their and neighboring jurisdictions to achieve response goals.

- **This planning process addresses all hazards.** The causes of incidents across the spectrum of homeland security can vary greatly, but the effects do not. This means planners can address incident functions common to all hazards. For example, floods, wildfires, and hazardous materials releases may lead a jurisdiction to issue an evacuation order. Even though each hazard's characteristics (e.g., speed of onset, size of the affected area) are different, many general tasks for conducting an evacuation are the same. Differences in the speed of onset may influence when an evacuation order is given, but the process of issuing an evacuation order does not change. All-hazards planning ensures that planners identify common tasks and determine who is responsible for accomplishing those tasks.

- **Planning does not need to start from scratch**. Planners should capitalize on the experiences of others. The State is a valuable resource for the local jurisdiction. Many States publish their own standards and guidance for emergency planning, conduct workshops and training courses, and assign their planners to work with local planners. By reviewing existing emergency or contingency plans, planners can:
    - Identify applicable authorities and statutes,
    - Gain insight into community risk perceptions,
    - Identify organizational arrangements used in the past,
    - Identify mutual aid agreements with other jurisdictions, and
    - Learn how some planning issues were resolved in the past.

- **Planning depicts the anticipated environment for action.** This promotes early understanding and agreement on planning assumptions and risks, and provides the context for interaction. Effective planning identifies clear tasks and purposes, promotes frequent interaction among stakeholders, guides preparedness activities, establishes procedures for implementation, provides measures to synchronize actions, and allocates or reallocates resources. Planners should review the existing plans for questionable assumptions, inaccuracies, inconsistencies, omissions, and vagueness. Critiques of recent operations and exercises in the jurisdiction will help planners develop a list of topics to address when updating plans.

- **Planning must involve *all relevant* partners.** Just as coordinated operations depend on teamwork, good planning requires a team effort. The most realistic and complete plans are prepared by a team that includes representatives of the Federal agencies, State, local, and Tribal governments, private sector representation, and nongovernmental organizations (NGOs) that will have to execute the plan.

- **Planning assigns tasks, allocates resources, and establishes accountability.** Decision makers must ensure planners have the resources needed to accomplish the planning requirements as well as provide the necessary organizing, staffing, equipping, and resource allocation to implement the plans. Decision makers ensure this by organizing, staffing, equipping, and allocating resources.

- **Planning includes senior officials throughout the process to ensure both understanding and buy in.** Potential planning team members have many day-to-day concerns. For a team to come together, potential members must be convinced that planning has a higher priority, and the person to convince them is the jurisdiction's chief executive. Planning helps decision makers anticipate and think critically, reducing time between decisions and actions. The more involved decision makers are in planning, the better the planning product is. This includes reminding the chief executive that planning is an iterative, dynamic process that ultimately facilitates his or her job in an emergency.

- **Planning is influenced by time, uncertainty, risk, and experience.** These factors define the starting point where planners apply appropriate concepts and methods to create solutions to particular problems. Since this involves judgment and balancing of competing demands, plans cannot be overly detailed, followed to the letter, or so general that they provide insufficient direction.

- **Planning not only tells those within the planning community what to do (the task) and why to do it (the purpose), it also informs those outside the jurisdiction about how to cooperate and provide support and what to expect.** Planning identifies important constraints (what "must be done") and restraints (what "must not be done") that affect freedom of action and expectations.

- **Planning is fundamentally a risk management tool.** Uncertainty and risk are inherent in response planning and operations. Risk management during planning identifies potential hazards and assesses the probability and severity of each to mission accomplishment. Decision makers determine and communicate acceptable levels of risk."

(**FEMA,** *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, pp. 2-4 through 2-6)

Planning Organizations (Permanent and Temporary): "Homeland security's complex and demanding nature requires a permanent planning organization with dedicated and trained planners.

- The permanent planning organization's purpose is the continuous planning that addresses the homeland security requirements to prepare the Nation for potential terrorist attacks, natural disasters, and other emergencies. The planners in this organization must have the skills and judgments normally gained through an extensive education, training, and assignment background. The planning organization will be routinely augmented by functional subject matter experts and liaisons from organizations that have a role in the homeland security operations being planned. Permanent planning organizations will often

require additional duty planners that provide unique subject matter expertise to particular planning efforts. The leadership of the permanent planning organization must ensure these planners are trained and integrated into the planning effort seamlessly.

- Temporary planning organizations are formed for limited times to achieve limited planning objectives. They may be repeatedly formed and disbanded, or organized as exceptional circumstances require. However, these organizations should contain one or two members whose full-time role is planning and can facilitate the organization's planning effort." (**FEMA,** *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-11)

Planning Process: See, also, "Emergency Operations Plan, Planning Process."

Planning Process: "There are many ways to produce an EOP. The planning process that follows has enough flexibility for each community to adapt it to its unique characteristics and situation….The steps of this process are to:

1. Form a collaborative planning team;
2. Conduct research;
3. Analyze the information;
4. Determine goals and objectives;
5. Develop and analyze courses of action,, identify resources;.
6. Write the plan;
7. Approve and implement the plan;
8. Exercise the plan and evaluate its effectiveness; and.
9. Review, revise, and maintain the plan."

Planning Process:

1. Ascertain Authority
2. Ascertain Hazards
3. Ascertain Jurisdiction Assignment
4. Determine local government Structure and Operations
5. Determine capability of:
    1. Local Government
    2. Support Agencies
6. Analyze functions required in each hazard applicable.
7. Assign functions to appropriate department of government by order of Executive.
8. Prepare plan with the assistance of department specialists.
9. Obtain approval of plan by executives.
10. Meet with all departments. Revise plan. Distribute.
11. Periodically review, update, amend plan. Distribute changes. (**DCPA,** *Local Disaster Preparedness Course Syllabus*, 1973, p. 59)

Planning Process: Incident Decision Making Process is a five phase – nine step process:

- Phase 1 – Understand the Situation
    - Mission Identification
- Phase 2 – Determine Objectives and Strategies

    - Mission Analysis
    - Course of Action Development
- Phase 3 – Plan Development
    - Course of Action Analysis
    - Course of Action Comparison
    - Course of Action Approval
- Phase 4 – Plan Preparation
    - Plan/Order Preparation
    - Rehearsal/Training
- Phase 5 – Plan Refinement
    - Plan Refinement (**DHS**, *Interagency Planning Workshop*, 29Nov07, slides 4, 8)

Planning Process: "*Emergency planning is an orderly, analytical problem-solving process.* It follows a set of logical steps from

> plan initiation and analysis of an objective; to
> development and comparison of ways to achieve that objective; and
> selection and description of the proposed solution.

Rather than concentrating on every detail, an effective plan provides basic structure and supports insight, creativity and initiative in the face of an uncertain and fluid environment. While using a prescribed planning process cannot guarantee success, inadequate plans and planning are proven contributors to failure. Effective planning assigns clear tasks and purposes, promotes frequent interaction among stakeholders, guides preparedness activities, establishes procedures for implementation, provides measures to synchronize actions and allocates or reallocates resources." (**DHS**, *NRF Comment Draft*, September 2007, p. 69)

Planning Process:

- Form Local Emergency Planning Committee
- Begin to Plan
    - Review and Coordinate Existing Plans
    - Assess Response Capabilities
        - Assess Industry Response Capabilities
        - Assess Community Response Capabilities
    - Conduct Hazards Analysis
- Develop plan
- Seek Plan Concurrence through State Emergency Response Commission
- Revise, Test, and Maintain Plan (**EPA**, *Technical Guidance for Hazards* Analysis, 1987, p. 1-2)

Planning Process: "The four steps of the planning process are:

- Hazard Analysis.
- EOP Development.
- Testing the Plan.
- Plan Maintenance and Revision." (**FEMA**, *Emergency Planning* IS-235, 2007, p. 2.16)

Planning Process: "Through the planning process, you can identify the hazards that threaten your community, assess your vulnerability to them, and build consensus on approaches to mitigating them. This process leads to the identification of cost-effective, environmentally sound mitigation measures. In fact, the planning process is so critical to implementation of effective mitigation measures that some of the programs, described previously, that are intended to fund mitigation measures, require a mitigation plan as a condition of such funding. The planning process is as important as the plan itself. Your community can follow a general 10-step process that incorporates the classic planning approach of gathering information, setting goals, reviewing alternatives, and deciding upon which actions to take. The steps are:

1. Organize to prepare the plan. Selecting the right person to lead the planning effort is important.
2. Involve the public. Emphasize participation of key stakeholders, including at-risk homeowners, business owners, managers of critical facilities, and technical staff.
3. Coordinate with other agencies and organizations. They can provide technical assistance and inform the community of relevant activities and programs that can support your efforts.
4. Assess the hazard. Identify the particular hazards affecting your community and the risks they pose to your community's critical infrastructure.
5. Evaluate the problem. Getting participants to agree on a problem statement is the first step in reaching consensus on solutions to the problem.
6. Set goals. Establish goals as positive and achievable statements that people can work towards.
7. Review possible strategies and measures. Include a range of hazard mitigation measures for consideration. While some measures may be quickly eliminated, others should be evaluated carefully to determine how they work as well as their costs and benefits.
8. Draft an action plan. Keep it brief. Include sections on how the plan was prepared, recommended mitigation actions, and a budget and schedule.
9. Formally adopt the plan. Gaining public acceptance is vital to reducing conflicts, building support for the recommendations, and getting the plan formally adopted. Keep the public informed and educated so they will readily accept the plan.
10. Implement, evaluate, and revise the plan. Develop procedures to measure progress, assess strengths and weaknesses, and decide on necessary changes." (**FEMA**, *The Planning Process: The Foundation of Disaster Resistance*, September 14, 2006, p.2)

Planning Process: "Regardless of which process is used, the basic procedures are the same for both adaptive, deliberate and crisis action planning:

- receive and analyze the task to be accomplished
- review the enemy situation and begin to collect necessary intelligence
- develop and compare courses of action
- select a course of action (COA)
- develop and get approval for the selected COA
- prepare a plan
- then document the plan." (**JFSC**, *Joint Transition Course: Planning Primer*, 2005, p. 1-7)

Planning Process: "Although no one planning tool or template can provide the breadth of guidance needed, this planning guide is offered as a multifunctional tool or template. It outlines

13 essential components of an effective community-based emergency management planning process and provides multiple planning strategies addressing each component. The components include the following:

1. Define the community.
2. Identify and establish the emergency management preparedness and response team.
3. Determine the risks and hazards the community faces.
4. Set goals for preparedness and response planning.
5. Determine current capacities and capabilities.
6. Develop the integrated plan.
7. Ensure thorough communication planning.
8. Ensure thorough mental health planning.
9. Ensure thorough planning related to vulnerable populations.
10. Identify, cultivate, and sustain funding sources.
11. Train, exercise, and drill collaboratively.
12. Critique and improve the integrated community plan.
13. Sustain collaboration, communication, and coordination. (**The Joint Commission**, *Standing* Together, 2005, p. 6)

Planning Process (Adaptive Planning):

- Strategic Guidance
- Concept Development
- Plan Development
- Plan Refinement/Supporting Plan Development (**JFSC**, *JTC Planning Primer*, 2005, 1-35)

Planning, Programming, Budget and Execution (PPBE): "The Historical Context: In the early part of the 20th century, the federal budget process emphasized the control of actual expenditures. Budget estimates were totals of expenses for items such as salaries, spare parts, or office supplies. DoD lacked a mission or functional structure to classify costs. In addition, the DoD system was highly decentralized, and resource formulation and allocation processes across the services were duplicative, inequitable, and limited to consideration of a single budget year. In the 1940s and 50s, a number of reforms shifted the focus from budget estimates to performance measurement. Performance measures of effectiveness were developed (for example, "miles of road paved per day"), and the budget was based upon functions, activities, and projects. However, there still did not exist a systematic way to ensure that the budget supported the mission or plans of DoD. Consequently, when the budget changed hands or when new issues were given precedence, objectives or planned courses of action changed also, thwarting continuity from year to year.

"*PPBS Introduced to Improve the Budgeting Process*: The Planning, Programming, and Budgeting System (PPBS) had its birth in 1962 under then Secretary of Defense Robert McNamara. Proponents of PPBS believed that efficiencies and improvements in government operations could be achieved through a common approach for:

- Establishing long-range planning objectives
- Analyzing the costs and benefits of alternative programs that would meet those objectives
- Translating programs into budget and legislative proposals and long-term projections.

"PPBS differed from the traditional budgeting process that preceded it in two significant ways.

- *Emphasized objectives*—PPBS focused less on the existing base and annual incremental improvements to it, and more on the objectives and long-term alternative means for achieving them. As a result of this shift in focus, PPBS was elevated to a level on par with budgetary management and control.
- *Linked planning and budgeting*—by means of programming, PPBS instilled a process that essentially defines a procedure for distributing available resources equitably among the many competing or possible programs.

"*PPBS Becomes PPBE—A Focus on Execution*: PPBS imposed financial discipline, integrated the information necessary to develop effective programs to address existing and emerging needs, and established a disciplined review and approval process. However, DoD's processes for strategic planning, identifying needs for military capabilities, developing and acquiring systems, and developing programs and budgets continued to exist as disparate systems.

"The strategic planning process did not explicitly drive the identification of needs for military capabilities. Also, the program and budget development processes, while imposing fiscal discipline, often have failed to integrate strategic decisions into a coherent defense program. In addition, more time was being spent on deciding how much to spend on a program rather than evaluating what was received for the investment.

"In 2003, Defense Planning Guidance (DPG) tasked the Senior Executive Council to lead a study and identify improvements that could be made to DoD decision-making and budgeting process. Known as the DPG 20 Streamlining Decision Process, the study recommended a process that became known as Planning, Programming, Budgeting, and Execution (PPBE). Concurrent with the new planning, programming, and budgeting processes, PPBE set forth a two-year budget cycle, which allows DoD to formulate two-year budgets and use the Off-Budget year to focus on budget execution and evaluate program performance.

"PPBE provides a vehicle for decision makers to examine and analyze decisions by taking into consideration influencing environmental factors such as threats, political and economic climates, technological developments, and resource availability. The processes within PPBE are based on and are consistent with the objectives, policies, priorities, and strategies derived from National Security Decision directives, and shift DoD's focus from straight financial discipline to increased attention and emphasis on program performance and results.

"With the introduction of PPBE, a major thrust of DoD moving forward is to increase the effectiveness of the programming and budgeting process and to place significant importance on budget execution. Specific emphasis is on linking any major decision both to the Defense Planning Guide and to program and budget development, and then evaluating the performance results.

"The new PPBE process guides DoD in developing strategy; identifying needs for military capabilities; planning programs; estimating, allocating, and acquiring resources; and other decision processes. In addition, the change more closely aligns DoD's internal cycle with external requirements embedded in statutes and administration policy.

"*PPBE…The Bridge Between Military Planning and Budgeting*: PPBE is the primary vehicle for identifying mission requirements and translating them into budget and personnel resources required to accomplish that mission. Through the evaluation of alternatives, PPBE ensures the highest priority requirements are funded. Thorough reviews during each phase of the process ensure that major issues (mission-readiness, quality-of-life for military personnel, modernization, Administration priorities, and legislative initiatives) have been addressed within the constraints of total DoD resources.

"The process itself is flexible enough to reflect the political priorities and management focus of the Secretary and Deputy Secretary of Defense while still providing a rigorous and comprehensive means to ensure that all essential issues are considered in the resource allocation process. Because of the new two-year cycle, PPBE allows the budget to be adapted to each Administration's priorities and policies, while still providing for review, refinement, execution, and continuation of the Administration's programs.

"The ultimate objective of PPBE is to provide Operational Commanders with the best mix of forces, equipment, and support attainable within fiscal constraints. Based on the anticipated threat, a strategy is developed. Requirements of that strategy are then estimated and programs are developed to execute the strategy. Finally, a budget is developed to pay for the programs." (**DOD, OSD Comptroller iCenter**, *PPBE*) [Note: Noted and detailed in that FEMA in FY 2008 and 2009 is adopting the PPBE process.]

Planning Section: "The section that is responsible for the collection, evaluation, and dissemination of tactical information related to the incident, and for the preparation and documentation of incident action plans. The section also maintains information on the current and forecasted situation, and on the status of resources assigned to the incident." (**USCG**, *IM Handbook*, 2006, Glossary 25-19)

Planning Support Systems: "Planning support systems are a class of decision support systems that planners employ to help ensure they consider all viable options, weigh their potential value correctly, make and present recommendations, and make sound decisions. Planning support systems are a complement to, not a substitute for, individual and team skills and judgment. These support systems should be interoperable to ensure transparency of planning efforts across jurisdictions. Planning support systems include:

Communication Systems. Supporting communications systems must handle data, video, and voice, and process classified and unclassified information.

Planning Tools. Planning tools fall into two categories--automated and manual.

- Automated Planning Tools. Local systems should, to the maximum extent possible, be compatible with networked systems. Standardized firewalls, access protocols, and common software should be maximized. At the least, local systems must be worked to a common understanding and differences accommodated well in advance of need.

- Manual Planning Tools. Manual planning tools should be available to and understood by as much of the planning community as possible. Niche systems that are understood by

only a small pocket of planners generally lead to misunderstanding and confusion in the rest of the community, which leads directly to disjointed action." (**FEMA,** *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, pp. 2-11 – 2-12)

Planning Team: "An effective EOP planning team displays the following characteristics:

- A common goal (development of the EOP)
- A leader who provides direction and guidance
- Open communication
- Constructive conflict resolution
- Mutual trust
- Respect for each individual and his or her contributions." (**FEMA,** *Emergency Planning* IS-235, May 24, 2007, p. 2.16)

Planning Typologies/Categories: "The two basic types of planning are: contingency planning (also known as deliberate planning), and crisis action planning (CAP). Contingency planning is the cornerstone of homeland security planning. It supports crisis action planning by anticipating potential crises and developing plans that facilitate timely selection of courses of action and execution planning during a crisis. Crisis action planning provides the means to transition from normal circumstances to heightened threats, emergency response, and recovery." (**FEMA**, *Interim Integrated Planning System for HLS* (Draft Version 2.3), 3 July 2008 copy p. 2-8)

Plans: "Documents such as procedures, mutual aid agreements, strategies, and other publications that may describe some of the following: governance, management, standard operating procedures, technology, and activities in support of defined missions and tasks." (**FEMA**, *FY 2007 NIMS Compliance Metrics Terms of Reference*, October 23, 2006, p. 2)

Plate Tectonics: "The scientific theory that the Earth's outer shell is composed of several large, thin, relatively strong "plates" that move relative to one another. Movements on the faults that define plate boundaries produce most earthquakes." (**USGS**, *Putting Down Roots*, 2007, Glossary)

PLE: Principles-Level Exercises. (**FEMA**, *Statement of Dennis Schrader*, October 2007, p. 3)

Plume: Identifiable stream of air with a temperature or composition different from that of its environment. Examples are a smoke plume from a chimney and a buoyant plume rising by convection from heated ground. (**WMO** 1992, 456)

PMCS: Preventative Maintenance Checks and Services. (**DA**, *WMD-CST Operations*, 2007, Glossary-5)

PMEFs: Primary Mission Essential Functions. (**White House,** *HSPD-20*, May 9, 2007)

PM ISE: Program Manager, Information Sharing Environment. http://www.ise.gov/

PMF: Probable Maximum Flood. (**USACE**, *Digest of Water Resources Policies*…, 1999)

PMO: Property Management Officer. (**FEMA**, *Mission Assignment SOPs*, July 2007, p. 6)

PMP: Probable Maximum Precipitation (**USACE**, *Water Resources Policies…*, 1999, 13-2)

PMTL: Protective Measures Target List.

PNPs: Private Nonprofit Organizations. (**FEMA**, *Public Assistance Guide*, June 2007)

PNSR: Project on National Security Reform.

PNWER: Pacific NorthWest Economic Region.

POC: Point of Contact. (**DHS**, *FCD 1*, Nov. 2007, p. O-2)

POD: Pacific Ocean Division, United States Army Corps of Engineers.

PODs: Points of Distribution Sites. (**FEMA**, *Logistics Supply Chain*, 2006)

POI: Plan of Instruction. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

POE: Port of Entry. (**DHS**, *Opening Statement of Vayl Oxford (DNDO)*, March 8, 2007)

Points of Distribution (PODs) Sites: "Temporary local facilities at which commodities are distributed directly to disaster victims. PODs are operated by the affected state." (**FEMA**, *Logistics Supply Chain*, 2006)

Political Jurisdictions in the United States (See "Governments in the United States").

Political Will: "The greatest challenge facing emergency preparedness is one of political will: Mustering the courage to spend political capital and scarce dollars on stopping a problem before it appears. In the past, policy-makers have preferred to wait for problems to develop and then fund solutions instead of prevention. But Hurricane Katrina has shown that that gamble is not worth the risks." (**Little Hoover Commission**, *Safeguarding the Golden State*, 2006, 64)

PONAST: Post Nuclear Attack Study.

Population at Risk: "A well-defined population whose lives, property, and livelihoods are threatened by given hazards. Used as a denominator." (**UNDHA**, *DM Glossary*, 1992, 58)

Population Threat Assessment (PTA) DHS: "The PTA estimates the size of the population exposed by the agents identified in the MTDs to gauge the impact on the population and national infrastructure if that particular agent was released for a given high consequence plausible scenario." (**DHS**, *Statement for the Record by Runge*, April 18, 2007) [Note: see Material Threat Determination.]

Port Security Assessment (PSA) Program. "The mission of the Coast Guard Port Security Assessment (PSA) Program is to improve port security. We will do this by making federal, state, and local governmental agencies and other appropriate port stakeholders aware of the susceptibility of maritime critical infrastructure and key assets to negative consequences from subversive acts of terrorism, and to recommend mitigation strategies to protect our national port system and the United States public." (USCG, *Port Security Assessment Program*)

Port Security Assessment (PSA) Program. "PSGP supports sustainable, risk-based efforts to enhance access control and credentialing, protect against IED and other non-conventional attacks, and conduct disaster-response scenarios. PSGP funds are awarded on the basis of risk and competition to eligible ports, as well as eligible ferry systems." (**DHS**, *Fact Sheet FY08 Preparedness Grants*, 1Feb2008)

Port Security Grant Program (PSG): "PSG funds owners and operators of ports, terminals, as well as port authorities and state and local agencies that provide a layered approach, U.S. inspected passenger vessels and ferries, as well as port authorities and State and local agencies to improve security for operators and passengers through physical security enhancements. The Program strives to create a sustainable, risk-based effort for the protection of critical infrastructure from any incident that would cause major disruption to commerce and significant loss of life." (**DHS/ODP**, *FY 2006 EMPG Program Guidance*, November 2005, p. 10)

Port Security Grant Program (PSGP): "…provides grant funding to port areas for the protection of critical port infrastructure from terrorism. PSGP funds are primarily intended to assist ports in enhancing port-wide risk management capabilities, enhanced domain awareness, capabilities to prevent, detect, respond to and recover from attacks involving improvised explosive devices (IEDs) and other non-conventional weapons, as well as training and exercises. PSGP funds are allocated to the Nation's highest risk port areas to address priorities identified in NPG, the NIPP and the National Strategy for Maritime Security. The pool of eligible port applicants has been expanded to reflect the changes required by the SAFE Port Act, which states that all entities covered by an Area Maritime Security Plan may submit an application for consideration. PSGP funds support the development of an integrated risk-based decision-making process for each port area patterned after the risk management framework articulated in the NIPP. At the recommendation of the U.S. Coast Guard, in several cases, multiple port areas have been grouped together to reflect geographic proximity, shared risk and a common waterway." (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*. March 11, 2008, p. 5)

Position Task Books (FEMA): "FEMA Task Book is a list of tasks for a defined position /function in the FEMA JFO Organizational structure. Task Books are created in 2 formats: Job Aid (downloaded or handed to employee at check-in); Assessment Guide (supervisor/employee assessment at completion of assignment). The Task Book (in either format) describes your functions in a disaster operation; the Tasks in the Job Aid are identical to those in the Assessment Guide. As mentioned above, every employee should receive the Job Aid when they check-in at the JFO or other Field site. The employee should review the tasks in the Job Aid with their supervisor to ensure all position-specific tasks (or only some of them) will

be performed on that assignment. The Job Aid is intended to be used during his/her assignment, as a desk reference. When the employee completes their assignment, the supervisor and employee will assess the task performance of the employee; this is when the Assessment Guide is used. In the Assessment Guide, there are 3 indicators:

- Performed
- Needs Improvement
- N/A (Not Applicable for this assignment)…

that allow the supervisor to evaluate task performance against each task. The supervisor will rate the employee's performance of every task in the Position Task Book… The assessment process: documents your performance of required tasks; helps you plan for development and improvement of your work performance." (**FEMA**, *Position Task Book*, 2007)

Position Task Books (Purpose): "Position task books have been developed for positions within the FEMA Disaster Workforce. Each task book lists the essential tasks for the specific position. Task books are designed to: Describe the tasks to be performed for a given position; Determine training needs of individual employees; Serve as a tool for promoting task-related." (**FEMA**, *Position Task Book Purpose*, 2007)

Positive Pressure Self-Contained Breathing Apparatus (SCBA): "This apparatus provides a constant, positive pressure flow of air within the facepiece, even if one inhales deeply while doing heavy work. Use apparatus certified by NIOSH and the Department of Labor/Mine Safety and Health Administration in accordance with 42 CFR Part 84. Use it in accordance with the requirements for respiratory protection specified in OSHA 29 CFR 1910.134 (Respiratory Protection) and/or 29 CFR 1910.156 (f) (Fire Brigades Standard). Chemical-cartridge respirators or other filtering masks are not acceptable substitutes for positive pressure self-contained breathing apparatus. Demand-type SCBA does not meet the OSHA 29 CFR 1910.156 (f)(1)(i) of the Fire Brigades Standard." (**DOT**, *Emergency Response Guidebook*, 2004, p. 350)

Posse Comitatus Act: "The PCA prohibits the U.S. military from providing direct support to domestic civilian law enforcement.[98] Therefore, as a general rule, the PCA restricts Marines from acting in a civilian law enforcement capacity, allowing neither execution of civilian law nor direct participation in civilian searches, seizures, or arrests. The PCA does not bar *all* military support to civilian law enforcement. Statutory exceptions allow military assistance to law enforcement in certain limited scenarios. One such scenario is a civil disturbance mission most recently played out during the 1992 Los Angeles riots. Under the Insurrection Act,[99] Congress authorized the President to use the federal military to restore order during times of civil disturbance, to include fulfilling a law enforcement function, without running afoul of the PCA.

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[98] Citation: 18 U.S.C. § 1385 (2002). Congress enacted the PCA in 1878 as a result of concerns over the military presence in the Reconstruction South. On its face the current PCA only applies to the Army and Air Force. In 1981, however, Congress directed the Secretary of Defense to promulgate regulations to essentially apply the PCA to the Navy and Marine Corps. See 10 U.S.C. § 375 (2002). The resulting regulation is *DoD Directive 5525.5, DoD Cooperation With Civilian Law Enforcement Officials*, 15 January 1986. Of note, the PCA does not apply to the members of the National Guard unless they have been federalized.

[99] Citation: 10 U.S.C. §§ 331–34 (2002).

The civil disturbance Garden Plot RUF[100] reflect this more permissive legal background. For example, Garden Plot allows the military to restore order by apprehending civilians who have committed crimes.[101] Moreover, while not firmly settled, it is generally agreed that the PCA does not apply outside the United States. The military, therefore, can, unhindered by the PCA, develop overseas operational ROE that permit a significant military role in host-nation civilian law enforcement if the mission so requires." (**Center for Law and Military Operations and HQ Marine Corps, Judge Advocate Division**…, *ROE v. RUF*, 2006)

Posse Comitatus Act: "The **Posse Comitatus Act**, 18 U.S.C. 1385, prohibits the use of the Army or the Air Force for law enforcement purposes, except as otherwise authorized by the Constitution or statute. This prohibition applies to Navy and Marine Corps personnel as a matter of DOD policy. The primary prohibition of the Posse Comitatus Act is against direct involvement by active duty military personnel (to include Reservists on active duty and National Guard personnel in Federal service) in traditional law enforcement activities (to include interdiction of vehicle, vessel, aircraft, or other similar activity; a search or seizure; an arrest, apprehension, stop and frisk, or similar activity)." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 69)

Posse Comitatus Act (Title 18 USC, Section 1385): "This federal statute places strict limits on the use of federal military personnel for law enforcement. Enacted in 1878, the PCA prohibits the willful use of the US Army (and later, the US Air Force) to execute the laws, except as authorized by the Congress or the US Constitution. Although the PCA, by its terms, refers only to the Army and Air Force, DOD policy extends the prohibitions of the Act to US Navy and Marine Corps forces, as well. Specifically prohibited activities include: interdiction of a vehicle, vessel, aircraft, or similar activity; search and/or seizure; arrest, apprehension, "stop-and-frisk" detentions, and similar activities; and use of military personnel for surveillance or pursuit of individuals, or as undercover agents, informants, investigators, or interrogators. Additionally, federal courts have recognized exceptions to the PCA. These common law exceptions are known as the "military purpose doctrine" and the "indirect assistance" exceptions. Exceptions and/or circumstances not falling under PCA include:
(1) Actions that are taken for the primary purpose of furthering a military or foreign affairs function of the United States.
(2) Federal troops acting pursuant to the President's Constitutional and statutory authority to respond to civil disorder.
(3) Actions taken under express statutory authority to assist officials in executing the laws, subject to applicable limitations.
(4) CD operations authorized by statute. The PCA does not apply to NG forces operating in state active duty or Title 32 USC status, nor to the USCG, which operates under Title 14 USC authority." (**JCS/DoD**, *Civil Support*, 2007, p. F-2)

Posse Comitatus Act: "The Posse Comitatus Act does not apply to the National Guard when in state active duty or federal Title 32 service because the Guard is under the command and control of the Governor and the Adjutant General in both statutes. It does apply to the Guard when in

[100] "Rules for the use of force," for domestic support to civil authority missions and "nonoperational" force protection.
[101] Citation: Garden Plot, supra note 5, at ann. C, app. 1, para. (1)(C).

Title 10 service, however, because when the Guard is federalized under Title 10 it becomes an indistinguishable part of the federal forces and is under federal as opposed to state control." (**Lowenberg**, "Statement by Major General Timothy Lowenberg," April 24, 2007)

Post-Disaster Sustainability Mission Statement: "To promote and facilitate sustainable redevelopment at the local level by integrating the principles and practices of sustainable development into the broader goals of the post-disaster recovery process. This is accomplished in partnership with the state and in coordination with OFAs, local agencies, and NGOs." (**FEMA**, *Rebuilding For A More Sustainable Future: An Operational Framework*, Nov. 2000, p. 1-1)

Post Incident Critique: "The critique can be a powerful tool for effecting change. A noted fire service expert observed that, "the post incident critique allows emergency responders to get a clear idea of the effects of their actions on the outcome of the operation. By comparing the expected outcome to the actual consequences, the fire department can make personal as well as organizational adjustments. And by assessing what worked, and what did not, improvements can be made."

A critique is a fact-finding exercise and a chance to relate and record pieces of information that collectively form a picture of the event and how personnel responded from both a command (tactical) and line (operational) standpoint. It is a tool to assess firefighting, rescue, and training effectiveness, and should include tactical plans and command decisions accompanied by how well they were followed. Lessons learned from the experience should be used constructively to correct deficiencies and influence training and education. Changes made to the department's plans and procedures typically occur per the outcome of incident critiques. Management must be willing to act upon the lessons learned and correct the problems as quickly as possible; otherwise, subordinate personnel will think the critique process is a waste of time, and future critiques could suffer accordingly.

The term "critique" may carry a negative connotation for some personnel in the fire service. Critiquing an incident may be perceived as a way to assign blame for mistakes that were made. The postincident critique, (or perhaps a less threatening term such as debriefing, after-action review, or postincident analysis (PIA)) should be viewed as a constructive way to obtain helpful feedback and positive suggestions. The process should be considered an important tool for improving firefighter safety and health, as well as a means for ensuring that the public is receiving quality services." (**USFA**, *Special Report: The After-Action Critique: Training Through Lessons* Learned, 2008, p. 1)

The following are examples of the inherent value of critiques and what they can accomplish:

• provide emergency service personnel with a clear indication of the impact their actions had on the general outcome of an incident;

• used to analyze and compare how different applied strategies and tactics affect the outcome of incidents;

• identify trends and patterns in errors during emergency operations so that immediate action can be taken to prevent them from reoccurring;

• identify positive outcomes that reflect proper attention to procedures, good decisionmaking, leadership skills, and so forth;

• serve as a catalyst for revising flawed tactical plans and Standard Operating Procedures (SOPs);

• used as a test bed where alternative tactics and evolutions are attempted, and to study their effect on the outcome of the incident;
• help identify additional or remedial training for personnel;
• used as technical reference material and cataloged for retrieval and examination during any similar future incidents;
• disseminate critical lessons learned during an incident…." (Ibid., p. 2)

Post-Katrina Emergency Management Reform Act (PKEMRA) (Title VI of the Department of Homeland Security Appropriations Act, 2007, Pub. L. 109-295, 120 Stat. 1355 (2006)): The PKEMRA "clarified and modified the Homeland Security Act with respect to the organizational structure, authorities, and responsibilities of FEMA and the FEMA Administrator. In addition to these modifications, PKEMRA made changes – some appearing in the Homeland Security Act and the Stafford Act – directing FEMA, among other things, to:

• Establish a Disability Coordinator and develop guidelines to accommodate individuals with disabilities;

• Add disability and English proficiency to the list of provisions requiring nondiscrimination in relief and assistance activities;

• Establish the National Emergency Family Registry and Locator System to reunify separated family members and assist in establishing the National Emergency Child Locator Center to locate missing children after a major disaster or emergency;

• Coordinate and support precautionary evacuations and recovery efforts;

• Provide transportation assistance for relocating and returning individuals displaced from their residences in a major disaster;

• Provide rescue, care, shelter, and essential needs assistance to individuals with household pets and service animals as well as to such pets and animals;

• Provide case management assistance to identify and address unmet needs of victims of major disasters;
:
• Note: Federal agencies shall not: deny or impede access to the disaster site to an essential service provider whose access is necessary to restore and repair an essential service; or impede the restoration or repair of essential services, to include telecommunications service, electrical power, natural gas, water and sewer services, or any other essential service, as determined by the President; and

• Receive input from a National Advisory Council, including State and private sector members, about the development and revision of the National Response Framework and other related plans or strategies." (**DHS**, *National Response Framework List of Authorities and References* (Draft), September 10, 2007, p. 4) [Note: See References section for URL for the Post Katrina…Act.]

Post-Katrina Emergency Management Reform Act (PKEMRA):

- "FEMA is responsible for leading the nation efforts to prepare for, protect against, respond to, recover from, and mitigate against the risk of natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents.

- Develop a Federal disaster response capability that can act effectively and rapidly to deliver assistance essential to saving lives and protecting or preserving property or public health and safety.

- Provide funding, training, exercises, technical assistance, planning, and other assistance to build Tribal, State, regional, and national disaster response capabilities.

- Develop and coordinate the implementation of a risk-based, all-hazards national strategy for preparedness." (**FEMA**, *Catastrophic Disaster Planning 2007 IAEM Presentation*, 2)

Post-Katrina Emergency Management Reform Act (PKEMRA): "In September 2006, Congress passed the Post-Katrina Emergency Management Reform Act of 2006 ("the Act"), which President Bush signed into law in October 2006.

The Act, which implemented many of the recommendations from the Committee's investigation, creates a new FEMA - with responsibilities, missions, capabilities, and resources far exceeding those of FEMA at the time of Hurricane Katrina – by vesting greater autonomy and elevating the status of FEMA and its leaders within the Department. Among other things, unlike its predecessor, the new FEMA is: (1) a distinct entity within DHS, with protections similar to those afforded the U.S. Coast Guard; (2) focused on all-hazards preparedness, protection, mitigation, response, and recovery; and (3) responsible for the entire cycle of emergency management, including the management of close to $2 billion in grants to help State and local officials and first responders prepare for terrorist attacks and natural disasters.

In debating the Act, Congress decided to strengthen FEMA within the Department of Homeland Security in recognition of the fact that the kinds of catastrophic disasters the nation must prepare for requires resources far beyond what FEMA can effectively marshal standing alone. The Act's goal is to better enable FEMA to coordinate effectively the substantial response resources in other components within the Department, such as the Coast Guard, as well as to enable FEMA to be more effective in coordinating the response assets of the rest of the Federal government.

….the Act gave FEMA and its Administrator elevated and expanded roles in leading the nation's efforts to prepare for, protect against, respond to, recover from, and mitigate against the risk of natural disasters, acts of terrorism, and other man-made disasters. It made the FEMA Administrator an Executive Level II official (equivalent to the level of Deputy Secretary) and the principal advisor to the President, the Homeland Security Council, and the Secretary of Homeland Security on emergency management. It also gave the President the authority to make the FEMA Administrator a cabinet member during disasters. These changes are designed to ensure that FEMA has the political authority and clout to direct and coordinate the appropriate

personnel and resources within DHS (which are substantial) and to coordinate across the Federal government when needed." (**Lieberman**, "Letter to DHS Secretary Chertoff," Oct. 22, 2007)

Potential Threat Element (PTE): "Potential threat elements are any group or individual in which there are allegations or information indicating a possibility of the unlawful use of force or violence, specifically the utilization of WMD, against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of a specific motivation or goal, possibly political or social in nature. *Following are examples of threat element factors:*

- PTE existence
- PTE violent history
- PTE intentions
- PTE WMD capabilities, and
- PTE targeting
- Motivation of each PTE
- Identification of the WMD capabilities of PTE." (**DHS**, *UASI FY Grant App*, 2004, B-1)

POTUS: President of the United States.

Power Failure: "Any interruption or loss of electrical service due to disruption of power generation or transmission caused by accident, sabotage, natural hazards, equipment failure, or fuel shortage….The HICA defines a 'significant' power failure as any incident which would require the involvement of the local emergency management organization to coordinate provision of food, water, hearing, etc." (**FEMA**, *Hazard Identification* (CPG 1-34), 1985, A-3)

PP: Program Paper. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

PPA: Performance Partnership Agreements, FEMA. [Defunct]

PPA: Program, Project, or Activity. (DHS Appropriations Accounting Category)

PPBE: Planning, Programming, Budget and Execution. (**DHS**, *FEMA FY09 OMA*, 2008, 33)

PPE: Personal Protective Equipment.

PPPA: Office of Prepredness Planning and Analysis**,** FEMA, NPD. (**FEMA**, The Office of PPPA, June 26, 2008)

PPW: Partnership for Public Warning.

PRC: Primary Receiving Center.

Precaution: "Action taken to anticipate, identify and reduce the impact of 'surprises' (unknown impacts and therefore unknown probabilities)." (**European Environment Agency**, *EEA*

Environmental Glossary; cites: **EEA**, *Late Lessons From Early Warnings: The Precautionary Principle 1896-2000*, 1991)

Precautionary Approach: "A decision to take action, based on the possibility of significant environmental damage, even before there is conclusive, scientific evidence, that the damage will occur." (**European Environment Agency**, *EEA Environmental Glossary*; cites: **European Commission** (Brussels), *Integrating Environmental Concerns into Development and Economic Cooperation*, 1999.

Precautionary Prevention: "Action taken to reduce potential hazards." (**European Environment Agency**, *EEA Environmental Glossary*; cites: **EEA**, *Late Lessons From Early Warnings: The Precautionary Principle 1896-2000*, 1991)

Precautionary Principle: "(1) Principle adopted by the UN Conference on the Environment and Development (1992) that in order to protect the environment, a precautionary approach should be widely applied, meaning that where there are threats of serious or irreversible damage to the environment, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation. (2) The precautionary principle permits a lower level of proof of harm to be used in policy-making whenever the consequences of waiting for higher levels of proof may be very costly and/or irreversible." (**European Environmental Agency**, *EEA Environmental Glossary*; cites: 1) **ETC/CDS,** *General Environmental Multilingual Thesaurus* (GEMET 2000); 2) **EEA**, 1999, *Environment in the European Union at the turn of the century*, p. 278. Environmental assessment report No 2)

Precursor: "Phenomenon indicating a probable occurrence of an earthquake or a volcanic eruption." (**UNDHA**, *DM Glossary*, 1992, 58)

Pre-declaration Department of Defense (DOD) Mission Assignment: "Also known as 403(c) assistance. FEMA may direct DoD to use its personnel and equipment for removal of debris and wreckage and temporary restoration of essential public facilities and services, when requested by the Governor of an affected State within 48 hours of the incident. The Assistant Administrator, Disaster Operations Directorate, may authorize 403(c) assistance." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 57)

Pre-Designated Incident Locations & Facilities (NIMS): "Various types of operational locations and support facilities are established in the vicinity of the incident to accomplish a variety of purposes. Typical pre-designated facilities include command post, bases, camps, staging areas, mass casualty triage areas, and others as required." (**FEMA**, *National Incident Management System National Standard Curriculum Training Development Guidance*, 2005, p.8)

Pre-Designated Principal Federal Official (PFO): "In certain scenarios, a PFO may be pre-designated by the Secretary of Homeland Security to facilitate Federal domestic incident planning and coordination at the local level outside the context of a specific threat or incident. A PFO also may be designated in a pre-incident mode for a specific geographic area based on threat and other considerations. (**DHS**, *Notice of Change to the National Response Plan* (Version 5.0), May 25, 2006, p. 5)

Pre-Disaster Emergency Declaration Requests: "States immediately threatened with impact from an existing *hurricane* or *typhoon* will be considered for an emergency declaration when, in addition to the State request complying with requirements set forth in 44 CFR 206.35, FEMA determines the following three requirements are also met: The National Weather Service determines that the State, or a portion thereof, is threatened by landfall of a major hurricane or typhoon, AND:

1. The Governor has declared a State of Emergency, AND:
2. Either:

a. The State, or any jurisdiction(s) thereof, has issued *mandatory* evacuation orders for three or more counties/parishes, or any geographical area with a combined population of more than 100,000 residents, OR:

b. The declaration is necessary to provide direct federal assistance (e.g., teams, equipment, supplies) to meet critical emergency protection requirements before landfall, other than pre-positioning, that would overwhelm the capability or capacity of State resources.

"States immediately threatened by *any other natural or man-made incident* that threatens such destruction as could result in a major disaster (except fires, for which emergency assistance is provided under the provisions of the Fire Management Assistance Grant program in 44 CFR part 204) will be considered for an emergency declaration when, in addition to the State request complying with requirements set forth in 44 CFR 206.35, FEMA determines the following three requirements are also met:

1. A qualified Federal government agency - acknowledged as a national authority in a specific incident field (e.g., United States Geological Survey for seismic incidents, the National Weather Service for tsunamis, the Nuclear Regulatory Commission for nuclear power plants, or the Department of Homeland Security for acts of terrorism) - determines or affirms that a catastrophic incident is immediately imminent, AND:
2. The Governor has declared a State of Emergency, AND:
3. Either:

a. The State, or any jurisdiction(s) thereof, has issued *mandatory* evacuation orders for three or more counties/parishes, or any geographical area with a combined population of more than 100,000 residents, OR:

b. FEMA determines that the scope of the potential or projected incident is such that it would or could result in such damage as would constitute a catastrophe; AND the declaration is necessary to provide direct federal assistance (e.g., teams, equipment, supplies) to meet critical emergency protection requirements before impact, other than pre-positioning, that would overwhelm the capability or capacity of State resources." (**FEMA**, *Pre-Disaster Emergency Declaration Requests*, July 18, 2007)

Pre-Disaster Hazard Mitigation (42 U.S.C. 5133): "The President may establish a program to provide technical and financial assistance to States and local governments to assist in the implementation of predisaster hazard mitigation measures that are cost-effective and are designed to reduce injuries, loss of life, and damage and destruction of property, including damage to critical services and facilities under the jurisdiction of the States or local governments." (**Stafford Act**, June 2007 (FEMA 592), p. 17)

Pre-Disaster Mitigation (PDM) Program: "The Pre-Disaster Mitigation (PDM) program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Funding these plans and projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. PDM grants are to be awarded on a competitive basis and without reference to state allocations, quotas, or other formula-based allocation of funds." (**FEMA**, *Pre-Disaster Mitigation Grant Program*, September 12, 2007 update)

Pre-Disaster Mitigation (PDM) Program Eligible Activities:

Mitigation planning activities:

- New plan development;
- Comprehensive review and update.

Mitigation project activities:

- Voluntary acquisition of real property (*i.e*. structures and land, where necessary) for conversion to open space in perpetuity;
- Relocation of public or private structures;
- Elevation of existing public or private structures to avoid coastal or riverine flooding;
- Structural retrofitting and non-structural retrofitting (*e.g.*, storm shutters, hurricane clips, bracing systems) of existing public or private structures to meet or exceed applicable building codes relative to hazard mitigation;
- Construction of safe rooms (*e.g.,* tornado and severe wind shelters) for public and private structures that meet the FEMA construction criteria in FEMA 320 "Taking Shelter from the Storm" and FEMA 361 "Design and Construction Guidance for Community Shelters";
- Hydrologic and Hydraulic studies/analyses, engineering studies, and drainage studies for the purpose of project design and feasibility determination included as part of a project subapplication;
- Vegetation management for natural dune restoration, wildfire or snow avalanche;
- Protective measures for utilities (*e.g.,* electric and gas), water and sanitary sewer systems and/or other infrastructure (*e.g.,* roads and bridges);
- Storm water management projects (*e.g.,* culverts and retention basins) to reduce or eliminate long-term risk from flood hazards; and
- Localized flood control projects, such as certain ring levees and floodwall systems that are designed specifically to protect critical facilities (defined as Hazardous Materials Facilities, Emergency Operation Centers, Power Facilities, Water Facilities, Sewer and Wastewater Treatment Facilities, Communications Facilities, Emergency Medical Care Facilities, Fire Protection, and Emergency Facilities) and that do not constitute a section of a larger flood control system.

Any of the above mitigation projects for a critical facility, as defined above, may include the purchase of a generator or related equipment purchases (*i.e*., generator hook-ups) as a functional portion to the larger eligible mitigation project subapplication, as long as the generator or related

equipment purchase directly relates to the hazard(s) that threatens the critical facility." (**FEMA**, *Pre-Disaster Mitigation (PDM) Program Guidance Fiscal Year 2008*, 2007, p. vi.)

Preferred Risk Policy (PRP): "The Preferred Risk Policy (PRP) offers low-cost coverage to owners and tenants of eligible buildings located in the moderate-risk B, C, and X Zones in NFIP Regular Program communities." The Preferred Risk Policy covers one- to four-family buildings. (**FEMA**, *Preferred Risk Flood Insurance – A Smart Buy*, 2003)

Preliminary Damage Assessment (PDA): "A mechanism used to determine the impact and magnitude of damage and the resulting unmet needs of individuals, businesses, the public sector, and the community as a whole. Information collected is used by the State as a basis for the Governor's request for a Presidential declaration, and by FEMA to document the recommendation made to the President in response to the Governor's request. PDAs are made by at least one State and one Federal representative. A local government representative familiar with the extent and location of damage in the community often participates; other State and Federal agencies and voluntary relief organizations also may be asked to participate, as needed." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), 1996, p. GLO-8)

Preliminary Damage Assessment (PDA): A process used to determine the impact and magnitude of damage and the resulting unmet needs of individuals, businesses, the public sector, and the community as a whole. Information collected as a result of the PDA process is used by the State as a basis for the Governor's request for Federal assistance under the Stafford Act, and by FEMA to document the recommendation made to the President in response to the Governor's request. In a particularly fast-moving or clearly devastating disaster, the PDA process may be deferred until after the declaration." (**FEMA**, *Mission Assignment SOPs*, 2007, p. 58; see 44 CFR 206.33)

Preliminary Damage Assessment (PDA) Damage Definitions (FEMA):

Destroyed - structure is a total loss or damaged to such an extent that repairs are not economically feasible. Any one of the following may constitute a status of destroyed:

- Repair of structure is not economically feasible;
- Structure is permanently uninhabitable;
- There is a complete failure of major structural components (collapse of walls or roof); or
- Unaffected structure will be required to be removed or demolished due to ordinance (e.g., beachfront homes removed due to severe beach erosion).

Major – structure has sustained structural or significant damage, is uninhabitable and requires extensive repairs. Any of the following may constitute major damage: Substantial failures to structural elements of the residence (e.g., walls, floors, foundations);

- Damage to the structure exceeds the Disaster Housing Program, Home Repair Grant maximum ($10,000);
- General exterior property damage exceeds the Disaster Housing Program Home Repair Grant maximum (e.g., roads and bridges, wells, earth movement) and has more than 50% damage to the structure; or
- Damage will take more than 30 days to repair.

Minor – structure is damaged and uninhabitable, but may be made habitable in a short period of time with home repairs. Any of the following may constitute minor damage:

- Structure can be repaired within 30 days;
- Structure has more than $100 of eligible habitability items through the Disaster Housing Program, Home Repair Grant; has less than $10,000 of eligible habitability items through the Disaster Repair Program, Home Repair Grant; or
- Damage repair costs are less than 50% of total value of house.

Affected – structures sustain some damage to structure and contents but which are habitable without repairs, and damage to habitability items is less than Disaster Housing Program, Home Repair Grant minimum. (**FEMA**, *Use of HAZUS-MH to Support Individual Assistance Program*, January 29, 2007 modification)

Preliminary Hazard Analysis: (See "Hazard Analysis, Preliminary")

Preparation: "Activities undertaken in advance of an emergency, including developing operational capabilities, training, preparing plans and improving public information and communications systems." (**Little Hoover Com**., *Safeguarding the Golden State*, 2006, 6)

Preparedness: "…for the purposes of this report, the committee uses the term "preparedness" to include the full breadth of preparedness-related activities, that is, the activities that range from prevention to recovery that are performed by all relevant organizations, including the many levels of governmental and community organizations." (**Altevogt**, *Research Priorities in Emergency Preparedness and Response for Public Health Systems: A Letter Report*, Jan08, 10)

Preparedness: "Preparedness within the field of emergency management can best be defined as a state of readiness to respond to a disaster, crisis, or any other type of emergency situation. It includes that activities, programs, and systems that exist before an emergency that are used to support and enhance response to an emergency or disaster." (**Bullock & Haddow** 2005, 181)

Preparedness: "Definition: activities necessary to build, sustain, and improve readiness capabilities to prevent, protect against, respond to, and recover from natural or man-made incidents. Extended Definition: activities and measures designed or undertaken to prepare for or minimize the effects of a natural or man-made hazard upon the civilian population, to deal with the immediate emergency conditions that would be created by the hazard, and to effectuate emergency repairs to, or the emergency restoration of, vital utilities and facilities destroyed or damaged by the hazard; is a continuous operationally focused process for establishing guidelines, protocols, and standards for planning, training and exercises, personnel qualification and certification, equipment certification, and publication management. Annotation: Preparedness is a continuous process involving efforts at all levels of government and between government and private sector and nongovernmental organizations to identify threats, determine vulnerabilities, and identify required resources to prevent, respond to, and recover from major incidents. Preparedness refers to the existence of plans, procedures, policies, training, and the resources and equipment necessary at the Federal, State, local and tribal level to maximize the ability to prevent, respond to, and recover from incidents." (**DHS**, *Lexicon*, **2007**, p. 19-20)

Preparedness (2nd of Six NIMS Major Components, 2004): "Effective incident management begins with a host of preparedness activities conducted on a 'steady-state' basis, well in advance of any potential incident. Preparedness involves an integrated combination of planning, training, exercises, personnel qualification and certification standards, equipment acquisition and certification standards, and publication processes and activities." (**DHS**, *NIMS*, March 2004, p. 4)

Preparedness: "The range of deliberate critical tasks and activities necessary to build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from domestic incidents. Preparedness is a continuous process involving efforts at all levels of government and between government and private sector and nongovernmental organizations to identify threats, determine vulnerabilities, and identify required activities and resources to mitigate risk." (**DHS,** *National Infrastructure Protection Plan*, **2006**, p. 104)

Preparedness (NIMS): "Under NIMS, Preparedness encompasses the full range of deliberate, critical tasks and activities necessary to build, sustain and improve the operational capability to prevent, protect against, respond to and recover from domestic incidents. Preparedness, in the context of an actual or potential incident, involves actions to enhance readiness and minimize impacts. This includes hazard mitigation measures to save lives and protect property from the impacts of terrorism, natural disasters and other events. Additional examples of preparedness activities include:

1. Pre-deployment of response resources;
2. Pre-establishment of incident command posts, mobilization centers, staging areas and other facilities;
3. Evacuation and protective sheltering;
4. Implementation structural and non-structural mitigation measures;
5. Use of remote sensing technology, risk assessment, predictive and plume modeling tools;
6. Private sector implementation of business and continuity of operations plans."

(**DHS**, *National Response Plan* (Draft #1), February 25, **2004**, pp. 15-16; **DHS**, *National Incident Management System*, March 1, 2004, p. 146)

Preparedness: "Preparedness is discussed in the National Response Plan thusly: "the NRP focuses on those activities that are directly related to an evolving incident or potential incident rather than steady-state preparedness or readiness activities conducted in the absence of a specific threat or hazard." (**DHS**, *National Response Framework Draft*, September **2007**, 26)

Preparedness (Incidence Management): "…preparedness or readiness activities conducted in the absence of a specific threat or hazard." (**DHS**, *NRF Comment Draft*, September **2007**, p. 68)

Preparedness (Steady-State): "*A national focus on steady-state readiness is imperative***.** The *Framework* [NRF] focuses on preparedness activities that are *directly related to an evolving incident or potential incident.* The *National Preparedness Guidelines* and the *NIPP* focus on *steady-state preparedness or readiness activities* conducted in the absence of a specific threat or hazard. This response *Framework* does not try to subsume all of these larger efforts; instead, it

integrates these efforts and brings them to bear in managing incidents." (**DHS**, *NRF Comment Draft*, September **2007**, p. 68)

Preparedness: "Effective preparedness requires jurisdictions to identify and have strategies to obtain and deploy major equipment, supplies, facilities, and systems in sufficient quantities to perform assigned missions and tasks. The mobilization, tracking, use, sustaining, and demobilization of physical and human resources require an effective logistics system. That system must support both the residents in need and the teams that are responding to the incident. Resource typing provides a uniform method of sharing commonly understood resources when needed in a major incident." (**DHS**, *National Response Framework*, Jan 2008, 30)

Preparedness: "Evaluation and continual process improvement are cornerstones of effective preparedness." (DHS, *National Response Framework*, Jan 2008, 32)

Preparedness: "Preparedness is not simply about getting ready for disasters. Preparedness is about uniting all of our tools of national power to manage risk. And we have already seen marked improvements of how we, as a nation, protect and prevent under a broad umbrella of risk. We are targeting our Federal operational readiness, risk management, information flow, and grant programs with State and local and private sector partners in a manner that fosters coordination and cooperation. We now have shared doctrine, resources, and increased visibility into shared missions." (**DHS**, *Statement of George Foresman*, 2006, 2)

Preparedness: "Build, sustain and improve the operational capability to prevent, protect against, respond to, and recover from domestic incidents. Preparedness includes:
• Planning, training, and exercises.
• Personnel qualification and certification standards.
• Equipment acquisition and certification standards.
• Publication management processes and activities." (**DHS**, *UTL 2.1*, 2005, p. 8)

Preparedness: Those activities, programs, and systems that exist prior to an emergency that are used to support and enhance response to an emergency or disaster. (**FEMA**, **1992**)

Preparedness: "Preparedness involves establishing authorities and responsibilities for emergency actions and garnering the resources to support them: a jurisdiction must assign or recruit staff for emergency management duties and designate or procure facilities, equipment, and other resources for carrying out assigned duties. This investment in emergency management requires upkeep: the staff must receive training and the facilities and equipment must be maintained in working order. To ensure that the jurisdiction's investment in emergency management personnel and resources can be relied upon when needed, there must be a program of tests, drills, and exercises. Consideration also must be given to reducing or eliminating the vulnerability of the jurisdiction's emergency response organizations and resources to the hazards that threaten the jurisdiction. Accordingly, preparedness measures should not be improvised or handled on an *ad hoc* basis. A key element of preparedness is the development of plans that link the many aspects of a jurisdiction's commitment to emergency management." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), **1996**, pp. 1-3 and 1- 4)

Preparedness: "Building the emergency management profession to prepare for, mitigate, respond to, and recover from natural and man-made hazards and terrorist acts through planning, training, education, and exercising." (**FEMA**, *A Nation Prepared – FEMA Strategic Plan*, **2002**, p. 59)

Preparedness (NIMS 2005-2006): 2nd of five Compliance Assessment Metrics. "Describes the specific measures and capabilities that jurisdictions and agencies should develop and incorporate into an overall system to enhance operational preparedness for incident management." (**FEMA**, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 28)

Preparedness (NIMS 2007): "A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response. Within NIMS preparedness focuses on the following elements: planning, procedures and protocols, training and exercises, personnel qualification and certification, and equipment certification." (**FEMA**, *NIMS* (FEMA 501/Draft), **2007**, p. 156)

Preparedness: "The range of deliberate, critical tasks and activities necessary to build, sustain, and improve the capability to protect against, respond to, and recover from hazard impacts. Preparedness is a continuous process. Within NIMS, preparedness involves efforts at all levels of government and the private sector to identify threats, to determine vulnerabilities, and to identify required response plans and resources. NIMS preparedness focuses on establishing guidelines, protocols, and standards for planning, training and exercise, personnel qualifications and certification, equipment certification, and publication management." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-9, Glossary)

Preparedness: "The ability to plan, organize, equip, train, and exercise homeland security personnel to perform their assigned missions to nationally accepted standards—this mission area includes public education and awareness." (**Homeland Security Council**, *National Planning Scenarios* Final Draft, March 2006, p. vi)

Preparedness: "Build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from domestic incidents. Preparedness includes:

- Planning, training, and exercises
- Personnel qualification and certification standards
- Equipment acquisition and certification standards
- Publication management processes and activities
- Mutual aid agreements and Emergency Management Assistance Compacts (EMACS)." (**Homeland Security Institute**, *HS Strategic Planning MAA* (for DHS), Appendix B: MAA Common Task Definitions, p. 61) [Note: See DHS, NIMS, 2004, pp. 4-5, not cited, and DHS, UTL, 2005, 8.]

Preparedness: Establishing and delineating authorities and responsibilities for emergency actions and making provisions for having the people, equipment, and facilities in place to respond when the need arises. Preparedness involves planning, training, exercising, procuring and maintaining equipment, and designating facilities for shelters and other emergency purposes. (**MI DEM** 1998, 7)

Preparedness: "Preparedness is the range of deliberate, critical tasks and activities necessary to build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from domestic incidents. Preparedness is a continuous process involving efforts at all levels of government as well as between government and private-sector and nongovernmental organizations to identify threats, determine vulnerabilities, and identify required resources." (**NCR**, *National Capital Region Homeland Security Strategic Plan 2007-2009 – Overview*, August 2006, p. 4)

Preparedness: "Activities, tasks, programs, and systems developed and implemented prior to an emergency that are used to support the prevention of, mitigation of, response to, and recovery from emergencies." (**NFPA,** *NFPA 1600*, 2007, p. 8)

Preparedness: "Preparedness activities are necessary to the extent that mitigation measures have not, or cannot, prevent disasters. In the preparedness phase, governments, organizations, and individuals develop plans to save lives and minimize disaster damage (for example, compiling state resource inventories, mounting training exercises, or installing warning systems). Preparedness measures also seek to enhance disaster response operations (for example, by stockpiling vital food and medical supplies, through training exercises, and by mobilizing emergency personnel on a standby basis)." (**NGA**, *CEM Governors' Guide*, 1979, p. 13)

Preparedness: "Preparedness represents actions that are undertaken to reduce the negative consequences of events where there is insufficient human control to institute mitigation measures." (**Peterson and Perry** 1999, 242)

Preparedness: "…planning, training, and building the emergency management profession to prepare effectively for, mitigate against, respond to, and recover from any hazard." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1399)

Preparedness: "Part of the problem is the lack of a common definition of "preparedness." When PricewaterhouseCoopers' Health Research Institute (HRI) asked industry leaders to define preparedness, they agreed on only two things: (1) there is currently no universally accepted definition of preparedness; and (2) we must continue getting "better prepared." Without a definition, it's hard to develop benchmarks. Noted Irwin Redlener, M.D., associate dean and director of the National Center for Disaster Preparedness at the Columbia University Mailman School of Public Health, 'Whatever you think about being prepared as an individual or family, extrapolate that to a hospital CEO. They have no idea of what the end point is because there are no satisfactory benchmarks to establish what we mean by '*prepared.*'" (**PricewaterhouseCoopers**, 2007, p. 5)

Preparedness: involves the development and regular testing of warning systems (linked to forecasting systems) and plans for evacuation or other measures to be taken during a disaster alert period to minimize potential loss of life and physical damage; the education and training of officials and the population at risk; the establishment of policies, standards, organizational arrangements and operational plans to be applied following a disaster impact; the securing of resources (possibly including the stockpiling of supplies and the earmarking of funds); and the training of intervention teams. It must be supported by enabling legislation. (**Simeon Institute** 1998)

Preparedness: "Activities designed to minimize loss of life and damage, to organize the temporary removal of people and property from a threatened location and facilitate timely and effective rescue, relief and rehabilitation. See also 'prevention'." (**UNDHA**, *Internationally Agreed Gloss.*. 1992, 59)

Preparedness: "Activities and measures taken in advance to ensure effective response to the impact of disasters, including the issuance of timely and effective early warnings and the temporary removal of people and property from a threatened location." (**UN/ISDR** 2002, 25)

Preparedness: "(c) Preparedness. The Office of Homeland Security shall coordinate national efforts to prepare for and mitigate the consequences of terrorist threats or attacks within the United States. In performing this function, the Office shall work with Federal, State, and local agencies, and private entities, as appropriate, to:

(i) review and assess the adequacy of the portions of all Federal emergency response plans that pertain to terrorist threats or attacks within the United States;

(ii) coordinate domestic exercises and simulations designed to assess and practice systems that would be called upon to respond to a terrorist threat or attack within the United States and coordinate programs and activities for training Federal, State, and local employees who would be called upon to respond to such a threat or attack;

(iii) coordinate national efforts to ensure public health preparedness for a terrorist attack, including reviewing vaccination policies and reviewing the adequacy of and, if necessary, increasing vaccine and pharmaceutical stockpiles and hospital capacity;

(iv) coordinate Federal assistance to State and local authorities and nongovernmental organizations to prepare for and respond to terrorist threats or attacks within the United States;

(v) ensure that national preparedness programs and activities for terrorist threats or attacks are developed and are regularly evaluated under appropriate standards and that resources are allocated to improving and sustaining preparedness based on such evaluations; and

(vi) ensure the readiness and coordinated deployment of Federal response teams to respond to terrorist threats or attacks, working with the Assistant to the President for National Security Affairs, when appropriate." (**White House**, *EO 13228*, October 8, 2001)

Preparedness: "The term 'preparedness' refers to the existence of plans, procedures, policies, training, and equipment necessary at the Federal, State, and local level to maximize the ability to prevent, respond to, and recover from major events. The term 'readiness' is used interchangeably with preparedness." (**White House**, *HSPD-8*, December 2003)

Preparedness Capability (Elements):

- *Planning*: Collection and analysis of intelligence and information, and development of policies, plans, procedures, mutual aid agreements, strategies, and other publications that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks.
- *Organization and Leadership*: Individual teams, an overall organizational structure, and leadership at each level in the structure that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks.

- *Personnel:* Paid and volunteer staff who meet relevant qualification and certification standards necessary to perform assigned missions and tasks.
- *Equipment and Systems*: Major items of equipment, supplies, facilities, and systems that comply with relevant standards necessary to perform assigned missions and tasks.
- *Training*: Content and methods of delivery that comply with relevant training standards necessary to perform assigned missions and tasks.
- *Exercises, Evaluations, and Corrective Actions:* Exercises, self-assessments, peer-assessments, outside reviews, compliance monitoring, and actual major events that provide opportunities to demonstrate, evaluate, and improve the combined capability and interoperability of the other elements to perform assigned missions and tasks to standards necessary to achieve successful outcomes." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 5)

Preparedness Cycle: (Also described as "six essential activities for responding to an incident")
- Plan
- Organize
- Train
- Equip
- Exercise
- Evaluate and Improve (**DHS**, *NRF*, Jan 2008, 27)

Preparedness Cycle:
- Conduct Risk Assessment
- Conduct Capabilities Assessment
- Develop Strategy
- Plan and Resource Programs
- Identify/Purchase Equipment
- Develop Multi-year Training and Exercise Plan and Schedule
- Conduct Training
- Conduct Exercises to Validate Training and Plans
- Assign Corrective Actions resulting from Exercise Evaluation and Improvement Plans
- Track/Implement Corrective Actions
- Update Capabilities Assessment/Strategy/Multi-year Plans (**DHS**, *TCL*, 2007, p. 13)

Preparedness Cycle: "The Preparedness Cycle, which provides a process for developing, evaluating, and improving homeland security preparedness, serves as the organizing construct for NPD analyses.
- Plan
- Organize, Equip & Train
- Exercise
- Evaluate and Improve" (**FEMA**, *90 Day Update to Congress on National Preparedness*, Dennis R. Schrader, Deputy Administrator National Preparedness, Apr 2008, slide 11)

Preparedness Fatigue: A reporters question during White House Press Conference on Pandemic Preparedness: "I was just wondering in the different areas that you work in whether or

not you're seeing any preparedness fatigue, given that we're two years into it and will probably go -- continue for a few more years before anything probably happens. But just wondering if you've seen any preparedness fatigue, and if you haven't, what are your thoughts about how you should deal with it, once it starts surfacing in years to come?" Answer from Dr. Jeff Runge, DHS Chief Medical Officer: "I appreciate you pointing this out… you know, we need to reach a battle rhythm of a state of preparedness that is higher than it was before the President made this a priority, and the absence of any hyperventilation but more as a marathon." (**White House**, *Press Briefing on National Strategy for Pandemic Influenza Implementation Plan: One Year Summary*, July 17, 2007)

Preparedness Goal: "The best way to protect against the effects of harmful incidents is to be prepared. Preparedness and mitigation are important elements in reducing the impacts of acts of terror and other disasters. We will ensure all levels of public safety and emergency management are capable of rapid and effective response by establishing a unified, capabilities-based preparedness strategy incorporating all-hazards assessments, training, exercises and assistance for federal, state, tribal and local governments, first responders and communities. We will establish, implement and evaluate capabilities through a system of national standards, mutual aid systems and credentialing protocols, and supply technologies for rapid and interoperable communications, personal protection and incident management. We will implement and sustain a national citizen preparedness movement that includes private sector involvement. We will expand the Nation's community risk management capabilities and reduce the Nation's vulnerability to acts of terrorism and other disasters through effective vulnerability assessments and risk management programs." (**DHS**, *Securing the Homeland Strategic Plan*, **2004**, p. 26)

Preparedness Organizations: "Preparedness is the responsibility of individual jurisdictions; this responsibility includes coordinating various preparedness activities among all appropriate agencies within a jurisdiction, as well as across jurisdictions and with private organizations. This coordination is effected by mechanisms that range from individuals to small committees to large standing organizations. These mechanisms are referred to in this document as 'preparedness organizations,' in that they serve as ongoing forums for coordinating preparedness activities in advance of an incident. Preparedness organizations represent a wide variety of committees, planning groups, and other organizations that meet regularly and coordinate with one another to ensure an appropriate focus on planning, training, equipping, and other preparedness requirements within a jurisdiction and/or across jurisdictions. The needs of the jurisdictions involved will dictate how frequently such organizations must conduct their business, as well as how they are structured. When preparedness activities routinely need to be accomplished across jurisdictions, preparedness organizations should be multijurisdictional. Preparedness organizations at all jurisdictional levels should

- Establish and coordinate emergency plans and protocols including public communications and awareness;
- Integrate and coordinate the activities of the jurisdictions and functions within their purview;
- Establish the standards, guidelines, and protocols necessary to promote interoperability among member jurisdictions and agencies;

- Adopt standards, guideline, and protocols for providing resources to requesting organizations, including protocols for incident support organizations;
- Set priorities for resources and other requirements; and
- Ensure the establishment and maintenance of multiagency coordination mechanisms, including EOCs, mutual-aid agreements, incident information systems, nongovernmental organization and private-sector outreach, public awareness and information systems, and mechanisms to deal with information and operations security." (**DHS**, *NIMS*, 2005, pp. 34-35)

Preparedness Planning: "Plans must be realistic, scalable, and applicable to all types of incidents, from daily occurrences to incidents requiring the activation of interstate mutual aid, and to those requiring a coordinated Federal response. Plans, including emergency operations plans, should form the basis of training and be exercised periodically to ensure that all individuals involved in response are able to execute their assigned tasks. It is essential that plans address training and exercising and allow for the incorporation of after-action reviews, lessons learned and corrective actions with responsibility agreements following any major incidents or exercises. Plans should be updated periodically to reflect changes in the emergency management and incident response environment, as well as any institutional or organizational changes.

Plans describe how personnel, equipment, and other governmental and nongovernmental resources will be used to support emergency management and incident response requirements. They represent the operational core of preparedness and provide mechanisms for setting priorities, integrating multiple jurisdictions/organizations and functions, establishing collaborative relationships, and ensuring that communications and other systems effectively support the full spectrum of emergency management and incident response activities. Plans should also incorporate strategies for maintaining continuity of government and continuity of operations during and after incidents, provide mechanisms to ensure resiliency of critical infrastructure and economic stability of communities, and incorporate the advance planning associated with resource management, and communications and information management.

Plans should integrate all relevant departments, agencies, and organizations (including the private sector and NGOs, where appropriate) to facilitate coordinated emergency management and incident response activities. Where appropriate, these plans should incorporate a clearly defined process for seeking and requesting assistance from necessary department(s), agency(ies), and/or organizations. The Federal Government has defined plans by which Federal response resources will be deployed prior to or during incidents. Jurisdictions should be aware of these plans in order to accommodate Federal resources when necessary and should integrate them into their plans as appropriate. While it is recognized that jurisdictions and/or organizations will develop multiple types of plans, such as response, mitigation, and recovery plans, it is essential that these plans be coordinated and complement one another." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 16)

Preparedness Planning (Procedures and Protocols): "Procedures and protocols should detail the specific actions that can be taken to implement a plan or system. All emergency management/response personnel and their affiliated organizations should develop procedures and

protocols that translate into specific action-oriented checklists for use during incident response operations, including how the organizations will accomplish their assigned tasks.

Procedures are documented and implemented with: checklists; resource listings; maps, charts, and other pertinent data; mechanisms for notifying staff; processes for obtaining and using equipment, supplies, and vehicles; methods of obtaining mutual aid agreements and/or assistance agreements; mechanisms for reporting information to Department Operations Centers (DOC) and EOCs; and communications operating instructions, including connectivity among governments, the private sector, and NGOs. There are four standard levels of procedural documents:

Standard Operating Procedure (SOP) or Operations Manual: Complete reference document that provides the purpose, authorities, duration, and details for the preferred method of performing a single function or a number of interrelated functions in a uniform manner.

Field Operations Guide or Incident Management Handbook: Durable pocket or desk guide that contains essential information required to perform specific assignments or functions.

Mobilization Guide: Reference document used by agencies/organizations outlining agreements, processes, and procedures used by all participating organizations for activating, assembling, and transporting resources.

Job Aid: Checklist or other visual aid intended to ensure that specific steps of completing a task or assignment are accomplished. Job aids may also serve as training aids to teach how to complete specific job tasks.

Protocols are sets of established guidelines for actions (which may be designated by individuals, teams, functions, or capabilities) under various specified conditions. Establishing protocols provides for the standing orders, authorizations, and delegations necessary to permit the rapid execution of a task, function, or a number of interrelated functions without seeking permission to do so. Based on training and delegation of authority, protocols permit specific personnel to assess the situation presented, take immediate steps to intervene, and escalate their efforts to a specific level before further guidance or authorizations are required." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 19)

Preparedness Plans (Operational): "Operational plans identify and direct the agencies/organizations and resources required to execute the tasks and objectives necessary based on the strategic planning. Operational plans often include (but are not limited to) contingency and tactical plans." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 17)

Preparedness Plans (Strategic): "Strategic plans define and develop programmatic priorities that address requirements, goals, objectives, milestones, and resources that ensure interoperable and integrated actions among all levels of government, the private sector, and NGOs to manage all-hazard emergency management and incident response activities. Strategic planning involves the adoption of long-range goals and objectives, the setting of priorities, the establishment of budgets and other fiscal decisions, policy development, and the application of measures of performance or effectiveness." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 17)

Preparedness Priorities: "PREPAREDNESS PRIORITIES.—In establishing the guidelines under subsection (a), the Administrator shall establish preparedness priorities that appropriately balance the risk of all hazards, including natural disasters, acts of terrorism, and other man-made disasters, with the resources required to prevent, respond to, recover from, and mitigate against the hazards." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1426)

Preparedness Strategy: "The FEMA preparedness strategy is to build and maintain a collaborative framework of Federal, state, local and private sector resources that can ensure effective response to all hazards. The centerpiece of this preparedness strategy is the establishment of emergency management performance objectives to guide continuous capability enhancement at all levels of government.

"FEMA, in partnership with the states, will foster innovation and improvement by facilitating emergency management professional development training; assisting in the establishment of performance standards and assessment through tests, exercises and real world experiences; supporting planning and public education; and by forming partnerships with the private sector and other nations to support a robust emergency management capability. The strategy will foster a decentralized capability for state and local preparedness and response for all but the most catastrophic disasters." (**FEMA** *Strategic Plan FY 1998-2002*, 1997, p. 25)

Preparedness Tasks (DHS Target Capabilities List): "Preparedness activities and tasks are those things that should be done prior to the demand for the capability. Development of plans, procedures, protocols, and systems; establishment of mutual aid agreements and authorities; provision of training; and the conduct of exercises are all examples of preparedness tasks." (**DHS**, *TCL*, 2007, p. 6)

PREPnet: "The Preparedness Network (PREPnet) is a satellite-based distance learning system used by…[FEMA/National Emergency Training Center] to bring interactive training programs into virtually any community nationwide." (**FEMA,** *About the National Preparedness Network*)

Pre-Positioned Disaster Supplies (PPDS) Program: "The Pre-Positioned Disaster Supplies (PPDS) Program was developed to position life saving and life sustaining disaster equipment and supplies as close to a potential disaster site as possible. The goal is to substantially shorten the response time from incident to delivery of these initial critical assets… The strategy is to place PPDS containers in hurricane/typhoon-prone states first, then earthquake-prone, then highly populous metropolitan areas…. PPDS containers are also stockpiled at various locations where containers are staged and ready for transport as threats arise." (**FEMA**. "Homeland Security's Pre-Positioned Disaster Supplies (PPDS) Program," May 16, 2006)

Pre-positioned Equipment Program (PEP): "The PEP consists of caches of standardized equipment pods, deployable to support State and local governments facing a major chemical, biological, radiological, nuclear, or explosives (CBRNE) event. PEP pods are supported by specialized teams of emergency responders and contain personal protective, decontamination, detection, technical search and rescue, law enforcement, interoperable communications and other emergency response equipment. The pods are available to State and local governments through formal requests and deployment procedures that are initiated by the Governors. In addition to

State and local government support, PEP is used on the Federal level to supplement response operations including the National Disaster Medical System and Urban Search & Rescue." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, p. 9)

Pre-positioned Equipment Program (PEP): "Each PEP unit consists of a $2.2 million cache of standardized equipment pods and a Special Events Pod (SEP). The pods are deployable to state and local governments facing a major chemical, biological, radiological, nuclear, explosives or natural hazard event of national emergency within 10 to 12 hours." (**FEMA**, *NEMA Initiatives and Issues From the Disaster Operations Directorate*, August 20, 2007, p. 11)

Pre-Scripted Mission Assignment(s) (PSMAs): "In order to expedite the delivery of Federal assistance, FEMA is developing "Pre-Scripted" Mission Assignments (PSMAs) that provide standard "Statements of Work" to other departments and agencies prior to an actual disaster or emergency. The use of PSMAs is expected to streamline the process and to provide a planning base for the Federal agencies. However, not all mission assignments are intended to be pre-scripted and those that are may be modified to meet event-specific needs. FEMA may use PSMAs as templates for statements of work to expedite planning and execution. FEMA and the Federal departments and agencies will develop PSMAs jointly. All PSMAs will include cost estimates. PSMAs will not automatically be issued unless requested and necessary. The Statements of Work (SOWs) for "Pre-Scripted" missions may be adjusted to meet event specific needs." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 25, 2007, p. 1; also 58)

Presidential Decision 41, 1978, on Civil Defense Policy: PD 41 was the result of an "interagency study of U.S. civil defense policy, directed by the President in September 1977…conducted over a period of about a year…[drawing upon] studies of Soviet and U.S. civil defense programs… Among the specific questions addressed were: 'What is the role of civil defense in strategic policy?' 'Can civil defense make a significant difference in the outcome of a nuclear exchange?' 'What civil defense measures would be most useful?' and finally, 'If a role is identified, what should it be?' Hence, the study looked not only at whether civil defense would make a difference in nuclear war, but also at whether it could play a role in a preattack crisis.

"The study examined a range of CD program options for the United States, and was presented to the Policy Review Committee of the NSC and then to the President. The options were essentially the same as those analyzed in…[an] earlier study for the Secretary of Defense: 91) essentially no program; (2) the current program; (3) a program providing for evacuating the population of larger U.S. cities and other risk areas, should time permit during a period of strategic warning resulting from an international crisis; and (4) a short warning time program to protect the population in-place, including construction of blast shelters in cities.

"In September 1978, the President directed in Presidential Decision (PD) 41 that a new civil defense policy be implemented along the following lines:

- That the United States civil defense program should enhance the survivability of the American people and its leadership in the event of nuclear war, thereby improving the basis for eventual recovery, as well as reducing vulnerability to a major Soviet attack;

- That the program should enhance deterrence and stability, and contribute to perceptions of the overall U.S./Soviet strategic balance and to crisis stability, and also reduce the possibility that the Soviets could coerce us in times of increased tension;
- That the CD policy not suggest any change in the U.S. policy of relying on strategic nuclear forces as the preponderant factor in maintaining deterrence; and,
- That the program include planning for population relocation during times of international crisis as well as be adaptable to help deal with natural disasters and other peacetime emergencies." (**Chipman**, *CD For the 1980's*, 1979, pp. 24-25)

Presidential Decision Directive (PDD) 39, US Policy on Counterterrorism 1995:
"Presidential Decision Directive 39 (PDD 39), signed in June 1995, is the foundation for current [2001] U.S. policy for combating terrorism. The document spells out three objectives for confronting terrorism: 1) reduce the nation's international and domestic vulnerabilities to terrorism; 2) deter terrorism; and 3) respond to terrorism rapidly and decisively. PDD 39 designates Lead Federal Agencies for international and domestic terrorism policy. The Lead Federal Agency for combating terrorism overseas is the Department of State (DOS) and the agency designated to respond to terrorist attacks on U.S. soil is the Department of Justice (DOJ) through the Federal Bureau of Investigation (FBI). The Federal Emergency Management Agency (FEMA) has primary responsibility to lead federal efforts to deal with the consequences and collateral second and third order effects of terrorist WMD attacks on American soil. PDD 39 pays particular attention to WMD and includes language stating "The United States shall give the highest priority to developing effective capabilities to detect, prevent, defeat and manage the consequences of nuclear, biological or chemical (NBC) materials or weapons use by terrorists'."[102] (**CRS**, *Terrorism and the Military's Role in Domestic Crisis Management…,* 19April2001, p. 5)

Presidential Decision Directive (PDD) 39, US Policy on Counterterrorism 1995:
"Presidential Decision Directive 39, U.S. Policy on Counterterrorism, June 21, 1995, establishes policy to reduce the Nation's vulnerability to terrorism, deter and respond to terrorism, and strengthen capabilities to detect, prevent, defeat and manage the consequences of terrorist use of WMD and assigns agency responsibilities. Portions of the PDD, to include the distinction between crisis and consequence management, have been superceded by the President's direction in HSPD-5." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 72; also **W. H.**, *PDD-39*, June 21, 1999)

Presidential Decision Directive (PDD) 39, US Policy on Counterterrorism, 1995: "PDD-39…designates DOJ, specifically the FBI, as the LFA [Lead Federal Agency] for CrM [Crisis Management]. (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. IV-8)

Presidential Decision Directive (PDD) 39, US Policy on Counterterrorism, 1995: "PDD-39 validates and reaffirms existing federal lead agency responsibilities for counterterrorism, which are assigned to DOJ, as delegated to the FBI, for threats or acts of terrorism within the United States. The FBI as the LFA for CrM will involve only those federal agencies required and

[102] Presidential Decision Directive 39, *U.S. Policy on Counterterrorism*, The White House, June 21, 1995.

designated. The Directive further states that DHS/FEMA with the support of all agencies in the NRP, will support the FBI until the Attorney General transfers lead agency to DHS/FEMA. DHS/FEMA retains responsibility for CM throughout the response." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. A-3)

Presidential Decision Directive (PDD) 62, 1998: "Presidential Decision Directive 62, Combating Terrorism, May 22, 1998, reinforces the missions of Federal departments and agencies charged with roles in defeating terrorism. Portions of the PDD have been superceded." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 72)

Presidential Decision Directive (PDD) 62, 1998: *Protection Against Unconventional Threats to the Homeland and Americans Overseas*, May 22, 1998. "PDD-62, issued by President Clinton on May 22, 1998, directs the establishment of an integrated program to increase U.S. effectiveness in countering terrorist threats and to prepare to manage the consequences of attacks against U.S. citizens or infrastructures. Lead agencies responsible for supporting the program… must designate a Senior Program Coordinator who is responsible for coordinating this effort within the U.S. government. This PDD reaffirms and complements the directives contained in PDD 39…. PDD 62 also requires each agency to maintain a Continuity of Operations Plan as outlined in Executive Order 12656. This plan must ensure the operation of essential agency functions following an attack that incapacitates headquarters facilities and key leadership." (**EPA,** *Presidential Decision Directives*, 2007)

Presidential Decision Directive (PDD) 63 (1998) **-- Critical Infrastructure Protection** (superseded by HSPD-7, Critical Infrastructure Identification, Prioritization, and Protection): "The goal of PDD 63, issued by President Clinton in 1998, is that public and private organizations be able to maintain continuity of the U.S. critical infrastructure in the event of a terrorist attack. Critical infrastructure includes the physical and cyber-based systems that are essential for the economy and the government to operate at a minimum level. Because these systems are highly automated and interconnected, they are vulnerable to physical and cyber attack. Examples of critical infrastructure systems are telecommunications, banking, energy, transportation, water systems, and emergency services.

Minimum operation of the economy and government includes the following:

- The federal government performs essential national security missions and ensures public health and safety.
- State and local governments maintain order and deliver minimum essential public services.
- The private sector ensures the orderly functioning of the economy and delivery of essential services.

The Role of Federal Agencies -- Each agency has specific responsibilities for maintaining continuity of government operations:

- protect its own critical infrastructure, "including but not limited to its cyber-based systems"

- make the Chief Information Officer responsible for keeping agency information accessible
- appoint a Critical Infrastructure Assurance Officer to protect all other critical infrastructure
- develop and implement a Critical Infrastructures Protection Plan (CIPP) by May of 2000.

Agencies also participate in the Critical Infrastructures Coordination Group created under this directive." (**EPA**, *Presidential Decision Directives*)

Presidential Decision Directive (PDD/NSC) 67: *Enduring Constitutional Government and Continuity of Government Operations,* October 21, 1998: "PDD 67 succeeded NSD 69 "Enduring Constitutional Government" of June 1992. PDD 67, among other things, requires federal agencies to develop COOP plans for essential operations. These COOP plans were viewed as a unifying concept not to replace existing plans but, instead, to be superimposed if and when a problem threatens a serious disruption of agency operations.

"Several Federal Preparedness Circulars (FPCs) that detail a series of government policies specific to COOP planning and national security emergency preparedness have been written under the authority of PDD 67. The focus of these documents includes succession, vital records, training, COOP requirements, alternative facility requirements, and communications. They are associated with supporting all Federal organizations with viable COOP programs.

"FPC 65 provides guidance to all Federal Executive Branch departments, agencies, and independent organizations on the development of viable and executable COOP plans.
FPC 66 further supports COOP efforts by providing guidance on the development of test, training, and exercise programs to support the implementation and validation of COOP plans.

"FPC 67, designed as a supplement to FPC 65, provides guidance on implementing COOP plans, specifically in locating alternate facilities to support COOP efforts." (**White House**, PDD 67)

Presidential Decision Directive (PDD/NSC) 67: "PDD 67, issued in 1998, addressed enduring constitutional government and introduced continuity of operations plan (COOP) and continuity of government operations. PDD 67 succeeded NSD 69 "Enduring Constitutional Government" of June 1992. PDD 67, among other things, requires federal agencies to develop COOP plans for essential operations. These COOP plans were viewed as a unifying concept not to replace existing plans but, instead, to be superimposed if and when a problem threatens a serious disruption of agency operations. Several Federal Preparedness Circulars (FPCs) that detail a series of government policies specific to COOP planning and national security emergency preparedness have been written under the authority of PDD 67. The focus of these documents includes succession, vital records, training, COOP requirements, alternative facility requirements, and communications. They are associated with supporting all Federal organizations with viable COOP programs. FPC 65 provides guidance to all Federal Executive Branch departments, agencies, and independent organizations on the development of viable and executable COOP plans. FPC 66 further supports COOP efforts by providing guidance on the development of test, training, and exercise programs to support the implementation and validation of COOP plans. FPC 67, designed as a supplement to FPC 65, provides guidance on

implementing COOP plans, specifically in locating alternate facilities to support COOP efforts." (**White House**, *Presidential Decision Directive 67 (PDD 67): Enduring Constitutional Government and Continuity of Government*. October 1998)

Presidential Major Disaster Declaration: "A **Presidential major disaster declaration** triggers long-term Federal recovery programs, some of which are matched by State programs, and designed to help disaster victims, businesses, and public entities." (**DHS**, *NRF*, 2008, 41)

President's Commission on Critical Infrastructure Protection (PCCIP): "The PCCIP was established July 15, 1996, and charged with developing a national policy and the implementation strategies for protecting our critical infrastructures from both physical and cyber threats. The goal, of course, was to assure the infrastructures' continued operation. The President identified eight infrastructures (Figure 1)—or our nation's life support systems, as I view them—for study. The incapacity or destruction of these systems would have a debilitating effect on the defense and/or economic security of the United States.

Telecommunications
Banking & Finance
Electric Power
Water
Transportation
Emergency Services
Oil & Gas Delivery & Storage
Government Services….

The Commission was uniquely tailored for its task. Recognizing that the infrastructures are largely owned and operated by the private sector, the Commission was established as a joint, public-and-private undertaking. Therefore, half the commissioners came from the private sector and the other half were detailed from the affected agencies of government. A Steering Committee made up of senior government officials oversaw the work of the commissioners and guided us through myriad government concerns. A Presidentially appointed Advisory Committee made up of key industry leaders provided the unique perspective of infrastructure owners and operators. Finally, there was an Infrastructure Protection Task Force, established at the same time as the Commission, and intended to support infrastructure protection and coordinate the activities of government should a problem develop prior to the completion of the Commission's efforts and implementation of its recommendations." (**Marsh**, *Critical Foundations,* 12Nov97)

Pressure and Release (PAR) Model: "The PAR model (described in an analytical framework (Blaikie et al., 1994, Wisner et al., 2003)identifies a disaster as the outcome of, on one side, natural hazards, such as the Indian Ocean tsunami, and on the other, a progression of driving forces which shapes the degree of *people's vulnerability* to these hazards. These driving forces, which are primarily socio-economic and political, determine the extent to which people can protect themselves and recover from the occurrence of a "natural" disaster. These slower acting, often insidious and tacitly acknowledged, aspects of political and economic life which shape people's vulnerability are brutally exposed upon the sudden onset of a natural event, such as a tsunami, but can also include earthquakes, volcanic eruptions, wild fires, riverine and coastal

floods, and storms. So people's vulnerability and ecosystem vulnerability are shaped by long term and slow acting processes…. until a sudden event occurs, the impact of which is partly determined by long term processes which produce vulnerability of people and ecosystems." (**Blaikie**, *The Indian Ocean Tsunami*, 2005)

Pressure and Release (PAR) Model: "The starting point of the pressure and release model is that a disaster is the intersection of two opposing forces: the process generating vulnerability on one side, and the physical exposure to hazard on the other. Increasing pressure can come from either side but vulnerability has to be reduced to relieve the pressure. Vulnerability is considered in three levels: root causes, dynamic pressures and unsafe conditions. The strengths of the model are that it provides a broad view of vulnerability, it gives weight to natural hazards, and it provides a framework for looking at livelihoods and vulnerability. The limitation of the model, is that it is a tool for explaining vulnerability, not for measuring it. The model cannot be applied operationally without a great deal of data collection and analysis." (**UNDAP**, *Techniques*, 2008)

Pressure and Release (PAR) Model: "Whether…hazards turn into a natural disaster has been summarized by the following simple Pressure and Release (PAR) Model: *Disaster Risk = Hazard + Vulnerability.* The likelihood of hazards leading to disasters is thus primarily dependant on an area or people's level of vulnerability. Many issues can increase vulnerability but these tend to depend upon:

- root causes: e.g. limited access to resources or poor political or economic systems
- dynamic pressures: e.g. lack of training, skills, investment, local institutions
- macro-forces: e.g. rapid population growth or urbanization, poor planning, deforestation, decline in soil productivity

Together these issues can result in vulnerable conditions (e.g. fragile physical environments or local economies, or lack of preparedness to disaster) which when combined with a hazard can lead to disaster. The level of vulnerability, and thus the likelihood of a hazard developing into a disaster, is therefore in many cases in our control." (**WWF**, *Natural Security*, 1008, 17; cites Blaikie, *At Risk,* 1994)

Prevent: "The prevention mission includes operations and activities to reduce risk of threats and vulnerabilities, to intervene and stop an occurrence, or to mitigate effect. Homeland security prevention is generally achieved via counter-terrorism operations and is usually led by members of the law enforcement community." (**DHS**, Chapter 2, *Capstone Doctrine Pub 1 Draft*, 2008, 5)

Prevent: "Actions to avoid an incident or to intervene or stop an incident from occurring. Prevention involves actions taken to protect lives and property. It involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice"

(**DHS/ODP**, *State and Urban Area HS Strategy: Guidance*, June 2005, p. 3 (citing DHS, NIMS, March 2004).

Prevent: "Actions to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions taken to protect lives and property, including: intelligence and deterrence operations; heightened inspections; improved surveillance and security operations; investigations; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and certain law enforcement operations. Public announcements, evacuation planning, infrastructure improvements and citizen disaster preparation also are important especially when considering an "all hazards" approach." (**DHS**, *Fiscal Year 2006 Homeland Security Grant Program: Application Kit and Program*, October 5, **2005**, pp. 1-2)

Prevent: "Deter all potential terrorists from attacking America, detect terrorists before they strike, prevent them and their instruments of terror from entering our country, and take decisive action to eliminate the threat they pose." (**DHS**, *UTL* 2.1, 2005, p. 20)

Preventative Measures: "Controls aimed at deterring or Mitigating undesirable events form taking place." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, p. 61)

Prevention: "Definition: actions taken and measures put in place for the continual assessment and readiness of necessary actions to reduce risk of threats and vulnerabilities, to intervene and stop an occurrence, or to mitigate effects. Extended definition: involves prescribed actions and measures put in place to impede the success of a natural or man-made disaster from adversely affecting the safety, security, or continuity of the Nation, critical infrastructures its citizens, and citizen's civil rights or civil liberties." (**DHS**, *Lexicon: Terms and Definitions*, October 19, **2007**, p. 20)

Prevention: "Prevention involves actions to interdict, disrupt, pre-empt or avert a potential incident. This includes homeland security and law enforcement efforts to prevent terrorist attacks. Prevention includes actions to:

1. Collect, analyze, and apply intelligence and other information;
2. Conduct investigations to determine the full nature and source of the threat;
3. Implement countermeasures such as inspections, surveillance, security and infrastructure protection;
4. Conduct tactical operations to interdict, preempt, or disrupt illegal activity; and to apprehend and prosecute the perpetrators;
5. Conduct public health surveillance and testing processes, immunizations, and isolation or quarantine for biological and agricultural threats; and
6. Deter, defeat, detect, deny access or entry, and take decisive action to eliminate threats." (**DHS,** *National Response Plan* (Draft #1), February 25, **2004**)

Prevention. "Actions to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions taken to protect lives and property. It involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural

surveillance and testing processes; immunizations, isolation, or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice. (**DHS**, *NIMS*, 2004, pp. 134-135)

Prevention: "Actions taken to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions taken to protect lives and property. Involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; immunizations, isolation, or quarantine; public health and agricultural surveillance and testing processes; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice." (**DHS,** *NIPP* **2006**, p. 104; **FEMA** *NIMS* 2007, 156)

Prevention: "Prevention consists of those activities that serve to detect, deter, and disrupt terrorist threats or actions against the United States and its interests. These activities decrease the perpetrators' chance of success, mitigate attack impact, minimize attack visibility, increase the chance of apprehension or detection, and obstruct perpetrators' access to resources. Tasks in this area are important regardless of a single type of threat, adversary capability, time or location of incident. Similarly, these capabilities reflect many tasks routinely undertaken by law enforcement and related organizations as they conduct traditional all-hazards, all-crimes activities. This capability applies to all potential terrorist incidents and is applicable to all 12 terrorism-related National Planning Scenarios. Initial planning, however, has been focused on bombing using improvised explosives device, chlorine tank explosion, aerosol anthrax, improvised nuclear device, and a radiological dispersal.

"Effective prevention depends on timely, accurate, and actionable information about the adversary, their operations, their support, potential targets, and methods of attack. Homeland security intelligence/information fusion is the overarching process of managing the development and flow of information and intelligence across all levels and sectors of government and the private sector on a continual basis. Although the primary emphasis of fusion is to identify, deter, and respond to emerging terrorism-related threats and risks, a collateral benefit to Federal, State, local, and tribal entities is that it will support ongoing efforts to address non-terrorism-related, all-hazards, all-crimes issues." (**DHS**, *TCL*, **2007**, p. 76)

Prevention: "Prevention is a broad term that is often contextually defined. In the context of terrorism employing weapons of mass destruction (WMD), the *National Strategy for Homeland Security* includes the following elements that comprise prevention:

- "…deter all potential terrorists from attacking America through our uncompromising commitment to defeating terrorism wherever it appears."
- "…detect terrorists before they strike."
- "…prevent them and their instruments of terror from entering our country."
- "…take decisive action to eliminate the threat they pose." (**DHS**, *The ODP Guidelines for HS: Prevention and Deterrence*, 2003, p. 2)

Prevention: "Deter all potential terrorists from attacking America, detect terrorists before they strike, prevent them and their instruments of terror from entering our country, and take decisive action to eliminate the threat they pose." (**DHS**, *Universal Task List 2.1*, 2005, p. B-3)

Prevention: "The security procedures undertaken by the public and private sectors in order to discourage terrorist acts." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Prevention: "Action taken to reduce known risks." (**EEA**, *EEA Environmental Glossary*; cites: **EEA**. 1991. Late lessons from early warnings: the precautionary principle 1896-2000)

Prevention: "The Prevention mission area encompasses activities that serve to detect and disrupt terrorist threats or actions against the United States and its interests. They are actions taken to avoid an incident or to intervene to stop an incident from occurring, and involve actions taken to prevent the loss of lives and property. Prevention involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice. Prevention also includes activities undertaken by the first responder community during the early stages of an incident to reduce the likelihood or consequences of threatened or actual terrorist attacks." (**FEMA,** *HSEEP Glossary*, 2008)

Prevention: "Prevention comprises actions taken and measures put in place to reduce risk of threats and vulnerabilities, to intervene and stop an occurrence, or to mitigate effects of a potential incident, be it naturally occurring or man-made.[103]

> Prevention planning will identify actions that minimize the possibility of a natural or man-made disaster adversely affecting the safety, security, or continuity of the Nation, its critical infrastructures, its inhabitants, and their civil rights and liberties.
>
> Prevention planning for terrorist attacks will focus on reducing the likelihood or consequence of threatened or actual terrorist attacks.[104] These planning efforts will be aligned with the broader efforts of the National Implementation Plan for the War on Terror to disrupt and prevent terrorist attacks on the homeland, deny terrorist and terrorist weapons entry to the United States and disrupt terrorist ability to operate within the borders of the United States. Prevention planning must ensure the complete exploitation of classified and unclassified information to increase the likelihood of successfully thwarting terrorists' plans.[105]

[103] DHS Lexicon Terms and Definitions, Approved October 23, 2007.
[104] HSPD-8, section 2(i), National Preparedness, December 17, 2003
[105] National Implementation Plan for the War on Terror, National Counterterrorism Center, June 26, 2006.

> Many aspects of prevention planning are sensitive and must be produced in and controlled in a classified or law enforcement sensitive environment." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 2-6)

Prevention: "Actions to avoid a hazard occurrence, or to avoid or minimize the hazard impact (consequences) if it does occur. Prevention involves actions to protect lives and property. Under HSPD-5, it involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and as appropriate specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity, and apprehending potential perpetrators and bringing them to justice." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-9, Glossary)

Prevention/Deterrence: "The ability to detect, prevent, preempt, and deter terrorist attacks and other manmade emergencies." (**Homeland Security Council**, *National Planning Scenarios*, March 2006 Final Draft, p. vi)

Prevention: "Measures that enable an organization to avoid, preclude, or limit the impact of a disruption." (**ISO 22399**, *Societal Security*…, 2007, 5)

Prevention: "Activities to avoid an incident or to stop an emergency from occurring." (**NFPA 1600**, 2007, p. 8)

"Activities, tasks, programs, and systems intended to avoid or intervene in order to stop an incident from occurring. Prevention can apply both to human-caused incidents (such as terrorism, vandalism, sabotage, or human error) as well as to naturally occurring incidents. Prevention of human-caused incidents can include applying intelligence and other information to a range of activities that includes such countermeasures as deterrence operations, heightened inspections, improved surveillance and security operations, investigations to determine the nature and source of the threat, and law enforcement operations directed at deterrence, preemption, interdiction, or disruption." (**NFPA 1600**, 2007, p. 11)

Prevention: "The term 'prevention' means any activity undertaken to avoid, prevent, or stop a threatened or actual act of terrorism." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1424)

Prevention: "Encompasses activities designed to provide permanent protection from disasters. It includes engineering and other physical protective measures, and also legislative measures controlling land use and urban planning. See also 'preparedness'." (**UNDHA**. *Internationally Agreed Glossary.…*, 1992, 59)

Prevention: "Activities to provide outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters." (**UN/ISDR** 2002, 25)

Prevention: "(d) Prevention. The Office [Homeland Security] shall coordinate efforts to prevent terrorist attacks within the United States. In performing this function, the Office shall work with Federal, State, and local agencies, and private entities, as appropriate, to:

(i) facilitate the exchange of information among such agencies relating to immigration and visa matters and shipments of cargo; and, working with the Assistant to the President for National Security Affairs, ensure coordination among such agencies to prevent the entry of terrorists and terrorist materials and supplies into the United States and facilitate removal of such terrorists from the United States, when appropriate;

(ii) coordinate efforts to investigate terrorist threats and attacks within the United States; and

(iii) coordinate efforts to improve the security of United States borders, territorial waters, and airspace in order to prevent acts of terrorism within the United States, working with the Assistant to the President for National Security Affairs, when appropriate." (**White House**, *EO 13228, Establishing Office of Homeland Security*, October 8, 2001)

Prevention: "The term 'prevention' refers to activities undertaken by the first responder community during the early stages of an incident to reduce the likelihood or consequences of threatened or actual terrorist attacks." (**White House**, *HSPD-8*, December 2003)

Prevention: "The first priority of homeland security is to prevent terrorist attacks. The United States aims to deter all potential terrorists from attacking America through our uncompromising commitment to defeating terrorism wherever it appears. We also strive to detect terrorists before they strike, to prevent them and their instruments of terror from entering our country, and to take decisive action to eliminate the threat they pose. These efforts—which will be described in both the *National Strategy for Homeland Security* and the *National Strategy for Combating Terrorism*—take place both at home and abroad. The nature of modern terrorism requires a global approach to prevention." (**White House**, *National Strategy for HS*, 2002, p. 2)

Prevention: "The term 'prevention' refers to activities undertaken by the first responder community during the early stages of an incident to reduce the likelihood or consequences of threatened or actual terrorist attacks." (**White House**, *HSPD-8*, December 2003)

Prevention and Protection: "Support federal interagency prevention and protection initiatives through preparedness programs under the authority of the FPC, including coordination with Protective Security Advisors, the law enforcement and intelligence communities, and critical infrastructure and key resource sectors to implement the National Infrastructure Protection Plan and the War on Terrorism National Implementation Plan." (From description of FEMA Regional NPD responsibilities, in **FEMA**, *Regional-National Preparedness CONOPS*, 8Feb2008, p. 14)

Prevention Core Capabilities:
"Prevention core capabilities are at the root of the TPEP [Terrorism Prevention Exercise Program]. They define which terrorism-prevention equipment, personnel, planning, and tasks will be exercised. The program will address the need to exercise certain capabilities and associated critical tasks that are integral to the prevention mission. The prevention core capabilities have been selected from the Target Capabilities List (TCL). The capability

descriptions have been identified and consolidated based on terrorism prevention activities that serve to detect and disrupt terrorist threats or actions against the United States and its interests, and that decrease the likelihood that a specific terrorist threat or plan will be culminated or executed.

"The core capabilities required for successful terrorism prevention operations are inherently intertwined. Therefore, the lines between them are often blurred, with many of the individual capabilities serving functions in more than one mission area. Rather than specific, individual phases of prevention operations, they are interdependent and simultaneously occurring elements of the larger antiterrorism mission. The prevention core capabilities are as follows:

- **Information Gathering and Recognition of Indicators and Warnings (I&W)** involves gathering, consolidating, and retaining raw, unexamined data from various sources. Recognition of I&W is the ability to see in this data the potential indicators and/or warnings of terrorist activities or planning against U.S. citizens, land, infrastructure, and/or allies.
- **Intelligence Analysis and Production** involves the merging of data and information for the purpose of analyzing, linking, and disseminating timely and actionable intelligence with an emphasis on public safety and homeland security. This process focuses on the consolidation of intelligence-community analytical products at the Federal, State, local, and tribal levels for tactical, operational, and strategic use. This capability also includes the examination of raw data to identify threat pictures, recognize potentially harmful patterns, or connect suspicious links to discern potential indicators or warnings.
- **Intelligence/Information Sharing and Dissemination** involves the multi-jurisdictional, multidisciplinary exchange and dissemination of information and intelligence among Federal, State, local, and tribal layers of government, the private sector, and citizens. The primary goal of sharing and disseminating is to facilitate the distribution of relevant, actionable, timely, and preferably unclassified information and/or intelligence that is updated frequently to consumers that need it. More simply, the goal is to get the right information, to the right people, at the right time.
- **Chemical, Biological, Radiological, Nuclear, and/or Explosive (CBRNE) Detection** is the capability to defend against weapons of mass destruction (WMD) through deployment of systems to ensure early detection of the import, transport, manufacture, or release of CBRNE materials.
- **Law Enforcement Investigation and Operations** covers the broad range of activities undertaken by law enforcement and related entities to detect, examine, probe, investigate, and conduct operations related to potential terrorist activities. Current and emerging investigative techniques are used, with emphasis on training, legal frameworks, recognition of indications and warnings, source development, interdiction, and related issues special to antiterrorism activities. (**DHS**, *HSEEP Vol. 5: Prevention Exercises* (Draft), Dec. 2005)

Prevention Exercise Program (PEP): "The Prevention Exercise Program (PEP) is dedicated to provide participants at the Federal, State, tribal, and local levels the tools through which to test

and improve their ability to prevent terrorism. Exercises are intended to produce comprehensive and valuable analyses of prevention capabilities in order to ultimately enhance the Nation's ability to prevent terrorism by preparing information sharing environment stakeholders at the State and local levels to fuse local and National information and intelligence and produce predictive analysis." (**DHS**, *HSEEP*, Vol. V, 2005, p. 5)

Prevention Exercises: "Prevention exercises can be either *discussion-* or *operations-based* and may focus on issues that pertain to information and intelligence sharing, credible threats, surveillance, and/or opposing force or *red team* activity." (**FEMA**, *HSEEP Glossary*, 2008)

Prevention Principle: "This principle allows action to be taken to protect the environment at an early stage. It is now not only a question of repairing damages after they have occurred, but to prevent those damages occurring at all. This principle is not as far-reaching as the precautionary principle. It means in short terms: it is better to prevent than repair." (**European Environment Agency**, *EEA Environmental Glossary*, 2007)

Primary Agencies: "The NRP identifies primary agencies based on authorities, resources and capabilities. When a Federal agency is activated in response to an Incident of National Significance, the primary Federal agency is responsible for orchestrating Federal support within its functional area for an affected State. The primary agency provides staff for the operations functions at fixed and field facilities; notifies and requests assistance from support agencies; manages mission assignments and coordinates with support agencies; plans for short-term and long-term incident management and recovery operations; and, ensures financial and property accountability for ESF activities." (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 58)

Primary Agency: "The federal department or agency assigned primary responsibility for managing and coordinating a specific emergency support function in the National Response Plan." (**JCS/DoD**, *Civil Support*, 2007, p. GL-11)

Primary Entry Point (PEP) Stations:

- Currently 34 Tier 1 EAS PEP stations across USA
    - 30 AM radio stations, 3 FM radio stations, 1 State Operations Center
    - Tier 1 PEP stations requirements:
    - Diesel backup generator with fuel sufficient for 30 days of continuous broadcasting without commercial power
    - Landline, satellite, and HF radio connectivity to FEMA OperationCenters
    - Special EAS Encoder/Decoders (ENDECs) with unique EAS codes
    - Generally located just outside of major city area (improves survivability)
    - Other: Fallout shelter, on-site food, and special lightning protection
    - One mobile AM/FM tunable PEP radio station being procured
- Tier 2 EAS PEP radio stations:
    - 3 new PEP stations being provisioned in Alabama, Mississippi, and Florida
    - Meet all requirements of Tier 1 stations except fallout shelter
    - Additional 24 Tier 2 stations planned; at least one for each State/Territory.
- Tier 3 EAS PEP radio stations:
    - 2006/7: New direct EAS link between FEMA and Public Radio satellite net

        - Adds direct FEMA EAS link to public radio affiliates
    - 2006/7: New direct EAS link between FEMA and XM Radio satellite net
        - Adds direct FEMA EAS link over XM Radio network channels
        - XM Radio receivers being added to all Tier 1 and 2 PEP stations
    - Tier 3 stations have a direct communications link to FEMA, but otherwise do not have any special provisioning like the Tier 1 and 2 PEP stations
    - Additional Tier 3 stations planned with major media networks. (**FEMA**, *IPAWS Update*, 2007, slides 12 and 13)

Primary Entry Point Advisory Committee (PEPAC): "PEPAC was established by FEMA [1990] to help manage the 34 EBS Primary Entry Point (PEP) stations across the USA**.** (**FEMA**, *IPAWS Update*, June 2007, 3)

Primary Joint Field Office (JFO): "When incidents impact the entire nation or multiple States or localities, multiple JFOs may be established regionally… In these situations, one of the JFOs may be identified (typically in the most heavily impacted area) to serve as the primary JFO and provide strategic leadership and coordination for the overall incident management effort, as designated by the Secretary." (DHS, *Notice of Change to the National Response Plan* (Version 5.0), May 25, 2006, p. 5)

Primary Mission Essential Functions (PMEFs): "Those department and agency Mission Essential Functions, validated by the NCC, which must be performed in order to support the performance of NEFs before, during, and in the aftermath of an emergency. PMEFs need to be continuous or resumed within 12 hours after an event and maintained for up to 30 days or until normal operations can be resumed." (**DHS**, *FCD 1*, Nov. 2007, P-8)
Primary Mission Essential Functions (PMEFs): "`Primary Mission Essential Functions,' or 'PMEFs,' means those Government Functions that must be performed in order to support or implement the performance of NEFs before, during, and in the aftermath of an emergency." (**White House,** *HSPD-20***,** May 9, 2007)

Primary Mission Essential Functions (PMEFs) Identification: "PMEF identification is an iterative process performed by each department and agency in coordination with the NCC. In order to identify and analyze PMEFs, the following actions will take place…:

- Upon MEF approval by each department or agency head, a joint effort between the NCC and each department or agency Continuity Coordinator and staff will result in a preliminary identification of PMEFs that potentially support NEFs. The joint effort will culminate in the department or agency's submission of PMEF identification results to the NCC for further interagency analysis.
- An interagency board (IAB), established by the NCC, conducts a review of submitted potential PMEFs and validates PMEFs relationship to the NEFs. A risk management methodology (i.e., BIA or BPA) will be used to ensure that the PMEFs are appropriate and relevant.
- Upon confirmation that the IAB has determined that a department or agency's MEF shall serve as a PMEF, each department and agency will revisit the prioritization of their MEF recovery timelines to ensure PMEF criticality.

- The IAB will conduct a BPA to identify and map interagency PMEF processes, workflows, activities, expertise, systems, data, and facilities inherent to the interagency execution of each NEF. The BPA should also define the PMEF relationship to the NEF. In other words, the BPA will define how each NEF is executed via business process flow mapping (i.e., NEF serving as the "end product output" and interagency PMEF serving as the functional "inputs").
- The IAB must also conduct an analysis of interagency PMEF interdependencies within each NEF to accurately depict each department or agency's PMEF execution capability and dependencies. The IAB will conduct NEF-specific BIAs to: (1) identify potential single points of failure(s) that may adversely affect the execution of the interagency PMEF support to NEFs; (2) define the impact of downtime (i.e., impact of delayed PMEF recovery on NEF execution); and (3) define potential PMEF process alternatives/work-around(s) solutions.
- NEF BPA and BIA and interagency list of PMEFs are submitted to the NCC for final approval." (**DHS**, *FCD 1*, Nov. 2007, pp. D-7 & D-8)

Primary Mission Essential Functions (PMEFs) Screening Aid:

- Does the function directly support a NEF?
- Does the function need to be continued uninterrupted or need to be resumed within 12 hours, regardless of circumstance?

The answers to both of these must be 'Yes" for the function to be considered a PMEF. (**DHS**, *FCD 1*, Nov. 2007, p. D-7)

Principal Advisor on Emergency Management: "The Administrator [FEMA] is the principal advisor to the President, the Homeland Security Council, and the Secretary [DHS] for all matters relating to emergency management in the United States." (**FEMA 592**, 2007, p. 96; passage from Title V (National Emergency Management) Sec. 503. Federal Emergency Management Agency (6 U.S.C. 313), Department of Homeland Security Appropriations Act, 2007 (Pub. L. No. 109-295) amending the Homeland Security Act of 2002)

Principal Federal Official (PFO): "For actual or potential national incidents, the Secretary of Homeland Security may designate a Federal officer, either a Principal Federal Official (PFO) and/or a Federal Coordinating Officer (FCO), to serve as his representative locally. Incidents involving presidential declarations of major disasters or emergencies under the Stafford Act require the appointment of an FCO. The PFO provides senior leadership, strategic guidance and operations integration for catastrophic events, terrorist incidents and other high visibility, multi-state, multi-jurisdiction events. The FCO, on the other hand, provides the leadership for managing Federal resource support in a multi-hazard context. While the Secretary has the authority to appoint a PFO for any national incident, *it is most likely that a PFO will be appointed only for incidents or high visibility events with significant national or regional implications such as significant terrorist events causing considerable destruction, catastrophic natural disasters, and complex non-Stafford Act emergencies*." (**DHS**, *National Response Plan* (Draft #1), February 25, **2004**, pp. 18-19; italics added) [Note, compare italicized sentence above with the Jan 2008 NRF: "The Secretary will only appoint a PFO for catastrophic or unusually complex incidents that require extraordinary coordination." (**DHS**, *NRF*, 2008, p.66)

Principal Federal Official (PFO): "The Secretary of Homeland Security is the principal Federal official responsible for domestic incident management. This includes coordinating Federal operations and resource deployments within the United States to prepare for, respond to and recover from terrorist attacks, major disasters or other emergencies." (**DHS**, *NRF Comment Draft*, September **2007**, p. 52)

Principal Federal Official (PFO). "By law and by Presidential directive, the Secretary of Homeland Security is the principal Federal official responsible for coordination of all domestic incidents requiring multi-agency Federal response. *In a catastrophic or unusually complex incident, the Secretary may elect to designate a single individual to serve as his or her primary representative and as the lead Federal official in the field.* Only the most complex incidents will likely call for appointment of a PFO. Acting on the Secretary's behalf, the PFO will coordinate the activities of other Federal officials, acting under their own authorities, to ensure consistency of Federal support as well as the overall effectiveness of the Federal incident management. When appointed, such an individual serves on-scene as the *Principal Federal Official* for the incident.

"The PFO will interface with Federal, State, tribal and local jurisdictional officials regarding the overall Federal incident management strategy and act as the primary Federal spokesperson for coordinated media and public communications. The PFO will serve as a member of the Unified Coordination Group and provide a primary point of contact and situational awareness locally for the Secretary of Homeland Security.

"*A PFO is a senior Federal official with proven management experience and strong leadership capabilities. The PFO deploys with a small, highly-trained mobile support staff.* Both the PFO and support staff undergo specific training prior to appointment to their respective positions. Once formally designated for an ongoing incident, a PFO relinquishes the conduct of all previous duties to focus exclusively on his or her incident management responsibilities.

"This *Framework* stipulates that *the same individual will not serve as the Principal Federal Official and the Federal Coordinating Officer…at the same time for the same incident.* When both positions are assigned, circumstances will be such that each will have significant, complementary responsibilities to assist with response to a very demanding event. The Secretary is not restricted to DHS officials when selecting a PFO.

"*The PFO does not direct or replace the incident command structure established at the incident.* Nor does the PFO have line authority over a Federal Coordinating Officer, a Senior Federal Law Enforcement Official, a DOD Joint Task Force Commander or any State or local official. Other Federal incident management officials retain their authorities as defined in existing statutes and directives. Rather, the PFO promotes cohesion and, as possible, resolves any Federal interagency conflict that may arise. The PFO identifies and presents to the Secretary of Homeland Security any policy issues arising from the particular circumstances that need resolution at a higher level within the Federal Government." (**DHS**, *NRF Comment Draft*, September **2007**, pp. 63-64)

Principal Federal Official (PFO), Federal Coordinating Officer (FCO) Responsibilities: "The Secretary may elect to designate a single individual to serve as his or her primary representative to ensure consistency of Federal support as well as the overall effectiveness of the

Federal incident management. When appointed, such an individual serves in the field as the PFO for the incident. The Secretary will only appoint a PFO for catastrophic or unusually complex incidents that require extraordinary coordination. When appointed, the PFO interfaces with Federal, State, tribal, and local jurisdictional officials regarding the overall Federal incident management strategy and acts as the primary Federal spokesperson for coordinated media and public communications.

"For Stafford Act incidents (i.e., Presidentially declared emergencies or major disasters), upon the recommendation of the FEMA Administrator and the Secretary of Homeland Security, the President appoints an FCO. The FCO is a senior FEMA official trained, certified, and well experienced in emergency management, and specifically appointed to coordinate Federal support in the response to and recovery from emergencies and major disasters. The FCO executes Stafford Act authorities, including commitment of FEMA resources and the mission assignment of other Federal departments or agencies. The same individual will *not* serve as the PFO and the FCO at the same time for the same incident." (**DHS**, *NRF FAQs*, Jan 2008, 6)

Principal Federal Official (PFO) (Pre-Designated, Delegation Authority): "In certain scenarios, a PFO may be pre-designated by the Secretary of Homeland Security to facilitate Federal domestic incident planning and coordination at the local level outside the context of a specific threat or incident. A PFO also may be designated in a pre-incident mode for a specific geographic area based on threat and other considerations. In the event of a single incident with national implications or in the case of multiple incidents, a national-level PFO may be designated to provide overall coordination of Federal incident management activities. The PFO may further delegate duties to a Deputy PFO, the FCO or other designated Federal official as appropriate to facilitate incident management span of control or after an event transitions to long-term recovery and/or cleanup operations." (**DHS**, *Notice of Change to the National Response Plan* (Version 5.0), May 25, 2006, p. 5)

Principal Federal Official (PFO): "Once formally designated, PFOs relinquish the conduct of all normal day-to-day duties and functions. PFOs typically may not be "dualhatted" with any other roles or responsibilities that could detract from their overall incident management responsibilities. However, the Secretary may, in other than terrorism incidents choose to combine the roles of the PFO and FCO in a single individual to help ensure synchronized Federal coordination." (**DHS**, *Notice of Change to the National Response Plan*, May 25, 2006, p. 5)

Principal Federal Official (PFO): "The Principal Federal Official (or the successor thereto) shall not—(A) direct or replace the incident command structure established at the incident; or (B) have directive authority over the Senior Federal Law Enforcement Official, Federal Coordinating Officer, or other Federal and State officials." (**FEMA 592**, 2007, p. 105; passage from Title V (National Emergency Management) Sec. 509. National Integration Center (6 U.S.C. 319), Department of Homeland Security Appropriations Act, 2007 (Pub. L. No. 109-295) amending the Homeland Security Act of 2002)

Principal Federal Official (PFO): "Depending upon the scope and magnitude of the incident, the DHS Secretary may appoint a PFO to be the Secretary's "point person" on the ground to oversee Department operations. The PFO may provide suggestions to the Federal Coordinating

Officer (FCO) in coordinating the interagency response that may lead to issuance of mission assignments." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 5; see also 58)

Principal Federal Official (PFO): "The Federal official designated by the Secretary of Homeland Security to act as his/her representative locally to oversee, coordinate, and execute the Secretary's incident management responsibilities under HSPD-5 for Incidents of National Significance." (**USCG**, *IM Handbook*, 2006, Glossary 25-20)

Principles for Domestic Emergencies (NSDD 47, 1982): "Emergency mobilization preparedness programs for domestic emergencies will be based on the following principles:

- Preparedness measures must reflect the Constitutional roles of the Federal, State and local governments. In peacetime, principal responsibility for preparing for, and responding to, domestic emergencies rests with State and local governments.
- Primary emphasis should be placed on natural disasters or other domestic emergencies of a catastrophic nature that cannot be managed effectively without substantial Federal presence; or, arise within spheres of activity in which there is an established Federal preeminence.
- Federal preparedness measures should assist State and local jurisdictions in increasing their capabilities to meet their responsibilities.
- Domestic preparedness programs should be developed in close coordination with the private sector.
- Preparedness measures for allocation of resources during domestic emergencies should rely on market-based mechanisms.
- Economic stabilization preparedness measures should provide mechanisms that do not rely on the imposition of direct economic controls.
- Preparedness measures for domestic emergencies should facilitate responses which may be necessary for only temporary and selective departures from established public policies. Equally, such measures should aim for the prompt restoration of routine policies and programs." (**White House**, *NSDD 47*, 1982, p. 4)

Principles of Civil Defense:

- Joint Responsibility of Federal Government/States and Communities
- Leadership
- Flexible (peacetime program adaptable to war conditions; federal template modified by states; changes with the times)
- Use Existing Agencies
- Organize Volunteers
- Civilian and non-partisan (**OCDP**, *Hopley Report*, 1948, pp 14-17)

Principles of Emergency Management: "…there are some fundamental principles we follow at DHS with respect to emergency management. These are principles grounded in the wisdom of the emergency management community and those who have spent entire careers dealing with hurricanes and other kinds of disasters.

"First and foremost, we recognize that state and local governments are the primary first responders in a disaster. And there is a good reason for this. Disasters, by their very nature, occur locally – in communities far removed from federal assets. State and local responders are the first on the scene and are most attuned to the needs and concerns of local populations. This fundamental fact is not going to change and the Federal government has no interest in superseding your authority to protect and serve your citizens….

"I'd like to talk for a minute about the standard framework for managing a disaster – because the fact of the matter is that we may need to do some things differently this year, particularly in the Gulf.

"By law, local government is responsible for providing for the safety and security of citizens in advance of a hurricane. That means they are in charge of developing emergency plans, determining evacuation routes, providing public transportation for those who can't self-evacuate, and setting up and stocking local shelters with relief supplies.

"State government is responsible for mobilizing the National Guard, pre-positioning certain assets and supplies, and setting up the state's emergency management functions. They are also in charge of requests for Federal support though the formal disaster declaration process.

"The Federal government is responsible for meeting those requests from the state – both during the disaster and in its aftermath. As we saw during Katrina, that includes logistical support for search and rescue, providing food, water and ice, establishing disaster centers and processing federal disaster claims, and participating in short- and long-term public works projects – such as debris removal and infrastructure rebuilding. This is the basic framework." (DHS, *Remarks as Prepared for Delivery by Homeland Security Secretary Michael Chertoff at the National Hurricane Conference*, April 12, 2006)

Principles of Emergency Management:

1. **Comprehensive** – emergency managers consider and take into account all hazards, all phases, all stakeholders and all impacts relevant to disasters.
2. **Progressive** – emergency managers anticipate future disasters and take preventive and preparatory measures to build disaster-resistant and disaster-resilient communities.
3. **Risk-driven** – emergency managers use sound risk management principles (hazard identification, risk analysis, and impact analysis) in assigning priorities and resources.
4. **Integrated** – emergency managers ensure unity of effort among all levels of government and all elements of a community.
5. **Collaborative** – emergency managers create and sustain broad and sincere relationships among individuals and organizations to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication.
6. **Coordinated** – emergency managers synchronize the activities of all relevant stakeholders to achieve a common purpose.
7. **Flexible** – emergency managers use creative and innovative approaches in solving disaster challenges.

8. **Professional** – emergency managers value a science and knowledge-based approach based on education, training, experience, ethical practice, public stewardship and continuous improvement. (**Emergency Management Roundtable**, Sep. 11, 2007, p. 4)

Principles of Homeland Security: "Guiding Principles:

- Make America "*Safer, Stronger, and Better*."
- Recognize the effects of all terrorist attacks occur locally.
- Maximize collective efforts to prevent terrorist attacks, reduce risks, and respond effectively to attacks that do occur.
- Assure that efforts are State based but locally focused and driven—*flexible, scalable, and adaptable*.
- Recognize that our enemy is networked and can only be defeated by a networked system – therefore homeland defense must resemble networked PCs rather than a mainframe computer.
- Ensure that our homeland security efforts do not result in significant alteration of our federalist form of government.
- Empower state and local officials' Homeland Security efforts, leveraging existing emergency preparedness and response programs and capabilities to meet emerging threats to the Nation and its citizens.
- Promote interoperable and reliable telecommunications capabilities nationwide.
- Promote integrated and collective training, exercises and evaluations.
- Facilitate the adoption of best practices from other jurisdictions.
- Enable government and private sector at all levels the ability to carry out its Homeland Security responsibilities.
- Promote citizen participation in state, local, private sector and regional homeland security efforts through volunteer service activities, preparedness, education and awareness.
- Ensure funding follows policy.
- Process matters—specific measures of performance in plans drive clarity, accountability, and success.
- The *Homeland* will be secure when *Hometowns* are secure. (**PHSAC**, *STI*. 2003, 3)

Principles of Homeland Security Strategy: "…eight principles have shaped the design of the *National Strategy for Homeland Security.*

Require responsibility and accountability…
Mobilize our entire society…
Manage risk and allocate resources judiciously…
Seek opportunity out of adversity…
Foster flexibility…
Measure preparedness…
Sustain efforts over the long term…
Constrain government spending." (**White House**, *National HS Strategy*, 2002, pp. 3-4)

Principles of the Homeland Security Enterprise, Proposed "Guiding Principles":

- **Citizen Focused** – engaging citizens to set priorities, develop plans, participate as volunteers, and demand accountability in their role as owners of our government.

- **Collaborative** – requiring leaders throughout the enterprise to work together as never before to achieve results that transcend organizational boundaries and individual egos.

- **Strategic** – articulating clear goals and measures, based on an analysis of threats and vulnerabilities; creating coordinated action plans; employing pilot programs and rigorous evaluations to identify, refine, replicate, and share best practices.

- **Innovative** – pioneering new approaches, unusual partnerships, state of the art technology, and creative thinking.

- **Trustworthy** – assuring appropriate degrees of balance, transparency, limits, and openness to build public trust in the homeland security enterprise.

- **Accountable** – setting clear performance measures against which leaders at all levels can be held publicly accountable for specific results in specific timeframes. (*Council for Excellence in* Government, *We the People: Homeland Security…* May 2004, p. 9)

Principles of Incident Response:
- Engaged partnership
- Tiered response
- Scalable, flexible, and adaptive operational capabilities
- Unity of effort through unified command
- Readiness to act. (**DHS**, *NRF*, Jan 2008, 8)

Principles of Pandemic Preparedness: "This report calls for a new paradigm for pandemic preparedness based on the following general principles:

1. *Health*—The goal of preparing for a pandemic is to protect the lives and health of all people in America…
2. *Justice*—Preparation for a potential pandemic (or any disaster) should ensure a fair distribution of the benefits and burdens of precautions and responses and equal respect for the dignity and autonomy of each individual.
3. *Transparency*—Pandemic preparedness requires transparent communication of accurate information among all levels of government and the public in order to warrant public trust.
4. *Accountability*—Everyone, including private individuals and organizations and government agencies and officials, should be accountable for their actions before, during and after an emergency." (**ACLU**, *Pandemic Preparedness*, 2008, 7)

Principles of Survivable Crisis Management (SCM):

- A basic emergency response capability is needed to deal with any disaster.
- Key preparedness elements are common to all emergencies.

- Every State and Territory can experience a wide range of emergencies from natural disasters to terrorism and war.
- Any jurisdiction can experience more than one severe emergency at a time.
- Any emergency may affect several jurisdictions at the same time.
- Federal, State, and local coordination is essential to comprehensive national emergency preparedness.
- To respond effectively. Governments must be able to survive and continue to direct and control emergency operations. (**FEMA**, *An Introduction to SCM*, 1992, 3)

Principles of War:

Objective
Mass
Maneuver
Offensive
Economy of Force
Unity of Command
Simplicity
Surprise
Security (**USCG** *Pub 1*, 2002, p. 64-65)

Principles of War, Strategic Level:

- **Objective**: Identify and pursue clearly defined and attainable goals whose achievement best furthers the national interest(s).
- **Initiative**: Seize, retain, and exploit the initiative.
- **Unity of Effort**: For every objective coordinate all activities to achieve unity of effort.
- **Focus**: Concentrate the elements of national power at the place and time which best furthers pursuit of the primary national objective.
- **Economy of Effort**: Allocate minimum essential resources to subordinate priorities.
- **Orchestration**: Orchestrate the application of resources at the times, places, and in ways which best further the accomplishment of the objective.
- **Clarity**: Prepare clear strategies that do not exceed the abilities of the organizations that will implement them.
- **Surprise**: Accrue disproportionate advantage through action for which an adversary is not prepared.
- **Security**: Minimize the vulnerability of strategic plans, activities, relationships, and systems to manipulation and interference by opponents. (**Johnsen**, et al, *The Principles of War in the 21st Century: Strategic Considerations,* 1995, p. iv)

Prioritization: "The ordering of critical activities and their dependencies are established during the BIA and Strategic-planning phase. The business continuity plans will be implemented in the order necessary at the time of the event." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 61)

Private Nonprofit Facility: "(A) In General - The term "private nonprofit facility" means private nonprofit educational, utility, irrigation, emergency, medical, rehabilitational, and temporary or permanent custodial care facilities (including those for the aged and disabled) and facilities on Indian reservations, as defined by the President. (B) Additional Facilities – In

addition to the facilities described in subparagraph (A), the term "private nonprofit facility" includes any private nonprofit facility that provides essential services of a governmental nature to the general public (including museums, zoos, performing arts facilities, community arts centers, libraries, homeless shelters, senior citizen centers, rehabilitation facilities, shelter workshops, and facilities that provide health and safety services of a governmental nature), as defined by the President." (**Stafford Act**, June 2006 (FEMA 592), p. 15)

Private Sector Senior Advisory Committee (PVTSAC): "The Secretary of Homeland Security established the PVTSAC as a subcommittee of the HSAC [Homeland Security Advisory Committee] to provide the HSAC with expert advice from leaders in the private Sector." (**HHS,** *NIPP*, 2006, p. 27)

PRND: Preventable Radiological Nuclear Detection. (**DHS/OIG**, *DNDO Progress*, 2007, 39)

Probable Maximum Flood (PMF): "…the flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the drainage basin under study." (**USACE**, *Engineering Pamphlet EP 1165-2-1*, 1999)

Probable Maximum Precipitation (PMP): "Theoretically, the PMP is the greatest depth of precipitation for a given duration that is physically possible over a given size storm area at a particular geographical location during a certain time of the year. Development of the PMP considers all storms of record and the observed precipitation is increased by maximizing the moisture inflows to the storm system. Generalized depth-area-duration and seasonal relationships for the continental U.S. are published by the National Weather Service in a series of hydrometeorological reports." (**USACE**, *Water Resources Policies and Authorities*, 1999, 13-2)

Probability: "The likelihood that an event will occur." (**FEMA**, *Hazards Analysis for Emergency Management (Interim Guidance)*, CPG 1-101, September 1983, p. 5)

Probability: "Extent to which an event is likely to occur." (**ISO 22399**, 2007, 5)

Probability: The likelihood of a specific outcome, measured by the ratio of specific outcomes to the total number of possible outcomes. Probability is expressed as a number between 0 and 1, with 0 indicating an impossible outcome and 1 indicating an outcome is certain. (**Standards Australia/New Zealand** 1995)

Probability Analysis: The derivation of both the likelihood of incidents occurring and the likelihood of particular outcomes (or effects) should those events occur. (**NSW** 1989)

Probability and Frequency: "Probability and Frequency means a measure of how often an event is likely to occur. Frequency can be expressed as the average time between occurrences or exceedances (non-exceedances) of an event or the percent chance or probability of the event occurring or being exceeded (not exceeded) in a given year or a longer time period." (**FEMA**, *Multi Hazard Identification and Risk Assessment*, 1997, p. xxv)

Problem-Based Learning (PBL): "Problem-based learning (PBL) is an instructional method that challenges students to "learn to learn," working cooperatively in groups to seek solutions to real world problems. These problems are used to engage students' curiosity and initiate learning the subject matter. PBL prepares students to think critically and analytically, and to find and use appropriate learning resources." (**Barbara Dutch**, *Problem-Based Learning*, Univ. of Delaware)

Procedural Flow (ProFlow): "The ProFlow is an exercise document that outlines a sequential flow of actions anticipated from *participating* organizations in response to a hypothetical situation. The ProFlow allows *controllers* and *evaluators* to track and monitor expected actions to ensure their completion at designated times. (Note: The ProFlow differs from the *MSEL* in that it contains only expected player actions such as establishing decontamination, triage, treatment, and transport.) Typically, ProFlows are only produced for large-scale, complex exercises." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Processing and Exploitation: "Converting raw information/data into formats that can be efficiently and effectively used by executives, managers, analysts and investigators. Examples of Processing and Exploitation include:

- Imagery interpretation
- Data conversion and correlation
- Document and eavesdropping translations
- Key Word searches on seized data
- Facial Recognition searches involving image capture systems, records, databases, etc
- Data Mining in seized or open source databases
- Decryption of seized or intercepted data" (**FEMA**, *IIFOG Version 3 Draft*, 2008, 39)

Proclamation 7463: *Declaration of National Emergency by Reason of Certain Terrorist Attacks*. (**White House**, September 18, 2001)

Procurement Unit (ICS): "The unit within the Finance/Administration Section responsible for financial matters involving vendor contracts." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 56)

Production: "The documentation and creation of finished and/or raw intelligence/information including records, data, warnings, reports, briefings, bulletins, biographies, assessments, in a conventional, analog and/or digital format utilizing text, images, audios and data." (**FEMA**, *IIFOG Version 3 Draft*, 2008, 39)

Professional (Core Principle of Emergency Management): "Professional: emergency managers value a science and knowledge-based approach based on education, training, experience, ethical practice, public stewardship and continuous improvement." (**EM Roundtable**, 2007, p. 4)

Professionalism – Continuous Improvement and Accountability: "...William Jenkins, the director of Homeland Security and Justice Issues for the U.S. Government Accountability Office, told the Commission that California must take on the difficult challenge of promoting

performance. He commented that the basic steps are easy to list, but extremely difficult to complete:

- Develop a strategic plan with clear goals, objectives and milestones.
- Develop performance goals that can be used to set desired performance baselines.
- Collect and analyze relevant and reliable data.
- Assess…results of analyzing…data against performance goals to guide priority setting.
- Take action based on those results.
- Monitor the effectiveness of actions taken to achieve the designated performance goals." (**Little Hoover Com**., *Safeguarding the Golden State*, Promote Continuous Improvement and Accountability section, 2006, 60-61)

Professional Development of Architects and Engineers: "The primary and immeediate objective of this program during fiscal year 1962 was to qualify architects and engineers to help identify existing fallout shelter…. To assure this capability, knowledge gleaned from research, development, and testing is transmitted to selected faculty members of schools of architecture and engineering, who are encouraged to share their knowledge with their students and with active members of their profession by means of professional development programs." (**OCD**, *Annual Report 1962*, p. 36)

Program: "A group of related initiatives managed in a coordinated way, so as to obtain a level of control and benefits that would not be possible from the individual management of the initiatives. Programs may include elements of related work outside the scope of the discrete initiatives in the program." (**DHS**, *FCD 1*, Nov. 2007, P-8)

Program: "NFPA 1600 defines the criteria for development of a program. According to the standard, the term *program* refers to 'a system of plans, procedures, and activities designed to achieve a specific goal.' An emergency management and business continuity program typically involves many different people, systems, equipment, policies, plans, and procedures that must be identified, organized, implemented, reviewed, evaluated, and maintained. An emergency management and business continuity program should be developed following a systematic process, then implemented and periodically assessed to ensure that it meets the evolving needs of the organization." (**NFPA**, *Implementing NFPA 1600*, 2007, p. 4)

Program and Capability Enhancement Plan: "The analytical output of the Program and Capability Review will be captured in the Program and Capability Enhancement Plan. The Enhancement Plan is a comprehensive program management plan that looks at homeland security irrespective of preparedness funding streams." **(DHS**, *State Homeland Security Program and Capability Review Guidebook Vol. 1***.** October 2005, p. 5)

Program and Capability Review: "In the Program Review, States are essentially being asked to consider two high-level questions: 1) *Is the State program executing the appropriate activities to operate and manage the homeland security program?* and 2) *Has the State organized itself and established governance structures to effectively manage those activities?* To answer these questions, States will evaluate current homeland security program management capacity, baseline operations, and future program needs. An effective homeland security program requires sound program management structures that help ensure the program is capable of conducting

business across departments, agencies, and disciplines at all levels of government. Successful efforts to build capabilities hinge on effective homeland security program management and operations. Understanding program management challenges can help address homeland security needs that support statewide efforts to enhance and sustain capabilities." **(DHS**, *State Homeland Security Program and Capability Review Guidebook Vol. 1.* October 2005, p. 5)

Program Effectivness: "Program effectiveness depends on three main variables: capability, capacity and coverage.

- Capability: The program's ability to perform its role in reducing risk at the asset, team, or force package level.
- Capacity: How much capability you have. The amount of operational assets, teams or force packages available.
- Coverage: How the program's capacity is arrayed, in time and space, against the risk exposure served by the program." (**DHS**, *IPG FY 2011-2015 Draft*, p. 9)

Program for Response Options and Technology Enhancement Against Chemical/Biological Terrorism (PROTECT), Washington, DC: "A partnership was formed in 1999, between the Washington Metropolitan Area Transit Authority and several Federal agencies to include the U.S. Departments of Energy (DOE), Justice (DOJ), and Transportation (DOT) to advance the efforts to improve the safety and security of the Metrorail system against chemical or biological terrorism. The federal partners and several National laboratories offered installation direction and testing of the chemical sensor system. WMATA is utilizing a sensor system designed to act as an early warning system to safeguard first responders, employees, and customers on its subway system. WMATA is the first transit property in the United States to implement a strategic test program of this nature. The chemical detection system is performing to specifications. The system will be expanded throughout the Metrorail system to add additional technology as it becomes available. In addition to the PROTECT system, the Metro Transit Police Department has provided small, devices to its officers that they can wear in the Metrorail system that detect radiation. The devices notify the officer of the presence of radiation so further investigation may be employed. The department has also deployed hand held radiation sensor equipment to its specialized units." (**WMATA**, *PROTECT and the WMATA*) [**PROTECT** "was transitioned from DHS support in summer 2003 and has been operated by WMATA since that time." (**DHS, NCRC**, *First Annual Report, 2005*, p. 94)]

Program Management Technical Assistance: "The Program Management TA builds off the existing Program Management Handbook, incorporates the vision for preparedness outlined in the National Preparedness Goal, and provides guidance on how to apply program management concepts to multi-jurisdictional and multi-disciplinary programs. Specific components include:
• Identifying and coordinating with key stakeholders from neighboring jurisdictions and across multiple disciplines;
• Assessing programmatic and preparedness strengths and weaknesses and planning approaches;
• Developing a program staffing and budget plan that is aligned with the state's strategic plans; and
• Evaluating interdependencies and challenges specific to urban area, state or region." (DHS, *G&T Information Bulletin No. 221, Subject: Investment Planning and Program Management Technical Assistance*, October 2, 2006, pages 1-2)

Progressive (**Core Principle of Emergency Management):** "Progressive: emergency managers anticipate future disasters and take preventive and preparatory measures to build disaster-resistant and disaster-resilient communities." (**EM Roundtable**, 2007, p. 4)

Project BioShield: "On July 21, 2004, President George W. Bush signed the Project BioShield Act of 2004 (Project BioShield) into law as part of a broader strategy to defend America against the threat of weapons of mass destruction. The purpose of Project BioShield is to accelerate the research, development, purchase, and availability of effective medical countermeasures against biological, chemical, radiological, and nuclear (CBRN) agents." (**HHS**, *Project BioShield*, August 30, 2007 revision, p. 1)

Project BioShield: "During its first two years of implementation, Project BioShield acquisitions were guided by requirements derived from interagency deliberations in 2003 that involved Cabinet-level Departments and the Executive Office of the President. Under this initial strategy, HHS pursued acquisitions for those highest priority threats for which there were candidate products at relatively advanced stages of development and for which there were opportunities to have a significant impact on improving preparedness. These products included medical countermeasures for anthrax, smallpox, botulinum toxins, and radiological/nuclear agents - the four threat agents initially determined by DHS to pose a material threat to national security. Acquisitions under Project BioShield to date include the currently licensed anthrax vaccine, anthrax therapeutics (monoclonal and human immune globulin), a pediatric formulation of potassium iodide to protect against absorption of radioactive iodine, calcium and zinc diethylenetriaminepentaacetate (DTPA), chelating agents to treat ingestion of certain radiological particles, and botulinum antitoxin." (**HHS**, *HHS PHEMCE Implementation Plan for CBRN Threats*, April 2007, p. 3)

Project East River: A "broad study of the measures necessary to an effective civil defense of the United States against all forms of attack…conducted by Associated Universities, Inc…. In additon to outlining the military measures precedent to a manageable civil defense and the measures essential to caryying out reduction of urban vulnerability, Project East River analyzed the overall civil defense problem, organization, and projected program. The resulting reports contained more than 200 specific recommendations…

Project East River recommended that the following principles and concepts be accepted as the essential framework upon which an adequate civil defense system can be built:

- Civil defense must be a permanent partner in national defense….
- The civil defense program must emphasize, as a positive goal of first priority, those activities that will improve the individual citizen's chance of survival and minimize his proper damage in the case of enemy attack….
- A civilain civil defense must be developed to the maximum degree possible….
- Civil defense must be organized and operated on the principle that existing agencies and facilities should be used to the greatest extent possible….

- Civil defense must be accomplished, in the main, as an extension of the normal duties of various officials at all levels of government, assisted by volunteers and volunteer organizations….
- Dual use of equipment and facilities for civil defense should be encouraged to the maximum practical degree….
- All areas of the United States are not of equal vulnerability to the several elements of the threat and civil defense programs must be adjusted to the requirements of the individual area….
- Reduction of target vulnerability is an essential function of civil defense…." (**FCDA**, *1953 Annual Report*, pp. 62-63)

Project Impact, Building a Disaster Resistant Community: "James Lee Witt, director of the Federal Emergency Management Agency (FEMA), introduced Project Impact in 1997 [November 6][106] in an effort to "protect families, businesses, and communities by reducing the impact of natural disasters," Through its four-pronged program, Project Impact builds safe communities when individuals, businesses, and community leaders take the following steps:

- Identify and recruit Project Impact partners in the community such as local government leaders, civic and volunteer groups, businesses, and individual citizens.
- Determine the community's risk for falling victim to natural disasters.
- Set priorities and target resources to reduce impact of future disasters.
- Keep the entire community informed and focused on Project Impact's ability to reduce damage and costs of future disasters." (**FEMA**, *Project Impact: Building A Disaster-Resistant Community*, November 22, 1999)

Project Impact, Building a Disaster Resistant Community: "On November 6, the Federal Emergency Management Agency (FEMA) launched Project Impact: Building a Disaster Resistant Community, an initiative designed to challenge the country to undertake actions that protect families, businesses and communities by reducing the effects of natural disasters. We've got to change the way we deal with disasters. We have to break the damage-repair, damage-repair cycle. We need to have communities and businesses come together to reduce the costs and consequences of disasters. It is our number one priority at FEMA. Project Impact includes a national awareness campaign, the selection of pilot communities that demonstrate the benefits of hazard mitigation through a partnership approach, and an outreach effort to businesses and communities using a new guidebook that offers a formula for a community or business to follow to become disaster resistant. *Rationale*: The increasing number and severity of natural disasters the past decade demands that action be taken to reduce the threat that hurricanes, severe storms, earthquakes, floods and wildfires impose upon the economic stability, economic future and safety of the citizens of the U.S. As the federal agency responsible for emergency management, FEMA is committed to reducing disaster losses by focusing the energy of businesses, citizens, and communities in the U.S. on the importance of reducing their

[106] Witt, James Lee. "Project Impact: Building a Disaster Resistant Community." *Disaster Recovery Journal*, Winter 1998/ Accessed at: http://www.drj.com/win98/witt.htm

susceptibility to the impact of natural disasters." (**Witt**, "Project Impact: Building a Disaster Resistant Community," *Disaster Recovery Journal*, Winter 1998)

Project Impact, Building a Disaster Resistant Community, Business and Industry: "Part of what we're trying to address in the Disaster Resistant Communities process is bringing business and industry into this partnership -- not just as a vital member but, more importantly, to work with business and industry to establish some common denominators for their protection, the protection of their employees, and increased involvement in the community. There are three central elements to this process:

1. It is critical that business and industry understand the need to protect themselves. This process is made much easier once risk identification has been conducted because they can then target specific threats that could have a significant impact….

2. The second element is for business and industry to take care of their employees -- they need to provide them with information on how to protect their homes and their families and the appropriate steps to take if disaster strikes….

3. The third element is for business and industry to be involved in the community in disaster preparedness and mitigation efforts." (**Witt**, "Creating Disaster Resistant Communities." 1999)

Project Impact, Building a Disaster Resistant Community, Four Phases (Steps): "Essentially, *Project Impact* is a planning based approach that challenges and supports communities to become disaster resistant. FEMA encourages your community to participate in the four phases of the Project Impact Initiative.

Building Community Partnerships. This initiative is most effective if it draws upon the experiences, resources, and policies already in place in your community. Identify and recruit Project Impact Partners that reflect all sectors: local government leaders, civic and volunteer organizations, businesses, and individual citizens.

Assessing Risks. Identify hazards to determine which areas of your community are affected by disasters, how likely it is that the disaster may occur, and the magnitude of the disaster. Assess the vulnerability of buildings, utilities, and transportation systems serving the community.

Prioritizing Mitigation Efforts. Identify mitigation priorities and mitigation measures to address these priorities. Determine resources needed to implement these measures and identify potential sources for technical and financial assistance.

Communicating Success. Use the print, radio, and television media to build support for the *Project Impact* initiative and to bring the message of the benefits of mitigation to all residents and businesses in the community." (**FEMA**, *Disaster Prevention: A Catalyst for Change* (Chapter 2), p 13)

Project Impact, Building a Disaster Resistant Community, Rationale: "Last week I visited a subdivision of 54 homes in Wichita, Kansas. The families were going through the wreckage of

their homes...sifting through the muck and stink left when the Arkansas River overflowed its banks on Nov. 1 . People were pulling out their carpets and putting their water soaked furniture on their curb. It was a terrible scene but one I have witnessed over and over again in the past 5 years. In fact, it was a scene that had been repeated five times in recent years in this very subdivision.

The sad truth is, this scene should never have taken place much less been repeated. The fact is...we have the opportunity to cut losses...the know-how to reduce risks...and the responsibility to save lives. But it means we must change the way we think and plan and budget. It means that instead of responding to disasters...we must prevent them...instead of waiting to react, we prepare NOW for the next flood, hurricane, fire or earthquake. And that's exactly what we have been doing at FEMA through our Project Impact initiative to build disaster resistant communities. We are working with our State and local partners in 57 communities all across America...and we are changing the face of emergency management in this country...we are shifting to proactive prevention….

These days, disasters are becoming daily occurrences. Regardless of whether you believe the cause is global warming or natural changes in weather patterns, there is no disagreement that the frequency and severity of what we call "weather events" are on the rise." (**Witt**, *Disaster Recovery Journal*)

Project Impact, Building a Disaster Resistant Community, Three Primary Tenets: "There are three primary tenets of the Project Impact initiative:

- Mitigation is a local issue. It is best addressed through a local partnership involving government, business and private citizens.
- Private sector participation is essential. Disasters threaten the economic and commercial growth of our cities, towns, villages and counties. Without the participation of the private sector, comprehensive solutions will not be developed.
- Mitigation is a long-term effort that requires long-term investment. Disaster losses will not be eliminated overnight. (**Witt**, "Project Impact: Building a Disaster Resistant Community," *Disaster Recovery Journal*, Winter 1998)

Proposed Statement of Work (PSOW): "A <u>preliminary</u> statement of work prepared by the Primary Department/Agency (D/A) of an Emergency Support Function prior to an event (e.g., major disaster or emergency). The key components of a PSOW are the scope of work (e.g., specific tasks to be performed, requirements or criteria to be followed) and a projected cost estimate. Preparation of the PSOW is the first step in the development of a Pre-Scripted Mission Assignment." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 58)

Proposition 127: Measure passed by California voters in 1990 which exempts seismic rehabilitation improvements to buildings from property tax reassessments. (**Financial Services Roundtable**, *Nation Unprepared for Mega-Catastrophe*, 2007, 37)

PROTECT: Program for Response Options and Technology Enhancements for Chemical Terrorism, Washington, DC. (**WMATA**, *PROTECT and the WMATA*)

Protect: "Protection operations are those geared at taking defensive steps designed to provide lines of defense to stop an attack if preventative actions are unable to preclude a terrorist or criminal operation from being initiated, and to shield or safeguard the Nation, or to keep from harm, injury or attack. Protection includes safeguarding people and their freedoms, critical infrastructure, property, and the economy of our nation from acts of terrorism, natural disasters, or other emergencies." (**DHS**, *Capstone Doctrine Pub 1 Draft*, Chapter 2, 2008, p. 2-5)

Protect: "Protect – to cover or shield from exposure, injury, or destruction." (**DHS**, *Critical Infrastructure Task Force Presentation to HSAC,* January 10, 2006)

Protect: "Actions to reduce the vulnerability of critical infrastructure or key resources in order to deter, mitigate, or neutralize terrorist attacks, major disasters, and other emergencies Source—HSPD 7, December 2003). It requires coordinated action on the part of federal, state, and local governments; the private sector; and concerned citizens across the country. Protection also includes: continuity of government and operations planning; awareness elevation and understanding of threats and vulnerabilities to their critical facilities, systems, and functions; identification and promotion of effective sector-specific protection practices and methodologies; and expansion of voluntary security-related information sharing among private entities within the sector, as well as between government and private entities. (Source – The National Strategy For The Physical Protection of Critical Infrastructures and Key Assets, February 2003)." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidance*…, 2005, pp. 3-4)

Protect: "Reduce the likelihood of attack on assets or systems and limit the impact should an attack occur." (**DHS**, *Universal Task List*, *Version 2.1*, 2005, p. 38)

Protect: "The terms 'protect' and 'secure' mean reducing the vulnerability of critical infrastructure or key resources in order to deter, mitigate, or neutralize terrorist attacks." (**White House**, *HSPD-7, Critical Infrastructure Identification, Prioritization, and Protection*, December 17, 2003)

Protected Critical Infrastructure Information (PCII) Accreditation Program: "The PCII Accreditation Program was established to uphold stringent safeguards while facilitating access to vital information for homeland security professionals. Under the PCII Accreditation Program, government entities may receive access to PCII after meeting certain requirements…. Individuals in an accredited entity must complete training on proper handling and safeguarding procedures and have a need to know specific PCII in order to gain access to it." (DHS, *PCIIP Fact Sheet*)

Protected Critical Infrastructure Information (PCII) Program: "The PCII Program, part of the…DHS…is designed to encourage private industry to share its sensitive security-related business information with the Federal government. PCII is an information-protection tool that facilitates information sharing between the government and the private sector. DHS and other Federal, State and local analysts use PCII in pursuit of a more secure homeland, focusing primarily on:

Analyzing and securing critical infrastructure and protected systems,

Identifying vulnerabilities and developing risk assessments, and
Enhancing recovery preparedness measures.

Information submitted, if it satisfies the requirements of the Critical Infrastructure Information Act of 2002, is protected from public disclosure under

The Freedom of Information Act,
State and local disclosure laws, and
Use in civil litigation." (**DHS**, *Protected Critical Infrastructure Information Pgm*, 2007.

Protected Critical Infrastructure Information/Sensitive Security Information: "…an information-protection tool that facilitates information sharing between the government and the private sector, which is used by DHS and other Federal, State, and local analysts in pursuit of a more secure homeland, focusing primarily on analyzing and securing critical infrastructure and protected systems, identifying vulnerabilities and developing risk assessments, and enhancing recovery preparedness measures." (**White House**, *National Strategy for Info. Sharing*, 2007, 23)

Protection: "Dictionary definitions for 'protection' and 'protect' are: 'Protection: the act of protecting; the state of being protected…Protect: to cover or shield from exposure, injury, or destruction…' The use of 'protect' in HSPD-7 [Homeland Security Presidential Directive] is aligned with the dictionary definition in that it maintains the defensive focus…The CITF [Critical Infrastructure Task Force] believes that protection, in isolation, is a brittle strategy. We cannot protect every potential target against every conceivable attack; we will never eliminate all vulnerabilities. Furthermore, it is virtually impossible to define a desired end-state – to quantify how much protection is enough – when the goal is to reduce vulnerabilities. In contrast, a dictionary definition for 'resilience' is: 'Resilience: an ability to recover from or adjust easily to misfortune or change'." (**Critical Infrastructure Task Force, HSC,** 2006, 4)

Protection: "Protection instills a defender's view (i.e. from the inside out) and lessens the ability to see and effectively anticipate what the enemy may see looking from the outside in – what has been termed the 'predator's view'." (**Critical Infrastructure Task Force, HSC,** 2006, 15)

Protection: "Protection – the act of protecting." (**DHS**, *Critical Infrastructure Task Force Presentation to HSAC,* January 10, 2006, slide 7)

Protection: "Definition: actions or measures taken to cover or shield from exposure, injury, or destruction. "Extended Definition: includes such actions and measures needed to ensure protective reactions do not unnecessarily interfere with citizen's freedoms and liberties. "Annotation: To take defensive steps designed to provide the last line of defense to stop an attack if preventative actions are unable to preclude a terrorist or criminal operation from being initiated; to shield or safeguard; to keep from harm, injury or attack. To safeguard our people and their freedoms, critical infrastructure, property and the economy of our nation from acts of terrorism, natural disasters, or other emergencies." (**DHS**, *DHS Lexicon*, Oct. 2007, pp. 20-21)

Protection: "Actions to mitigate the overall risk to CI/KR assets, systems, networks, or their interconnecting links resulting from exposure, injury, destruction, incapacitation, or exploitation. In

the context of the NIPP, protection includes actions to deter the threat, mitigate vulnerabilities, or minimize consequences associated with a terrorist attack or other incident. Protection can include a wide range of activities, such as hardening facilities, building resiliency and redundancy, incorporating hazard resistance into initial facility design, initiating active or passive countermeasures, installing security systems, promoting workforce surety, and implementing cyber security measures, among various others." (**DHS**, *NIPP***,** 2006, p. 104)

Protection: [Note: The following definition from the *National Preparedness Guidelines* cites HSPD-7 on Critical Infrastructure as its "Source." Nothing remotely resembling the following definition is to be found in that document. Note, instead, the definition of "Protect." The "definition" below is repeated word for word, including source citation, in FEMA's November 2007 Strategic Goals document in the glossary section. Thus far the earliest usage of the wording below I have been able to find is from a "Revised Illinois Homeland Security Strategy" document dated September 30, 2005, which, under the heading of "Goal 4: Protecting Against a Major Event," contains the exact paragraph below, providing no specific citation. In that the December 2005 draft of the *National Preparedness Goal* contains the same paragraph as the definition of "Protection" I suspect that an earlier version of the NPG was the Illinois source. The December 2005 NPG also incorrectly cites HSPD-7, December 2003 as its source.]

"Actions to reduce the vulnerability of critical infrastructure or key resources in order to deter, mitigate, or neutralize terrorist attacks, major disasters, and other emergencies. It requires coordinated action on the part of Federal, State, and local governments, the private sector, and concerned citizens across the country. Protection also includes continuity of government and operations planning; awareness elevation and understanding of threats and vulnerabilities to their critical facilities, systems, and functions; identification and promotion of effective sector-specific protection practices and methodologies; and expansion of voluntary security-related information sharing among private entities within the sector as well as between government and private entities. (Source: HSPD-7, December 17, 2003). (**DHS**, *National Preparedness Guidelines*, 2007, p. 42)

Protection: "1. Preservation of the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area. 2. Measures that are taken to keep nuclear, biological, and chemical hazards from having an adverse effect on personnel, equipment, or critical assets and facilities. Protection consists of five groups of activities: hardening of positions; protecting personnel; assuming mission-oriented protective posture; using physical defense measures; and reacting to attack." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Protection: "The protection function focuses on conserving the joint force's fighting potential in four primary ways — **active defensive** measures that protect the joint force, its information, its bases, necessary infrastructure, and lines of communications from an adversary's attack; **passive defensive** measures that make friendly forces, systems, and facilities difficult to locate, strike, and destroy; applying technology and procedures to reduce the risk of fratricide; and **emergency management and response** to reduce the loss of personnel and capabilities due to

accidents. It includes, but extends beyond, FP [force protection] to encompass protection of US noncombatants; the forces, systems, and civil infrastructure of friendly nations; and other government agencies, IGOs [intergovernmental organizations] and NGOs. The protection function applies domestically in the context of HD." (**DOD**, *Homeland Defense*, 2007, p. JP 3-27 (31))

Protection: "The Protection mission area includes actions to reduce the vulnerability of critical infrastructure or key resources in order to deter, mitigate, or neutralize terrorist attacks, major disasters, and other emergencies. Protection focuses on deterrence, mitigation, and *response*-oriented activities to prevent an attack from occurring, whereas prevention centers on the recognition of threats via information sharing and intelligence analysis." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Protection: "Protection is the ability to protect critical infrastructure and key resources (CI/KR) and is vital to the national security, public health and safety, economic vitality, and way of life of the United States. It preserves life and property during a natural disaster or terrorist attacks. Protection safeguards citizens and their freedoms, critical infrastructure, property and the economy from acts of terrorism, natural disasters, or other emergencies.[107]

- Protection includes actions to mitigate the overall risk to CI/KR assets, systems, networks, functions, or their interconnecting links resulting from exposure, injury, destruction, incapacitation, or exploitation.[108] It involves actions or measures taken to cover or shield from exposure, injury, or destruction. Protective actions may occur before, during, or after an incident and are designed to prevent, minimize, or contain the impact of an incident.[109]

- Protection planning will address structures and processes that are adaptable to incorporate lessons learned and best practices and adjust quickly within the time constraints of a fast-moving crisis or threat environment. This planning should manage risk and address known and potential threats and hazards.[110]

(**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, pp. 2-6 through 2-7)

Protection: "Protection includes all activities to identify CI/KR, assess vulnerabilities, prioritize CI/KR, and develop protective programs and measures, since these activities lead to the final act of implementing such protective strategies to reduce vulnerability. **Protective actions** include detection mechanisms or programs (e.g. surveillance systems that indicate a potential threat), deterrence actions (e.g., enhanced security that reduces the aggressor's likelihood of success and interest in the target); defensive actions (e.g., physical hardening or buffer zones, that prevent or delay an attack); and actions that reduce the value or incentive to an aggressor to attack (e.g., creating redundancies in a system and recovery programs that minimize consequences). Strategies for response and recovery are also important." (**NIST**, "CIP Instructions," June 2004)

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[107] DHS Lexicon Terms and Definitions, Approved October 23, 2007.
[108] National Infrastructure Protection Plan (NIPP), 2006.
[109] DHS Lexicon Terms and Definitions, Approved October 23, 2007.
[110] National Infrastructure Protection Plan, 2006.

Protection: "(e) Protection. The Office [Homeland Security] shall coordinate efforts to protect the United States and its critical infrastructure from the consequences of terrorist attacks. In performing this function, the Office shall work with Federal, State, and local agencies, and private entities, as appropriate, to:

(i) strengthen measures for protecting energy production, transmission, and distribution services and critical facilities; other utilities; telecommunications; facilities that produce, use, store, or dispose of nuclear material; and other critical infrastructure services and critical facilities within the United States from terrorist attack;

(ii) coordinate efforts to protect critical public and privately owned information systems within the United States from terrorist attack;

(iii) develop criteria for reviewing whether appropriate security measures are in place at major public and privately owned facilities within the United States;

(iv) coordinate domestic efforts to ensure that special events determined by appropriate senior officials to have national significance are protected from terrorist attack;

(v) coordinate efforts to protect transportation systems within the United States, including railways, highways, shipping, ports and waterways, and airports and civilian aircraft, from terrorist attack;

(vi) coordinate efforts to protect United States livestock, agriculture, and systems for the provision of water and food for human use and consumption from terrorist attack; and

(vii) coordinate efforts to prevent unauthorized access to, development of, and unlawful importation into the United States of, chemical, biological, radiological, nuclear, explosive, or other related materials that have the potential to be used in terrorist attacks." (**White House**, *EO 13228, Establishing Office of Homeland Security*, October 8, 2001)

Protection of Radio Stations Program: "A fallout shelter program for selected radio stations was started in fiscal year 1962. The purpose of this program is to enable these stations to operate in a radioactive fallout environment in disseminating official information during a postattack period." (**OCD**, *Annual Report 1962*, p. 35)

Protective Action: "Definition: step taken before, during, or after an incident designed to prevent, minimize, or contain impact of incident

"Extended Definition: methods for selecting the best actions within the time constraints of a fast-moving emergency; measures describe preparations taken before an emergency situation to ensure implementation is possible during an emergency; includes decision-making and implementation issues to rapidly reduce the effects of an emergency situation or contamination

"Annotation: Protective action involves actions taken to protect lives and property. It involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public

health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice." (**DHS,** *Lexicon: Terms and Definitions*, October 19, 2007, p. 21)

Protective Action Guide (PAG): "The projected dose to reference man, or other defined individual, from an accidental release of radioactive material at which a specific protective action to reduce or avoid that dose is warranted." (**EPA**, *Manual of Protective Action Guides and Protective Actions For Nuclear Incidents*, 1991, p. A. 3, Glossary)

Protective Action Implementation: "Definition: Guard the public from potentially hazardous effects of an emergency, including evacuation, shelter-in-place and isolation." (**DHS**, *Universal Task List 2.1*, 2005, p. 80)

Protective Action Zone: "The **Protective Action Zone** defines an area DOWNWIND from the incident in which persons may become incapacitated and unable to take protective action and/or incur serious or irreversible health effects. The Table provides specific guidance for small and large spills occurring day or night." (**DOT**, *Emergency Response Guidebook*, 2004, p. 295)

Protective Actions: "Protective Actions are those steps taken to preserve the health and safety of emergency responders and the public during an incident involving releases of dangerous goods.." (**DOT**, *Emergency Response Guidebook*, 2004, p. 298)

Protective Measures Target List (PMTL): "RMD [Risk Management Division] derived the initial 1,849 BZPP [Buffer Zone Protection Program] sites from the Protective Measures Target List developed by DHS at the request of Congress in 2003." (**DHS/OIG**, *Review of the Buffer Zone Protection Program*, July 2007, p. 6)

Protective Security Advisor (PSA): "…the Department's [DHS] infrastructure protection work is not performed only in Washington, DC; rather, it takes place across the country via the Protective Security Advisor (PSA) cadre. PSAs are in place in communities throughout the Nation to assist with local efforts to protect critical assets, providing a Federal resource to communities and businesses. During natural disasters and contingency events, PSAs work in State and local Emergency Operations Centers. PSAs also provide real-time information on facility significance and protective measures to facility owners and operators, as well as State and local representatives. Typically, PSAs are engaged to support the planning and execution of National Special Security Events (NSSEs), led by the U.S. Secret Service, as well as non-NSSEs, led by the Department's Office of Operations Coordination and Planning…" (**DHS**, *Statement for the Record, Robert B. Stephan, Assistant Secretary, Infrastructure Protection, National Protection and Programs Directorate…, before the Committee on Homeland Security*, July 9, 2008, page 3)

PRP: Preferred Risk Policy. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

PRT: Planning and Response Team, USACE.

PS: Chloropicrin. (**DA**, *WMD-CST Operations*, December 2007, Glossary-5)

PSA: Port Security Assessment. (**USCG**, *Port Security Assessment Program*)

PSA: Protective Security Advisor. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 634)

PSA: Public Service Announcement.

PSAP: Public Safety Answering Point. (**DHS**, *TCL*, September 2007, p. 30)

PSC: Public Safety Communications. (**FEMA**, *TEI/TO Course Catalog*, 2008, 3)

PSCC: Public Safety Communication Center (9-1-1).

PSEPC: Public Safety and Emergency Preparedness Canada. (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

PSEPC: Public Security and Emergency Preparedness Canada.

PSFA: Public Safety Foundation of America. (*APCO Homeland Security Commitment,* 2005)

PSGP: Port Security Grant Program. (DHS, *DHS Announces Additional $260M*…, 16Aug2007)

PSIC: Public Safety Interoperable Communications Grant Program.

PSMA: Pre-Scripted Mission Assignment(s). (**FEMA**, *Statement of Glen Cannon*, 2007, p. 4)

PST: Pacific Standard Time.

Psychological Operations (PSYOP): "US law and DOD policy prohibits DOD from using psychological operations (PSYOP) units to conduct operations against US citizens. However, these assets can be used to help disseminate critical information to the civilian population. DOD may use PSYOP personnel and equipment to support activities such as information dissemination, printing, reproduction, distribution, and broadcasting." (**JCS/DoD**, *CBRNE CM* (JP 3-41), 2006, p. viii)

PTA: Population Threat Assessments, DHS. (**HHS**, *PHEMCE for CBRN Threats*, 2007, p. 6)

PTE: Potential Threat Element. (**DHS**, *Intelligence and Information Sharing Initiative* (Final Report), December 2004, slide 29)

PTEE PCC: Plans, Training, Exercises and Evaluations Policy Coordination Committee, HSC. (**OMB**, *Detailed Information on FEMA Grants and Training Office NEP Assessment,* 2007)

Public Assistance Coordinator (PAC): "The Public Assistance Coordinator is a subsection of the Public Assistance Team (PAT). The PAC is assigned to work with a Public Assistance (PA)

applicant from declaration to funding approval." (**FEMA**, *Typed Resource Definitions: Incident Management Resources* (FEMA 508-2), p. 29)

Public Assistance (PA) Program, FEMA Disaster Relief: "Supplementary Federal assistance provided pursuant to a Presidential Declaration of emergency or major disaster under the Stafford Act to State and local governments or certain private, not-for-profit organizations other than assistance for the direct benefit of individuals and families." (**FEMA**/EMI 1996) "FEMA's public *assistance program is typically the largest source of disaster relief." (***GAO***, Disaster Assistance: Federal Aid to the New York City Area Following the Attacks of September 11,*th 2003, p. 5)

Public Assistance (PA) Program, FEMA Disaster Relief: "Under a major disaster declaration, Public Assistance may be approved to fund a variety of projects, including:

- Debris clearance, when in the public interest, on public or private lands or waters.
- Emergency protective measures for the preservation of life and property.
- Repair or replacement of public roads, streets, and bridges.
- Repair or replacement of public water control facilities (dikes, levees, irrigation works, and drainage facilities).
- Repair or replacement of public buildings, utilities, and related equipment.
- Repair or restoration of public recreational facilities and parks." (**FEMA**, *Disaster Basics* (IS-292), May 24, 2007 update, p. A-9, Glossary)

Public Assistance (PA) Program, FEMA Disaster Relief: "Under the PA Program, which is authorized by the Stafford Act, FEMA awards grants to assist State and local governments and certain Private Nonprofit (PNP) entities with the response to and recovery from disasters. Specifically, the program provides assistance for debris removal, emergency protective measures, and permanent restoration of infrastructure. The Federal share of these expenses typically cannot be less than 75 percent of eligible costs. The program also encourages protection from future damage by providing assistance for hazard mitigation measures during the recovery process. The PA Program encourages planning for disaster recovery, but PA Program funds may not be used for the costs of planning. The costs incurred implementing the plans are eligible for reimbursement only if they meet PA Program eligibility criteria. The PA Program is based on a partnership of FEMA, State, and local officials.

"FEMA is responsible for managing the program, approving grants, and providing technical assistance to the State and applicants.

"The State, in most cases, acts as the Grantee for the PA Program. FEMA, the State, and the Applicant are all responsible for grants awarded under the PA program. The State educates potential applicants, works with FEMA to manage the program, and is responsible for

implementing and monitoring the grants awarded under the program. In some instances, the State may take a more active role in overall management of certain disasters, as discussed later in this chapter under State Management of Disasters. Some State regulations prohibit the State from acting as Grantee for an Indian Tribe. In such cases, or upon the Tribe's choice, a Tribal government may act as its own Grantee.

"Local officials are responsible for identifying damage, providing sufficient data for FEMA to develop an accurate scope and cost estimate for doing the work and approving grants, and managing the projects funded under the PA Program.

"The PA Program staff consists of management and field personnel who assist the applicant during the recovery process. These staff members include a Public Assistance Group Supervisor (Public Assistance Officer), Public Assistance Coordination Crew Leader (Public Assistance Coordinator), Public Assistance Project Specialist (Project Officer), and Public Assistance Technical Specialists (Specialists)." (**FEMA**, *Public Assistance Program* (FEMA 322), 2007)

Public Assistance (PA) Program, FEMA Disaster Relief, PA Group Supervisor: "The PA Program is managed at the JFO [Joint Field Office] by the PA Group Supervisor. As the program manager, the PA Group Supervisor advises the FCO [Federal Coordinating Officer] on all PA Program matters; manages the operation of PA Program staff and any coordination between the PA Program and other arms of the Federal disaster recovery effort; works with State counterparts; and ensures that the PA Program is operating in compliance with all laws, regulations, and policies." (**FEMA**, *Public Assistance Program* (FEMA 322), June 2007)

Public Assistance (PA) Program, FEMA Disaster Relief, PA Coordination (PAC) Crew Leader: "At the beginning of the disaster recovery process, FEMA, in coordination with the State, assigns a PAC Crew Leader to each applicant. The PAC Crew Leader is a customer service manager who works with the applicant to resolve disaster-related needs and ensure that the applicant's projects are processed as efficiently and expeditiously as possible. By being involved from the declaration to the obligation of funds, the PAC Crew Leader ensures continuity of service throughout the delivery of the PA Program. A PAC Crew Leader generally has responsibility for more than one applicant." (**FEMA**, *Public Assistance Program*, 2007)

Public Assistance (PA) Program, FEMA Disaster Relief, PA Project Specialists and Technical Specialists: "Project and Technical Specialists are resources for the applicant. Typically, Project Specialists are responsible for assisting with the development of projects and cost estimates. While a Project Specialist is generally knowledgeable with regard to the PA Program, a Technical Specialist usually has a defined area of expertise that a Project Specialist may call upon in the development of a specific project. Technical Specialists assigned to a JFO may have experience in such areas as roads and bridges, utility infrastructure, debris removal and disposal, environmental and historic preservation compliance, insurance, and cost estimating." (**FEMA**, *Public Assistance Program* (FEMA 322), June 2007)

Public Awareness: "The process of informing the community as to the nature of the hazard and actions needed to save lives and property prior to and in the event of disaster." (**UNDHA**, *DM Glossary*, 1992, 60)

Public Disaster Communications: FEMA program. "…nearly $1 million will be set aside for Public Disaster Communications. FEMA will assume a leadership position as coordinator of all hazards messaging to the American public during peacetime and disasters, leading the national campaign for greater personal and community preparedness. Specifically, the funding requested will support FEMA's efforts to strengthen interagency incident communications systems and capabilities to ensure coordinated public information efforts across all hazards. By working one-on-one with State, local, and major urban area jurisdictions to build knowledge and capability for public information efforts and conducting planning, training, and exercises to ensure integrated crisis communication strategies and messaging FEMA will facilitate public discourse, outreach, and adoption of a national culture of personal preparedness and mitigation that will have a direct impact on reducing the loss of life and property. Through effective public communications and outreach programs, FEMA will ensure the general public is provided with and has access to vital disaster preparedness and planning information including those with special needs and multilingual and multicultural populations." (**FEMA**, *Opening Statement of Paulison, House Appropriations HS Subcommittee*, March 9, 2007, p. 17)

Public Education: "Public education is the process of making the public aware of risks and how they can prepare for all hazards in advance…. Public education may be accomplished through events (safety fairs) or products such as media releases or packets and the distribution of brochures. Examples of public education campaigns include:

- hurricane preparedness;
- personal preparedness and developing family or business emergency plans;
- hazardous materials awareness;
- tornado and severe weather awareness; and
- special needs population awareness." (**FEMA**, *FEMA 517*, Nov 2007, 4)

Public Education: See Citizen Disaster Education.

Public Facility: "`Public facility' means the following facilities owned by a State or local government: (A) Any flood control, navigation, irrigation, reclamation, public power, sewage treatment and collection, water supply and distribution, watershed development, or airport facility. (B) Any non-Federal-aid street, road, or highway. (C) Any other public building, structure, or system, including those used for educational, recreational, or cultural purposes. (D) Any park." (**Stafford Act**, June 2006 (FEMA 592), p, 15)

Public Health: "…the committee adopted the definition of public health from the landmark 1988 IOM [Institutes of Medicine] report *The Future of Public Health*, which defined public health as "what we, as a society, do collectively to assure the conditions in which people can be healthy" (IOM, 1988, p. 1)." (**Altevogt**, et al. (Editors). *Research Priorities in Emergency Preparedness and Response for Public Health Systems: A Letter Report*, Jan 2008, 10)

Public Health (PH): "Individuals who prevent epidemics and the spread of disease, protect against environmental hazards, promote healthy behaviors, respond to disasters and assist in recovery, as well as assure the quality and accessibility of health services." (**FEMA**, *TIE/TO Course Catalog*, 2008, p. 3)

Public Health: "The term 'public health' means the science and practice of protecting and improving the overall health of the community through disease prevention and early diagnosis, control of communicable diseases, health education, injury prevention, sanitation, and protection from environmental hazards." (**White House**, *HSPD 21*, October 18, 2001)

Public Health and Medical Preparedness: "The term 'public health and medical preparedness' means the existence of plans, procedures, policies, training, and equipment necessary to maximize the ability to prevent, respond to, and recover from major events, including efforts that result in the capability to render an appropriate public health and medical response that will mitigate the effects of illness and injury, limit morbidity and mortality to the maximum extent possible, and sustain societal, economic, and political infrastructure." (**White House**, *HSPD 21*, October 18, 2001)

Public Health and Medical Preparedness Critical Components: "…the four most critical components of public health and medical preparedness are

- biosurveillance,
- countermeasure distribution,
- mass casualty care, and
- community resilience.

Although those capabilities do not address all public health and medical preparedness requirements, they currently hold the greatest potential for mitigating illness and death and therefore will receive the highest priority in our public health and medical preparedness efforts. Those capabilities constitute the focus and major objectives of this Strategy." (**White House**, *HSPD 21*, October 18, 2001)

Public Health and Medical Preparedness Principles: "This Strategy draws key principles from the *National Strategy for Homeland Security* (October 2007), the *National Strategy to Combat Weapons of Mass Destruction* (December 2002), and *Biodefense for the 21st Century* (April 2004) that can be generally applied to public health and medical preparedness. Those key principles are the following:
(1) preparedness for all potential catastrophic health events;
(2) vertical and horizontal coordination across levels of government, jurisdictions, and disciplines;
(3) a regional approach to health preparedness;
(4) engagement of the private sector, academia, and other nongovernmental entities in preparedness and response efforts; and
(5) the important roles of individuals, families, and communities." (**WH**, *HSPD 21*, 18Oct2001)

Public Health Emergency: "`Public health emergencies' have been defined by Burkle (2007)[111] as those `that adversely impact the public health system and/or its protective

[111] Burkle, F. M., Jr. 2007. "Public health emergencies, cancer, and the legacy of Katrina." *Prehospital Disaster Medicine*, Vol. 22, No. 4, pp. 291–292.

infrastructure (i.e., water, sanitation, shelter, food, and health), resulting in both direct and indirect consequences to
the health of a population, and occur when this protective threshold is absent, destroyed, overwhelmed, not recovered or maintained, or denied to populations'." (Quoted in **Altevogt**, et al. (Editors). *Research Priorities in Emergency Preparedness and Response for Public Health Systems: A Letter Report*, Jan 2008, 13)

Public Health Emergency: "Defined by the *Model State Emergency Health Powers Act* (MSEHPA): An occurrence or imminent threat of an illness or health condition that is believed to be caused by: (1) bioterrorism; (2) the appearance of a novel or previously controlled or eradicated infectious agent or biological toxin; (3) a natural disaster; (4) a chemical attack or accidental release; or (5) a nuclear attack or accident. It must pose a high probability of a large number of deaths in the affected population, or a large number of serious or long-term disabilities in the affected population, or widespread exposure to an infectious or toxic agent that poses a significant risk of substantial future harm to a large number of people in the affected population." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-10)

Public Health Emergency Medical Countermeasures Enterprise (PHEMC), HHS: "The HHS Public Health Emergency Medical Countermeasures Enterprise (HHS PHEMCE) leads the mission to develop and acquire medical countermeasures that will improve public health emergency preparedness as well as prevent and mitigate the adverse health consequences associated with CBRN and naturally occurring threats. HHS PHEMCE is a coordinated, intra-agency effort led by the Office of the Assistant Secretary for Preparedness and Response (ASPR) and includes three HHS internal agencies: the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), and the National Institutes of Health (NIH). Additionally, HHS PHEMCE collaborates with its *ex officio* members: the Department of Defense (DOD), the Department of Homeland Security (DHS), the Department of Veterans Affairs (VA) and other interagency stakeholders as appropriate." (**HHS**, *PHEMC Implementation Plan for CBRN Threats*, April 2007, p. 2)

Public Health Emergency Medical Countermeasures Enterprise (PHEMC), HHS, Implementation Plan for CBRN Threats: "The *HHS PHEMCE Implementation Plan for CBRN Threats* addresses twelve biological threat agents, a class of chemical threats (volatile nerve agents) and radiological and nuclear threats…. The *HHS PHEMCE Implementation Plan for CBRN Threats* excludes pandemic influenza, which is addressed in the *HHS Pandemic Influenza Plan….*" (**HHS**, *PHEMC Implementation Plan for CBRN Threats*, April 2007, p. 2)

Public Health Emergency Medical Countermeasures Enterprise (PHEMCE), HHS Strategic Plan for CBRN Threats: "The *HHS PHEMCE Strategy*, published in the *Federal Register* on March 20, 2007, described a framework of strategic policy goals and objectives for identifying medical countermeasure requirements and establishing priorities for medical countermeasure evaluation, development and acquisition. These strategic policy goals and objectives were used to establish the Four Pillars upon which this *HHS Public Health Emergency Medical Countermeasures Enterprise Implementation Plan* (*HHS PHEMCE Implementation Plan*) is based….

- **Pillar One: Identify and assess CBRN threats.**
- **Pillar Two: Assess medical/public health consequences.**
- **Pillar Three: Establish medical countermeasure requirements that incorporate assessments of current levels of preparedness, concepts of utilization, and product specifications.**
- **Pillar Four: Identify and prioritize near-, mid-, and long-term development and acquisition programs informed by assessment of the maturity of the product development pipeline and estimated costs. (HHS**, *PHEMCE Implementation Plan*, 2007, p. 6)

Public Health Emergency Preparedness: "Public health emergency preparedness (PHEP) is the capability of the public health and health-care systems, communities, and individuals to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities. Preparedness involves a coordinated and continuous process of planning and implementation that relies on measuring performance and taking corrective action." (Nelson et al, *American Journal of Public Health*, 2007, p. S9; Adopted by Altevogt, *Research Priorities in EP&R…*, Jan2008, 9.

Public Health Emergency Preparedness Cooperative Agreement, CDC, HHS: "The purpose of the Division of State and Local Readiness' cooperative agreement program is to upgrade and integrate State and local public health jurisdictions' preparedness for and response to terrorism and other public health emergencies with Federal, State, local, and tribal governments, the private sector, and Non-Governmental Organizations (NGOs). These emergency preparedness and response efforts are intended to support the NRP and NIMS. Activities included in the cooperative agreement are designed to develop emergency-ready public health departments." (**DHS/ODP**, *FY 2006 EMPG Program Guidance*, November 2005, p. 11)

Public Health Information Network: "The CDC Public Health Information Network (PHIN) is a national initiative to improve the capacity of public health to use and exchange information electronically by promoting the use of standards, defining functional and technical requirements. PHIN strives to improve public health by enhancing research and practice through best practices related to efficient, effective, and interoperable public health information systems." (**CDC**, *Detailed Definition of PHIN*, Accessed November 17, 2007)

Public Health Infrastructure: "Public health infrastructure refers to essential public health services, including the people who work in the field of public health, information and communication systems used to collect and disseminate accurate data, and public health organizations at the state and local levels." (**CDC**, *The Laboratory Response Network*, 2005)

Public Health Preparedness, Key Elements: "A prepared community is one that develops, maintains, and uses a realistic preparedness plan that is integrated with routine practices and has the following components:
Preplanned and coordinated rapid-response capability
1. *Health risk assessment.* Identify the hazards and vulnerabilities (e.g., community health assessment, populations at risk, high-hazard industries, physical structures of importance) that will form the basis of planning.

2. *Legal climate*. Identify and address issues concerning legal authority and liability barriers to effectively monitor, prevent, or respond to a public health emergency.
3. *Roles and responsibilities*. Clearly define, assign, and test responsibilities in all sectors, at all levels of government, and with all individuals, and ensure each group's integration.
4. *Incident Command System (ICS).* Develop, test, and improve decision making and response capability using an integrated ICS at all response levels.
5. *Public engagement*. Educate, engage, and mobilize the public to be full and active participants in public health emergency preparedness.
6. *Epidemiology functions*. Maintain and improve the systems to monitor, detect, and investigate potential hazards, particularly those that are environmental, radiological, toxic, or infectious.
7. *Laboratory functions*. Maintain and improve the systems to test for potential hazards, particularly those that are environmental, radiological, toxic, or infectious.
8. *Countermeasures and mitigation strategies*. Develop, test, and improve community mitigation strategies (e.g., isolation and quarantine, social distancing) and countermeasure distribution strategies when appropriate.
9. *Mass health-care*. Develop, test, and improve the capability to provide mass health-care services.
10. *Public information and communication*. Develop, practice, and improve the capability to rapidly provide accurate and credible information to the public in culturally appropriate ways.
11. *Robust supply chain.* Identify critical resources for public health emergency response and practice and improve the ability to deliver these resources throughout the supply chain.
Expert and fully staffed workforce
1. *Operations-ready workers and volunteers*. Develop and maintain a public health and health-care workforce that has the skills and capabilities to perform optimally in a public health emergency.
2. *Leadership*. Train, recruit, and develop public health leaders (e.g., to mobilize resources, engage the community, develop interagency relationships, and communicate with the public).
Accountability and quality improvement
1. *Testing operational capabilities.* Practice, review, report on, and improve public health emergency preparedness by regularly using real public health events, supplemented with drills and exercises when appropriate.
2. *Performance management.* Implement a performance management and accountability system.
3. *Financial tracking.* Develop, test, and improve charge capture, accounting, and other financial systems to track resources and ensure adequate and timely reimbursement." (**Nelson** et al, *American Journal of Public Health*, 2007, p. S10; in **Altevogt**, *Research Priorities in EP&R…*, Jan 2008, pp. 11-12)

Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act): "Public Law 107-188, 42 U.S.C. 247d and 300hh, June 12, 2002, is designed to improve the ability of the United States to prevent, prepare for, and respond to bioterrorism and other public health emergencies. Key provisions of the act address the development of a national preparedness plan designed to provide effective assistance to State and local governments in the event of bioterrorism or other public health emergencies; operation of the National Disaster Medical System to mobilize and respond to public health emergencies; grant programs for the education and training of public health professionals and improving State, local, and hospital preparedness for and response to bioterrorism and other public health

emergencies; streamlining and clarifying communicable disease quarantine provisions; enhancing controls on dangerous biological agents and toxins; and protecting the safety and security of food and drug supplies." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p. 68) [This Act can be accessed at: http://www.fda.gov/oc/bioterrorism/bioact.html]

Public Health Service Act: "The Public Health Service Act provides a general grant of authority for Federal-State cooperation and authorizes the Secretary of Health and Human Services to develop and take such action as may be necessary to implement a plan under which the personnel. Equipment, medical supplies and other resources of the Service and other agencies under the jurisdiction of the Secretary may be effectively used to control epidemics of any disease or condition and to meet other health emergencies and problems, 42 U.S.C. 243. The Secretary is further empowered to extend temporary assistance to States or localities to meet health emergencies. During an emergency proclaimed by the President, the President has broad authority to direct the services of the Public Health Service, see 42 U.S.C. 217. Under that section, the President is authorized to "utilize the [Public Health] Service to such extent and in such manner as shall in his judgment promote the public interest." Additionally, under 42 U.S.C. 264, the Surgeon General is authorized to make and enforce quarantine regulations "necessary to prevent the introduction, transmission, or spread of communicable diseases" from foreign countries into the states or possessions, or from one state or possession to another. The diseases for which a person may be subject to quarantine must be specified by the President through an Executive Order." (**DHS**, *National Response Plan* (Draft #1), February 25, 2004, p.71)

Public Health System: "The 2002 IOM [Institute of Medicine] report *The Future of the Public's Health in the 21st Century* describes the concept of a "public health system" as "a complex network of individuals and organizations that have the potential to play critical roles in creating the conditions for health" (IOM, 2002, p. 28). It also lists various factors in a public health system, and explains that they can both act individually and together to affect health… factors, which include communities, health-care delivery systems, employers and business, the media, homeland security and public safety, academia, and the governmental public health infrastructure." (**Altevogt**, Bruce M., et al. (Editors). *Research Priorities in Emergency Preparedness and Response for Public Health Systems: A Letter Report*, January 2008, p. 10)

Public Information: "The term "public information" refers to any text, voice, video, or other information provided by an authorized official and includes both general information and crisis and emergency risk communication (CERC) activities. CERC incorporates the urgency of disaster communication with risk communication to influence behavior and adherence to directives." (**DHS**, *TCL*, 2007, p. 421)

Public Information Officer (PIO): "The PIO is responsible for communicating with the public, media, and/or coordinating with other agencies, as necessary, with incident related information requirements. The PIO is responsible for developing and releasing information about the incident to the news media, incident personnel, and other appropriate agencies and organizations. Depending on the size or complexity of the incident, a lead PIO should be assigned for each incident and may have assistants, as necessary, including supporting PIOs representing other responding agencies or jurisdictions." (**FEMA**, *FEMA 517*, Nov 2007, p. 2)

Public Information Planning: "Public information efforts should begin well in advance of an incident or planned event and may involve a combination of planning, resource gathering, organizing, and training and exercises. Public information planning allows for lifesaving measures such as evacuation routes, alert systems, and other public safety information, to be coordinated and communicated to diverse audiences in a timely, consistent manner. Public education contributes to preparing citizens to respond to a variety of hazards." (**FEMA**, *FEMA 517*, Nov 2007, p. 4)

Public Information Preparedness: "Public information preparedness includes developing and maintaining plans and procedures, checklists, contact lists, and public information materials. Below are some factors a PIO should consider when developing or planning prior to an incident or planned event." (**FEMA**, *FEMA 517*, Nov 2007, 4)

Public Law 80-253: *National Security Act of 1947.*

Public Law 81-516: *Flood Control Act of 1950.*

Public Law 81-774: *Defense Production Act of 1950.*

Public Law 81-875: *Federal Disaster Act of 1950*.

Public Law 81-920: *Federal Civil Defense Act of 1950*, 12Jan1951. Repealed 1994, by PL 103-337.

Public Law 83-115: *Drought Relief.* "The 83rd Congress, 1st session…enacted Publi Law 115 in order to provide assistance by the Department of Agriculture in agricultural areas affected by drought. This action amends Publi Law 38, 81st Congress, and provides that Public Law 875 must be invoked prior to assistance being provided by the Department under sections 2 (b) and (d) of Public Law 38. Section 2 (b) of Public Law 38, as amended by Public Law 115, provides loan assistance by the Department of Agriculture in areas declared 'major disaster' by the President under authority of Public Law 875…." (**FCDA**, *1953 Annual Report*, p. 22)

Public Law 83-134: *Surplus Property*. Amended section 3 (c) of Public Law 81-875 "by rpoviding for the donation or loan of surplus Federal equipment and supplies to States for use or distibution by them under Public Law 875. Such property may be used to restore public facilities damaged or destroyed in major disaster and to rehabilitate persons in need as the result of such disaster. There is no financial outlay from Public Law 875 funds to provide such surplus. All costs must be borne by the State…" (**FCDA**, *1953 Annual Report*, p. 21)

Public Law 84-99: *Flood Control and Coastal Emergency Act, as amended*.

Public Law 84-655: *Federal Property and Administrative Services Act* "Federal surplus property became available for civil defense purposes in July 1956, when an amendment to the Federal Property and Administrative Services Act was approved." (**FCDA**, *1957 Annual Report*, 64)

Public Law 84-1016, *Federal Flood Insurance Act of 1956.* "Besides providing protection from flood loss, the law requires a study and report on insurance needs against other natural desaster perils." (**FCDA**, *1956 Annual Report*, 1957, pp. 35 & 37)

Public Law 85-606 (August 8, 1958): Amends the Federal Civil Defense Act of 1950, changing responsibilities for civil defense from primarily State and local government responsibilities to joint responsibilities of the Federal government in partnership with State and local government, and expanding the program of Federal financial assistance as well as providing for the distribution of radiological defense instruments to State and local units. (**Gessert**, *Federal Civil Defense Organization*, 1965, p. 71)

Public Law 93-288: *Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988.*

Public Law 95-124: *Earthquake Hazards Reduction Act of 1977.*

Public Law 99-149, as amended: *Superfund Amendments and Reauthorization Act of 1986.*

Public Law 99-198: *The Food Security Act of 1985.*

Public Law 101-380 (104 Stat. 484): *Oil Pollution Act of 1990.*

Public Law 103-337: *National Defense Authorization Act for Fiscal Year 1995*. (Title XXXIV – Civil Defense – Sec. 3411. "Restatement of Federal Civil Defense Authorities in the Robert T. Stafford Disaster Relief and Emergency Assistance Act." [Abolished Federal CD Act of 1950 and incorporated selected provisions into the Stafford Act.]

Public Law 103-191: *Health Insurance Portability and Accountability Act of 1996* (HIPPA).

Public Law 103-325: *National Flood Insurance Reform Act of 1994*. (**FEMA**, NFIRA)

Public Law 104-201, Title XIV: *Defense Against Weapons of Mass Destruction Act of 1996*.

Public Law 106-390: *Disaster Mitigation Act of 2000*. (**U.S. Congress**, October 30, 2000)

Public Law 107-56: *Uniting and Strengthening America By Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA Patriot Act) Act of 2001*. October 26, 2001

Public Law 107-188: *Public Health Security and Bioterrorism Preparedness and Response Act of 2002*. June 12, 2002.

Public Law 107-197: *Terrorist Bombings Convention Implementation Act of 2002*. 25Jun2002.

Public Law 107-295 (116Stat.2064)**:** *Maritime Transportation Security Act of 2002* (MTSA).

Public Law 107-296, as amended: *Homeland Security Act of 2002* (November 25, 2002).

Public Law 107-310: *The Dam Safety and Security Act of 2002.*

Public Law 107-314. *Bob Stump National Defense Authorization Act for Fiscal Year 2003*. (U.S. Congress, December 2, 2002)

Public Law 108-7: *Consolidated Appropriations Resolution, 2003*.

Public Law 108-20: *Smallpox Emergency Personnel Protection Act of 2003*. (**U.S. Congress**)

Public Law 108-264: *The Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004*.

Public Law 108-276: *Project BioShield Act of 2004.*

Public Law 108-458: *Intelligence Reform and Terrorism Prevention Act of 2004*.

Public Law 109-59: *Safe, Accountable, Flexible, Efficient Transportation Equity Act; A Legacy for Users* (SAFETEA-LU), 2005.

Public Law 109-295: *DHS Appropriations Act for 2007*, October 4, 2007.

Public Law 109-295 (Title VI): *Post-Katrina Emergency Management Reform Act of 2006.*

Public Law 109-347: *Security and Accountability Act for Every (SAFE) Port Act of 2006*.

Public Law 109-364: *John Warner National Defense Authorization Act.* 2006.

Public Law 109-417 (December 2006): *The Pandemic and All-Hazards Preparedness Act.*

Public Law 110-53 (August 3, 1007): *Implementing Recommendations of the 9/11 Commission Act of 2007*. (**Library of Congress**, Thomas)

Public Law 110-114. *Water Resources Development Act of 2007*.

Public Law 110-181: *National Defense Authorization Act of 2008*. At paragraph 1068 repealed P.L. 109-364 paragraph 1076 giving the President greater authority vis-vis State Governors in disaster respone incident management.

Public-Private Sector Partnerships: "Public-private partnerships should be expanded to pursue three opportunities:

1. Access private sector assets to support response. Hurricane Katrina demonstrated that public sector emergency response capacity can be overwhelmed by large-scale catastrophes. In the Gulf States, local, state and federal government resources were not sufficient to respond to immediate needs, but effective partnerships with the private sector were lacking. Private-sector distribution of essential goods was slowed because sufficient protocols and contingency plans had not been established prior to the disaster. To bolster response capacity, public officials and private sector

leaders have called for states and local agencies to improve public-private partnerships to supplement public sector responses. To bolster state and local response capacity, the State must explore opportunities to collaborate with the private sector and leverage private sector assets for preparedness.

2. Tap private sector expertise to support preparedness. Hurricane Katrina also demonstrated that the public sector has not adopted state-of-the-art supply chain management and other strategies which could speed response. Moreover, private sector expertise in management strategies, communications, networking and other areas could further enhance public sector capacity. To ensure that emergency managers and responders are armed with cutting-edge expertise necessary to ensure quick response, the State must tap the continuously evolving knowledge of the private sector.

3. Leverage market opportunities to support preparedness. The federal government and some states have called for market-based strategies to bolster preparedness. Strategies proposed include catastrophic insurance plans and savings accounts. While some communities have put in place market-based incentives for preparedness, the State has not aggressively pursued these or other strategies – including performance-based building codes that can create incentives for buildings that exceed minimum construction standards, tax and regulatory incentives, or independent certifications of preparedness. To fully leverage the potential of private sector collaboration, the State must promote market strategies to improve household, business and public sector preparedness." (**Little Hoover Com**., *Safeguarding the Golden State*, 2006, 40)

Public Safety Communications (PSC): "Individuals who, on a full-time, part-time, or voluntary basis, through technology, serve as a conduit and put persons reporting an incident in touch with response personnel and emergency management, in order to identify an incident occurrence and help support the resolution of life-safety, criminal, environmental, and facilities problems associated with the event." (**FEMA**, *TEI/TO Course Catalog*, 2008, 3)

Public Safety Foundation of America (PSFA): "The PSFA, a 501(c)(3) charitable organization, was established in January 2002 by the Association of Public-Safety Communications Officials International (APCO). The PSFA's objective is to provide critical funding and technical support to public safety answering points (PSAPs) and local emergency response officials." (**PSFA**, *About the PSFA*, 2007)

Public Safety Interoperable Communications Grant Program (PSIC) DHS. See, also, Department of Homeland Security, PSIC.

Public Sector: "A particular element or component of government, i.e. police, fire, emergency services, public works, local, state, or federal government entity. (**Jones**, *Critical Incident* Protocol, 2000, 37)

Public Transportation Security Grants Program (TSGP): "…provides grant funding to support mass transit agencies within the Nation's key highthreat urban areas in their efforts to enhance security measures for critical transit infrastructure including bus, rail and ferry systems. This program also provides funding to Amtrak for continued security enhancements for intercity rail operations between key, high-risk urban areas throughout the United States. A risk-based

approach is used to allocate TSGP funding to eligible mass transit and intra-city bus systems on a regional basis to address priorities identified in the National Preparedness Guidelines, the NIPP and the National Strategy for Transportation Security (NSTS), with particular focus on high-risk and high consequence transit systems." (FEMA, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*, March 11, 2008, p. 5)

Public Warning: "Timely and effective public warnings can save lives, reduce property losses and speed economic recovery. Public warning empowers citizens by providing them with the information they need during times of emergency to make informed decisions. The objective of a public warning system is to capture the attention of people at risk, to provide them with relevant and accurate information regarding the nature of the threat and to provide such information in time for protective actions to be taken. A truly effective public warning capability will reach those at risk regardless of their location, the time of day or night or any disabilities or special needs." (**Partnership for Public Warning**, *Protecting America's Communities*, 2004, p. 3)

Public Warning Issues – To Warn Or Not: "Officials are sometimes reluctant to communicate information to the public until the situation becomes clearer, out of a fear that public knowledge may make things worse. Experience and research show that when there is a credible threat, it is better to get information to people who can do something about it rather than to withhold it. Opening up an ongoing information flow as incident unfolds -- literally telling the story of the emergency as new facts disclose themselves -- allows initial directives to be modified as circumstances change. No one would expect directives for protective action to remain static when the emergency itself does not remain static. The public will listen to the emergency story unfold and will modify their actions as facts become clear and situations change. In many after action reviews of major emergencies, the economic, political and moral costs and liabilities of not providing information when it could have been released are often assessed as being very high. (**PPW**, *Protecting America's Communities,* 2004, 8)

Public Warning Issues – Too Much Information: "The Too-Much Information Myth:
If information is accurate, it is impossible to give the public too much information that applies directly to their safety. Warning, especially of uncertain events, is a dialog for the purpose of helping people deal constructively with that uncertainty. Fear of the known is better than fear of the unknown. An abundance of accurate information can cut down on speculation. The issues are to be direct, clear and relevant. In our free and information-rich society, people are used to processing information; they have demonstrated a desire for information. They often assume someone is trying to hide information if it is not available." (**PPW**, *Protecting America's Communities*, 2004, p. 8)

Public Warning Process and Goal: "The warning process consists of people with information communicating with people at risk and others, such as emergency responders, in advance of or during a hazardous event, with the intent that those at risk will take appropriate action to reduce casualties and losses. The goal of a warning is to prevent hazards from becoming disasters. -- the success of a warning is measured by what actions people take." (**Partnership for Public Warning**, *Protecting America's Communities*, 2004, p. 3)

Public Warning Process, Key Elements: "The key elements of the public warning process include:

1. **Data collection and analysis.** Development or collection of data regarding a potential hazard and the analysis of that data by experts as to the potential risk associated with the hazard.

2. **Deciding to issue a warning.** Review of the data and the expert analysis by the appropriate authorities and the reaching of a decision to issue a warning to the public.

3. **Framing the warning**. Creating a warning message for the public that includes pertinent information such as the nature of the hazard, the risk the affected area, and the protective actions that are recommended.

4. **Disseminating the warning.** Distribution of the warning through all appropriate and available channels. This could include sirens, the Emergency Alert System, the media and specialized warning services such as telephone dial-out. The warning is also disseminated to those with special needs (e.g. blind, deaf, non-English speaking).

5. Public Reception. Members of the public at risk hear the alert and understand the warning.

6. Validation. Before taking action most members of the public will seek to validate the warning by going to alternate information sources to see if the same message is being sent.

7. Take Action. Members of the public take appropriate protective action to protect themselves, their families and their property." (**PPW**, *Protecting America's Communities*, 2004, p. 5)

Public Warning System: "An all-hazard warning system suitable for all types of events is preferable to stand-alone, event-based systems. An effective public warning system is one that does far more than just alert citizens to an impending hazard. An effective public warning system is one that provides the ability for government authorities to communicate with citizens prior to, through and after the emergency event. In addition to alerting citizens, an effective public warning system provides information on how to prevent and protect against disasters, and information to assist in recovery efforts." (**Partnership for Public Warning**, *Protecting America's Communities*, 2004, p. 3)

Public Warning System Design: "Warning sources often seem to assume that there will be immediate reception of the warning, unlimited attention to the warning message, perfect comprehension of message content based upon accurate prior knowledge about the threat, and perfect compliance with the recommended actions. None of these conditions will occur, even though reception, attention, comprehension, and personalization increase when there is an imminent threat. Consequently, warning systems and warning strategies must be carefully designed to make it more likely that warnings will be as effective as possible.

The first step in warning system design is to define the desired message effects, especially the behavioral objectives of the system—what actions do authorities want the end-users to take? The second step is to identify any distinctively different segments of the target population—how do people differ in terms of their abilities to receive a warning, attend to it, comprehend its content, personalize the threat, choose an appropriate protective action, and implement that protective action? The third step is to identify the channels through which warning messages will be transmitted—what technologies and what intermediate sources are needed? Finally, warning system designers must define who the initial message sources will be and develop their perceived credibility by taking steps to ensure their expertise and trustworthiness." (**Partnership for Public Warning**, *Protecting America's Communities*, 2004, p. 7)

Public Warning System Development Strategy: "Developing a successful warning strategy requires three things:

• **Planning.** Long before an emergency occurs the appropriate officials should develop plans for when and how to issue public warnings. Key elements in any plan include the criteria for issuing a warning, the officials with the authority to issue a warning, standard terminology and the methods of distribution.

• **Public Education.** Just as important as the plan is educating the public. Information needs to be provided to the public that explains how they will be warned, what do warnings mean (e.g. if a siren goes off is it calling the volunteer firemen to the station or signaling that citizens should stay in their houses?), and where to get additional information, especially if the power is off.

• **Testing and Evaluation.** An effective warning system will be tested on a regular basis; both to make sure the system works and that citizens understand the purpose and the message. Evaluation of the system by emergency managers, government officials, the media, private sector and the public can be invaluable in identifying ways to improve the communication of warning messages." (**PPW**, *Protecting America's Communities*, 2004, pp. 5-6)

Public Works: "Organizations and individuals who make up the public/private infrastructure for the construction and management of these roles at the Federal level. The categories/roles include administration, technical, supervision, and craft (basic and advanced)." (**FEMA**, *TEI/TO Course Catalog*, 2008, 3)

Purchase Order: "Any unconditional agreement, contract or other commitment by a state or local government under state and local law for the acquisition of goods and services." (**FEMA**, *100% Funding for Direct Federal Assistance and Grant Assistance*, June 9, 2006)

Push-Pull Distribution Strategy: "DHS/FEMA uses a Push-Pull Strategy for distributing materiel. DHS/FEMA will develop a phasing plan for delivering material during the initial surge response to each incident scenario. Scenario-tailored resource/materiel packages will be pushed in phases so the regional logistics teams can focus on establishing the FOSA [Federal Operations Staging Area] and organizing their teams. The materiel and phased delivery plan will be coordinated for each scenario. Once the FOSA is established and the JFO [Joint Field Office] functional, the LCs [Logistics Center] will revert to a pull strategy for sustainment that waits for

the regional or JFO request before shipping resources." (**DHS**, *NRF Logistics Management Support Annex*, September 2007 Draft, p. 11)

PVK: Packaged Ventilation Kit. (**OCD**, *Abbreviations*, 1971, p. 4) [Program defunct.]

PVT RPM: Polyvinyl Toluene "(PVT)-based radiation portal monitors (RPM) that are currently deployed at the Nation's POEs, and select foreign POEs through the DOE Megaports Initiative." (**DHS**, *Opening Statement of Vayl Oxford*, March 2007, p. 3)

PW: Public Works.

Pyroclastic Flow: "High density flow of solid volcanic fragments suspended in gas which flows downslope from a volcanic vent (at speeds up to 200 km/h) which may also develop from partial collapse of a vertical eruption cone, subdivided according to fragment composition and nature of flowage into: ash flow, glowing avalanche…, pumice flow." (**UNDHA**, *DM Glossary*, 1992, 60)

Q3 Flood Data: "Q3 Flood Data are developed by digitizing existing hardcopy Flood Insurance Rate Maps (FIRMs) to create a thematic overlay of flood risks. This product is generally produced in a countywide format. Q3 Flood Data files contain only certain features from the existing hardcopy maps. Q3 Flood Data do not replace the existing hardcopy maps. They are designed to support planning activities, some Community Rating System (CRS) activities, insurance marketing, mortgage portfolio review, FEMA's Response and Recovery activities, and to assist in floodplain management activities at a local level. Base Flood Elevations are not included so its use is limited. Q3 Flood Data do not include a base map, are not used to produce a new version of the hardcopy FIRM, and are not reviewed by communities. They are for use with desk-top mapping and Geographic Information Systems technology." (**FEMA**, *FAQs: Digital Flood Data and Mapping*, 2007)

QNSR: Quadrennial National Security Review. (**Wormuth**, *Ready or Not?* 2008, ix)

QSII: Quad State Interoperability Initiative. (**DHS**, *Expanded Regional Collaboration,* 2006, 19)

Quad State Interoperability Initiative (QSII): "The QSII is a collaborative effort between the states of West Virginia, Virginia, Maryland, and Pennsylvania to establish a governance structure that will provide organization, planning, and implementation of policies, procedures, and projects to assure voice and data interoperable communications between states. This initiative will establish a governance structure, plan and coordinate a standardized quad state baseline, and implement a limited number of specific tangible projects. The purpose…is to overcome state boundaries and increase connectivity on the regional level to protect residents within the state, along its borders, and throughout the region including the National Capital Region." (**DHS/OGT**, *Expanded Regional Collaboration…FY 2004-2006*, 2006, p. 19)

Quadrennial Homeland Security Review (QHSR): From the 9/11 Act of 2007 (Public Law 110-53, August 3, 2007, Sec. 707 (6USC 347) Quadrennial Homeland Security Review): "In fiscal year 2009, and every 4 years thereafter, the Secretary shall conduct a review of the homeland security of the Nation (in this section referred to as a 'quadrennial homeland security

review'). ''(2) SCOPE OF REVIEWS.—Each quadrennial homeland security review shall be a comprehensive examination of the homeland security strategy of the Nation, including recommendations regarding the long-term strategy and priorities of the Nation for homeland security and guidance on the programs, assets, capabilities, budget, policies, and authorities of the Department [DHS]." (**9/11 Act** of 2007, p. 544)

"In each quadrennial homeland security review, the Secretary shall—
(1) delineate and update, as appropriate, the national homeland security strategy, consistent with appropriate national and Department strategies, strategic plans, and Homeland Security Presidential Directives, including the National Strategy for Homeland Security, the National Response Plan, and the Department Security Strategic Plan;
(2) outline and prioritize the full range of the critical homeland security mission areas of the Nation;
(3) describe the interagency cooperation, preparedness of Federal response assets, infrastructure, budget plan, and other elements of the homeland security program and policies of the Nation associated with the national homeland security strategy, required to execute successfully the full range of missions called for in the national homeland security strategy described in paragraph (1) and the homeland security mission areas outlined under paragraph (2);
(4) identify the budget plan required to provide sufficient resources to successfully execute the full range of missions called for in the national homeland security strategy described in paragraph (1) and the homeland security mission areas outlined under paragraph (2);
(5) include an assessment of the organizational alignment of the Department with the national homeland security strategy referred to in paragraph (1) and the homeland security mission areas outlined under paragraph (2); and
(6) review and assess the effectiveness of the mechanisms of the Department for executing the process of turning the requirements developed in the quadrennial homeland security review into an acquisition strategy and expenditure plan within the Department." (**9/11 Act** of 2007, pp. 544-545)

Qualitative Analysis: "Analysis that uses words rather than numbers to describe and measure the magnitude of potential consequences and the likelihood that those consequences will occur. These scales can be adapted or adjusted to suit the circumstances, and different descriptions may be used for different risks. Qualitative indicators are preferred as a way to engage as many parties as possible. In addition they may be used: As an initial screening activity to identify risks which require more detailed analysis Where this kind of analysis is appropriate for decisions, or Where the numerical data or resources are inadequate for a quantitative analysis. Qualitative analysis should be informed by factual information and data where available." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Qualitative Assessment: "The process for evaluating a business function based on observations and does not involve measures or numbers. Instead, it uses descriptive categories such as customer service, regulatory requirements, etc to allow for refinement of the quantitative assessment. This is normally done during the BIA phase of planning." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 61)

Quantitative Analysis: "Analysis that uses numerical values (rather than the descriptive scales used in qualitative and semi-quantitative analysis) for both consequences and likelihood. The quality of the analysis depends on the accuracy and completeness of the numerical values and the validity of the models used. Quantification does have limitations and clearly it is not possible to measure all human experience. One of the major criticisms regarding the creation of indicators is that they attempt to encapsulate complex and diverse processes into numerical form." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Quantitative Assessment: "The process for placing value on a business function for risk purposes. It is a systematic method that evaluates possible financial impact for losing the ability to perform a business function. It uses numeric values to allow for prioritizations. This is normally done during the BIA phase of planning." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 61)

Quantitative Risk Analysis: "**QUANTITATIVE RISK ANALYSIS** incorporates numerical estimates of frequency or probability and consequence. In practice a sophisticated analysis of risk requires extensive data which are expensive to acquire or often unavailable. Fortunately few decisions require sophisticated quantification of both frequency and consequences. (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

Quarantine: "Definition: prohibition or restriction on travel or passage, imposed to keep contagious diseases, or harmful chemicals/biologicals from spreading. "Annotation: Quarantine is not the same as isolation. Isolation refers to the separation of persons who have a specific infectious illness from those who are healthy and the restriction of their movement to stop the spread of that illness. Isolation allows for the focused delivery of specialized health care to people who are ill, and it protects healthy people from getting sick. In sum, isolation is for treatment of a known illness and quarantine is for observation of possible exposure to an agent." (**DHS**, *Lexicon; Terms and Definitions*, October 19, 2007, p. 21)

Quarantine: "`I'm concerned about what an avian flu outbreak could mean for the United States and the world,' he [the President] told reporters during a Rose Garden news conference…Such an event would raise difficult questions, such as how a quarantine might be enforced, he said. 'One option is the use of a military that's able to plan and move,' he said. 'So that's why I put it on the table. I think it's an important debate for Congress to have'." (**CNN.com**, *Military*, 5Oct 05)

Quarantine: A restraint upon the activities or communication (e.g., physical separation or restriction of movement within the community/work setting) of an individual(s) who has been exposed to an infection but is not yet ill to prevent the spread of disease; quarantine may be applied voluntarily (preferred) or on compulsory basis dependent on legal authority. (**HHS**, *Community Strategy for Pandemic Influenza Mitigation*, 2007, Glossary)

Quite Sentenial 07 Exercise: FEMA Continuity of Operations exercise used to review essential functions and Continuity of Operations Relocation Site Plans to determine secondary Continuity of Operations site locations should the need arise for the dispersion or social distancing of Emergency Relocation Members. Was run in conjunction with Pinnacle 07 utilizing a scenario which was a continuation of Pinnacle 05. (**FEMA**, OMA FY09, 2008, 16)

R2K: Readiness 2000. (**USACE**, *Readiness 2000 Tested By Storms*, 1998, p. 1)

R4C: Regional Four Corners Homeland Security Initiative. (**DHS**, *Expanded Regional Collaboration…FYs 2004-2006*, 2006, p. 15)

R/hr: Roentgens per hour. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

RA: Regional Administrator, FEMA.

RAC: Regional Advisory Council (**FEMA**, "FEMA Names New England RAC," 3 Oct 2007)

RAC: Regional Assistance Committee. (**FEMA**, *Statement of Glen Cannon*, No, 15, 2007)

RACES: "The emergency communication system is backstopped with a highly organized network of 'radio hams' called Radio Amateur Civil Emergency Service (RACES). The Federal Communications Commission has approved the RACES plans of four States, organized from the State to county or community level." (FCDA, 1953 Annual Report, p. 29)

RACES: Radio Amateur Civil Emergency Service. "The Radio Amateur Civil Emergency Service (RACES) was established under the Federal Communications Commission Rules and Regulations, as part of the amateur radio service. The mission of RACES is to establish and maintain the leadership and organizational infrastructure necessary to provide amateur radio communications in support of emergency management entities throughout the United States and its territories. RACES is employed during a variety of emergency/disaster situations where normal governmental communications systems have sustained damage or when additional communications are required or desired. Situations that RACES can be used include: natural disasters, technological disasters, civil disorder, nuclear/chemical incidents, acts of terrorism or enemy attack. Through its courses and programs, USRACES.org serves as the national focal point for the development and delivery of emergency communications training and publications to enhance the Emergency Support Function 2 - Communications capabilities of federal, state, and local governments, volunteer organizations, and the public and private sectors to minimize the impact of disasters on the American public." (**USRACES**, *About RACES*, 2007)

Rad: "A unit of absorbed dose of radiation; it represents the absorption of 100 ergs of nuclear (or ionizing) radiation per gram of absorbing material, such as body tissue." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, Glossary, p. 638)

RADCON: Radiological Control. (**JCS/DOD**, *CBRNE CM*, 2006, p. III-6)

RADEF: Radiological Defense. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

Radiation: Emission or transfer of energy in the form of electromagnetic waves or particles. (**WMO** 1992, 492)

Radiation Sickness: "An illness resulting from excessive exposure to ionizing radiation. The earliest symptoms are nausea, vomiting, and diarrhea, which may be followed by loss of hair, hemorrhage, inflammation of the mouth and throat, and general loss of energy." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Radioactive Fallout: "Any nuclear blast results in some fallout. Blasts that occur near the earth's surface create much greater amounts of fallout than blasts that occur at higher altitudes. This is because the tremendous heat produced from a nuclear blast causes an up-draft of air that forms the familiar mushroom cloud. When a blast occurs near the earth's surface, millions of vaporized dirt particles also are drawn into the cloud. As the heat diminishes, radioactive materials that have vaporized condense on the particles and fall back to Earth. The phenomenon is called radioactive fallout. This fallout material decays over a long period of time, and is the main source of residual nuclear radiation.

"Fallout from a nuclear explosion may be carried by wind currents for hundreds of miles if the right conditions exist. Effects from even a small portable device exploded at ground level can be potentially deadly.

"Nuclear radiation cannot be seen, smelled, or otherwise detected by normal senses. Radiation can only be detected by radiation monitoring devices. This makes radiological emergencies different from other types of emergencies, such as floods or hurricanes. Monitoring can project the fallout arrival times, which will be announced through official warning channels. However, any increase in surface build-up of gritty dust and dirt should be a warning for taking protective measures." (**FEMA**, *Are You Ready? Nuclear Blast*, 2006)

Radioactive Fallout Threat: "On September 28, 1954, the FCDA made public certain of the facts about radioactive fallout and provided beginning information on civil defense measures to cope with this threat." (**FCDA**, *1954 Annual Report*, pp. 1-2)

Radioactive Material: "material which spontaneously emits ionizing radiation as a consequence of radioactive decay." (**Commonwealth of Australia**, *Recommendations for Limiting Exposure to Ionizing Radiation*, 1995, Glossary, p. r-36)

Radiological Accident: "A loss of control over radiation or radioactive material that presents a hazard to life, health, or property or that may result in any member of the general population exceeding exposure limits for ionizing radiation." (**DoD**, *DoD Response to Radiological Accidents*, 1996, p. 10)

Radiological and Nuclear Countermeasure System Architectures Analysis (RNCSAA): "The Radiological and Nuclear Countermeasure System Architectures Analysis (RNCSAA) program was initiated in February 2004 to address the threat of terrorist use of a radiological dispersal device, improvised nuclear device, or nuclear weapon in the U.S. through a comprehensive systems approach that emphasizes early detection and effective intervention capabilities at the federal, State and local levels." (**DHS**, *NCRC First Annual Report*, 2005, 81)

Radiological Assistance Program (RAP): "The U.S. Department of Energy (DOE) created the Radiological Assistance Program (RAP) in the 1950s to make DOE resources and expertise available to organizations responding to incidents involving radioactive materials. Management responsibilities and direction for the RAP are primarily contained in DOE Order 5530.3. RAP provides resources (trained personnel and equipment) to evaluate, assess, advise, and assist in the mitigation of actual or perceived radiation hazards and risks to workers, the public, and the environment. RAP is divided into eight geographical regions, each managed by a Regional Coordinating Office. Each region has one or more RAP response teams… Regional coordination is intended to provide a timely response capability and to foster a working relationship between DOE and the emergency response elements of other federal agencies, states, and tribes." (**DOE**, *RAP Program Information*, Accessed November 16, 2007).

Radiological Defense Program: "A Radiological Defense (RADEF) Program is essential to minimize effects of radiation hazards in the event of a nuclear attack and to facilitate recovery efforts. RADEF provides:
(1) Shelter monitoring to assess and evaluate protection of occupants against radiation.
(2) Radiological monitoring for self-protection of personnel engaged in emergency services functions, operation of primary facilities, and in recovery operations.
(3) Recovery techniques including decontamination and related countermeasures." (**USACE**, *Planning and Operations Guidelines, Annex B: Emergency Relocation Sites*, 1985, p. B-6)

Radiological Dispersion/Dispersal Devise (RDD): "A Radiological Dispersion Devise, or "dirty bomb", is a mix of explosives with radioactive powder or pellets. When it explodes the blast scatters radioactive material.

- A dirty bomb is not the same as an atomic bomb, which produces an atomic mushroom cloud.
- A dirty bomb cannot create an atomic blast. It uses dynamite or other explosives to scatter radioactive materials which cause radioactive contamination….

The terrorists' purpose is to spread fear. The main danger from a dirty bomb is the explosion, which can cause serious injuries and damage. The radioactive materials in a dirty bomb would probably not lead to enough radiation exposure to cause serious illness immediately, except to those people who are very close to the blast site. However, the radioactive dust and smoke that spreads could be dangerous to health if they are inhaled." (**FEMA**, "Fact Sheet – Dirty Bombs" (FEMA 573), NIMS Integration Center, June 2007, p. 1)

Radiological Dispersion/Dispersal Devise (RDD): "The RDD is a device or mechanism that spreads radioactive material over an area with intent to cause harm, from the detonation of conventional explosives or other means. It is very difficult to construct an RDD that would deliver radiation doses high enough to cause immediate health effects or fatalities in a large number of people. However, if these materials are stolen or otherwise acquired, whether in the US or abroad, they could be used in an RDD to contaminate facilities, urban areas, or places where people live, disrupting lives and livelihood causing fear and anxiety, and leading to significant social and economic damage. The cost to clean up and recover following a moderately large RDD has been estimated to be billions of dollars. An RDD could effectively

cause an area to be inaccessible for a long period of time." (**FEMA**, *Statement for the Record, Glenn M. Cannon*, 2007, p. 2)

Radiological Dispersion/Dispersal Devise (RDD): "Radiological dispersal devices (RDDs) are devices, other than a nuclear explosives device, designed to disseminate radioactive material in order to cause destruction, damage, area denial, or injury.

"(a) RDDs are designed to disperse radiation and/or contamination. One design, called "dirty bombs," uses explosives to disperse radioactive contamination. A dirty bomb typically generates its immediate casualties from the direct effects of the conventional explosion (i.e., blast injuries and trauma). The main purpose of a dirty bomb is to frighten people by contaminating their environment with radioactive materials and threatening large numbers of people with exposure. Their use may also result in area denial and costly cleanup or decontamination.

"(b) By scattering the radiological material, the RDD may create a large area of radiological contamination. The actual dose-rate will be dependent upon the type and quantity of radioactive material spread over the area. This may not be uniformly distributed. As an area denial weapon, an RDD can generate significant public fear and economic impact since the area affected may involve loss of use during a lengthy and costly decontamination process. The contaminated area poses a danger to individuals by external or internal radiological contamination. External contamination on individuals can usually be removed by surface cleaning, and by removing contaminated clothing. Internal contamination is much more dangerous and occurs when contaminants are ingested and/or inhaled and concentrate in tissue. This may result in prolonged, high intensity local radiation exposure." (**JCS/DOD**, *CBRNE CM,* 2006, pp. I-7 and I-8)

Radiological Emergency: A radiological incident that poses an actual, potential, or perceived hazard to public health or safety or loss of property. (**FRERP**, *Appendix B*)

Radiological Emergency Preparedness (REP).

Radiological Emergency Preparedness Program (REPP): "The Federal Emergency Management Agency (FEMA) established the REP Program to ensure the public health and safety of citizens living around commercial nuclear power plants by protecting them in the event of a nuclear power station accident and informing and educating the public about radiological emergency preparedness. It helped contribute to the *HSEEP* methodology." (**FEMA**, *Homeland Security Exercise and Evaluation Program,* 2008)

Radiological Emergency Preparedness Program (REPP): "We will assist State, local, and tribal governments in the development of offsite radiological emergency preparedness plans within the emergency planning zones of Nuclear Regulatory Commission (NRC) licensees of commercial nuclear power facilities. REPP will continue to support the development of offsite radiological emergency preparedness plans for the emergency planning zones of NRC licensees of commercial nuclear power facilities." (**FEMA**, *Vision for New FEMA*, 12Dec2006, pp. 24-25)

Radiological Emergency Response Teams (RERT's): "Teams provided by EPA's Office of

Radiation and Indoor Air to support and respond to incidents or sites containing radiological hazards. These teams provide expertise in radiation monitoring, radionuclide analyses, radiation health physics, and risk assessment." (**USCG**, *IM Handbook*, 2006, Glossary 25-20)

Radiological Survey: "The directed effort to determine the distribution and dose rates of radiation in the area." (**DA**, *WMD-CST Operations*, December 2007, Glossary-16)

Radiological Terrorist Event: "For the purposes of this position statement a radiological terrorist event is defined as the intentional release of radioactive material to the environment or use of a source of radiation for the purpose of harming the health or safety of the public. It includes any type of device or method used to disperse radioactive material, including conventional explosive materials (i.e., a dirty bomb) and improvised nuclear weapons." (**Health Physics Society**, *Guidance for Protective Actions Following a Radiological Terrorist Event*, 2004, p. 3)

RADM: Real Admiral. (**FEMA**, *Region III Annual Report FY 2007*, 2008, 30)

RadNet: "RadNet is a national network of monitoring stations that regularly collect air, precipitation, drinking water, and milk samples for analysis of radioactivity. The RadNet network, which has stations in each State, has been used to track environmental releases of radioactivity from nuclear weapons tests and nuclear accidents. Future uses of this network might include monitoring waste disposal and radioactive cleanup sites. RadNet also documents the status and trends of environmental radioactivity; these data are published by NAREL in a quarterly report entitled *Environmental Radiation Data*." (**EPA**, *RadNet – Tracking Environmental Radiaton Nationwide*, February 13, 2009 Update)

RAMCAP: Risk Analysis and Management for Critical Asset Protection. (**DHS,** *NIPP* 2006, 102)

RAMONT: Radiological Monitoring. (**OCD**, *Abbreviations*, 1971, p. 4) [Program defunct]

RAMP: Remedial Action Management Plan/Program. (**DHS**, *NRF Logistics Management Support Annex*, 2007 Draft, p. 4)

RAP: Radiological Assistance Program, DOE.

RAP: Resource Allocation Plan. DHS 2008

RAPID: Risk Assessment Process for Informed Decision-making. (**DHS**, *IPG FY 2011*, 9)

RapidCom: "In May 2004, former DHS Secretary Ridge announced the launch of RapidCom, an initiative to help improve capabilities for immediate, incident-level, interoperable emergency communications in ten high-threat urban areas. The SAFECOM program led the effort, working in cooperation with federal partners such as the DHS Office for Domestic Preparedness (ODP), Department of Justice (DOJ) 25 Cities program, and the National Institute of Justice CommTech program to provide assistance to the following urban areas:

- Boston, Massachusetts

- Chicago, Illinois
- Houston, Texas
- Jersey City, New Jersey
- Los Angeles, California
- Miami, Florida
- National Capital Region
- New York, New York
- Philadelphia, Pennsylvania
- San Francisco, California

Program Description – RapidCom has provided assistance to incident commanders to improve their abilities to adequately communicate with each other and their respective command center within one hour of a major incident. RapidCom NCR's main function was to provide emergency-level communications interoperability assistance." (**DHS**, *National Capital Region Coordination First Annual Report*, 2005, p. 82)

Rapid Deepening: "A decrease in the minimum sea-level pressure of a tropical cyclone of 1.75 mb/hr or 42 mb for 24 hours." (**NHC**, *Glossary of NHC Terms*, 2007)

Rapid Needs Assessment (RNA) Teams: "These teams deploy to assess damages in the affected area as soon as possible. The team is a composite of State and Federal interagency personnel that are organized and controlled by the State Coordinating Officer and the Federal Coordinating Officer—or Emergency Response Team-Advance team leader if an Federal Coordinating Officer has not been appointed." (**FEMA**, *Federal Interim Contingency Plan – Predecisional Draft: NMSZ*, December 15, 2007, p. 21)

RCBAP: Residential Condominium Building Association Policy. (**FEMA**, *Call for*…, 2000, xxiii)

RCP: Regional Catastrophic Preparedness Grant Program. (**DHS**, *Fact Sheet FY08 PrepGrants*)

RCPGP: Regional Catastrophic Preparedness Grant Program. (**FEMA**, *RCPGP*, 1 Feb 2008)

RCS: Regional Communications System. (EG&G, *San Diego County Firestorms AAR*, Feb08, 42)

RDD: Radiological Dispersion Device. (**DHS**, *TCL*, 2007 Draft, p. 274)

RDDs: Radiological Detection Devices. (**DHS**, *NCRC, First Annual Report*, 2005, p. F-40 (80))

RDECOM: United States Army Research, Development and Engineering Command

RDO: Radiological Defense Officer. (**DCPA**, *On-Site Assistance Appendices*, 1974) [defunct]

RDPC: Rural Domestic Preparedness Consortium. (**EKU**, *RDPC Launched*, 28 May 2007)

RDSTF: Regional Domestic Security Task Force, Florida.

RDTE: Research, Develop, Test, and Evaluate. (**FEMA**, *Compendium of Federal Terrorism Training Courses*, 2003, p. 12)

Readiness: "…an overall judgment concerning the probability that the organization could successfully perform some specified task if asked to do so" (**Campbell**, John S. "On the Nature of Organizational Effectiveness," in *New Perspectives on Organizational Effectiveness,* ed. Paul S. Goodman and Johannes M. Pennings and Associates (San Francisco: Jossey Bass, 1977), 39, as quoted in Banerjee and Gillespie, "Linking Disaster Preparedness," 131; quoted in Light, *Predicting Organizational Crisis Readiness*, 2008, p. 13)

Readiness: "Readiness is the ability of an organization to respond to an incident." (**DHS**, *FCD 1*, November 2007, p. 4)

Readiness: "Definition: condition of being prepared and capable to act or respond as required." (**DHS**, *Lexicon: Terms and Definitions*, October 19, 2007, p. 22)

Readiness: "The definition of *readiness,* as found in the *Oxford English Dictionary,* focuses on more than the obvious "quality, state or condition of being ready." It also suggests "promptness in voluntary action," "quickness or facility with which something is done," and "a state or preparation" or "the condition or fact of being ready or fully prepared." (**Oxford English Dictionary,** 2nd ed., s.v. "readiness."**;** cited in Light, *Predicting Organizational Crisis Readiness*, 2008, 13)

Readiness and Emergency Management for Schools Technical Assistance Center (REMS TA Center), DOE: "The U.S. Department of Education's Office of Safe and Drug-Free Schools (OSDFS) began administering the REMS (formerly, Emergency Response and Crisis Management) discretionary grant program in October 2003 to help school districts develop comprehensive plans for any emergency or crisis, including natural disasters, pandemic influenza, violent incidents, and terrorist acts. A primary service coordinated by the Center is the provision of responses to emergency planning questions and technical assistance needs. Requests for assistance could range from example REMS plans; to strategies and materials to help with staff trainings; to tips for creating buy-in with stakeholders; to help evaluating REMS plans. Center staff collaborate with a network of local and national crisis planning experts to provide answers to REMS-related questions and to meet any specific technical assistance needs." (DOE, *REMS TA*, Folsom, CA (http://rems.ed.gov/), Accessed April 25, 2008)

Readiness Reporting System (RRS): "Department of Homeland Security program to collect and manage continuity capability data and assessments of executive branch departments and agencies and their status to perform their Priority Mission Essential Functions (PMEFs) in support of the National Essential Functions (NEFs). The RRS will be used to conduct assessments and track capabilities at all times under all conditions, to include natural disasters, manmade incidents, terrorism, and war." (**Homeland Security Council**, *NCPIP*, 2007, p. 67)

Readiness To Act – 5th of Five Key National Response Framework Principles: "Effective response requires readiness to act balanced with an understanding of risk. From individuals, households, and communities to local, tribal, State, and Federal governments, national response

depends on the instinct and ability to act. A forward-leaning posture is imperative for incidents that have the potential to expand rapidly in size, scope, or complexity, and for no-notice incidents…. Well-developed public information, education strategies, and communication plans help to ensure that lifesaving measures, evacuation routes, threat and alert systems, and other public safety information are coordinated and communicated to numerous diverse audiences in a consistent, accessible, and timely manner." (**DHS**, *NRF*, Jan 2008, 11-12)

Rebuilding and Revitalization: "Rebuilding and revitalization efforts are distinguished from shorter-term recovery efforts not only by the length of time involved, but also by the scope and nature of the incident, the complexity of efforts required to regenerate infrastructure, and the effect on the social fabric of the community and region….

The majority of reconstruction efforts will occur beyond the Federal Government's purview. However, the Federal Government, in collaboration with all stakeholders, will draw upon and apply the field's most innovative thinking, lessons learned, and best practices to create a comprehensive framework for our Nation that fully appreciates free markets and the vast power of incentives and empowers individuals, businesses, and non-profit groups in the decisions about the future of their communities. In order to develop this new framework, our Nation must continue to assess the challenges in this area and provide recommendations to improve our ability to rebuild and revitalize areas following a catastrophic natural or man-made disaster. We must determine how Federal, State, local, and Tribal governments, the private and non-profit sectors, and communities can improve collaboration and develop recommendations that further economic renewal and help stabilize and reconstruct communities. In addressing these challenges, Federal, State, local, and Tribal governments, the private and nonprofit sectors, and communities must be focused on citizens – and not on bureaucracy or processes – and be guided by the concepts of compassion, speed, efficiency, common sense, and the devolution of as many decisions as reasonably possible to individual citizens, businesses, and communities." (**White House**, *National Strategy for Homeland Security*. Washington, DC: Homeland Security Council, October 2007, p. 37-38)

RECA: Residual Capability Assessment. (**DoD**, *MSCA* (Directive 3025.1), 1993, p. 22)

Reception Area (NIMS): "This refers to a location separate from staging areas, where resources report in for processing and out-processing. Reception Areas provide accountability, security, situational awareness briefings, safety awareness, distribution of IAPs, supplies and equipment, feeding, and bed down." (**DHS**, *NIMS*, 2004, p. 136)

Reconstitute Government Services: "Definition: Reinstate government services and operations interrupted by, or in response to, an incident." (**DHS**, *UTL 2.1*, 2005, p. 110)

Reconstitution: "The process by which surviving and or replacement agency personnel resume normal agency operations from the original or replacement primary operating facility." (**DHS**, *FCD 1*, Nov. 2007, P-9)

Reconstitution Operations: "Agencies must identify and outline a plan to return to normal operations once agency heads or their successors determine that reconstitution operations for resuming normal business operations can be initiated. Agencies must

1. Provide an executable plan for transitioning back to efficient normal operational status from continuity of operations status, once a threat or disruption has passed
2. Coordinate and preplan options for agency reconstitution regardless of the level of disruption that originally prompted the agency to implement its continuity of operations plan. These options must include moving operations from the continuity or devolution location to either the original operating facility or, if necessary, to a new operating facility
3. Outline the necessary procedures, whether under a standard continuity of operations scenario or under a devolution scenario, for conducting a smooth transition from the relocation site to a new facility." (**DHS**, *FCD 1*, Nov. 2007, p. M-1)

Reconstruction: "Actions taken to re-establish a community after a period of rehabilitation subsequent to a disaster. Actions would include construction of permanent housing, full restoration of all services, and complete resumption of the pre-disaster state." (**UNDHA**, *DM Glossary*, 1992, 61; cites OFDA)

Reconstruction: "Actions taken under the surviving command authority to reestablish a damaged or destroyed headquarters staffed by survivors of the attack." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-4)

Recover: "Activities that include the development, coordination, and execution of service- and site-restoration plans; the reconstitution of government operations and services; individual, private- sector, nongovernmental, and public-assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental, and economic restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents (Source—NIMS, March 2004)." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, 2006, p. 4)

Recover: "Definition of Recover: Develop, coordinate, and execute service- and site-restoration plans and reconstitute government operations and services through individual, private-sector, nongovernmental, and public assistance programs." (**DHS**, *Universal Task List 2.1*, 2005, p. 99)

Recovery: (See, also, "Response and Recovery" (FEMA 1996).)

Recovery: "The recovery mission is the sustained commitment to return an impacted population and geographic area to a sustainable standard of living following an incident. This supports the goal of creating resilient populations and communities. Whereas response is focused primarily on minimizing immediate impacts, minimizing immediate consequences, and setting the conditions for long-term success, recovery is focused on restoring societies. Without a commitment to that restoration, resiliency is not possible." (**DHS**, *Capstone Doctrine Pub 1 Draft*, Chapter 2, 2008, p. 2-6)

Recovery: "The implementation of prioritized actions required to return an organization's processes and support functions to operational stability following an interruption or disaster." (**DHS**, *FCD 1*, Nov. 2007, P-9)

Recovery: "Recovery involves actions, and the implementation of programs, needed to help individuals and communities return to normal. Recovery programs are designed to assist victims and their families, restore institutions to sustain economic growth and confidence, rebuild destroyed property, and reconstitute government operations and services. Recovery actions often extend long after the incident itself. Recovery programs include mitigation components designed to avoid damage from future incidents. Typical recovery actions may include:

1. Repair and replacement of disaster damaged public facilities (roads, bridges, municipal buildings, schools, hospitals, qualified non-profits);
2. Debris cleanup and removal;
3. Temporary housing and other assistance for disasters victims and their families;
4. Low-interest loans to help individuals and businesses with long-term rebuilding and mitigation measures;
5. Restoration of public services (electric power, water, sewer, telephone);
6. Crisis counseling and mental health;
7. Disaster unemployment; and
8. Planning and programs for long-term economic stabilization, community recovery and mitigation." (**DHS**, *National Response Plan* (Draft #1), Feb. 25, 2004, p. 16)

Recovery: "The development, coordination, and execution of service- and site-restoration plans for impacted communities and the reconstitution of government operations and services through individual, private sector, nongovernmental, and public assistance programs that identify needs and define resources; provide housing and promote restoration; address long-term care and treatment of affected persons; implement additional measures and techniques, as feasible; evaluate the incident to identify lessons learned; and develop initiatives to mitigate the effects of future incidents." (**DHS,** *NIPP*, 2006, p. 104)

Recovery: "Implementing the prioritized actions required to return the processes and support functions to operational stability following an interruption or disaster." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 61)

Recovery: The coordinated process of supporting emergency-affected communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical well-being. (**EMI Australia** 1996)

Recovery: Those long-term activities and programs beyond the initial crisis period of an emergency or disaster and designed to return all systems to normal status or to reconstitute these systems to a new condition that is less vulnerable. (**FEMA**, **1992**)

Recovery: "Recovery is the effort to restore infrastructure and the social and economic life of a community to normal, but it should incorporate mitigation as a goal. For the short term, recovery may mean bringing necessary lifeline systems (e.g., power, communication, water and sewage, and transportation) up to an acceptable standard while providing for basic human needs (e.g., food, clothing, and shelter) and ensuring that the societal needs of individuals and the

community are met (e.g., maintain the rule of law, provide crisis counseling, demonstrate that people do care and that help is becoming available). Once some stability is achieved, the jurisdiction can begin recovery efforts for the long term, restoring economic activity and rebuilding community facilities and family housing with attention to long-term mitigation needs." (**FEMA,** *Guide For All-Hazard Emergency Operations Planning* (SLG 101), **1996**, p. 9)

Recovery: Activities traditionally associated with providing Federal supplemental disaster recovery assistance under a Presidential major disaster declaration. These activities usually begin within days after the event and continue after the response activities' cease. Recovery includes individual and public assistance programs, which provide temporary housing assistance, grants and loans to eligible individuals and government entities to recover from the effects of a disaster. (**FEMA** *FRP***, 1999**, Appendix B)

Recovery: "Rebuilding communities so individuals, businesses, and government infrastructure can function on their own, return to normalcy, and are protected against future hazards." (**FEMA**. *A Nation Prepared – FEMA Strategic Plan – Fiscal Years 2003-2008*, **2002**, p. 59 (Glossary))

Recovery: "The Recovery mission area is the development, coordination, and execution of service- and site-restoration plans for impacted communities and the reconstitution of government operations and services through individual, private-sector, non-governmental, and public assistance programs that: identify needs and define resources; provide housing and promote restoration; address long-term care and treatment of affected persons; implement additional measures for community restoration; incorporate mitigation measures and techniques, as feasible; evaluate the incident to identify *lessons learned*; and develop initiatives to mitigate the effects of future incidents." (**FEMA**, *Homeland Security Exercise & Eval Pgm Glossary*, 08)

Recovery: "The development, coordination, and execution of service− and site-restoration plans; the reconstitution of government operations and services; individual, private sector, nongovernmental, and public assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental, and economic restoration; evaluation of the incident to identify lessons learned; postincident reporting; and development of initiatives to mitigate the effects of future incidents." (**DHS**, *National Preparedness Goal*, December 2005 draft {citing NIMS March 2004); **FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, pp. 156-157)

Recovery: "…recovery is considered as: 'the coordinated process of supporting the reconstruction of physical infrastructure and the restoration of economic, physical and emotional well being. Through this process, it is preferable that individuals and communities are supported in the management of their own recovery as they know best what their needs are, and this approach is most likely to build community capacity and sustainability.'" (**Gov. of South Australia**, *Collaboration is the Key*, 2005, p. 3)

Recovery/Remediation: "The ability to restore essential services, businesses, and commerce; cleanup the environment and render the affected area safe; compensate victims; provide long-term mental health and other services to victims and the public; and restore a sense of well-being in the community." (**Homeland Security Council**, *National Planning Scenarios*, 2006 Final, p. vi)

Recovery: "The phase beyond response that addresses physical and financial restoration of the impacted population and area, including developing and implementing strategic plans for full restoration, improvement and growth. Activities include development, coordination, and execution of service- and site-restoration plans; the reconstitution of government operations and services; individual, private-sector, and public-assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental, and economic restoration; evaluation of the incident to identify lessons learned; and post-incident reporting." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-10, Glossary)

Recovery: "At the onset of an emergency, emergency management officials begin recovery efforts. Recovery is both short-term activity intended to restore vital life -support systems, and long-term activity designed to return infrastructure systems to pre-disaster conditions. Recovery also includes cost recovery efforts." (**Little Hoover Com**., *Safeguarding Golden State*, 2007, 6)

Recovery: "The process of rebuilding, restoring and rehabilitating the community following an emergency." (**London Resilience**, *London Recovery Management Protocol,* 2008, 2; citing *Emergency Response and Recovery Guidance*, HM Government)

Recovery: "The process of restoring community infrastructure and social and economic systems following an emergency or disaster." (**Michigan DEM**, 1998, 7)

Recovery: "Activities and programs designed to return conditions to a level that is acceptable to the entity." (**NFPA 1600**, 2007, p. 8)

"Recovery programs are designed to assist victims and their families, restore institutions to suitable economic growth and confidence, rebuild destroyed property, and reconstitute government operations and services. Recovery actions often extend long after the incident itself. Recovery programs include mitigation components designed to avoid damage from future incidents." (**NFPA 1600**, 2007, p. 11-12)

Recovery: "Recovery activities continue until all systems return to normal or better. They include two sets of activities: Short-term recovery activities return vital life-support systems to minimum operating standards (for example, cleanup, temporary housing). Long-term recovery activities may continue for a number of years after a disaster. Their purpose is to return life to normal, or improved levels (for example, redevelopment loans, legal assistance, and community planning)." (**NGA**, *Comprehensive Emergency Management Governors' Guide*, 1979, p. 13)

Recovery: "…recovery measures encompass what has traditionally been called reconstruction and recovery; ultimately the rebuilding of the disaster-impacted community." (**Peterson and Perry** 1999, 242; citing Drabek, 1986)

Recovery: "…rebuilding communities so individuals, businesses, and governments can function on their own, return to normal life, and protect against future hazards." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1399)

Recovery: "Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk." **World Health Organization**, *Mass Casualty Management* Systems, April 2007, p. 31)

Recovery: "As an essential component of homeland security, the United States will build and maintain various financial, legal, and social systems to recover from all forms of terrorism. We must, therefore, be prepared to protect and restore institutions needed to sustain economic growth and confidence, rebuild destroyed property, assist victims and their families, heal psychological wounds, and demonstrate compassion, recognizing that we cannot automatically return to the pre-attack norm." (**White House**, *National Strategy for HS*, 2002, 3)

Recovery, Long Term: "Long-term recovery, which is outside the scope of the *Framework* [NRF] may involve some of the same actions but may continue for a number of months or years, depending on the severity and extent of the damage sustained. For example, long-term recovery may include the complete redevelopment of damaged areas." (**DHS**, *NRF,* 2008, p. 45)

Recovery (Short Term): "Short-term recovery is immediate and overlaps with response. It includes actions such as providing essential public health and safety services, restoring interrupted utility and other essential services, reestablishing transportation routes and providing food and shelter for those displaced by the disaster. Although called "short term," some of these activities may last for weeks." (**DHS,** *National Response Framework -- Federal Partner Guide* (Comment Draft), September10, 2007, p. 18)

Recovery (Short Term): "Even as the immediate imperatives for response to an incident are being addressed, the need to begin recovery operations emerges. In an almost imperceptible evolution, response efforts will transition to short-term recovery operations, such as the restoration of interrupted utility services, reestablishment of transportation routes, and the provision of food and shelter for those displaced by the disaster – actions that will help individuals, communities, and the Nation return to a general state of normalcy. While short-term recovery efforts are the primary responsibility of States and communities, they also involve significant contributions from all sectors of our society – Federal, State, local, and Tribal governments, the private sector, nonprofit partners, as well as individual citizens. As the priorities and needs of an incident evolve, people, assets, and resources will be reassigned or demobilized to provide a flexible and scalable response, evolving as needs evolve, changing as the incident priorities change. As immediate life-saving and life-sustaining activities subside, and short-term recovery decisions are made over a period of weeks or even months, we must recognize that these efforts are steps to an effective transition to long-term rebuilding and revitalization efforts." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 37)

Recovery Exit Strategy: "Just what is included in the recovery phase is open to question. This paper does not address "exit criteria." The recovery phase must have pre-existing exit criteria which are used to generate goals that indicate when success has been achieved during the recovery phase. Otherwise, as with post-Katrina, success is a moving target and the questions of

how much recovery is needed and how much can be afforded leave the operational realm and enter the political realm." (**Perkins**, *Shaping DHS Doctrine…*, 2007, p. 21, footnote13)

Recovery Objectives (DHS):

"*Objective 5.1 Strengthen nationwide recovery plans and capabilities.* We will work with our partners to ensure the Nation's capability to recover from multiple or simultaneous disasters, including terrorist use of weapons of mass destruction, other man-made hazards and natural disasters, through the development and maintenance of short- and long-term plans and capabilities." (**DHS**, *Strategic Plan 2004*, p. 32)

"*Objective 5.2 Provide scalable and robust all-hazard recovery assistance:* We will lead the Nation's recovery from the impacts of disasters and emergencies. We will deliver timely and appropriate assistance to individuals and families following acts of terrorism, natural disasters and other emergencies, acknowledging the unique requirements of recovery from catastrophic disasters and weapons of mass destruction events. We will provide help to restore services and public facilities, and provide states and other partners with professional, readily deployable, trained and certified leaders and staff to manage all levels and types of disasters. We will make assistance available to states and local governments for the management, mitigation and control of local hazards and emergencies, which threaten to become major disasters." (**DHS**, *Strategic Plan 2004*, p. 32)

Recovery Plan: "A plan developed by each State, with assistance from the responding Federal agencies, to restore the affected area." (**USG**, *USG Interagency Domestic Terrorism CONPLAN*, Appendix B: Definitions, 2001)

Recovery Planning (Successful Steps): "

- Take advantage of the window of opportunity to develop an overall recovery strategy**.** The outside funding and technical assistance that becomes available after a disaster can help your community make progress on its long-term goals.
- **Establish community goals and objectives.** Take the time and effort to unite the community behind agreed-upon goals and objectives.
- **Consider the planning process as well as the plan itself.** Structure the planning process so that it is open and participatory, but also quickly leads to agreement on a broad framework for recovery.
- **Employ multi-objective planning.** Look for opportunities to reap multiple benefits when incorporating hazard mitigation and sustainable redevelopment concepts into your recovery efforts.
- **Be flexible.** The recovery process evolves rapidly and flexibility is mandatory. Keep your options open and take advantage of unexpected opportunities.
- **All sources of funding are fair game.** Don't overlook non-disaster related grant programs. If expertise is not locally available, seek experienced grant writing assistance from other sources, such as regional or State agencies and the private sector.
- **Maximize community stakeholder involvement.** Recruit local corporations, foundations, and nonprofit or civic organizations to participate in the planning process.
- **Maximize the use of non-traditional partners.** Marshal local nonprofit groups and organizations to supplement Federal and State agency support.

- **Stay out of the weeds.** The recovery plan should be brief. Prioritize immediate, short-term, and long-term recovery actions; detailed design, architectural, and engineering plans can follow later." (**FEMA**, *Rebuilding For A More Sustainable Future: An Operational Framework*, November 1, 2000, p. 3-3

Recovery Point Objective (RTO): "From a business perspective RPO is the maximum amount of data loss the business can incur in an event. The targeted point in time to which systems and data must be recovered after an outage as determined by the business unit." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 62)

Recovery Principles:
- timely and responsive;
- leadership;
- people focus;
- locally and community driven;
- partnerships;
- coordination;
- integration and sustainability;
- fair and transparent administration;
- communication;
- information management;
- planning; and
- efficient and effective management. (**Gov. of South Australia**, *Collaboration is the Key*, 2005, pp. 3-4)

Recovery Site: "A designated site for the recovery of business unit, technology, or other operations, which are critical to the enterprise. Related Terms: Alternate Site, Cold Site, Hot Site, Interim Site, Internal Hot Site, and Warm Site." (**DigitalCare**, *State of Oregon BC Workshop*, 2006, p. 62)

Recovery Strategy: "The recovery strategy should include provisions for the return of the following services, as applicable:

(1) Critical infrastructure (water, gas, electricity, and waste management)
(2) Telecommunications and cyber systems
(3) Distribution systems or networks for essential goods (food, clothing, personal supplies, and services)
(4) Transportation systems, networks and infrastructure
(5) Built environment (including residential, commercial, and industrial uses)
(6) Psychosocial services
(7) Health services
(8) Continuity of governance systems." (**NFPA 1600**, 2007, p. 16)

Recovery Time Objective (RTO): "The period of time within which systems, applications, or functions must be recovered after an outage (e.g. one business day). RTO's are often used as the basis for the development of recovery strategies, and as a determinant as to whether or not to

implement the recovery strategies during a disaster situation. Similar Terms: Maximum Allowable Downtime." (**DigitalCare**, *State of Oregon Business Cont. Workshop*, 2006, p. 62)

Recovery Time Objective (RTO): "Time goal for the restoration and recovery of functions or resources based on the acceptable down time in case of a disruption of operations." (**ISO 22399**, *Societal Security*…, 2007, 5)

RECP: Regional Emergency Coordination Plan.

Red Book: *Interagency Standards for Fire and Aviation Operations,* NIFC Boise, ID.

Red Team/Red Teaming: "Analytical Red Teaming uses an adversary perspective to advance security by providing an alternative view of threats, vulnerabilities, and countermeasures. Without testing the physical limitations of antiterrorism measures analytical red teaming can offer insight to challenge prevailing views, prevent surprise, help allocate resources, and expand the bounds of imagination. Analytical Red Teaming may occur as part of a discussion-based exercise (e.g., TTX) or as a stand-alone activity. This process indoctrinates participants into the mind-set of a specific adversary, modeled upon the results of the threat analysis. Once this perspective has been viably gained, participants use it to build a threat or attack that assaults the plan(s), policy(s), or procedure(s) under examination." **(DHS**, *HSEEP*, Vol. V, p. 43)

Red Team/Red Teaming: "a technique for assessing vulnerability that involves viewing a potential target from the perspective of an attacker to identify its hidden vulnerabilities, and to anticipate possible modes of attack." (**DHS**, *The ODP Guidelines*…, 2003, Glossary, p. 3 (30)

Red Team/Red Teaming: "A group of subject-matter experts (SME), with various appropriate disciplinary backgrounds, that provides an independent peer review of plans and processes, acts as a devil's advocate, and knowledgeably role-plays the adversary, using a controlled, realistic interactive process during operations planning, training, and exercising." (**DHS**, *TOPOFF 3 FAQ,* 2005)

Red Team/Red Teaming: "Purposefully testing a system, people, and equipment to probe for weaknesses can improve their security by mimicking the techniques the adversary would use to carry out an attack. When done at the system (rather than component) level, management can identify system improvements." (**DHS**, *HSAC WEF Task Force*, January 10, 2006, p. 9)

Red Team: "The red team is a group of subject matter experts (SMEs) of various appropriate disciplinary backgrounds who provide an independent peer review of plans and processes; act as the adversary's advocate; and knowledgeably role-play the adversary, using a controlled, realistic, interactive process during operations planning, training, and exercising. In *prevention* exercises, this group of operators adapt to player decisions and actions according to the prescribed adversary's motivations and tactics, which often provide players with instant feedback." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Red Team Handbook: "The Red Team Handbook is used solely *in operations-based prevention* exercises that employ *red teams*. This document aids red team operators, *safety*

controllers, and *evaluators* in the conduct of safe and valid red team exercise activity. It also provides essential information (not included in any other exercise documents) to red team operators, which enables them to understand their roles in exercise execution." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Red Team Operators: "Red team operators portray the physical entity of the adversary in an *operations-based prevention* exercise. Also called the Opposition Force (OPFOR)." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Red Zone: See "Hot Zone."

Refugees: "According to international legislation persons having a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinion mostly outside the country of nationality and unable to return or avail himself of the protection of that country. Includes mass exodus of peoples for reasons of conflict and natural disasters moving outside their country of origin." (**UNDHA**, *DM Glossary*, 1992, 62)

Refuges of Last Resort: "Refuges of last resort are sites that are opened when an evacuation cannot be completed. These are not shelters and will not have the same resources available to shelterees." (**New England Center for Emergency Preparedness**, *Community Planning Guide*, 2007, p. 42)

Region: "The term 'region' means—''(A) any geographic area consisting of all or parts of 2 or more contiguous States that have a combined population of at least 1,650,000 or have an area of not less than 20,000 square miles, and that, for purposes of an application for a covered grant, is represented by 1 or more governments or governmental agencies within such geographic area, and that is established by law or by agreement 1 of 2 or more such governments or governmental agencies in a mutual aid agreement; or ''(B) any other combination of contiguous local government units (including such a combination established by law or agreement of two or more governments or governmental agencies in a mutual aid agreement) that is formally certified by the Secretary as a region for purposes 9 of this Act with the consent of—''(i) the State or States in which they are located, including a multi-State entity established by a compact between two or 13 more States; and ''(ii) the incorporated municipalities, counties, and parishes that they encompass." (**US Congress**, *Implementing the 9/11 Commission Recommendations Act of 2007*, August 7, 2007)

Regional: "A region is any area that is defined as such by resident stakeholders responsible for disaster preparedness and management. A region can be a municipality, a single state (or province), or a portion of a state and may be multi-jurisdictional or cross national borders. Regions generally have certain accepted cultural characteristics and geographic boundaries and tend to coincide with the service areas of the infrastructures that serve them." (**TISP**, *Regional Disaster Resilience*, 2006, p. 2)

Regional Administrator (RA): "The new title for the executive in charge of a Regional Office of FEMA or his/her designated representative. According to the CFR, the term Regional Director (Administrator) also means the Disaster Recovery Manager who has been appointed to

exercise the authority of the FEMA Regional Administrator for a particular emergency or major disaster. *NOTE: To date, the CFR has not been updated to reflect organizational or position title changes.*" (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 25, 2007, pp. 57-58)

Regional Approach: "A multi-disciplinary, multijurisdictional group of stakeholders within the State come together to conduct a program and capability review and develop Regional/Jurisdictional Projects." Arizona Department of Homeland Security. *Arizona Department of Homeland Security: An Overview*. December 6-12, 2006, p. 5)

Regional Assistance Committees (RACs): "The Federal Radiological Preparedness Coordinating Committee (FRPCC) is an interagency body consisting of the coordinating and cooperating agencies discussed in the Radiological Incident Annex; it is chaired by DHS/FEMA. The FRPCC provides a national-level forum for the development and coordination for radiological prevention and preparedness policies and procedures. It also provides policy guidance for Federal radiological incident management activities in support of State, local and Tribal government radiological emergency planning and preparedness activities. At the Federal regional level, Regional Assistance Committees (RACs) in the DHS/FEMA Regions serve as the primary coordinating structure. RAC membership mirrors that of the FRPCC and RACS are chaired by a DHS/FEMA regional representative. Additionally, state emergency management agencies send representatives to RAC meetings and participate in regional exercise and training activities. The RACs provide a forum for information sharing, consultation, and coordination of Federal regional awareness, prevention, response, and recovery activities. The RACs provide technical assistance to State and local governments and evaluating radiological plans and exercises." (**FEMA**, *Prepared Statement of Glen Cannon*, November 15, 2007, p. 4)

Regional Catastrophic Preparedness Grant Program (RCP): "RCP provides funding to advance catastrophic incident preparedness to Tier I and designated Tier II Urban Areas Security Initiative (UASI) Jurisdictions. The goal of RCP is to support an integrated planning system that enables regional all-hazard planning for catastrophic events and the development of necessary plans, protocols, and procedures to manage a catastrophic event.

Tier 1: Chicago, Houston, Los Angeles/Long Beach, National Capital Region, Jersey City/Newark, New York, San Francisco Bay Area

Tier 2: Boston, Honolulu, Norfolk, Seattle." (**DHS**, *Fact Sheet FY08 Prepare Grants*)

Regional Collaboration National Priority:

Regional Emergency Transportation Coordinator (RETCO): "A senior-level executive from a DOT operating administration who is predesignated by DOT order to serve as the regional representative of the Secretary of Transportation for emergency transportation preparedness and response, including oversight of ESF #1. Depending upon the nature and extent of the disaster or major incident, the Secretary may designate another official in this capacity." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 59)

Regional Exercise Support Program (RESP): "The National Exercise Division, in partnership with FEMA Regional Officers, announced in January [2008] the implementation of the Regional Exercise Support Program (RESP). This marked a shift in strategy from a State-

focused approach to a regional (multi-state) approach to more effectively integrate national, regional, territorial, tribal, state, and local preparedness exercises. The primary goal of the RESP is to support and promote regionally coordinated exercise initiatives. As such, it will also serve as the mechanism through which several NEP exercises will be conducted. The RESP provides exercise support teams for all phases of design, development, conduct, and evaluation of preparedness exercises. While consideration may be given to requests for support to an individual State, territorial, tribal, and/or local exercise initiatives, priority will be given to those that support collaboration within a Region. Exercise support requests must be associated with the appropriate State/territory multi-year training and exercise plans and, as they are developed, the regional multi-year training and exercise plan. These plans should incorporate broader preparedness planning such as operational plans, State Preparedness Reports and applicable outputs from various other emergency management and homeland security program planning." (**FEMA**, *National Exercise Division, Homeland Security Exercise and Evaluation Program, Quarterly Newsletter*. Washington, DC: FEMA, Spring 2008, pp. 7-8)

Regional Four Corners Homeland Security Initiative (R4C): Description: "To develop collaboration when multiple sovereign jurisdictions are co-located in the same area as is the case in the "Four Corners" region where Arizona*, Colorado, New Mexico and Utah converge with the Navajo, Hopi, Ute Mountain Ute, Southern Ute, Jicarilla Apache, and numerous Pueblo Tribal lands. The SAA in each state, Tribes, and US DHS officials have established a collaborative partnership to support planning efforts of an all hazards approach to Homeland Security for the Four Corner States.

"The R-4C was created in collaboration with the National Native American Law Enforcement Association (NNALEA) and the National Congress of American Indians (NCAI). Outcomes: The R-4C will establish a holistic planning process resulting in the creation and implementation of standardized operating procedures, consistent response plans, and development of comprehensive training and exercise programs. This model for interstate and intrastate cooperation will serve as a national blueprint for replication in other interested regions throughout the USA." (**DHS**, *Expanded Regional Collaboration…FYs 2004-2006*, 2006, p. 15)

Regional Interagency Steering Committee (RISC): "RISCs are responsible for multi-agency coordination under the NRP on a steady-state basis. The RISCs support the national-level groups by coordinating issues and solutions that are unique to the regions. RISCs also coordinate preparedness efforts with other regional-level preparedness organizations (such as the Regional Response Teams (RRTs) that coordinate regional ESF #10 efforts). At a minimum, the RISC is comprised of representatives from each State in the region and, where appropriate, regional-level representatives from ESF primary and support agencies. RISCs meet at least quarterly and provide an operational-level forum for regional planning, interagency information-sharing, and coordination. Each RISC includes an executive-level committee that meets at least twice yearly to provide executive-level guidance and oversight." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 59)

Regional Military Emergency Coordinator (RMEC): "An individual, designated on behalf of the Secretary of Defense and the DoD Executive Agent, to perform coordination, information exchange, and liaison functions on behalf of the Department of Defense with any Federal

emergency management structure established at the Region level. Alternate RMECs are designated by other DoD Components, as required, in accordance with this Directive; and the RMECs and alternates collectively are referred to as "RMEC Teams." (**DoD**, *MSCA*, 1993, 22)

Regional Operations Center: "The temporary operations facility for the coordination of Federal response and recovery activities, located at the FEMA Regional Office (or Federal Regional Center) and led by the FEMA Regional Director or Deputy Director until the DFO becomes operational. Once the ERT-A is deployed, the ROC performs a support role for Federal staff at the disaster scene." (**FEMA**, *Guide For All-Hazard Emergency Ops Planning*, 1996, GLO-9)

Regional Preparedness Committee (RPC): :The primary regional organization to assist FEMA Regional Directors with implementing national preparedness policy at the regional level. It serves as the regional counterpart to the Interagency Emergency Coordinating Group (IECG) which has been established at the national level to perform coordinating functions and provide assistance to the Director, FEMA, on national emergency preparedness matters. (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-4)

Regional Rapid Support and Response Team (R-RSRT). (**DHS**, *Budget-in-Brief FY2008*, 68)

Regional Response Coordination Center (RRCC): "The RRCCs Coordinate initial regional and field activities; Deploy regional teams to assess the impact of the event, gauge immediate State needs and make preliminary arrangements to set up operational field facilities; Coordinate Federal support until a JFO is established; Establish a JIC to provide a central point for coordinating emergency public information activities." (**DHS**, *NRF Comment Draft*, 2007, 42)

Regional Response Coordination Center (RRCC): "The RRCC is the regional interagency coordination center and has primary responsibility for operations until a JFO(s) is established and operational. The RRCC may support operations in several of the States in the Region and is directly involved in the coordination and issuing of mission assignments until the JFO becomes operational. Normally, the RRCC issues the mission assignments to activate the ESFs at the regional level, establish logistical and operational support facilities, and to stage teams and resources. Close coordination is maintained with the Emergency Response Team–Advanced Element (ERT–A) to ensure that any needs identified by the State are being addressed." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 4; also p. 59)

Regional Response Coordination Center (RRCC): "The RRCCs are regionally-based multi-agency coordination centers that perform a complementary role to the NRCC [National Response Coordination Center, FEMA HQ]. Operating in the ten FEMA Regions, the RRCCs provide situational awareness information, identify and coordinate response requirements, perform capabilities analysis, and report on the status of Federal disaster response operations. The RRCCs deploy liaison officers and Emergency Response Teams-Advanced (ERT-A) [Emergency Response Team] to initiate Federal support, facilitate initial delivery of goods and services to save lives and property and to stabilize local infrastructures. They facilitate prioritizing "in theater" interagency resource allocation and coordination. NRCC and RRCC activations and operations are scalable and adjustable to most effectively address the nature, scope, magnitude, and potential impacts of an incident." (**FEMA**, *Statement of Cannon*, 2007, 6)

Regional Response Coordination Centers (RRCC): "A standing facility operated by DHS/EPR/FEMA that is activated to coordinate regional response efforts, establish Federal priorities, and implement local Federal program support until a JFO is established in the field and/or the PFO, FCO or FRC can assume their NRP coordination responsibilities." (**USCG**, *IM Handbook*, 2006. Glossary 25-21)

Regional Response Teams (RRT's): "Regional counterparts to the National Response Team, the RRT's comprise regional representatives of the Federal agencies on the NRT and representatives of each State within the region. The RRT's serve as planning and preparedness bodies before a response, and provide coordination and advice to the Federal OSC during response actions." (**USCG**, *IM Handbook*, 2006, Glossary 25-20/21)

Regulatory Floodway: The area regulated by federal, state or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program).

Regulatory Floodway: "As defined under the NFIP, the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height." (**APA**, Planning For A Disaster-Resistant Community, 2005, p. 84)

Rehabilitation: "The operations and decisions taken after a disaster with a view to restoring a stricken community to its former living conditions, whilst encouraging and facilitating the necessary adjustments to the changes caused by the disaster." (**UNDHA** *DM Glossary*, 1992, 62)

Rehearsal: The purpose of the rehearsal is to ensure that all participants understand their tasks and to identify any changes that need to be made prior to execution of the plan. CONPLANs and OPLANs may or may not lend themselves to conducting a rehearsal. (**DHS**, 2007)

Reinsurance: Insurance for insurance companies. (**GAO**, *Natural Disasters: Public Policy Options*…, Nov. 2007, p. 12)

RELATIVE RISK ANALYSIS: "**RELATIVE RISK ANALYSIS** means that a risk is evaluated in comparison to another risk. The type of risk analysis used should be appropriate for the available data and to the exposure, frequency and severity of potential loss." (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

RELIDO: "Releasable by Information Disclosure Officer." (**FEMA** *IIFOG Ver 3 Draft*, `08, 35)

Relief: Assistance and/or intervention during or after disaster to meet the life preservation and basic subsistence needs. It can be of emergency or protracted duration. (**UNDHA,** *DM Glossary* 1992, 63)

Relief: "The provision of assistance during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of

an immediate, short-term, or protracted duration." (**World Health Organization**, *Mass Casualty Management* Systems, April 2007, p. 31)

REM: Roentgen Equivalent Man. "A unit of biological dose of radiation… The number of rems of radiation is equal to the number of rads absorbed multiplied by the RBE of the given radiation (for a specified effect). The rem is also the unit of dose equivalent, which is equal to the product of the number of rads absorbed and the 'quality factor' of the radiation." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, Glossary, p. 638)

Remedial Action Management Program (RAMP): A "program that will identify and remedy operational and programmatic issues encountered in disaster response and recovery operations and exercises…. it will also capture lessons learned and smart practices that will become part of a Web-based national library accessible to all levels of government…. The RAMP replaces the Disaster Corrective Action Program and involves restructured procedures and new issue-management authorities." (FEMA, *New Remedial Action Management Program Launched*. Press Release, July 23, 2003)

Remediation: "Actions taken to correct known deficiencies and weaknesses. These actions are undertaken once a vulnerability has been identified." (**DoD**, *DCIP*, DODD 3020.40, 2005, p. 13)

Remote Sensing: "Remote sensing refers to the process of recording information from sensors mounted either on aircraft or on satellites. The technique is applicable to natural hazards management because nearly all geologic, hydrologic, and atmospheric phenomena are recurring events or processes that leave evidence of their previous occurrence. The benefits of the technique are that revealing the location of previous occurrences and/or distinguishing the conditions under which they are likely to occur makes it possible to identify areas of potential exposure to natural hazards. It additionally provides comprehensive displays of disaster information to assess vulnerability, enhance mapping, and monitor threatened areas. The limitations of the technique include the requirement for expert science writers and graphics designers to translate and package the resulting information into images and explanations that can be easily understood by a wide variety of users; and while space technology has advanced rapidly in recent years, a number of countries still lack the human, technical and financial resources required to conduct even the most basic space-related activities." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Remote Sensing: "The observation and/or study of an area, object or phenomenon from an aerial distance, frequently using data collected by satellite." (**UNDHA**, *DM Glossary*, 1992, 63)

REMS TA Center: Readiness and Emergency Management for Schools Technical Assistance Center, DOE.

Reorganization Plan No. 1 of 1958: Sent by President Eisenhower to Congress on April 24, 1958. Transferred all responsibilities of the Federal Civil Defense Administrator and of the Director of the Office of Defense Mobilization to the President, who consolidated the FCDA and ODM into the new Office of Defense and Civilian Mobilization in the Executive Office of the President. Became law on July 1, 1958. (**Gessert**, *Federal Civil Defense Organization*, 1965, p. 70)

REP: Radiological Emergency Preparedness.

Repetitive Flood Claims (RFC) Grant Program: "The Repetitive Flood Claims (RFC) grant program provides funding to reduce or eliminate the long-term risk of flood damage to structures insured under the National Flood Insurance Program (NFIP) that have had one or more claim payments for flood damages. RFC funds may only mitigate structures that are located within a State or community that can not meet the requirements of the Flood Mitigation Assistance (FMA) program for either cost share or capacity to manage the activities. The long-term goal of the RFC program is to reduce or eliminate flood claims under the NFIP through mitigation activities that are in the best interest of the National Flood Insurance Fund (NFIF)." (**FEMA**, *Repetitive Flood Claims Program Guidance* (Fiscal Year 2008), October 30, 2007, p. 4)

Repetitive Loss: "Under the National Flood Insurance Program, the payment of at least $1,000 twice or more since 1978 for flood damages to the same property. Thus, such a property would be a repetitive loss property; a community with one or more such properties is a repetitive loss community. Repetitive loss projects are mandatory for such communities when participating in CRS." (**APA**, *Planning For A Disaster-Resistant Community*, 2005, p. 84)

Repetitive Loss: "Repetitive loss refers to an NFIP-insured property where two or more claim payments of more than $1,000 have been paid within a 10-year period since 1978. About 20 to 25 percent of repetitive loss properties are rated as being in B, C, or X Zones." (FEMA, *Reducing Damage from Localized Flooding – A Guide for Communities*, 2005, viii)

REPM: Regional Emergency Planning Model. (**ORNL**, *SERRI Research*. REPM, 2007)

Reportable Quantity (RQ): "The quantity of a hazardous substance that triggers reporting under CERCLA; if a substance is released in a quantity that exceeds its RQ, the release must be reported to the National Response Center (NRC), as well as to the State emergency response commission (SERC) and the community emergency coordinator for areas likely to be affected by the release." (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, p. A-7)

REPP: Radiological Emergency Preparedness Program.

RERO: Radiological Emergency Response Operations. (**FEMA**, *Compendium of Federal Terrorism Training Courses*, 2003, p. 290)

Rescue Street: In 1952 the civil defense training center in Olney, MD "was reorganized and equipped for basic and advanced rescue training for wardens, firemen, and rescue squads…. Trainees learn rescue methods and perform actual rescue operations in five buildings build to duplicate conditions of collapse or ruin such as might result from enemy attack or natural disaster…Exercised performed by the students include rescue of 'victims' from upper stories of multistory buildings, from flooded basements, and from beneath collapsed floors and piles of rubble. Rescue methods under special hazards such as fire and exposed live electric wires also are studied." (**FCDA**, *Annual Report for 1952*, p. 69)

R-ESFs: Regional Emergency Support Functions.

Residual Capability Assessment (RECA): "An assessment of the effects of a nuclear or conventional attack on U.S. resources, or of a major peacetime disaster that results in the declaration of a national security emergency. Such an assessment is made (through all appropriate means) to determine the remaining capabilities of the United States with emphasis on military preparedness." (**DoD**, *MSCA* (Directive 3025.1), 1993, p. 22)

Residual Market Facilities (Insurance): "The intensity and frequency of hurricanes has led some states to establish certain insurance facilities to fund hurricane losses. Some of these facilities provide primary coverage directly to homeowners who cannot or will not purchase coverage from private insurers in the 'voluntary market.' These state-sponsored plans are known as 'residual markets' facilities."[112] (**FinancialServicesRoundtable**, *Nation Unprepared* 2007,46)

"There are at least two policy problems posed by these facilities, however. One issue relates to the fact that residual market insurers tend to offer catastrophe coverage at subsidized rates, which means that states (and thus taxpayers) can be frequently called upon to pay a portion of the claims losses that exceed the insurer's reserves. In addition, subsidized rates reduce incentives for mitigation (since they typically do not reward such investments with actuarially appropriate insurance premium discounts). A second issue is one of fairness: typically, anyone can purchase insurance from the residual facility, which in the past has meant that some homeowners who could easily afford coverage in the voluntary market have been able to take advantage of subsidized rates in the residual market." (Ibid, p. 49)

Residual Nuclear Radiation: "Nuclear radiation, chiefly beta particles and gamma rays, which persists for some time following a nuclear (or atomic) explosion. The radiation is emitted mainly by the fission products and other bomb residues in the fallout, and to some extent by earth and water constituents, and other materials, in which radioactivity has been induced by the capture of neutrons." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, Glossary, p. 638)

Residual Risk: "Risk remaining after risk treatment." (**ISO 22399**, *Societal Security*, 2007, 5)

Resilience: "Resiliency is defined as the capability of a system to maintaining its functions and structure in the face of internal and external change and to degrade gracefully when it must." (**Allenby and Fink** 2005, 1034)

Resilience: "Resilience refers to the capability to prevent or protect against significant multihazard threats and incidents and to expeditiously recover and reconstitute critical services with minimum damage to public safety and health, the economy, and national security." (**American Society of Civil Engineers**, *Critical Infrastructure Definitions*, 2006)

Resilience: "…the ability of social units (e.g., organizations, communities) to mitigate hazards, contain the effects of disasters when they occur, and carry out recovery activities in ways that minimize social disruption and mitigate the effects of future disasters." (**Bruneau**, et al, *A Framework to Quantitatively Assess and Enhance… Seismic Resilience…*, 2003)

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[112] See Florida Hurricane Catastrophe Fund (FHCF) as an example.

Resilience: The capacity to recover successfully from loss and damage. The central features of resilience appear to be access to resources (particularly finance), access to information and services, the capacity to manage one's own affairs and the capacity to deal with the stress and emotions generated by the disaster. (**Buckle** 1995, 13)

Resilience: "The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

Resilience: "Coutu's review of the resilience literature[113] suggests that there are three key elements to resilience: (1) "a staunch acceptance of reality," "a deep belief, often buttressed by strongly held values, that life is meaningful," and "an uncanny ability to improvise."" (Light, *Predicting Organizational Crisis Readiness: Perspectives and Practices toward a Pathway to Preparedness*, 2008, p. 16)

Resilience: "…a dictionary definition [Merriam-Webster Online Dictionary] for 'resilience' is: 'an ability to recover from or adjust easily to misfortune or change'. Strategies based on resilience accept that efforts to prevent attacks (reduce threats) and to defend against those attacks (reduce vulnerabilities), albeit necessary, will inevitably prove insufficient. Strategies based on resilience address all three components of the risk equation in an integrated fashion." (**Critical Infrastructure Task Force** 2006, 4-5).

Resilience: "Definition: the ability to recover from, or adjust to, adversity or change. "Extended definition: the ability of systems, infrastructures, government, business, and citizenry to absorb and/or quickly recover from an adverse event or series of events caused by attack or natural disaster which may cause harm, destruction, or loss of national significance and to restore minimum essential operations and reduce the consequences of its degradation or failure regardless of its cause. "Annotation: Resilience is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures. Includes: 1) immediate efforts to coordinate, execute, and plan to restore operations and services for various reasons, and 2) immediate evaluation of an incident to identify lessons learned, post incident reporting and development of initiatives to mitigate the effects of future incidents. (**DHS**, *Lexicon*, October 19, 2007, p. 23)

Resilience: Question: "The House Homeland Security Committee has devoted its hearings to the subject of resilience and has had a number of hearings so far. Would you have a comment - I don't think you've testified or were intending to testify on this - the department has offered some comments on resilience being either one of two things: part and parcel the strategy as it already is or actually a distraction from what's more important, and that is focusing on prevention and emergency response.

Secretary Chertoff: Resilience is part of the strategy because resilience is part of response and what resilience means - let's go back to having the food and water. Having the food and water,

[113] Diane L. Coutu, "How Resilience Works," *Harvard Business Review* 80, no. 5 (2002): 46–51.

having the capability to sustain yourself until things get better, that is resilience. Backing up your records on a back-up server is resilience. Having the capability to replace power lines that are down or having a back-up generator, that's resilience. That is something that is at the core of what we think is an appropriate response. I remember a couple of years ago in the latter of 2006 I wrote - the Secretary of Energy and I wrote the CEOs of the various oil companies and said to them you really have the responsibility to make sure that your distributors, your franchisees have generators at the gas stations so when the power goes down you can start up the gas pumps, fill up the trucks so the workers can go to the power plants so they can start the power up again. So we have always viewed resiliency as an important part of the strategy. That doesn't mean you don't try to prevent. It just means that you recognize that 100 percent prevention is not something that you can count on. (**DHS**, *Remarks by… Chertoff... at a Blogger Roundtable.…*, 20May2008)

Resilience: "…Resilience is key [to a determination of vulnerability] since it refers to our coping capacity to absorb events, adapt, and respond to and recover from its effects." (**DHS**, *TCL*, 2007, p. 13)

Resilience: "The ability of an organization to absorb the impact of a business interruption, and continue to provide a minimum acceptable level of service." (**DigitalCare**, *State of Oregon Business Cont. Workshop*, 2006, p. 62)

Resilience: "In this Code, the word 'Resilience' is to be interpreted in the broadest sense as the ability of an organization, resource or structure to be resistant to a range of internal and external threats, to withstand the effects of a partial loss of capability and to recover and resume its provision of service with the minimum reasonable loss of performance." (**Electronic Communications Resilience & Response Group.** *EC-RRG Resilience Guidelines for Providres of Critical National Telecommunications Infrastructure*. June 3, 2008, p. 3)

Resilience: "Defined as the ability of a system to withstand to and recover from adversity, resilience is increasingly applied to larger social and technical systems. Stress and adversity are experienced not only by individuals and groups, but also by organizations and institutions. In the context of increasing natural and man-made threats and vulnerabilities of modern societies, the concept seems particularly useful to inform policies that mitigate the consequences of such events." (**George Mason University** School of Law, CIPP, *Critical Thinking: Moving from Infrastructure Protection to Infrastructure Resilience*, May 2006)

Resilience: "The ability at every level to detect, prevent, prepare for and if necessary handle and recover from disruptive challenges." (**Great Britain** 2004, 1)

Resilience: "Ability of an organization to resist being affected by an event." (**ISO 22399**, *Societal Security.…*, 2007, 5)

Resilience: "Simply stated, resilience is the ability to rapidly respond to and recover from a catastrophic event…Enhancing resilience recognizes that not every disaster can be averted. It is imperative that our national security policy place as much attention to resilience as it does to prevention so that we employ the proper resources towards preparedness and contingency planning." (**Kelly, Robert W**., *Reform Institute Applauds Congressional Focus*…, May 6, 2008)

Resilience: "Resilience: a community or region's capability to prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to public safety and health, the economy, and national security.
•Prevents and mitigates cascading failures, often characteristic of critical infrastructure impacts
•Minimizes disruption to life and economies." (**ORNL**, *SERRI) Community and Regional Resilience Initiative: Resilient Communities, Resilient Regions* (Slide Pres.), 13Aug07, slide 3)

Resilience: "Resilience as a concept was initially used in ecology to describe the ability of ecosystems to resist and recover from external negative impacts (Blaikie and Brookfield, 1985). The term is increasingly used in the disaster management sphere and reflects a trend towards a holistic and proactive approach that has the community, and its ability to resist and recover as its focus. The term resilience brings together the components of the disaster cycle – response, recovery, mitigation and preparedness, utilizing a range of structural and non-structural approaches." (**O'Brien and Read** 2005, 354)

Resilience: "In examining the attributes and determinants of resilience, MCEER investigators [Bruneau et al, above] developed the R4 framework of resilience:

- *Robustness* – the ability of systems, system elements, and other units of analysis to withstand disaster forces without significant degradation or loss of performance;
- *Redundancy* – the extent to which systems, system elements, or other units are substitutable, that is, capable of satisfying functional requirements, if significant degradation or loss of functionality occurs;
- *Resourcefulness* – the ability to diagnose and prioritize problems and to initiate solutions by identifying and mobilizing material, monetary, informational, technological, and human resources; and
- *Rapidity* – the capacity to restore functionality in a timely way, containing losses and avoiding disruptions." (**Tierney and Bruneau**, 2007, p. 15)

Resilience: "Many attempts have been made to define 'resilience'. The variety of academic definitions and concepts can be confusing. For operational purposes it is more useful to work with broad definitions and commonly understood characteristics. Using this approach, system or community resilience can be understood as:

- capacity to absorb stress or destructive forces through resistance or adaptation
- capacity to manage, or maintain certain basic functions and structures, during disastrous events
- capacity to recover or 'bounce back' after an event.

'Resilience' is generally seen as a broader concept than 'capacity' because it goes beyond the specific behaviour, strategies and measures for risk reduction and management that are normally understood as capacities. However, it is difficult to separate the concepts clearly. In everyday usage, 'capacity' and 'coping capacity' often mean the same as 'resilience'.

A focus on resilience means putting greater emphasis on what communities can do for themselves and how to strengthen their capacities, rather than concentrating on their vulnerability to disaster or their needs in an emergency.

The terms 'resilience' and 'vulnerability' are opposite sides of the same coin, but both are relative terms. One has to ask what individuals, communities and systems are vulnerable or resilient to, and to what extent." (**Twigg**, *Characteristics of a Disaster-resilient* Community, August 2007, p. 6)

Resilience: "UK doctrine which centres on the ability to handle disruptive challenges that can lead to crisis, and withstand the consequences of any terrorist incident or disaster, e.g. by sustaining services in spite of damage. Resilience is underpinned by extensive preparation, including scenario exercises." (**UK Cabinet Office**, *Media Emergency Forum: Joint Glossary of Official and Media Terms and* Acronyms, August 2004, p. 19)

Resilience: "The ability of the community, services or infrastructure to withstand the consequences of an incident. (Cabinet Office: '*Emergency Preparedness/Emergency Response and Recovery*')." (**UK**, Chiefs of Staff. *Joint Doctrine Publication 02 (2nd Ed.): Operations in the UK: The Defence Contribution to Resilience*. September 2007, lexicon-13)

Resilience/Resilient: "The capacity of a system, community or society to resist or to change in order that it may obtain an acceptable level in functioning and structure. This is determined by the degree to which the social system is capable of organizing itself, and the ability to increase its capacity for learning and adaptation, including the capacity to recover from a disaster." (**UN/ISDR** 2002, 24)

Resilience, Business: "The ability to rapidly adapt and respond to risks and opportunities in order to maintain continuity of business operations, remain a trusted partner and enable growth." (**iJET** Intelligent Risk Systems, "Business Resiliency for the Global Marketplace: Transorming Operating Risk into Competitive Advantage," 2008)

Resiliency: "Resiliency is defined as the capability of a system to maintain its functions and structure in the face of internal and external change and to degrade gracefully when it must."[114] (**DHS**, *Critical Infrastructure Task Force Presentation to HSAC,* January 10, 2006, slide 7)

Resiliency: "In the context of the NIPP, resiliency is the capability of an asset, system, or network to maintain its function during or to recover from a terrorist attack or other incident." (**DHS, NIPP** 2006, p. 104)

Resiliency, Coastal: "Coastal resiliency refers to the ability of coastal cities, towns, and communities to adapt and recover from natural hazards, including hurricanes, tsunamis, floods, and disease epidemics." (**Abbott**, "Floods, Flood Insurance, Litigation, Politics," 2008, p. 129)

Resilient Community: "A resilient community is prepared to help prevent or minimize the loss or damage to life, property and the environment and more quickly return citizens to work, reopen

[114] Cites *Science*, August 12, 2005.

businesses, and restore essential services needed for a full and swift economic recovery." (**ORNL**, "ORNL 'Resilience Plan to Help TN, Miss., SC Communities Beat Disaster." 4Oct07)

Resistance: "The ability to resist or withstand impacts so that inevitable damage from an extreme event does not reach 'disastrous' proportions." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

Resistance, Disaster: "Disaster resistance emphasizes the importance of predisaster mitigation measures that enhance the performance of structures, infrastructure elements, and institutions in reducing losses from a disaster." (**Tierney and Bruneau**, "Conceptualizing and Measuring Resilience," *TR News*, May/June 2007, p. 14) [Note: See "Resilience.]

Resource Analysis: The systematic identification and analysis of available resources and authorities for managing these potential resources in an emergency.

Resource Conservation and Recovery Act (RCRA), 1976: "First enacted by Congress in 1976, RCRA established the "cradle to grave" regime for tracking toxic and hazardous substances from their manufacture to their transport to their usage to their disposal. Its orientation is thus on the present and future management of such substances, and it devolves a very substantial amount of implementation and enforcement authority to state government." (**Burton**, "The Constitutional Roots of All-Hazards Policy, Management…" 2008, p. 12)

Resource Evaluation: "Resource evaluation (formerly termed 'damage assessment') is a process of determining the effects of enemy attack uopon the human and material resources of the Nation and establishing the amount and location of the remaining resources so that intelligent decisions for the survival and recovery of the Nation can be made. Both electronic and manual methods are used in thes process. The National Resource Evaluation Center (formerly the National Damage Assessment Center), with its electronic computers and associated machine techniques, is designed to provide the most urgent needs of the Federal agencies for preattack estimates of attack hazards and postattack estimates of resource status." (**OCDM**, *Annual Report 1960*, p. 18)

Resource Management: "Coordination and oversight of tools, processes, and systems that provide incident managers with timely and appropriate resources during an incident…. Resources are defined as personnel and major items of equipment supplies, and facilities available for assignments to incident operations and for which status is maintained." (**DHS**, *UTL 2.1*, 2005, p. 14)

Resource Management: "Efficient emergency management and incident response requires a system for identifying available resources at all jurisdictional levels to enable timely and unimpeded access to resources needed to prepare for, respond to, or recover from an incident. Resource management under NIMS includes mutual aid agreements and assistance agreements; the use of special Federal, State, tribal, and local teams; and resource mobilization protocols." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 157)

Resource Management: (NIMS 2005-2006): 3rd of five Compliance Assessment Metrics. "Resource management involves coordinating and overseeing the application of tools, processes

and systems that provide incident managers with timely and appropriate resources during an incident." (**FEMA**, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 28)

Resource Management: "Resource management involves the systematic development of methodologies for the prompt and effective identification, acquisition, distribution, accounting, and use of personnel and major items of equipment for essential emergency functions." (**Idaho Bureau of Disaster Services**. *Local Capability Assessment for Readiness (CAR) Version 2*. January 2000, p. 5)

Resource Management: "A system for identifying available resources to enable timely and unimpeded access to resources needed to prevent, mitigate, prepare for, respond to, or recover from an incident." (**NFPA 1600**, 2007, p. 8)

A.5.6 The five key principles of resource management that underpin effective resource management are as follows:
(1) Advance Planning. Entities work together in advance of an incident to develop plans for managing and employing resources in a variety of possible emergency circumstances.
(2) Resource Identification and Ordering. Entities use standardized processes and methodologies to order, identify, mobilize, dispatch, and track the resources required to support incident management activities.
(3) Categorizing Resources. Resources are categorized by size, capacity, capability, skill, and other characteristics.
(4) Use of Agreements. Mutual aid/assistance agreements and pre-incident agreements among all parties providing or requesting resources are necessary to enable effective and efficient resource management during incident operations.
(5) Effective Management of Resources. Resource managers use validated practices to perform the following key resource management tasks systematically and efficiently:
(a) Acquisition Procedures. Used to obtain resources to support operational requirements.
(b) Management Information Systems. Used to collect, update, and process data; track resources; and display their readiness status.
(c) Ordering, Mobilization, Dispatching, and Demobilization Protocols. Used to request resources, prioritize requests, activate and dispatch resources to incidents, and return resources to normal status.

To the extent practical and feasible, an entity should type resources according to established definitions, such as utilizing the Department of Homeland Security/FEMA's National Mutual Aid and Resource Management Initiative Resource Type Definitions.

Resources for program administration as well as emergency operations should be specifically identified. These resources include, but are not limited to, the following:
(1) The locations, quantities, accessibility, operability, and maintenance of equipment (heavy duty, protective, transportation, monitoring, decontamination, response, personal protective equipment)
(2) Supplies (medical, personal hygiene, consumable, administrative, ice)
(3) Sources of energy (electrical, fuel)
(4) Emergency power production (generators)

(5) Communications systems
(6) Food and water
(7) Technical information
(8) Clothing
(9) Shelter
(10) Specialized personnel (medical, religious, volunteer organizations, emergency management staff, utility workers, morticians, and private contractors)
(11) Specialized volunteer groups [Red Cross, amateur radio, religious relief organizations, charitable agencies, VOAD (Volunteer Organization Active in Disaster), COAD (Community Organization Active in Disaster), CERT (Community Emergency Response Team)]
(12) External federal, state, provincial, tribal, territorial, and local agencies A resource should be available in a timely manner and should have the capability to do its intended function. Restriction on the use of the resource should be taken into account, and application of the resource should not incur more liability than would failure to use the resource. Finally, the cost of the resource should not outweigh the benefit." (**NFPA 1600**, 2007, pp.15-16)

Resource Mangement: "Resource management is the governmental control of the distribution, allocation, conservation, and use of essential resources and services in an emergncy so that they may be assigned to top priority activities." (**OEP**, *Organization and Planning Guide for State & Local Emergency Management of Resources*, September 1962, page 2)

Resource Management Concepts and Principles in DHS: "The core concepts and principles of resource management as taught by DHS (and as defined in the NIMS Document) incorporate the following components: Resource management involves coordination and overseeing the application of tools, processes, and systems that provide incident managers with timely and appropriate resources during an incident. Resources include personnel, teams, facilities, equipment, and supplies. Resource management involves the four primary tasks noted below.

- The establishment of systems for describing, inventorying, requesting, and tracking resources.
- The activation of these systems prior to and during an incident.
- The dispatching of resources prior to and during an incident.
- The deactivating or recalling of resources during or after an incident.

The underlying concepts that shall be included in NIMS resources management training include the following:

- Resource management provides a uniform method of identifying, acquiring, allocating, and tracking resources.
- Resource management uses effective mutual-aid and donor assistance and is enable by the standardized classification of kinds and types of resources required to support the incident management organization.
- Resource management uses a credentialing system tied to uniform training and certification standards to ensure the requested personnel resources are successfully integrated into on-going incident operations.

- Resource management coordination is the responsibility of the EOCs and/or multi-agency coordination entities, as well as specific elements of the ICS structure (e.g., the Resources Unit).
- Resource management should encompass resources contributed by the private-sector and non-governmental organizations.
- Training dealing with NIMS resource management shall describe to participants the components of resource management and establish relationships between all elements of resource management with the multi-agency coordination system under NIMS." (FEMA, *National Incident Management System National Standard Curriculum Training Development Guidance*, October 2005, pp. 25-26)

Resource Management Objectives: "…resource management objectives established shall include the following: (1) Personnel, equipment, training, facilities, funding, expert knowledge, materials, technology, information, intelligence, and the time frames within which they will be needed (2) Quantity, response time, capability, limitations, cost, and liability connected with using the involved resources (3) Resources and any needed partnership arrangements essential to the program." (**NFPA 1600**, 2007, p. 8)

Resource Management Tasks: "Resource management shall include the following tasks:
(1) Establishing processes for describing, inventorying, requesting, and tracking resources
(2) Activating these processes prior to and during an incident
(3) Dispatching resources prior to and during an incident
(4) Deactivating or recalling resources during or after incidents
(5) Contingency planning for shortfalls of resources." (**NFPA 1600**, 2007, p. 8)

Resource Tracking: "A standardized, integrated process conducted prior to, during, and after an incident by all emergency management/response personnel and their associated organizations." (**FEMA**, *National Incident Management System Draft*, August 2007, p. 157)

Resource Typing: "Resource typing is the categorization and description of response resources that are commonly exchanged in disasters through mutual aid agreements. Use of these standard definitions enables emergency management personnel to identify, locate, request, order, and track outside resources quickly and effectively and facilitate the response of these resources to the requesting jurisdiction." (**DHS**, *TCL*, 2007, p. 8)

Resource Typing: "Categorizing by capability the resources that incident managers commonly request, deploy, and employ. Measurable standards identifying the capabilities and performance levels of resources serve as the basis for categories. Resource users at all levels identify these standards and then type resources on a consensus basis, with a national-level entity taking the coordinating lead. Resource kinds may be divided into subcategories (types) to define more precisely the resource capabilities needed to meet specific requirements. Resource typing is a continuous process designed to be as simple as possible to facilitate frequent use and accuracy in obtaining needed resources. To allow resources to be deployed and used on a national basis, the NIMS Integration Center is responsible for defining national resource typing standards." (**DHS**, *The National Incident Management System*, March 2004, pp. 45-46.)

Resource Typing: "Resource typing is categorizing, by capability, the resources requested, deployed, and used in incidents. Measurable standards identifying the capabilities and performance levels of resources serve as the basis for categories. Resource users at all levels utilize these standards to identify and inventory resources. Resource kinds may be divided into subcategories to define more precisely the resource capabilities needed to meet specific requirements. Resource typing is a continuous process designed to be as simple as possible to facilitate frequent use and accuracy in obtaining needed resources. To allow resources to be deployed and used on a national basis, the NIC (with input from Federal, State, tribal, local, private sector, NGOs, and national professional organizations) is responsible for facilitating the development and issuance of national standards for the typing of resources and ensuring that these typed resources reflect operational capabilities." (**FEMA**, *NIMS Draft*, Aug. 2007, p. 41)

Resource Typing (Measures): "Measures are standards. The measures used will depend on the kind of resource being typed. The mission envisioned determines the specific measure selected. The measure must be useful in describing a resource's capability to support the mission. Measures should identify capability and/or capacity. As an example, one measure for a disaster medical assistance team is the number of patients it can care for per day. An appropriate measure for a hose might be the number of gallons of water per hour that can flow through it." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 42)

Resource Typing (National Categories):

Transportation
Communications
Public Works and Engineering
Firefighting
Information and Planning
Law Enforcement and Security
Mass Care
Resource Management
Health and Medical
Search and Rescue
Hazardous Materials Response
Food and Water
Energy
Public Information
Animals and Agricultural Issues
Volunteers and Donations

(**FEMA**, *National Incident Management System* (**FEMA** *501/Draft*), August 2007, p. 41)

Resource Typing Standards: "Categorization and description of response resources that are commonly exchanged in disasters through mutual aid agreements. The FEMA/NIMS Integration Center Resource typing definitions provide emergency responders with the information and terminology they need to request and receive the appropriate resources during an emergency or disaster." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (FY 2007), Oct. 23, 2006, p8)

Resources: "The personnel and major items of equipment that are available or potentially available for assignment to incident tasks on which status is maintained. (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

Resources Unit: "The unit within the Planning Section responsible for recording the status of resources that are committed to the incident." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

RESP: Regional Exercise Support Program, FEMA, National Exercise Division.

Respond: "Response operations are those taken in advance of and upon the onset of an incident to save lives, protect property, and meet basic human needs. They are tiered efforts designed to be managed at the lowest possible jurisdictional level and supported by additional response capabilities when needed. During major incidents with significant consequences, DHS plays a leadership role in ensuring that State and local community response efforts receive the support they need to achieve their objectives." (**DHS**, *Capstone Doctrine Pub 1 Draft*, Ch. 2, 2008, 2-6)

Respond: "Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice (Source—NIMS, March 2004)." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy Guidance on Aligning Strategies with the NPG*, 2005, p. 4)

Respond: "Definition of Respond: Implement immediate actions to save lives, protect property, and meet basic human needs." (**DHS**, *Universal Task List 2.1*, 2005, p. 61)

Respond to Hazard: "Definition: Reduce or eliminate risks to persons or to lessen the actual or potential effects or consequences of an incident, including removing contamination to acceptable levels from individuals, animals, equipment, and facilities." (**DHS**, *UTL 2.1*, 2005, p. 73)

Responder Knowledge Base (RKB): "Created to provide Emergency Responders, purchasers, and planners with a trusted, integrated, on-line source of information on products, standards, certifications, grants, and other equipment-related information."

"The RKB is funded through the FEMA National Preparedness Directorate, U.S. Department of Homeland Security (DHS). The RKB features data items from other DHS-sponsored sites, such as the System Assessment and Validation for Emergency Responders (SAVER) site, the Lessons Learned Information Sharing (LLIS) system, and the ANSI Homeland Security Standards Database (HSSD). (RKB, 2008. https://www.rkb.us/)

Response: "Response includes activities to address the immediate and short-term actions to preserve life, property, environment, and the social, economic, and political structure of the community. Response activities include:

1. Emergency shelter, housing, food, water and ice;
2. Search and rescue;
3. Emergency medical and mortuary services;
4. Public health and safety;
5. Decontamination following a chemical, biological or radiological attack;
6. Removal of threats to the environment;
7. Emergency restoration of critical services (electric power, water, sewer, telephone);
8. Transportation, logistics, and other emergency services;
9. Private sector provision of needed goods and services through contracts or donations; and
10. Secure crime scene, investigate and collect evidence." (**DHS**, *National Response Plan* (Draft #1), February 25, **2004**, p. 16)

Response: "Activities that address the short-term, direct effects of an incident, including immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and incident mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into the nature and source of the threat; ongoing surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice." (**DHS**, *NIMS*, 2004, p. 136; **DHS,** *National Infrastructure Protection Plan*, **2006**, pp. 104-105)

Response: "Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice." (**DHS**, *National Preparedness Goal*, December 2005 draft, p. A-3 (citing *NIMS*, March 2004); also **HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-10, Glossary (citing **DHS**, *NPG*; **FEMA**, *NIMS Draft*, August 2007, p. 157)

Response: "The term 'response' as used in this *Framework* includes immediate actions to save lives, protect property and meet basic human needs. Response also includes the execution of emergency operations plans, actions to support short-term recovery and some short-term mitigation activities. The *Framework* is always in effect and can be implemented as needed on a flexible, scalable basis that can help improve response. Response does not include prevention, protection or long-term recovery and restoration activities needed by communities to rebuild their way of life." (**DHS**, *National Response Framework* Comment Draft, September **2007**, p. 7)

Response: "The term "response" as used in this *Framework* includes immediate actions to save lives, protect property and the environment, and meet basic human needs. Response also includes the execution of emergency plans and actions to support short-term recovery. The *Framework* is always in effect, and elements can be implemented as needed on a flexible, scalable basis to improve response." (**DHS,** *NRF*, Jan 2008, 1)

Response: "The reaction to an incident or emergency to assess the damage or impact and to ascertain the level of containment and control activity required. In addition to addressing matters of life safety and evacuation, Response also addresses the policies, procedures and actions to be followed in the event of an emergency. . SIMILAR TERMS: Emergency Response, Disaster Response, Immediate Response, and Damage Assessment." (**DigitalCare**, *State of Oregon Business Continuity Workshop*, 2006, p. 62)

Response: "The efforts to minimize the risks created in an emergency by protecting the people, the environment, and property, and the efforts to return the scene to normal pre-emergency conditions." (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, p. A-7)

Response: "Conducting emergency operations to save lives and property, including positioning emergency equipment and supplies; evacuating potential victims; providing food, water, shelter, and medical care to those in need; and restoring critical public services." (**FEMA**, *A Nation Prepared – FEMA Strategic Plan – Fiscal Years 2003-2008*, **2002**, p. 59 (Glossary))

Response: "Those activities and programs designed to address the immediate and short-term effects of the onset of an emergency or disaster." (**FEMA**, *Federal Response Plan*, 1992; See also, **USG** *CONPLAN*, 2001))

Response: "The Response mission area focuses on activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of EOPs and of incident mitigation activities designed to limit loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include: applying intelligence and other information to lessen the effects or consequences of an incident; increasing security operations; continuing investigations into the nature and source of the threat; conducting ongoing public health and agricultural surveillance and testing processes; performing immunizations, isolation, or quarantine; and conducting specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice." (**FEMA**, *Homeland Security Exercise & Evaluation Program Glossary*, 2008)

Response and Recovery: "Response and recovery efforts include those of many State and other Federal agencies, private, public, and non-profit organizations, and individuals, coordinated by FEMA. The extensive response effort initially ensures safe water, food, and shelter to disaster victims and assists in the restoration of basic community services from electricity to telephone service. The complex recovery effort assists in the long-range restoration of services including contributing to the rebuilding of roads, bridges, and hospitals. FEMA's response and recovery

activities together reduce human suffering and work toward the restoration of the community. Through such means as pre-positioned capabilities, community outreach, the teleregistration process, information centers, and town meetings, FEMA signifies its commitment to provide to the fullest extent it can human and financial support to its customers. This is accomplished by response and recovery actions to:

- Collect and provide information to the President in the determination of a disaster declaration;
- Conduct emergency operations to save lives and property by positioning emergency equipment, supplies, and personnel;
- Provide accurate, timely public information;
- Gather, analyze, and use data for the determination of applicant eligibility;
- In collaboration with its partners, provide individual and public assistance for immediate needs and long-term recovery;
- Manage loan and grant application, approval, and disbursement;
- Assist in the restoration of communities so that individuals, businesses, and governments can function on their own; and,
- Manage response and recovery operations to assure compliance with laws and regulations." (**FEMA**, *Strategic Plan FY 1988 – FY 2002*, 1997, p. 27)

Response: "The onset of an emergency creates a need for time-sensitive actions to save lives and property, as well as for action to begin stabilizing the situation so that the jurisdiction can regroup. Such response actions include notifying emergency management personnel of the crisis, warning and evacuating or sheltering the population if possible, keeping the population informed, rescuing individuals and providing medical treatment, maintaining the rule of law, assessing damage, addressing mitigation issues that arise from response activities, and even requesting help from outside the jurisdiction." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (SLG 101), September **1996**, p. 1-4)

Response: Activities to address the immediate and short-term effects of an emergency or disaster. Response includes immediate actions to save lives, protect property, and meet basic human needs. Based on the requirements of the situation, response assistance will be provided to an affected State under the Federal Response Plan using a partial activation of selected Emergency Support Functions (ESF's) or the full activation of all 12 ESF's to meet the needs of the situation. (**FEMA**, *FRP*, **1999**, Appendix B)

Response: "Those actions taken to save lives and protect property during an emergency event." (**Little Hoover Commission**, *Safeguarding the Golden State*…, 2006, p. 6)

Response: "Carrying out time-sensitive actions to save lives and protect property during an emergency or disaster. In addition to managing the response, actions can include fire fighting, protective actions by law enforcement, warning, evacuation, mass care, emergency public information, search and rescue, health and medical care, resource management, and other activities." (**Michigan DEM** 1998, 7)

Response: "That portion of incident management in which personnel are involved in controlling (defensively or offensively) a hazardous materials incident. The activities in the response portion of a hazardous materials incident include analyzing the incident, planning the response, implementing the planned response, and evaluating progress." (**NFPA 471**, 1997, p. 8)

Response: "Immediate and ongoing activities, tasks, programs, and systems to manage the effects of an incident that threatens life, property, operations, or the environment." (**NFPA 1600**, 2007, p. 8)

"The response of an entity to a disaster or other significant event that might impact the entity. Activities, tasks, programs, and systems can include the preservation of life, meeting basic human needs, preserving business operations, and protecting property and the environment. An incident response can include evacuating a facility, initiating a disaster recovery plan, performing damage assessment, and any other measures necessary." (**NFPA 1600**, 2007, p. 8)

Response: "Response activities follow an emergency or disaster. Generally, they are designed to provide emergency assistance for casualties (for example, search and rescue, emergency shelter, medical care, mass feeding). They also seek to reduce the probability of secondary damage (for example, shutting off contaminated water supply sources, cordoning off and patrolling looting-prone areas) and to speed recovery operations (for example, damage assessment)." (**NGA**, *Comprehensive Emergency Management Governors Guide*, 1979, p. 13)

Response: "Response refers to actions undertaken immediately before and during impact to reduce primary and secondary negative effects." (**Peterson and Perry** 1999, 242)

Response: "…emergency operations to save lives and property through positioning emergency equipment, personnel, and supplies, through evacuating potential victims, through providing food, water, shelter, and medical care to those in need, and through restoring critical public services." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1399)

Response: "Within this *Strategy*, "response" refers to actions taken in the immediate aftermath of an incident to save lives, meet basic human needs, and reduce the loss of property." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, Oct. 2007, p. 31)

Response (and Recovery): "Response and Recovery. The Office [Homeland Security] shall coordinate efforts to respond to and promote recovery from terrorist threats or attacks within the United States. In performing this function, the Office shall work with Federal, State, and local agencies, and private entities, as appropriate, to:

(i) coordinate efforts to ensure rapid restoration of transportation systems, energy production, transmission, and distribution systems; telecommunications; other utilities; and other critical infrastructure facilities after disruption by a terrorist threat or attack;

(ii) coordinate efforts to ensure rapid restoration of public and private critical information systems after disruption by a terrorist threat or attack;

(iii) work with the National Economic Council to coordinate efforts to stabilize United States financial markets after a terrorist threat or attack and manage the immediate economic and financial consequences of the incident;

(iv) coordinate Federal plans and programs to provide medical, financial, and other assistance to victims of terrorist attacks and their families; and

(v) coordinate containment and removal of biological, chemical, radiological, explosive, or other hazardous materials in the event of a terrorist threat or attack involving such hazards and coordinate efforts to mitigate the effects of such an attack." (**White House**, *EO 13228*, 2001)

Response Asset Inventory (NIMS): "An inventory of the jurisdiction's resources that have been identified and typed according to NIMS Resource Typing Standards. Development of a Response Asset Inventory requires resource typing of equipment, personnel, and supplies identified in the inventories of State resources." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 9)

Response Assets: Resources that include equipment, personnel and supplies that are used in activities that address the effect of an incident. (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 9)

Response Doctrine: "*Our national response doctrine defines basic roles, responsibilities and operational concepts for incident response across all levels of government and with the private sector.* The overarching objective of response activities centers upon saving lives and protecting property. Five elemental principles of operations animate incident response actions in support of the nation's response mission. Taken together, these five principles of operation constitute *national response doctrine*.

*Our response doctrine is rooted in America's federal system and our Constitution's division of responsibilities between Federal and State governments***.** Because this doctrine reflects the history of emergency management and the distilled wisdom of first responders and leaders at all levels, it gives elemental form to the *Framework.*

But our response doctrine "evolves in response to changes in the political and strategic landscape, lessons learned from operations, and the introduction of new technologies. Doctrine influences the way in which policy and plans are developed, forces are organized and trained, and equipment is procured. It promotes unity of purpose, guides professional judgment and enables [first responders] to fulfill their responsibilities."[115] (**DHS**, NRF Draft, Sep 2007, p. 8)

Response Doctrine (NSF): Key Principles: (DHS, *Introducing the NRF*, 2007, p. 4)

Engaged Partnerships. Leaders at all levels must communicate and actively support engaged partnerships to develop shared goals and align capabilities so that none allows the other to be overwhelmed in times of crisis.

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[115] United States Coast Guard: America's Maritime Guardian, Coast Guard Publication 1 (Washington, DC: January 2002, second printing), p. 3. The term "doctrine" has clear and rich meaning as a guide to action within the military services. See also U.S. Department of Defense's Joint Operations Planning and Execution System, an overview of which is available at http://www.dtic.mil/doctrine/jel/other_pubs/jopes.pdf.

Tiered Response. Incidents must be managed at the lowest possible jurisdictional level and supported by additional response capabilities when needed.

Scalable, Flexible and Adaptable Operational Capabilities. As incidents change in size, scope and complexity, the response must adapt to meet requirements.

Unity of Effort Through Unified Command. Effective unified command is indispensable to all response activities and requires clear understanding of the roles and responsibilities of each participating organization.

Readiness To Act. Effective incident response requires readiness to act balanced with an understanding of risk. From individuals, families and communities to local, State and Federal agencies, national response depends on the instinct and ability to act.

Response Essentials: "The disasters of 1953 demonstrated that, although in an emergency people are willing and anxious to offer their help, they must have **leadership, training, and organization** to be of benefit. Civil defense can provide that leadership, training, and organization. The catastrophes of 1953 clearly showed that the same mena nd women who are organized, equipped, and trained to counteract an atomic blast can be effective on the homefrot in times of flood, earthquakes, tornadoes, and other natural disasters." (**FCDA**, *1953 Annual Report*, p. 17)

Response Management Plan (RMP): National Guard Bureau plan for National Guard Weapons of Mass Destruction Civil Support Team Operations. (**DA**, *WMD CST Ops*, 2007)

Response Planning Criteria For Measuring Key Aspects For Success: "The *Framework* [NRF] employs common criteria to measure key aspects of response planning:

Acceptability. A plan is acceptable if it can meet the requirements of anticipated scenarios, can be implemented within the costs and timeframes that senior officials and the public can support, and is consistent with applicable laws.

Adequacy. A plan is adequate if it complies with applicable planning guidance, planning assumptions are valid and relevant, and the concept of operations identifies and addresses critical tasks specific to the plan's objectives.

Completeness. A plan is complete if it incorporates major actions, objectives, and tasks to be accomplished. The complete plan addresses the personnel and resources required and sound concepts for how those will be deployed, employed, sustained, and demobilized. It also addresses timelines and criteria for measuring success in achieving objectives, and the desired end state. Completeness of a plan can be greatly enhanced by including in the planning process all those who could be affected.

Consistency and Standardization of Products. Standardized planning processes and products foster consistency, interoperability, and collaboration.

Feasibility. A plan is considered feasible if the critical tasks can be accomplished with the resources available internally or through mutual aid, immediate need for additional resources from other sources (in the case of a local plan, from State or Federal partners) are identified in detail and coordinated in advance, and procedures are in place to integrate and employ resources effectively from all potential providers.

Flexibility. Flexibility and adaptability are promoted by decentralized decisionmaking and by accommodating all hazards ranging from smaller-scale incidents to wider national contingencies.

Interoperability and Collaboration. A plan is interoperable and collaborative if it identifies other plan holders with similar and complementary plans and objectives, and supports regular collaboration focused on integrating with those plans to optimize achievement of individual and collective goals and objectives in an incident." (**DHS**, *NR*F, 2008, 74-75)

Response Planning Guide: "Purpose: This regulation establishes policy, provides planning guidance and assigns responsibilities to ensure timely execution of ESF #3, Public Works and Engineering, in support of the Federal Response Plan (FRP), and for high impact, low probability catastrophic events, as determined by Headquarters, USACE (HQUSACE). USACE is the lead Federal agency for execution of planning and ESF #3 missions." (**USACE**, E*mergency Employment of Army and Other Resources Response Planning Guide...*, 1995, p. 1-1)

Response Process: Four key actions typically occur in support of a response:
(1) gain and maintain situational awareness;
(2) activate and deploy key resources and capabilities;
(3) effectively coordinate response actions; then, as the situation permits,
(4) demobilize.
These response actions are illustrated in Figure 3 [titled "The Response Process"]." (**DHS**, *National Response Framework*, Jan 2008,, Jan 2008)

Response Program: "Plan, processes, and resources to perform the activities and services necessary to preserve and protect life, property, operations, and critical assets. Note: Response steps generally include incident recognition, notification, assessment, declaration, plan execution, communications, and resources management." (**ISO 22399**, *Societal*…, 2007, 5)

Response, DHS Response Objectives:

Objective 4.1 Reduce the loss of life and property by strengthening nationwide response readiness: "The Nation must have a vigorous capability to respond when disaster strikes. We will strengthen the national capability to respond to disasters of all types, including terrorism, through the integration of Department of Homeland Security response systems and teams and the completion of catastrophic all-hazard plans for the Nation's most vulnerable communities and geographic areas, including tactical elements to ensure coordinated response operations, logistics and support. We will provide health and medical response readiness through integrated planning, surge capacity to address health and medical emergencies or acts of terrorism and will develop the logistical capacity to provide intermediate emergency housing to large displaced populations following major disasters." (**DHS**, *Strategic Plan 2004*, p. 28)

Objective 4.2 Provide scalable and robust all-hazard response capability: The Nation will know it can rely on us to respond in time of need. We will provide and coordinate a quick and effective response when state, local and tribal resources are overwhelmed by disasters and emergencies. We will bring the right people and resources to bear where and when they are needed most, including medical, urban search and rescue, and incident management capabilities, and will

assist all mariners in peril. We will provide integrated logistical support to ensure a rapid and effective response and coordinate among Department of Homeland Security and other federal, state and local operations centers consistent with national incident command protocols. We will work with our partners to create and implement a National Incident Management System and a single, all-discipline National Response Plan that will strengthen the Nation's ability to respond to catastrophic events of all types, including terrorism. (**DHS**, *Strategic Plan 2004*, p. 29)

Response, Roles and Responsibilities of Key Actors: "Disaster response has traditionally been handled by State, local, and Tribal governments, with the Federal Government and private and non-profit sectors playing supporting and *ad hoc* roles, respectively. A lack of clarity regarding roles and responsibilities across these levels can lead to gaps and seams in our national response and delay our ability to provide life-saving support when needed. Accordingly, we must better articulate how roles, responsibilities, and lines of authority for all response stakeholders are fulfilled across all levels of government and among the private and nonprofit sectors so that each understands how it supports the broader national response. We will continue to base our Federal planning and response efforts on the premise that the vast majority of incidents will be handled at the lowest jurisdictional level possible, with the Federal Government anticipating needs and assisting State, local, and Tribal authorities upon request, when their capabilities are insufficient, or in special circumstances where Federal interests are directly implicated. Public-private partnerships also are essential, and we will work together to better define the roles that the private and non-profit sectors can play, particularly in their local communities, to achieve a more successful response." (**White House**, *National Strategy for Homeland Security*, Homeland Security Council, October 2007, p. 32)

Response, Six Essential Activities for Responding (also noted as "The Preparedness Cycle")

- Plan
- Organize
- Train
- Equip
- Exercise
- Evaluate and Improve (**DHS**, *NRF*, Jan 2008, 27)

Restoration: "Process of planning for and/or implementing procedures for the repair of hardware, relocation of the primary site and its contents, and returning to normal operations at the permanent operational location." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 63)

Restore Lifelines: "Definition: Ensure the restoration of service for any public utility interrupted by, or in response to an incident." (**DHS**,, *UTL 2.1*, 2005, p. 114)

Restricted Zone (Hazardous Materials Incident): See "Hot Zone."

Resumption: "The process of planning for and/or implementing the restarting of defined business processes and operations following a disaster. This process commonly addresses the most critical business functions within BIA specified timeframes." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 63)

Retrofit: "Strengthening an existing structure to improve its resistance to the effects of earthquakes." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Retrofitting: "Reinforcement of structures to become more resistant and resilient to the forces of natural hazards.

Retrofitting involves consideration of changes in the mass, stiffness, damping, load path and ductility of materials, as well as radical changes such as the introduction of energy absorbing dampers and base isolation systems. Examples of retrofitting includes the consideration of wind loading to strengthen and minimize the wind force, or in earthquake prone areas, the strengthening of structures." (**UN/ISDR**, *Terminology: Basic Terms of Disaster Risk Reduction*, March 31, 2004)

Retrograde Operations: "*Retrograde operations* refers to any movement of a command to the rear or away from the enemy. In the context of a WMD-CST response, a retrograde operation is a movement away from the source of contamination, the spread of contamination, or another hazard. A commander primarily executes retrograde operations to preserve the force and avoid hazards. There are many factors that may cause a WMD-CST to relocate after initial occupation of the WMD-CST footprint. Situations that may result in retrograde operations include substantial wind direction shifts or the expansion of the hazard area around an incident." (**Dept, of the Army**, *WMD-CST Operations*, December 2007, p. 5-8)

Reunification Services Unit (RSU: "The Reunification Services Unit (RSU) serves as the coordinating unit at the Federal level in support of the reunification of separated family members and the location of missing children. They ensure the coordination of information exchange for reunification purposes among Federal, State, local, Tribal and private sector entities and develop & implement programs and processes to comply with NRF and Post-Katrina Emergency Management Reform Act requirements, as well as managing the National Emergency Family Registry & Locator System (NEFRLS) and coordinating with the National Emergency Child Locator Center (NECLC)." (**FEMA**, *Statement of Paulison, Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath…",* June 26, 2008, p. 13)

RFA: Request for Assistance. (**DA**, *WMD CST Operations*, 2007, p. 2-4)

RFC: Repetitive Flood Claims. (**FEMA**, *FEMA Region III FY 2007 Annual Report*, 2008, 25)

RFI: Request for Information. (**DA**, *WMD CST Operations*, 2007, p. 2-4; Figure G-2)

Richter Scale: "A logarithmic scale for measuring the magnitude of an earthquake through the measurement of seismic waves recorded by seismographs at a point 60 miles from the epicenter. This measurement is very different from the severity of an earthquake's effects, measured on the Modified Mercalli Scale (defined above). Magnitude is related to wave amplitude and is recorded on a logarithmic scale. Each single-unit jump in magnitude reflects a 32-fold increase in seismic energy generated by the event." (**APA**, *Planning For A Disaster-Resistant Community*, 2005, p. 84)

Richter Scale: Logarithmic magnitude scale of earthquake energy, illustrated by typical impacts.

Energies of earthquakes (Richter-scale Magnitude):

Magnitude		**Energies (TNT)**
1	=	1.7 Kg
2	=	5.9 Kg
3	=	180 Kg
4	=	6 tons
5	=	199 tons
6	=	6,270 tons
7	=	100,000 tons
8	=	6,270,000 tons
9	=	199,000,000 tons (**Reference Center** 1998)

RID: Register of Interpreters for the Deaf. (**CDC**, *Reaching At Risk Populations*, 2007, p. 16)

RIO: Regional Investment Officers, FEMA. (**FEMA**, *Regional-National CONOPS*, 8Feb2008, 6)

RIP: Rehabilitation and Inspection Program, USACE. (**USACE**, *Fact Sheet: National Levee Safety Program*. February 1, 2007, 2)

RISC: Regional Interagency Steering Committee. (**FEMA**, *Mission Assignment* SOPs, 2007, 59)

Risk: A measure of the probability of damage to life, property, and/or the environment, which could occur if a hazard manifests itself, including the anticipated severity of consequences to people. (**Unknown source**)

Risk: "Risk is the product of hazard (H) and vulnerability (V) as they affect a series of elements (E) comprising the population, properties, economic activities, public services, and so on, under the threat of disaster in a given area….Risk is estimated by combining the probability of events and the consequences (usually conceptualized as losses) that would arise if the events take place." (**Alexander**, No Date, 1)

Risk: "The economics literature is intrinsically important to articulating an epistemological definition of risk in its characterization of risk being something different from uncertainty. The idea is that risk and uncertainty both relate to the unknown, but that risk is an attempt to 'control' the unknown by applying knowledge based on the orderliness of the world. Uncertainty, on the other hand, represents the totally random unknown and thus cannot be controlled or predicted." (**Althaus** 2005, 568)

Risk: Risk = Likelihood x Consequence. (**Ansell and Wharton** 1992, 100)

Risk: Risk is defined as: Risk = Hazard x Vulnerability divided by Disaster Management, where "Risk is defined as the scope of consequences (loss of life, damage to property or the environment…. Hazard is defined as the 'Punch of Nature' (external forces)…Vulnerability is defined as the weakness/strength of the element at risk…Disaster Management is defined as a comprehensive strategy based on a set of activities to reduce the risk by: 1. Reduction of the vulnerability of the elements at risk. 2. Ensuring that adequate measures are implemented before

disaster strikes. 3. Responding as efficiently and effectively as possible to disasters when they occur. 4. Assuring a sustainable development of the region stricken." (**Benouar and Mimi** 2001, 6)

Risk: "Risk is nothing more than the consequences of hazard." (**Bezek** 2002)

Risk: "We…need to identify and understand the links between risk, vulnerability, resilience and capacity that go beyond the iconic (though simplistic and misleading) formula of Risk = Vulnerability multiplied by Resilience and divided by Hazard." (**Buckle** 2004, 8)

Risk: "…risk is when you know the possible range of things that may happen following a choice; uncertainty is when you don't….Risk in its general form is when it is possible, at least in principle, to estimate the likelihood that an event (or set of events) will occur; the specific forms of those estimates are the probabilities of adverse consequences." (**Clarke** 1999, 11)

Risk: The possibility of suffering harm from a hazard. (**Cohrssen and Covello** 1989, 7)

Risk: "…the three components of risk: threat, vulnerability, and consequence." (**Critical Infrastructure Task Force** 2006, p. 4).

Risk: "…the measure of likelihood of occurrence of the hazard" (**Cutter** 1993, 2).

Risk: "*Risk* is the probability of an event occurring, or the likelihood of a hazard happening (Presidential/Congressional Commission on Risk Assessment and Risk Management 1997). Risk emphasizes the estimation and quantification of probability in order to determine appropriate levels of safety or the acceptability of a technology or course of action. Risk is a component of hazard." (**Cutter** 2001, 3)

Risk: The probability that a hazardous event will occur and the expected loss of lives and goods due to vulnerability to prevailing hazards. (**D&E** Reference Center 1998)

Risk: The possibility of suffering harm from a hazard. (**Deyle**, et al. 1998, 121)

Risk: "Risk is the product of threat, vulnerability, consequences, and likelihood of occurrence." (**DHS**, *National Preparedness Goal*, December 2005 Draft, p. A-3)

Risk: "Risk is generally defined as the combination of the frequency of occurrence, vulnerability, and the consequence of a specified hazardous event." (**DHS,** *NIPP*, 2006, p. 29)

Risk: "A measure of potential harm that encompasses threat, vulnerability, and consequence. In the context of the NIPP, risk is the expected magnitude of loss due to a terrorist attack, natural disaster, or other incident, along with the likelihood of such an event occurring and causing that loss." (**DHS**, *National Infrastructure Protection Plan*, 2006, p. 105)

Risk: "…Congress directed the Department of Homeland Security to identify and secure those chemical facilities that present the greatest security risk. Security risk is a function of the following:

- the consequence of a successful attack on a facility (consequence),
- the likelihood that an attack on a facility will be successful (vulnerability), and

the intent and capability of an adversary in respect to attacking a facility (threat)." (**DHS**, "Risk for Chemical Facility Anti-Terrorism Standards (CFATS), November 2, 2007)

Risk: "When I say risks I mainly talk about three elements. One is the threat itself. The second is our vulnerability to the threat; and the final is the consequence if the threat actually comes to pass and we're not able to avert it or protect ourselves against it." **(DHS,** *Secretary Michael Chertoff… "Addressing 21st Century Threats: The U.S. Prevention Strategy,"* June 5, 2008)

Risk: "Risk is a combination of credible threat, vulnerability, and consequence." (**DHS**, *Target Capabilities List*, 2007, p. 10)

Risk: "Probability and severity of loss linked to threats or hazards." (**DOD**, *DCIP*, 2005, p. 13)

Risk: "**RISK** is the combination of the likelihood and the consequence of a specified hazard being realized. It is a measure of harm or loss associated with an activity." (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

Risk: "Potential for exposure to loss. Risks, either man-made or natural, are constant. The potential is usually measured by its probability in years." (**DigitalCare**, *State of OR BC Workshop*, 2006, p. 63)

Risk: "A measure of the probability that damage to life, property, and/or the environment will occur if a hazard manifests itself: this measure includes the severity of anticipated consequences to people." (**EPA**, *Technical Guidance for Hazards* Analysis, 1987, p. A-7)

Risk: "…the potential losses associated with a hazard and, defined in terms of expected probability and frequency, exposure, and consequences" (**FEMA** 1997, *Multi Hazard…Risk Assessment,* xxi).

Risk: The estimated impact that a hazard would have on people, services, facilities, and structures in a community; the likelihood of a hazard event resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage above a particular threshold due to a specific type of hazard event. It also can be expressed in terms of potential monetary losses associated with the intensity of the hazard (**FEMA** 2001 (August), a-6)

Risk (flood example): "There are two sides to this risk: the probability of flooding, and the consequences that would follow. An area could have a high probability of flooding but minimal consequences because the area subject to flooding is forested and contains no infrastructure or people, so the risk is low. Conversely, a highly urbanized community that has a moderate or low probability of flooding would be considered high risk, because the consequences of a flood in

that location (loss of life, livelihood, property, health and human suffering) would be very high. We manage the probability side of risk with levees and other structures to control flooding. We manage the consequences side by making land-use decisions that keep infrastructure out of harm's way, or by reducing the consequences to existing infrastructure using a multitude of floodplain management methods." (**Galloway**, *A California Challenge*, 2007, iii)

Risk: "DHS uses an evolving risk-based methodology to identify the urban areas eligible for homeland security grants and the amount of funds states and urban areas receive. DHS designed the methodology to measure the relative risk of a given state or urban area using a risk analysis model that defined *Risk* as the product of *Threat* times *Vulnerability* and *Consequences* (R = T * (V & C)). Given the uncertainties inherent in risk assessment, the methodology uses a combination of empirical data (e.g., population, asset location) and policy judgment (e.g., the nature of the threat for specific areas and the weights to be assigned to specific variables in the model such as critical infrastructure, population, and population density)." (**GAO**, *Homeland Security*: *DHS Improved its Risk-Based Grant Programs' Allocation and Management Methods, But Measuring Programs' Impact on National Capabilities Remains a* March 11, 2008, p. i)

Footnote 9, page 4: "For this formula, DHS defined *Threat* as international threat of terrorism to locations and critical assets in the United States, *Vulnerability* as the susceptibility of an area to successful attack, and *Consequences* as the personal, physical, and economic consequences to an area of a successful attack." (Ibid, p.4)

"Because we have imperfect information for assessing risks, there is a degree of uncertainty in the information used for risk assessments (e.g., what the threats are and how likely they are to be realized). As a result, it is inevitable that assumptions and policy judgments must be used in risk analysis and management. It is important that key decision makers understand the basis for those assumptions and policy judgments and their effect on the results of the risk analysis and the resource decisions based on that analysis." (Ibid, 5-6)

"Since fiscal year 2006, DHS has applied a three-step process which incorporates analyses of risk and effectiveness, to select eligible urban areas and allocate UASI and SHSP funds…:

1. Implementation of a risk analysis model to calculate scores for states and urban areas, defining relative Risk, as the product of Threat, Vulnerability, and Consequences.

2. Implementation of an effectiveness assessment, including a peer review process, to assess and score the effectiveness of the proposed investments submitted by the eligible applicants.

3. Calculation of a final allocation of funds based on states' and urban areas' risk scores as adjusted by their effectiveness scores." (Ibid, p. 6)

Risk: Risk "is the probability that a hazard will occur during a particular time period." (**Godschalk** 1991, 132)

Risk: The potential for realization of unwanted, adverse consequences to human life, health, property, or the environment; estimation of risk is usually based on the expected result of the

conditional probability of the event occurring times the consequence of the event given that it has occurred. (**Gratt** 1987, 244)

Risk: "The expected number of lives lost, persons injured, damage to property, and disruption of economic activity due to a particular natural phenomenon, and consequently the product of specific risk and elements at risk – UNDRO." (**Gunn** 1990, 374.

Risk: Risk is an expression or possible loss over a specific period of time or number of operational cycles. It may be indicated by the probability of an accident times the damage in dollars, lives, or operating units. (**Hammer** 1972)

Risk: "Risk can be defined as the combination of the probability of an event and its Consequences." (**IRM**, *A Risk Management Standard*, 2002, 2; citing **ISO/IEC Guide 73**)

Risk: "Combination of the probability of an event and its consequences. Note 1: The term 'risk' is generally used only when there is at least the possibility of negative consequences. Note 2: In some situations, risk arises from the possibility of deviation from the expected outcome or event." (**ISO 22399**, *Societal Security*…, 2007, 5)

Risk: "A disaster risk is the probability of injury, loss of life, damage to property, disruption of services and activities, and negative environmental effects. The extent to which risk either increases or decreases is the result of interactions within a multiple chain of events." (**Jegillos** 1999, 12)

Risk: "…a measure of the probability of deviation from the expected." (**Kloman** 2001, 24)

Risk: "The western approach defines risk as the probability of physical harm due to technological or natural processes. However, we know that physical risks are always created and effected in social systems. Therefore, understanding risk means considering the social systems within which risk occur. Furthermore, within a social system, individuals do not necessarily share the same perceptions or risk and underlying risk factors.… In the expert knowledge system, disasters are seen as being driven primarily by hazard patters. By contrast, in a people-centered approach, the emphasis shifts from the hazard to a focus on socioeconomic vulnerability." (**Kotze** 1999, 35)

Risk: "Risk refers to the probability that death, injury, illness, property damage, and other undesirable consequences will stem from a hazard" (**Lerbinger** 1997, 267).

Risk: "There are as many definitions of 'vulnerability' and 'risk' as there are agencies in federal, state, and local governments combined….Currently, there is no universally accepted definition of the most basic measures of criticality – vulnerability and risk.

"For example, the intelligence community typically defines 'risk' as R = T + V 9Threat plus Vulnerability). The FBI says 'risk' is R = I x T x V (probability of an incident times threat times vulnerability).[116] A number of other methodologies use arbitrary metrics to gauge risk. The most popular method of gauging criticality of an asset such as a port, telecommunications center, water treatment plant, or transportation terminal is to assign numbers to each asset and then add them

[116] Dean, W. "Risk Assessments and Future Challenges." *FBI Law Enforcement Bulletin*, July 2005.

together. In ranked ordering systems such as the U.S. Coast Guard's port security and risk assessment tool, risk is computed by summing assigned numbers to various properties such as damage, casualties, vulnerability, and threat. These numbers are provided by subject matter experts who, in turn, rely on their individual judgment when rating 'vulnerability' and 'risk'. The port asset with the highest total is declared the most critical.

"The validity of this approach relies on subject matter experts, which does not address the problem of inconsistency across experts. This leads to uneven ranking, because every expert has a different idea of how to assign numbers. It also leads to meaningless totals, because of the different interpretations of what the numbers mean.

"The intelligence community's risk equation is difficult to apply because it is not clear how one compares a low-threat, high-vulnerability asset with a high-threat, low-vulnerability asset. If we add threat and vulnerability together and get the same total, what is the difference? Clearly, a high-threat condition deserves closer scrutiny than a low-threat condition, regardless of the vulnerability, and yet R = T + V produces indistinguishable totals….

"We need a standard, scientifically exact method of assessing vulnerability and risk. Only then will we be able to define vulnerability and risk. A standard definition means that states and localities will be able to compare apples to oranges, and that the result of vulnerability analysis will mean something – across the 50 states….

"Suppose for example, 'vulnerability' is defined as the *probability that an attack will succeed* and 'risk' is defined as the *expected value of the damage caused by a successful attack* Vulnerability is a probability (a number from zero to 100% and risk is a cost (a number that represents the impact of an attack on an asset or entire sector). Mathematically, risk is V x D, where V = vulnerability and D is typically in units of dollars, casualties, or some other loss." (**Lewis and Darken** 2005, 4-5)

Risk: "There are three components of risk – the magnitude of loss, the chance of loss, and the exposure of loss." (**MacCrimmon and Wehrung** 1986, 10)

> "The main definition of the verb 'risk' in the *Oxford English Dictionary*, is 'to expose to the chance of injury or loss.' …First, it is necessary that there be a potential loss of some amount (we will use 'loss' as a general expression to include 'injury'). Second, there must be a chance of loss. A sure loss is not a risk. Third, the notion 'to expose' means that the decision maker can take actions that can increase (or decrease) the magnitude or chance of loss. Therefore 'to risk' implies the availability of choice." (MacCrimmon and Wehrung 1986, 9)

Risk: Risk is when there is "accurate knowledge of a probability distribution of the consequences that will follow on each alternative." (**March and Simon**, 1993)

Risk: Risk can be related directly to the concept of disaster, given that it includes the total losses and damages that can be suffered after a natural hazard: dead and injured people, damage to property and interruption of activities. Risk implies a future potential condition, a function of the

magnitude of the natural hazard and of the vulnerability of all the exposed elements in a determined moment. (**Maskrey** 1989, 1)

Risk: "The term 'risk' is used in two ways. The first is to identify what is **at risk** from the threats generated by the hazard. The second is to identify **the probability** of losing community assets…" (**May**, *Concepts and Terminology*, 2000. p. 6)

Risk: The probability of an event or condition occurring. (**Mileti**, *Disasters By Design*, 1999, 106)

Risk. "A measure of the probability and severity of adverse effects that result from an exposure to a hazard." (**NFPA 1561**, 2002, p. 8)

Risk: Technical definition as follows: Risk (consequence/unit time) = Frequency (events/unit time) x Magnitude (consequence/event). (**Nuclear Regulatory Commission**, *Reactor Safety Study* 1975)

Risk: "The probability, based on available data and scientific knowledge, of a disaster occurring in a particular place." (**Pearce** 2000, Chapter 5, p. 27)

Risk: Defined in three ways:

1. With regard solely to the occurrence probability of the damaging event – a statistical concept.

2. With regard to both event probability and the degree and type of damage or potential damage (here, risk is seen as the product of event probability and severity of impact).

3. With regard to the distribution of power within society as well as to the distribution of costs and benefits. In other words, who bears and who imposes the risk? (**Penning-Rowsell** and Handmer 1990, 6; cited in Pearce 2000, Chapter 2, 20)

Risk: A function of two major factors: (a) the probability that an event, or series of events of various magnitudes, will occur, and (b) the consequences of the event(s). (**Petak and Atkinson** 1982)

Risk: (From **Risky Thinking**, *Risk Glossary*, 2007)

(ISO/IEC Guide 73). The combination of the probability of an event and its consequences.

(Business Continuity). The probability that an asset will be harmed due to a specific cause.

(Insurance). An asset which is insured. For example, if you have a life assurance policy and a homeowner's policy, the industry considers you and your house to be *risks*.

Risk: The potential for unwanted negative consequences of an event or activity. (**Rowe** 1997)

Risk: "…three components…make up a standard risk equation – scenario, probability and consequence…the first component, scenario, challenges the imagination; and the second, probability, defies knowledge. But the third component of risk – consequence – is the outcome of the first two and the most important place to focus one's energy." (**Scalet** 2006)

Risk: The potential losses associated with a hazard, defined in terms of expected probability and frequency, exposure, and consequences. (**Schwab**, et al. 1998, 329)

Risk: For engineering purposes, risk is defined as the expected losses (lives lost, persons injured, damage to property, and disruption of economic activity) caused by a particular phenomenon. Risk is a function of the probability of particular occurrences and the losses each would cause. Other analysts use the term to mean the probability of a disaster occurring and resulting in a particular level of loss. A societal element is said to be at "risk", or "vulnerable", when it is exposed to known disaster hazards and is likely to be adversely affected by the impact of those hazards if and when they occur. The communities, structures, services, or activities concerned are described as elements at "risk". Also, the FEMA damage and casualty production model for simultaneously handling multiple nuclear attacks to produce the spectrum of likely attack results and determine their associated possibilities. A pre-attack planning tool. (**Simeon Institute** 1992)

Risk: Risk is an integral part of life. Indeed, the Chinese word for risk "weij-ji" combines the characters meaning 'opportunity/chance' and 'danger' to imply that uncertainty always involves some balance between profit and loss. Since risk cannot be completely eliminated, the only option is to manage it. (**Smith** 1996, 54)

Risk: The probability per unit time of the occurrence of a unit cost burden. The cost burden may be measured in terms of injuries (fatalities or days of disability) or other damage penalties (expense incurred) or total social costs (including environmental intangibles). Risk thus involves the integrated combination of (a) the probability of occurrences, (b) the spectrum of event magnitudes, and (c) the spectrum of resultant personal injuries and related costs. (**Starr**, Rudman, Whipple, 1976)

Risk: The product of probability and consequences. (**Tarrant** 1997–98, 20)

Risk: "…the chance that some event that affects us adversely will occur." (**Terry** 2001, 330) "…the chance of an adverse event happening and the consequences of that event taken together." (331)

Risk: "Expected losses (of lives, persons injured, property damaged and economic activity disrupted) due to a particular hazard for a given area and reference period. Based on mathematical calculations, risk is the product of hazard and vulnerability. (**UNDHA**, *Internationally Agreed Glossary of Basic Terms Related to Disaster Management*, 1992, p. 64)

Risk: "The probability of harmful consequences, or expected loss (of lives, people injured, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human induced hazards and vulnerable/capable conditions.

Conventionally risk is expressed by the equation Risk = Hazards x Vulnerability/Capacity." (**UN/ISDR** 2002, 24)

Risk: The possibility of loss, injury, disadvantage or destruction; to expose to hazard or danger; to incur risk or danger. (**Webster's** 1981)

Risk: Risk if the product of the probability of the occurrence of a hazard and its societal consequences. (Pearce 2000, Chapter 2, 21; citing **Whyte** and Burton, 1980)

Risk Acceptance: "Decision to accept risk." (**ISO 22399**, *Societal Security*…, 2007, 6)

Risk, Actual: "Actual risk reflects the combination of…two factors…(1) probability, the likelihood, quantitative or qualitative, that an adverse event would occur; and (2) consequences, the damage resulting from the event, should it occur." (**GAO**, *Protection of Chemical and Water Infrastructure*, 2005, p. 24-25)

Risk Analysis: Assesses probability of damage (or injury) and actual damage (or injury) that might occur, in light of a hazard and vulnerability analysis. (**Unknown source**)

Risk Analysis: "Risk analysis involves identifying, measuring or estimating and evaluating risk. There has been considerable debate between engineers and social scientists about whether risk can profitably and successfully be quantified, indeed, whether it is necessary to quantify it al all (**Kleindorfer and Kunreuther** 1987). Engineers (e.g. **Lind** 1987) regard risk analysis as a formal means of quantitatively evaluating the possible misfunctioning of a system by assigning probabilities to a set of predicted outcomes. Social scientists (e.g. **Slovic** 1987) argue that risk need not be quantified to be analyzed and that it is often sufficient to conceptualize a risk in order to know the magnitude of a problem. In general types of risk analysis, comparisons are often more meaningful than absolute numbers or probabilities, especially when the values are quite small, as people tend not to understand likelihoods expressed as small fractions." (**Alexander**, no date, 2) "Formal risk analysis is based upon the creation of an ensemble of scenarios which express what might happen as a chain of occurrences." (**Alexander**, p. 3)

Risk Analysis: "The term risk analysis is often used synonymously with risk assessment. In this book, however, risk assessment refers to the technical assessment of the nature and magnitude of a risk. Risk analysis includes those functions, as well as methods to best use the resulting information. Risk analysis includes methods for:

- Hazard identification
- Risk assessment
- Determining the significance of risk
- Communicating risk information." (**Cohrssen and Covello** 1989, 355)

Risk Analysis: Estimates of the probability of various levels of injury and damage to provide a more complete description of the risk from the full range of possible hazard events in the area. (**Deyle**, et al. 1998, 121-122) Risk analysis makes "a quantitative estimate of damage, injuries, and

costs likely to be experienced within a specified geographic area over a specific period of time." (**Deyle**, et al. 1998, 133-134)

Risk Analysis: "…incorporates estimates of the probability of various levels of injury and damage to provide a more complete description of the risk from the full range of possible hazard events in the area" (**Deyle, French, Olshansky, and Paterson** 1998, 121–122).

Risk Analysis: Risk analysis is the most sophisticated level of hazard assessment. It involves making quantitative estimates of the damage, injuries, and costs likely to be experienced within a specified geographic area over a specific period of time. Risk, therefore, has two measurable components: (1) the magnitude of the harm that may result (defined through vulnerability assessment); and (2) the likelihood or probability of the harm occurring in any particular location within any specified period of time (risk = magnitude x probability). A comprehensive risk analysis includes a full probability assessment of various levels of the hazard as well as probability assessments of impacts on structures and populations. (**Deyle, French, Olshansky, and Paterson** 1998, 134.)

Risk Analysis: "The process by which risks are identified and evaluated." (**DHS**, *FCD 1*, Nov. 2007, P-9)

Risk Analysis: "**RISK ANALYSIS** is the study of risk in order to understand and quantify risk so it can be managed." (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

Risk Analysis: "Objective: Provide a basis to judge the relative likelihood (probability) and severity of various possible events. Risks can be expressed in qualitative terms (high, medium, low) based on subjective, common-sense evaluations, or in quantitative terms (numerical and statistical calculations)." (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, p. K-9)

Risk Analysis: "Method of evaluating the probability of the adverse effects of a substance, industrial process, technology or natural process." (**European Environment Agency**, *EEA Environmental Glossary*, 2007; cites: United Nations. Glossary of Environment Statistics)

Risk Analysis: "*Risk Analysis* promotes disaster resilience by enabling individuals and communities to recover more rapidly from floods and other disasters through effective risk analysis and hazard mitigation planning. To achieve this objective, we will:

- Expand our coastal mapping activity which will improve accuracy of flood hazard maps for coastal areas as part of FEMA's Flood Map Modernization effort.

- Provide data to assist State and local officials to prepare up-to-date hurricane evacuation plans and assess the accuracy of current plans through the Hurricane Evacuation Studies Program.

- Develop tools to ensure that efforts are made to properly address the vulnerabilities associated with the Nation's at-risk dams; that States and local communities have current

information about the safety of dams affecting their localities; and that emergency action plans are in place for high-risk dams.

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- Provide technical assistance for conducting risk assessments to evaluate all hazards impacts on communities. These risk assessments are key supporting components of local and State mitigation plans, which raise risk awareness; enable State, local, and tribal officials to take advantage of mitigation resources and the full suite of post-disaster assistance; and help them comply with the Disaster Mitigation Act of 2000 which requires each State to have an approved hazard mitigation plan to receive Hazard Mitigation Assistance." (**FEMA**, *Vision for New FEMA*, December 12, **2006**, p. 27)

Risk Analysis: "Risk Analysis applies engineering, planning, and advanced technology to determine the potential impact of natural hazard events and to develop strategies to manage the risks associated with these hazards. Risk Analysis includes assessing critical information both before and after a disaster strikes, developing and maintaining a state-of-the art inventory of flood maps, and supporting mitigation planning." (**FEMA**, "Fact Sheet – FEMA's Mitigation Directorate," August 2007, p. 1)

Risk Analysis: A detailed examination performed to understand the nature of unwanted, negative consequences to human life, health, property, or the environment; an analytical process to provide information regarding undesirable events; the process of quantification of the probabilities and expected consequences for identified risks. (**Gratt** 1987, 244)

Risk Analysis: "The analysis of an environment for risks. Each risk is evaluated according to the losses it may cause, probability of occurrence, the cost of countermeasures to mitigate the risk, and the likely loss if those countermeasures were implemented. The output from a risk analysis is typically a prioritized list of risks together with a cost/benefit analysis for possible countermeasures." (**Risky Thinking**, *Risk Glossary*. 2007.)

Risk Analysis: The systematic use of available information to characterize risk. (**Salter**, 1997–98, p. 24)

Risk Analysis: "The use of available information to estimate the risk to individuals or populations, property, or the environment, from hazards. Risk analysis generally contains the following steps: scope definition, hazard identification, and risk estimation. (**Western**, Cees van. *Disaster Risk Management*, 2005)

Risk Analysis: "Systematic use of available information to determine how often specified events may occur and the magnitude of their likely consequences." (**World Health Organization**, *Mass Casualty Management* Systems, April 2007, p. 31)

Risk Analysis and Management for Critical Asset Protection (RAMCAP): "Created and developed by ASME-ITI and adopted by DHS, RAMCAP is a framework for analyzing and managing the risks associated with terrorist attacks against critical infrastructures. The purpose of RAMCAP is to provide essential information to government decision makers about consequences and vulnerabilities in the private sector, which owns 85 percent of the nation's

critical infrastructure. RAMCAP is unique in that it facilitates the comparison of risks within a sector and across multiple sectors by employing a common terminology and standardized measurement metrics. The RAMCAP methodology is a 7-step process for assets analysis – asset characterization, threat characterization, consequence analysis, vulnerability analysis, threat assessment, risk assessment, and risk management. The process is then tailored to specific aspects of various sectors of the critical infrastructure in documents called Sector-Specific Guidance documents (SSGs). The SSGs will enable companies to identify and report on the vulnerabilities and potential consequences of terrorism by providing guidance on how to complete both preliminary and in-depth assessments." (**ASME**, *Aiding the Fight Against Terrorism*, September 14, 2006)

"RAMCAP is intended to provide asset owners and operators a means to calculate the potential consequences and vulnerability to an attack using a common and consistent system of measurements, or the means to convert the results from prior assessments performed with select approved methodologies into results that can be compared to those obtained using RAMCAP methodologies." (**DHS OIG**, *Fiscal Year 2008 Annual Performance Plan*, 2007, pp. 21-22)

Risk Assessment: "A process by which the results of a risk analysis (i.e., risk estimates) are prepared for use in decisions, either through the relative ranking of risk reduction strategies or through comparison with risk criteria." (**Center for Chemical Process Safety** 1995, xvii)

Risk Assessment: "refers to the technical assessment of the nature and magnitude of risk". (**Cohrssen** and Covello, 1989)

Risk Assessment: "…emphasizes the estimation and quantification of risk in order to determine acceptable levels of risk and safety; in other words to balance the risks of a technology or activity against its social benefits in order to determine its overall social acceptability" (**Cutter** 1993, 2).

Risk Assessment: Determination of vulnerabilities and hazards in certain location to establish risks and risk probabilities. (**D&E Reference Center** 1998)

Risk Assessment: "The identification and assessment of hazards." (**DHS**, *FCD 1*, 2007, P-9)

Risk Assessment: "The determination of risk includes identification and characterization of threats, their consequences, and our vulnerabilities. While each is important for capabilities-based planning and national preparedness, determinations of vulnerability are important since they include not only exposure and sensitivity, but resilience. Resilience is key since it refers to our coping capacity to absorb events, adapt, respond to, and recover from its effects….The completion of a risk assessment, the first step in the preparedness cycle, helps us understand the *types of threats and hazards we face*." (**DHS**, *Target Capabilities List*, 2007, p. vii and 13)

"Risk assessment does not focus on single incidents but rather assesses risk across a number of viable threats and critical assets." (**DHS**, *Target Capabilities List*, 2007, p. 52)

Risk Assessment: "A systematic examination of risk, using disciplined processes, methods, and tools. It provides an environment for decision making to continuously evaluate and prioritize risks and recommend strategies to remediate or mitigate those risks." (**DoD**, *DCIP*, 2005. p. 13)

Risk Assessment: "**RISK ASSESSMENT OR RISK CHARACTERIZATION** is determination of risk context and acceptability, often by comparison to similar risks." (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

Risk Assessment: "Risk assessment includes one or more of the following components:

- Hazard identification,
- Dose-response assessment,
- Exposure assessment,
- Risk characterization." (**Environmental Protection Agency** 1986)

Risk Assessment: "The procedure in which the risks posed by inherent hazards involved in processes or situations are estimated either quantitatively or qualitatively." (**European Environment Agency**, *EEA Environmental Glossary*, 2007)

Risk Assessment: The process of identifying the likelihood and consequences of an event to provide the basis for informed decisions on a course of action. (**FEMA**, *FRP,* **1992**)

Risk Assessment: "Risk Assessment means a process or method for evaluating risk associated with a specific hazard and defined in terms of probability and frequency of occurrence, magnitude and severity, exposure, and consequences" (**FEMA**, *Multi Hazard Identification…,* **1997**, p. xxv)

Risk Assessment: "Risk Assessment defines the potential consequences of a disaster based upon a combination of the community's hazard and vulnerability identification." (**FEMA** *Project Impact*, **1998**, 17)

Risk Assessment: "Risk assessment is the process of measuring the potential loss of life, personal injury, economic injury, and property damage resulting from natural hazards by assessing the vulnerability of people, buildings, and infrastructure to natural hazards. Risk assessment answers the fundamental question that fuels the natural hazard mitigation process: 'What would happen if a natural hazard event occurred in your community.'" A risk assessment tells you:

- "The hazards to which your state or community is susceptible;
- What these hazards can do to physical, social, and economic assets;
- Which areas are most vulnerable to damage from these hazards; and
- The resulting cost of damages or costs avoided through future mitigation projects." (**FEMA**, *Guide for All-Hazard Emergency Operations Planning* (SLG 101), **2001**, iii)

Risk Assessment: "Risk assessment, a critical step in the [risk management framework] approach, helps decision makers identify and evaluate potential risks so that countermeasures can be designed and implemented to prevent or mitigate the effects of risk. Risk assessment is a qualitative and/or quantitative determination of the likelihood of an adverse event occurring and

the severity, or impact, of its consequences. Risk assessment in a homeland security application often involves assessing three key elements—threat, criticality, and vulnerability:

• A threat assessment identifies and evaluates potential threats on the basis of factors such as capabilities, intentions, and past activities.

• A criticality or consequence assessment evaluates and prioritizes assets and functions in terms of specific criteria, such as their importance to public safety and the economy, as a basis for identifying which structures or processes are relatively more important to protect from attack.

• A vulnerability assessment identifies weaknesses that may be exploited by identified threats and suggests options to address those weaknesses.

Information from these three assessments contributes to an overall risk assessment that characterizes risks on a scale such as high, medium, or low and provides input for evaluating alternatives and management prioritization of security initiatives." (**GAO**, *Maritime Security*, Dec. 2007, p. 91)

Risk Assessment: Risk assessment estimates the probable degree of injury and property damage in a given area over a specific time interval (**Godschalk**, Kaiser, and Berke 1998, 99.)

Risk Assessment: The process, including both risk analysis and risk management alternatives, of establishing information regarding and acceptable levels of that risk for an individual, group, society, or the environment. (**Gratt** 1987, 244)

Risk Assessment: "A risk assessment is an objective scientific assessment of the chance of experiencing loss or adverse consequences when physical and social elements are exposed to potentially harmful natural and technological hazards, environmental impact, morbidity, and mortality." (**Hays and Ryland** 2001)

Risk Assessment: "Risk assessment, is a systematic characterization of the probability of an adverse event and the nature and severity of that event (Presidential/Congressional Commission on Risk Assessment and Risk Management 1997). Risk assessments are most often used to determine the human health or ecological impacts of specific chemical substances, microorganisms, radiation, or natural events….In the natural-hazards field, risk assessment has a broader meaning, and involves a systematic process of defining the probability of an adverse event (e.g., flood) and where that event is most likely to occur." (**Hill and Cutter** 2001, 15-16)

Risk Assessment: "Overall process of risk identification, analysis and evaluation. Note: Risk assessment involves the process of identifying internal and external threats and vulnerabilities, identifying the likelihood of an event arising from such threats or vulnerabilities, defining critical functions necessary to reduce exposure, and evaluating the cost of such controls." (**ISO 22399**, *Societal Security…*, 2007, 6)

Risk Assessment: "…the quantitative evaluation of the likelihood of undesired events and the likelihood of harm or damage being caused together with the value judgments made concerning the significance of the results." (**Jones** 1992, 27)

Risk Assessment: "Identification of risks to persons or property, operations, or business function or activity, and evaluation of the importance of the function to the continued business operation. Functions may be classified as critical, essential, or non-essential to their importance in continuing normal operations. May be individual assessments conducted by a particular entity or jointly conducted between the public and private sectors. The vulnerability of each function should also be evaluated. (**Jones**, *Critical Incident Protocol*, 2000, 37)

Risk Assessment: "…a basic risk assessment:

- Identifies the hazard,
- Profiles the hazard event,
- Inventories the assets that would be impacted (affected), and
- Estimates the losses that would result from events (floods) of different probability." (**Larson and Emmer** 2004, Session 16, page 11)

Risk Assessment: "The entity shall identify hazards, monitor those hazards, the likelihood of their occurrence, and the vulnerability of people, property, the environment, and the entity itself to those hazards." (**NFPA 1600**, 2007, p. 8)

"A comprehensive risk assessment identifies the range of possible hazards, threats, or perils that have or might impact the entity, surrounding area, or critical infrastructure supporting the entity. The potential impact of each hazard, threat, or peril is determined by the severity of each and the vulnerability of people, property, operations, the environment, and the entity to each threat, hazard, or peril. The risk assessment should categorize threats, hazards, or perils by both their relative frequency and severity, keeping in mind that there might be many possible combinations of frequency and severity for each. The entity should attempt to mitigate, prepare for, plan to respond to, and recover from those threats, hazards, or perils that are able to significantly impact people, property, operations, the environment, or the entity itself.

A.5.3.1 A number of methodologies and techniques for risk assessment exist that range from simple to complex. These techniques and associated amplifying information include, but are not limited to, the following: (1) "What-if": The purpose of the what-if analysis is to identify specific hazards or hazardous situations that could result in undesirable consequences. This technique has limited structure but relies on knowledgeable individuals who are familiar with the areas/operations/processes. The value of the end result is dependent on the team and the exhaustive nature of the questions they ask regarding the hazards. (2) Checklist: A specific list of items is used to identify hazards and hazardous situations by comparing the current or projected situations with accepted standards. The value of the end result is dependent on the quality of the checklist and the experience/credentials of the checklist user. (3) What-if/checklist: This technique is a combination of the what-if and checklist techniques, and uses the strength of both techniques to complete the risk assessment. The what-if questions are developed and the checklist(s) used to encourage the creativity of the what-if process, as well as fill in any

gaps in the process of developing questions. The value of the end result is dependent on the team and exhaustive nature of the questions they ask regarding the hazards. (4) Hazard and operability study (HAZOP): This technique requires an interdisciplinary team that is very knowledgeable of the areas/operations/processes to be assessed. This approach is thorough, time-consuming, and costly. The value of the end result depends on the qualifications/experience of the team, the quality of the reference material available, the ability of the team to function as a team, and strong, positive leadership. (5) Failure mode and effects analysis (FMEA): Each element in a system is examined individually and collectively to determine the effect when one or more elements fail. This is a bottom-up approach; that is, the elements are examined and the effect of failure on the overall system is predicted. A small interdisciplinary team is required. This technique is best suited for assessing potential equipment failures. The value of the end result is dependent on the credentials of the team and scope of the system to be examined. (6) Fault-tree analysis (FTA): This is a top-down approach where an undesirable event is identified and the range of potential causes that could lead to the undesirable event is identified. The value of the end result is dependent on the competence in using the FTA process, on the credentials of the team, and on the depth of the team's analysis." (**NFPA 1600**, 2007, p. 13-14)

Risk Assessment: "Risk assessment should be recognized as a process which consists of a number of steps. Whilst there is great diversity in the detailed approaches and methodologies used, all risk assessments share some common characteristics. The essential steps are hazard identification including information gathering, an estimation of consequences and frequencies, a characterizations of risk and an evaluation of the significance of the results, which then forms an input to a decision-making process." (**OECD Working Group** 1995, 12)

Risk Assessment: "Risk assessment involves the clarification of the nature of a risk, including its probability of occurrence and likely intensity, and measuring its potential impact on people, property and the environment." (**Pine and Waugh** 2005, 16-9)

Risk Assessment: A five-step process comprised of:

(1) Identification of undesired events.
(2) Analysis of the mechanisms by which undesired events could occur.
(3) Consideration of the extent of any harmful effects.
(4) Consideration of the likelihood of the undesired events and the likelihood of specific detrimental outcomes. Likelihood may be expressed as probability or frequency.
(5) Judgements about the significance of the identified hazards and estimated risks. (**Royal Society Study Group** 1983)

Risk Assessment: (sometimes Risk Analysis) The process of determining the nature and scale of the losses (due to disasters) which can be anticipated in particular areas during a specified time period. Risk assessment involves an analysis and combination of both theoretical and empirical data concerning the probabilities of known disaster hazards of particular force or intensities occurring in each area ("hazard mapping"); and the losses (both physical and functional) expected to result to

each element at risk in each area from the impact of each potential disaster hazard ("vulnerability analysis and expected loss estimation"). (**Simeon Institute** 1992)

Risk Assessment: …*[R]isk Assessment*…is undertaken to find out what the problems are. It involves evaluating the significance of a given quantitative (if necessary, qualitative) measure or risk in an integrated way…Generally speaking, risk assessment is such a complex concept that a single, scientifically repeatable, solution will rarely satisfy all the political and social realities of the decision-making process. (**Smith** 1996, 54)

Risk Assessment: "The statistical analysis of risk…based on mathematical theories of probability and scientific methods for identifying causal links between different types of hazardous activity and the resulting adverse consequences" (**Smith** 1996, 57).

> According to **Kates and Kasperson** (1983), risk assessment comprises three distinct steps:
>
> 1. An identification of hazards likely to result in disasters, i.e. what hazardous events may occur?
> 2. An estimation of the risks of such events, i.e. what is the probability of each event?
> 3. An evaluation of the social consequences of the derived risk, i.e. what is the loss created by each event?" (**Smith** 1996, 58)

Risk Assessment/Analysis: "A process to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability/capacity that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend." (**UN/ISDR** 2002, 24

Risk Assessment: "The term risk analysis is often used synonymously with risk assessment. In this book, however, risk assessment refers to the technical assessment of the nature and magnitude of a risk." (**US Council on Environmental Quality**, 1989, 355)

Risk Assessment: "The process of risk analysis and risks evaluation." (**Western**, Cees van. *Disaster Risk Management*, 2005)

Risk Assessment: (See, also, "Community Risk Assessment")

Risk Assessment, National: "**The National Risk Assessment (NRA)** is a classified cross-government document which incorporates expertise from a wide range of departments and agencies. It assesses the impact and likelihood of the major risks, both hazards and threats, that the country could face over a five year period, enabling prioritisation of the UK's planning for emergencies…. Understanding the risks and determining their relative significance in terms of potential impact is the starting point for emergency planning. The key to turning this into useful planning information is remembering that it is not the risks themselves that people have to deal with when things go wrong, but their consequences." (**UK Cabinet Office**. *The Risk Register*, 2008, 4)

Risk Assessment Process for Informed Decision-making (RAPID): "RAPID is a strategic-level process that uses standardized risk calculus to gauge future risks across the full range of

DHS responsibilities and inform the annual PPBE [Planning, Programming, Budgeting and Execution] cycle. RAPID looks at risk from a broad perspective and offers a strategic view to influence resource allocations through PPBE by seeking to answer the question of what program investments would provide the most risk reduction. In doing so, RAPID will help communicate expected risk reduction performance to DHS decision makers to support priority setting for resources, and potential investment increments and decrements." (**DHS**, *IPG FY 2011*, 9)

Risk Assessment Methodology: "A Risk assessment methodology should consider all risk factors including unexpected parameters. The methodology needs to answer the following basic questions:

What do we know? What is the risk?
Do we have an incident waiting to happen?
What action can we take?
What can go wrong? What are the potential consequences? How likely is it to happen?
What is the chain of events which could lead to harm?
Can we tolerate the potential consequences at the estimated likelihood?
What are the benefits and costs of alternative technologies?" (**Western**, *Disaster Risk Management*, 2005)

Risk Assessment Process:

1. Identify Risks
2. Profile Hazards
3. Inventory Assets
4. Estimate Losses (**Tetra Tech EM Inc**, *Suffolk County*…, 2007, page ES-3)

Risk Assessment Process: "The NRA [National Risk Assessment] process uses historical and scientific data, and the professional judgements of experts to analyse the risks to the UK. There are three stages to this analysis: identification of risks; assessment of the likelihood of the risks occurring and their impact if they do; and comparison of the risks." (**UK Cabinet Office**, *National Risk Register*, 2008, 43)

Risk Assessment Process for Informed Decision-making (RAPID): "…a methodology designed to enable top-level risk-informed resource decisions." (**HSI,** HSI Report Abstracts, April 2007)

Risk Aversion: "…the value people place directly on reducing their own and others' risk of death and injury…" (**Smith** 1996, 72).

Risk-Based: "The *Guidelines* [NPG] establish a risk-based approach to preparedness. Risk is a function of three variables: threat, vulnerability, and consequence. Both threat and vulnerability are influenced by the probabilities of events that are highly uncertain. In order to compensate for that uncertainty, the *Guidelines* provide a set of National planning Scenarios that represent a range of threats that warrant national attention. The National Planning Scenarios establish common assumptions to guide planning nationwide regarding potential vulnerabilities and consequences (or impacts) of major incidents. Analysis of the range of potential impacts is essential for defining capabilities in terms of both capacity (i.e., how many are needed) and

proficiency (i.e., how well must they be able to perform). These capabilities must be reflected in emergency operations plans (for the near-term) and in preparedness strategies (for the long-term). Federal, State, local, tribal, and territorial officials supplement this approach with risk assessments that provide additional data on their specific threats, vulnerabilities, and consequences. As a result, officials can tailor their approach according to differences in risk across the Nation." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 3)

Risk-Based Allocation (DHS): "The risk model used for UASI, SHSP, and LETPP considers the potential risk of terrorism to people, critical infrastructure, and the economy to estimate the relative risk of terrorism faced by a given area. Risk is defined as the product of three principal variables: threat – the likelihood of an attack occurring, vulnerability – the relative exposure to attack, and consequence – the expected impact of an attack." (**DHS**, *Fiscal Year 2007 Homeland Security Grant Program*, July 18, 2007, p. 3)

Risk-Based Analysis: "The risk-based analysis framework is defined as an approach to evaluation and decision making that explicitly, and to the extent practical, analytically, incorporates considerations of risk and uncertainty. These risks and uncertainties arise from measurement errors, short data records, and from the innate variability of complex physical, social, and economic situations, particularly those dealing with future occurrences. Because it captures and quantifies the extent of the risk and uncertainty in the various planning and design components of an investment project, this approach has been found very useful. Each of the components can be examined and conscious decisions made reflecting an explicit tradeoff between risk and costs. Risk-based analysis can identify which plans are more robust and can be used to compare plans in terms of their likely physical performance and economic success." (**USACE**, *Water Resources Policies and Authorities - Digest of Water* Resources..., 1999, 13-3)

Risk Categorization (Likelihood of Event) Example:

0 = No Event
1 = Rare Event
2 = Occasional Event
3 = Frequent Event (**DigitalCare, Inc**., *State of OR BC Training Workshop*, 2006, p. 44)

Risk Characterization: "Integration of evidence, reasoning, and conclusions collected in hazard identification, dose-response assessment, and exposure assessment and the estimation of the probability, including attendant uncertainties, of occurrence of an adverse effect if an agent is administered, taken, or absorbed by a particular organism or population. It is the last step of risk assessment." (**European Environment Agency**, *EEA Environmental Glossary*, 2007)

Risk Characterization: "Risk characterization is a synthesis and summary of information about a potentially hazardous situation that addresses the needs and interests of decision makers and of interested and affected parties. Risk characterization is a prelude to decision making and depends on an interactive, analytical-deliberate process." (**National Research Council**, 1996, p. 27)

Risk Communication: "According to acclaimed risk communication experts Baruch Fischhoff, McGranger Morgan, Ann Bostrom, and Cynthia Atman, risk communication is 'communication

intended to supply laypeople with the information they need to make informed, independent judgments about risks to health, safety, and the environment'." (**Bullock & Haddow** 2005, 295)

Risk Communication: "Risk communication is a field that has flourished in the area of environmental health. Through risk communication, the communicator hopes to provide the receiver with information about the expected type (good or bad) and magnitude (weak or strong) of an outcome from a behavior or exposure. Typically, it is a discussion about an adverse outcome and the probability of that outcome occurring. In some instances, risk communication has been employed to help an individual make a choice about whether or not to undergo a medical treatment, continue to live next to a nuclear power plant, pass on genetic risks, or elect to vaccinate a healthy baby against whooping cough. In some cases, risk communication is used to help individuals adjust to the knowledge that something that has already occurred, such as an exposure to harmful carcinogens, may put them at greater risk for a negative health outcome, such as cancer, in the future. Risk communication would prepare people for that possibility and, if warranted, give them appropriate steps to monitor for the health risk, such as regular cancer screening." (**CDC**, *Crisis and Emergency Risk Communication*, 2002, p. 6)

Risk Communication: "…risk communication: the effective understanding of risks and the transfer of risk information to the public, and the transfer of information from the public to decisionmakers….Risk management decisions should not simply be made by technical experts and public officials and then imposed on, and justified to, the public after the fact. Risk Communication involves a dialogue among interested parties – risk experts, policy makers, and affected citizens." (**Committee on Risk-Based Analysis**…2000, 37)

Risk Communication: "Interactive exchange of information about risks among risk assessors, managers, news media, interested groups, and the general public." (**European Environment Agency**, *EEA Environmental Glossary*, 2007)

Risk Communication: "Exchange or sharing of information about risk between the decision-maker and other stakeholders. Note: The information can relate to the existence, nature, form, probability, severity, acceptability, treatment or other aspects of risk." (**ISO 22399**, *Societal Security*…, 2007, 6)

Risk Communication: "…an interactive process of exchange of information and opinion among individuals, groups and institutions….We construe risk communication to be successful to the extent that it raises the level of understanding of relevant issues or actions for those involved and satisfies them that they are adequately informed within the limits of available knowledge." (**NRC** 1989, 2)

> "The NRC (1989, 149) concludes that four objectives are key to improving risk communications: (1) goal setting, (2) openness, (3) balance, and (4) competence. As a means of achieving these objectives, it is important, at the start of any given project, to determine:
>
> - what the public know, believe, and do not believe about the subject risk and ways to control it;

- what quantitative and qualitative information participants need to know to make critical decisions;
- and how they think about and conceptualize the risk. (NRC 1989, 153)." (**Pearce** 2000, Chapter 3, 16)

"**Pidgeon** et al. (cited in **Horlick-Jones and Jones** 1993, 31) conclude that there are four different conceptual approaches to risk communication:

- Scientific communications – 'top-down' or one-way transmission of some message about a hazard from a particular 'expert' source to a target 'non-expert' audience.
- Two-way exchange – an interactive process that recognizes the important role that feedback plays in any complex communication.
- Wider institutional and cultural contexts stressed – communicator takes account of the actions of risk management institutions, possible conflicting messages, and the history of the hazard in question.
- Risk communication as part of a wider political process – the process as a prerequisite to the enabling and empowerment of risk-bearing groups." (**Pearce** 2000, Chapter 3, 16)

Risk Communication Principles (EPA's Seven Cardinal Rules of Risk Communication):

Risk Communication Principles: Rule 1. Accept and involve the public as a legitimate partner.
Two basic tenets of risk communication in a democracy are generally understood and accepted. First, people and communities have a right to participate in decisions that affect their lives, their property, and the things they value. Second, the goal of risk communication should not be to diffuse public concerns or avoid action. The goal should be to produce an informed public that is involved, interested, reasonable, thoughtful, solution-oriented, and collaborative.

Guidelines: Demonstrate respect for the public by involving the community early, before important decisions are made. Clarify that decisions about risks will be based not only on the magnitude of the risk but on factors of concern to the public. Involve all parties that have an interest or a stake in the particular risk in question. Adhere to highest moral and ethical standards: recognize that people hold you accountable.

Risk Communication Principles: Rule 2. Listen to the audience.
People are often more concerned about issues such as trust, credibility, control, benefits, competence, voluntariness, fairness, empathy, caring, courtesy, and compassion than about mortality statistics and the details of quantitative risk assessment. If people feel or perceive that they are not being heard, they cannot be expected to listen. Effective risk communication is a two-way activity.

Guidelines: Do not make assumptions about what people know, think or want done about risks. Take the time to find out what people are thinking: use techniques such as interviews, facilitated discussion groups, advisory groups, toll-free numbers, and surveys. Let all parties that have an interest or a stake in the issue be heard. Identify with your audience and try to put yourself in

their place. Recognize people's emotions. Let people know that what they said has been understood, addressing their concerns as well as yours. Recognize the "hidden agendas," symbolic meanings, and broader social, cultural, economic or political considerations that often underlie and complicate the task of risk communication.

Risk Communication Principles: Rule 3. Be honest, frank, and open.
Before a risk communication can be accepted, the messenger must be perceived as trustworthy and credible. Therefore, the first goal of risk communication is to establish trust and credibility. Trust and credibility judgments are resistant to change once made. Short-term judgments of trust and credibility are based largely on verbal and nonverbal communications. Long term judgments of trust and credibility are based largely on actions and performance. In communicating risk information, trust and credibility are a spokesperson's most precious assets. Trust and credibility are difficult to obtain. Once lost they are almost impossible to regain.

Guidelines: State credentials; but do not ask or expect to be trusted by the public. If an answer is unknown or uncertain, express willingness to get back to the questioner with answers.
Make corrections if errors are made. Disclose risk information as soon as possible (emphasizing appropriate reservations about reliability). Do not minimize or exaggerate the level of risk. Speculate only with great caution. If in doubt, lean toward sharing more information, not less—or people may think something significant is being hidden. Discuss data uncertainties, strengths and weaknesses—including the ones identified by other credible sources. Identify worst-case estimates as such, and cite ranges of risk estimates when appropriate.

Risk Communication Principles: Rule 4. Coordinate and collaborate with other credible sources
Allies can be effective in helping communicate risk information. Few things make risk communication more difficult than conflicts or public disagreements with other credible sources.
Guidelines: Take time to coordinate all inter-organizational and intra-organizational communications. Devote effort and resources to the slow, hard work of building bridges, partnerships, and alliances with other organizations. Use credible and authoritative intermediaries. Consult with others to determine who is best able to answer questions about risk. Try to issue communications jointly with other trustworthy sources such as credible university scientists, physicians, citizen advisory groups, trusted local officials, and national or local opinion leaders.

Risk Communication Principles: Rule 5. Meet the needs of the media.
The media are a prime transmitter of information on risks. They play a critical role in setting agendas and in determining outcomes. The media are generally more interested in politics than in risk; more interested in simplicity than in complexity; and more interested in wrongdoing, blame and danger than in safety.

Guidelines: Be open with and accessible to reporters. Respect their deadlines. Provide information tailored to the needs of each type of media, such as sound bites, graphics and other visual aids for television. Agree with the reporter in advance about the specific topic of the interview; stick to the topic in the interview. Prepare a limited number of positive key messages in advance and repeat the messages several times during the interview. Provide background

material on complex risk issues. Do not speculate. Say only those things that you are willing to have repeated: everything you say in an interview is on the record. Keep interviews short. Follow up on stories with praise or criticism, as warranted. Try to establish long-term relationships of trust with specific editors and reporters.

Risk Communication Principles: Rule 6. Speak clearly and with compassion.
Technical language and jargon are useful as professional shorthand. But they are barriers to successful communication with the public. In low trust, high concern situations, empathy and caring often carry more weight than numbers and technical facts.

Guidelines: Use clear, nontechnical language. Be sensitive to local norms, such as speech and dress. Strive for brevity, but respect people's information needs and offer to provide more information. Use graphics and other pictorial material to clarify messages. Personalize risk data: use stories, examples, and anecdotes that make technical data come alive. Avoid distant, abstract, unfeeling language about deaths, injuries and illnesses. Acknowledge and respond (both in words and with actions) to emotions that people express, such as anxiety, fear, anger, outrage, and helplessness. Acknowledge and respond to the distinctions that the public views as important in evaluating risks. Use risk comparisons to help put risks in perspective; but avoid comparisons that ignore distinctions that people consider important. Always try to include a discussion of actions that are under way or can be taken. Promise only that which can be delivered, and follow through. Acknowledge, and say, that any illness, injury or death is a tragedy and to be avoided.

Risk Communication Principles: Rule 7. Plan carefully and evaluate performance.
Different goals, audiences, and media require different risk communication strategies. Risk communication will be successful only if carefully planned and evaluated.

Guidelines: Begin with clear, explicit objectives—such as providing information to the public, providing reassurance, encouraging protective action and behavior change, stimulating emergency response, or involving stakeholders in dialogue and joint problem solving. Evaluate technical information about risks and know its strengths and weaknesses. Identify important stakeholders and subgroups within the audience. Aim communications at specific stakeholders and subgroups in the audience. Recruit spokespersons with effective presentation and human interaction skills. Train staff—including technical staff—in communication skills: recognize and reward outstanding performance. Pretest messages. Carefully evaluate efforts and learn from mistakes." (EPA Document OPA-87-020, April 1988. Drafted by Vincent T. Covello and Frederick W. Allen)" (CDC, CERC, 2002, pp. 18-20)

Risk Communication Principles:

1. "Risk communication should involve the open, two-way exchange of information between professionals, including both policy makers and "experts" in relevant disciplines, and the public….
2. Risk management goals should be stated clearly, and risk assessments and risk management decisions should be communicated accurately and objectively in a meaningful manner….

To maximize public understanding and participation in risk-related decisions, agencies should:

a. explain the basis for significant assumptions, data, models, and inferences used or relied upon in the assessment or decision;
b. describe the sources, extent and magnitude of significant uncertainties associated with the assessment or decision;
c. make appropriate risk comparisons, taking into account, for example, public attitudes with respect to voluntary versus involuntary risk; and,
d. provide timely, public access to relevant supporting documents and a reasonable opportunity for public comment." (**OMB and OSTP**, *Updated Principles for Risk Analysis*, September 9, 2007, pp. 10-13.

Risk Control/Risk Treatment: "The process of decision making for managing risks, and the implementation, or enforcement of risk mitigation measures and the re-evaluation of its effectiveness from time to time, using the results of risk assessment as one input. (**Western**, *Disaster Risk Management*, 2005)

Risk Criteria: "Terms of reference by which the significance of risk is assessed. Note: Risk criteria can include associated cost and benefits, legal and statutory requirements, socio-economic and environmental aspects, the concerns of stakeholders, priorities and other inputs to the assessment." (**ISO 22399**, *Societal Security*…, 2007, 6)

Risk-Driven (Core Principle of Emergency Management): "Risk-driven: emergency managers use sound risk management principles (hazard identification, risk analysis, and impact analysis) in assigning priorities and resources." (**EM Roundtable**, 2007, p. 4)

Risk Estimation: "Risk estimation: the process used to produce a measure of the level of health, property, or environmental risks being analysed. Risk estimation contains the followings steps: frequency analysis, consequence analysis and their integration." (**Western**, Cees van. *Disaster Risk Management*, 2005)

Risk Evaluation: "Determiniation of risk management priorities through establishment of qualitative and/or quantitative relationships between benefits and associated risks." (**Business Dictionary**, 2007)

Risk Evaluation: "Establishment of a qualitative or quantitative relationship between risks and benefits, involving the complex process of determining the significance of the identified hazards and estimated risks to those organisms or people concerned with or affected by them. It is the first step in risk management." (**European Environment Agency**, *EEA Environmental Glossary*; cites: International Union of Pure and Applied Chemistry. Risk Assessment Terminology. Chemistry International Vol. 23, No. 2. March 2001. John H. Duffus.)

Risk Evaluation: "The stage at which values and judgements enter the decision process, explicitly or implicitly, by including consideration of the importance of the estimated risks and the associated social, environmental, and economic consequences, in order to identify a range of alternatives for managing the risks. (**Western**, Cees van. *Disaster Risk Management*, 2005)

Risk Evaluation and Control: "Determine the events and environmental surroundings that can adversely affect an organization, the damage that such events can cause, and the controls needed to prevent or minimize the effects of potential loss. (This includes understanding loss potentials; determining the organization's vulnerability to loss potentials; identifying controls and safeguards to prevent or minimize the effect of the loss potential; and evaluating the effectiveness of controls and safeguards.)" (**DRJ & DRII**, *GAP for DC Practitioners*, 2007, 15)

Risk Factors: Frequency of Occurrence
Location
Spatial Area (% of jurisdiction hazard likely to impact)
Duration
Secondary Effects
Seasonality
Speed of onset
Warning availability

Risk Factors (TCL): "Risk factors that affect capability need and placement include:

- population and population density,
- the presence of critical infrastructure and key resources,
- location in high terrorist threat or high risk natural disaster areas, and
- capabilities to prevent, protect against, or mitigate a threat." (**DHS**, *TCL*, 2007, p. 10)

Risk Management: "Risk management is recognized as an integral part of good management practice. It is an iterative process consisting of steps, which, when undertaken in sequence, enable continual improvement in decision-making. Risk management is the term applied to a logical and systematic method of identifying, analyzing, evaluating, treating, monitoring and communicating risks associated with any activity, function or process in a way that will enable organizations to minimize losses and maximize opportunities. Risk management is as much about identifying opportunities as avoiding or mitigating losses. This Standard may be applied at all stages in the life of an activity, function, project or asset. The maximum benefit is usually obtained by applying the risk management process from the beginning. Often a number of differing studies are carried out at different stages of a project. NOTE: This Standard may be applied to a very wide range of activities or operations of any public, private or community enterprise, or group." (**Australia/New Zealand Standards**, *Risk Management*, 1999 (2nd Ed.))

Risk Management: "The essence of risk management lies in maximizing the areas that we have some control over the outcome while minimizing the areas where we have absolutely no control over the outcome and the linkage between cause and effect is hidden from us." (**Berstein**)

Risk Management: "Public Risk management is a process that is used to decide what to do where a risk has been determined to exist. It involves identifying the level of tolerance the community has for a specific risk or set of risks and determines what risk assessment options are acceptable within a social, economic, cultural and political context. To achieve this, the process must be open since it has to factor in benefits, costs of control and any statutory or socially approved requirements needed

to manage the risk. Hence, it requires communicating and consulting with the public-at-large, either directly or through appropriate representation as well as with specialists" (**Britton** 1998, 1).

Risk Management: "Risk management is about playing the odds. It is figuring out which attacks are worth worrying about and spending money on and which are better left ignored. It is spending more resources on the serious attacks – defined as being very likely or if successful having devastating effects – and spending less on the trivial ones. It is taking a finite security budget and making the best use of it.. In other words, homeland security should be about wise choices, not just increased spending." (**De Rugy** 2004, 20)

Risk Management: "Risk management is the process to identify, control, and minimize the impact of uncertain events." (**DHS**, *FCD 1*, November 2007, p. 4)

Risk Management: "The process of identifying, controlling, and minimizing the impact of events whose consequences are or may be unknown, or events that are themselves fraught with uncertainty." (**DHS**, *FCD 1*, November 2007, P-9)

Risk Management: "Definition: a process of measuring or assessing the vulnerability to hazards, threats, or dangers, and subsequent development of strategies to minimize the overall levels of each. Extended Definition: process includes identification, analysis, mitigation plan development, testing, evaluation of safeguards, security review, and monitoring. Annotation: Risk management primarily strives to reduce or eliminate risk through mitigative measures (avoiding the risk or reducing the negative effect of the risk), but also includes the concepts of acceptance and/or transfer of responsibility for the risk as appropriate. Risk management principles acknowledge that, while risk often cannot be eliminated, actions can usually be taken to reduce risk. Example: Risk management framework establishes the process for combining consequence, vulnerability, and threat information to produce a comprehensive, systematic, and rational assessment of risk that drives risk reduction activities." (**DHS**, *Lexicon*, 19Oct07, 23-24)

Risk Management: "Federal, State, local, tribal, territorial, and private-sector entities identify and assess risks, prioritize and select appropriate protection, prevention, and mitigation solutions based on reduction of risk, monitor the outcomes of allocation decisions, and undertake corrective actions. Additionally, Risk Management is integrated as a planning construct for effective prioritization and oversight of all homeland security investments." (**DHS**, *National Preparedness Guidelines*, September 13, 2007, p. 6)

Risk Management: "Let me begin by discussing some key principles that apply to port security and, in fact, to all homeland security. First, we do not believe in security at any cost. We believe in risk management, which means looking at threats, vulnerabilities and consequences, weighing what are the risks we should be most concerned about, considering the measures we are looking to undertake, in terms of whether they are cost beneficial, and then weighing that in terms of making up a strategic plan." (**DHS**, *Remarks by Homeland Security Secretary Michael Chertoff to the American Association of Port Authorities*, March 20, 2007)

Risk Management: "Risk Management is defined by the Government Accountability Office (GAO) as "A continuous process of managing—through a series of mitigating actions that

permeate an entity's activities—the likelihood of an adverse event and its negative impact." Risk Management is founded in the capacity for all levels of government to identify and measure risk prior to an event, based on credible threats/hazards, vulnerabilities, and consequences, and to manage the exposure to that risk through the prioritization and implementation of risk-reduction strategies. The actions to perform Risk Management may well vary among government entities; however, the foundation of Risk Management is constant." (**DHS**, *TCL*, 2007, p. 43)

Risk Management: "The risks we confront continue to evolve and the potential targets across our nation are numerous indeed. If we tried to eliminate every risk, we would obviously fail. Moreover, we would become so heavy-handed with security, we would end up destroying exactly what we are trying to protect -- the normal, daily fabric of life across our nation. So instead of trying to eliminate risk, our overarching strategy is to reduce and manage it. Risk management lets us identify what should concern us most in terms of threats, existing vulnerabilities, and potential consequences. Our risk management philosophy drives all that we do." (**DHS**, *Testimony of Secretary Michael Chertoff before the House Committee on Homeland Security*. (Remarks as Prepared) September 5, 2007)

Risk Management: "What I am committed to doing is a disciplined approach to risk management that considers what is the optimal amount of security, but does it in a way that does not destroy our way of life." (**DHS**, *Testimony of Secretary of Homeland Security Michael Chertoff Before the House Homeland Security Committee*, July, 14, 2005)

Risk Management: "A process by which decision makers accept, reduce, or offset risk." (**DoD**, *Defense Critical Infrastructure Program*, DODD 3020.40, August 2005, p. 13)

Risk Management: "The process of identifying, assessing, and controlling, risks arising from operational factors and making decisions that balance risk cost with mission benefits." (**DoD**, *DOD Dictionary of Military and Related Terms*, 2007)

Risk Management: "A holistic risk management strategy implementation should address the following components:

- Threat assessment, both capability and intent;
- Vulnerability assessment;
- Consequence assessment;
- Mitigation options (cost/benefit) analysis; and
- Mitigation implementation.

"The Risk Management process involves Risk Assessment (the combination of the first three risk elements – threat, vulnerability, and consequence) and Risk Mitigation (development and analysis of mitigation options and implementation of the preferred options). The first three risk elements are strongly interdependent for malevolent threats and must be considered collectively. The success of the Risk Assessment process depends strongly upon good planning, a screening process based upon a preliminary analysis of consequences, and the development of a good baseline description (from which the mitigation options can be developed). The output of the Risk Assessment provides the degree of risk that is to be managed. Various mitigation options

can then be analyzed in a holistic context that considers other operational parameters such as life-cycle cost, operational impact, safety, policy, public opinion, and personal freedoms. These options provide input to the next round of risk assessments that result in risk/operational pairs. For each option there is a reduction in risk and an associated operational 'cost' – a real cost (e.g., life-cycle security, productivity, safety), and a virtual cost (e.g., public opinion, loss of personal freedoms). Only then does the decision-maker have the necessary data to determine which risks should be mitigated and which risks should be accepted."

"Furthermore, all involved in the process must understand the perishability of any risk assessment. With time, all factors can change: the threat may become more or less capable or 'threatening'; vulnerabilities can become more pronounced or less so)because of the implementation of mitigation options, or lack thereof); and consequences may be higher or lower depending on intervening developments involving the asset in question or related assets that may or may not be robust substitutes should something happen to the asset in question. As such, commitment to a risk management strategy also carries a commitment to a continuing process." (**DOD Defense Science Board**, *Report of the DSB Task Force on CHIP*, 2007, p. 15)

Risk Management: "**RISK MANAGEMENT** is the systematic application of policies, practices, and resources to the assessment and control of risk affecting human health and safety and the environment. Hazard, risk, and cost/benefit analysis are used to support development of risk reduction options, program objectives, and prioritization of issues and resources. A critical role of the safety regulator is to identify activities involving significant risk and to establish an acceptable level of risk. Near zero risk can be very costly and in most cases is not achievable. (**DOT**, *Risk Management Definitions*, Office of Hazardous Materials Safety, 2005)

Risk Management: "Process of evaluating alternative regulatory and non-regulatory responses to risk and selecting among them. The selection process necessarily requires the consideration of legal, economic and social factors." (**European Environment Agency**, *EEA Multilingual Environmental Glossary*, 2007; cites: United Nations. Glossary of Environment Statistics)

Risk Management: "Risk management is the deliberate process of understanding 'risk' – the likelihood that a threat will harm an asset with some severity of consequences – and deciding on and implementing actions to reduce it." (**FEMA**, *Building Design for Homeland Security*, January 2004, Unit V-3)

Risk Management: "Risk management—the process for measuring or assessing risk and developing strategies to manage it—is an essential aspect of mitigation. Risk management strategies may include avoiding the risk (e.g., removing structures in floodplains), reducing the negative effect of the risk (e.g., hardening buildings by placing barriers around them), or accepting some or all of the consequences of a particular risk." (**FEMA**. *National Incident Management System* (FEMA 501/Draft), August 2007, p. 21)

Risk Management: "Risk management is a systematic approach for analyzing risk and deciding how best to address it. Because resources are limited and cannot eliminate all risks, careful choices need to be made in deciding which actions yield the greatest benefit." (**GAO**, *Maritime Security*, Dec. 2007, p. 90)

Risk Management: "Coordinated activities to direct and control an organization with regard to risk. Note: Risk management generally includes risk assessment, risk treatment, risk acceptance and risk communication." (**ISO 22399**, *Societal Security*…, 2007, 6)

Risk Management: "Risk management is the process of determining the most beneficial combination of countermeasures and mitigation strategies that can be employed within the constraints of available resources." (**Jones**, *ASME Critical Assets Protection Initiative*, 2004, 11)

Risk Management: "Risk Management is a discipline for dealing with uncertainty." (**Kloman** 2001, 24)

Risk Management: "Risk management is a broad field encompassing all risks including day to day concerns such as safety and liability." (**Manitoba Emergency Measures Organization** (Canada), *Business Resumption Planning*, 1996, p. 8)

Risk Management: "For the purpose of this report, the Working Group defines risk management as: A systematic, analytical process to determine the likelihood that a threat or vulnerability will harm an asset or resource and then identify actions that reduce the risk and mitigate the consequences of the event." (**National Infrastructure Advisory Council**, *Risk Management Approaches to Protection* (Final Report and Recommendations by the Council), October 11, 2005, p. 6)

Risk Management: "The art or act of handling the possibility of loss or injury. Involves four components of (1) Indexing critical operations, (2) Assessing risk exposure for those operations designated as "vital" or "high," (3) Developing mitigation plan outlining who, what, when and how the corrective and preventive actions will be implemented, and (4) Testing and measurement of the effectiveness of the corrective and preventive actions." (**Schaming** 1998, 26-28.)

Risk Management: The process of intervening to reduce risk—the making of public and private decisions regarding protective policies and actions that reduce the threat to life, property, and the environment posed by hazards. Generally, the risk management process attempts to answer the following questions:

1. What can be done?
2. What options or alternatives are available and what are their associated tradeoffs in terms of costs, benefits, and other (current and future risks?
3. What are the effects of current decisions on future options? (**Shaw**, 1999.)

Risk Management: The process whereby decisions are made and actions implemented to eliminate or reduce the effects of identified hazards. (**Simeon Institute** 1992)

Risk Management: *Risk Management* means reducing the threats to life and property (and the environment) posed by known hazards, whilst simultaneously accepting unmanageable risks and maximizing any associated benefits. (**Smith** 1996, 54)

Risk Management: A Framework for the systematic application of management policies, procedures and practices to the tasks of identifying, analyzing, evaluating, treating and monitoring risk. (**Standards Australia/New Zealand** 1995, 4360; quoted in Salter (1997–98, 22)

Risk Management: "The systematic management of administrative decisions, organizations, operational skills and responsibilities to apply policies, strategies and practices for disaster risk reduction." (**UN ISDR** 2002, 25)

Risk Management: "The complete process of risk assessment and risk control (or risk treatment)." (**Western**, *Disaster Risk Management*, 2005)

Risk Management: "Process of deciding what should be done about a hazard; deciding which hazards at what scale (intensity, occurrence interval) should be managed and in what priority." (**Williamson and Lawless**, 2001)

Risk Management, National Level: "Currently, government bodies play a four-part role in risk management at the national level.
• *Action*: from identification of risks to crisis management and risk communication
• *Regulation*: the use of legislation to help prevent the emergence of risks and to protect against the consequences of risks should they arise
• *Economic continuity*: the use of measures (such as release of financial reserves or strategic energy reserves) which ensure economic robustness in the face of a wide range of risk events
• *Insurance*: acting as an insurer of last resort.

"The group established five principles of country risk management which could be applied across the spectrum of governments to guide country risk officers, whether the officer is an individual, a coordinating committee or takes some other institutional form.
• *Accountability*: The need for accountability of risk assessment is seen as a fundamental condition of the legitimacy of assessment as a basis for concerted government action both vertically (within departments of government) and horizontally (across branches of government). Clarity of accountability would increase the incentives for effective mitigation measures.
• *Integrated assessment*: Establishing common procedures across government departments to assess risks, cross-disciplinary scenarios and the language of risk would provide a basis not only for better crisis management but also for defining more effective prevention and mitigation of global risks. Too often positive externalities are overlooked and negative externalities are exaggerated by lack of an integrated assessment of risk.
• *Devolved implementation*: Integrated assessment should not imply centralized implementation. Devolved implementation of risk mitigation strategies should allow flexible and adaptive responses to common risks.
• *Separation of analysis and policy*: The case for devolved implementation is strengthened by the argument in favour of separation of analysis and policy. Analysis is better kept within a separate structure, so as to prevent bureaucratic pressures impinging upon independence of analysis.
• *Disclosure and transparency (if possible)*: Governments are constantly caught between pressure to disclose risk assessments and the need to keep some assessments confidential so as to avoid panic, protect sources and maintain resilience. But even the maintenance of confidential information can create the conditions for incomplete or inaccurate information leading to an

"infodemic" situation in a crisis, where the consequences of popular reaction to a perceived risk far outweigh the risk itself. The development of much more granular risk communication strategies will ensure a culture of maximum disclosure and transparency, while safeguarding against information overload." (World Economic Forum, *Global Risks 2008: A Global Risk Network Report*. January 2008, pp. 36-37)

Risk Management Cycle:

- Identify the risks
- Evaluate the risks
- Identify suitable responses to risk
- Select
- Plan and resource
- Monitor and report. (**RuleWorks**, *The Risk Management Guide*, 2008)

Risk Management Evaluation (RME): "The current understanding of risk management of an environmental challenge." (**Sayles**, *EPA's Risk Management Evaluation of EDCs*, 2002, slide 3)

Risk Management Framework: "…the following questions illustrate a general risk management framework:

- *What are you trying to protect? ...*
- *What are you trying to protect it from? ....*
- *What is the likelihood of each threat occurring and the consequence if it does? ....*
- *What kind of action does the program take in response to the threat?* There are four ways of responding to a threat: acceptance, prevention, interdiction, and mitigation. The response that the program represents may be placed in one or more of these categories:
    - *Acceptance* – Acceptance of a threat is a rational alternative that is often chosen when the threat has low probability, low consequence, or both…. For example, few people remain indoors during storms to avoid the low probability of being struck by lightning.
    - *Prevention* – Prevention is the alteration of the target or its circumstances to diminish the risk of the bad thing happening….
    - *Interdiction* – Interdiction is any confrontation with, or influence exerted on, an attacker to eliminate or limit its movement toward causing harm….
    - *Mitigation* – Mitigation is preparation so that, in the event of the bad thing happening, its consequences are reduced….
- *Does the response create new risks to the asset or others...*"

(**Data Privacy and Integrity Advisory Committee**, *Report of the Data Privacy and Integrity Advisory Committee No. 2006-01*, DHS, Privacy Office, March 29, 2006, pp. 3-4)

Risk Management Framework: "A planning methodology that outlines the process for setting security goals; identifying assets, systems, networks, and functions; assessing risks; prioritizing and implementing protective programs; measuring performance; and taking corrective action. Public and private sector entities often include risk management frameworks in their business continuity plans." (**DHS**, *NIPP*, 2006, p. 105)

Risk Management Framework: "As shown in figure 5 [modified below] a risk management framework represents a series of analytical and managerial steps, basically sequential, that can be used to assess risk, assess alternatives for reducing risks, choose among those alternatives, implement the alternatives, monitor their implementation, and continually use new information to adjust and revise the assessments and actions, as needed. Adoption of a risk management framework can aid in assessing risk by determining which vulnerabilities should be addressed in what ways within available resources." (**GAO**, *Protection of Chemical and Water Infrastructure*, 2005, 24)

- Strategic Goals, Objectives, and Constraints
- Risk Assessment
- Alternative Evaluation
- Management Selection
- Implementation and Monitoring

Risk Management Plan: "A document defining how project risk analysis and management is to be implemented in the context of a particular project." (**Brunswick IS**, *Glossary of Project Management*, 2007)

Risk Management Planning: "Risk Management Planning is about defining the process of how to engage and oversee risk management activities for a project. Risk Management planning is an important part of project management. Having a plan on how to manage risk, allows one to task to plan versus innovating and deciding after the fact and in the midst how to handle a risk. The earlier Risk Management planning is engaged within increases the possibility of success of all risk management activities and processes especially if the process definition was created with input and buy-in from the project manager and key project stakeholders.

The inputs for Risk Management Planning are:

> **Project Scope Statement** – The Project Scope Statement documents the project scope including a description, major deliverables, project objectives, project assumptions, project constraints, and a statement of work. In Risk Management Planning, the project scope statement is commonly used for identifying project boundaries and assumptions.
>
> **Project Management Plan** – The Project Management plan contains the WBS which is used in Risk Management Planning to determine possible areas where risks can occur. For example, if the WBS has usability testing being the last item completed after integrated testing. This is a risk. The usability of the application may have affect on how the information is passed into and out of the application. This could be considered a Project Management Planning Risk.
>
> **Organizational process assets** – The organizations' process assets may contain defined standards and policies pertaining to risk management. Process assets included are risk categories, roles and responsibilities, and processes of how to have a decision made.

Enterprise environmental factors – Enterprise environmental factors reveal the risk tolerance of the organization and the individuals involved in the project. For example, patient billing departments or leaders commonly have absolutely no risk tolerance for any impact to cash flow. This is especially true in non-for-profit organizations like hospitals. However educators and researchers have a high level or risk tolerance. Therefore in an academic medical center, one could have two ranges of risk tolerance. Understanding how much risk your stakeholders and organization are comfortable with help with decisions regarding the type, level, and amount of risk management to apply in the project.

Once the inputs have been obtained the only tool and technique used to engage in risk management planning is the planning meetings and analysis.

Planning Meetings and Analysis – The planning meetings are used to construct the risk management plan. Commonly attendees are the stakeholders, team members, and the project manager. The Risk costs and action plans are developed with assignments and risk responsibilities. When facilitating planning meetings a couple of tips are:

Ensure people can access the inputs to the planning process beforehand – Have a project collaborative a web site and store core project documents including the Project Scope Statement, Project Management Plan, your organization's policies on risk management, and any environmental factors that may affect your project.

Assure the object is to discuss and make decisions about the risk plan – During the Risk Management Planning meetings it is good to cover the five major elements of risk management. These are:

Methodology — Define how risks will be identified, how risk analysis (qualitative and quantitative) will be done, how risk response planning will happen, how risks will be monitored, and how ongoing risk-monitoring activities will occur.
Roles and Responsibilities — Determine who will have responsibility for resolving which risks. Create a matrix, list, or table and assign names. Your organization may already have pre-assigned roles and responsibilities.
Budget — Determine an order-of-magnitude estimate for how much risk-management activities will cost for the project, based on time estimates and personnel costs, and the size, impact, and importance of your project.
Schedule — Define when risk-management activities should be done, and schedule them. High-visibility, important projects will require more frequent risk identification and response than low-visibility or routine projects.
Templates and definitions of terms — Obtain copies of your organization's templates and any pre-existing risk categories and definitions. You and your team will need to discuss and agree on what these terms mean.

Risk Management Planning meetings are all about planning for subsequent risk identification and analysis. It's important not to get involved in actually identifying risks during these meetings.

The output of the Risk Management Planning process is the Risk Management Plan. The Risk Management Plan documents Project Risk Management will be structured and performed on the project.

The components of the Risk Management Plan are as follows:

Methodology – Methodology describes how the Risk Management processes will be performed, the tools which will be utilized, and the data source for handling risk.
Roles and responsibilities – Roles and responsibilities matrix identifies the lead, support, and risk management team for each action item in the risk management plan, and assigns people to the roles clarifying their responsibility and accountability.
Budgeting – Budgeting assigns resource and estimates costs needed for risk management. Simply state it is just better to be honest and above board, budgeting for risk with a risk contingency.
Timing – Timing clarifies the frequency of the risk management process and schedules some risk management activities in the project schedule. Without timely monitoring and response, risks can easily escalate into negative events or become missed opportunities because you failed to exploit them.
Risk categories - Risk categories are potential causes of risk included in the Risk Management Plan for use during the Risk Identification and Risk Analysis processes. Risk categories are sometimes shown as a Risk Breakdown Structure (RBS). The RBS is a hierarchically organized depiction of the identified project risks arranged by risk category and subcategory that identifies the various areas and causes of potential risks.
Definitions of risk probability and impact - Agreeing on standard definitions helps to ensure that everyone is communicating on the same wavelength. Definitions are included in the Risk Management Plan for later use during Risk Analysis.
Probability and impact matrix - The probability and impact matrix assists in determining whether a risk is considered low, moderate, or high by combining the two dimensions of a risk: its probability of occurrence, and its impact on objectives if it occurs.
Revised stakeholder tolerances — As discussions become more specific during planning meetings about actual risks and actual costs, schedules, scope, objectives, and quality criteria, you will begin to get a better idea of your stakeholders' tolerance for risk than you had at the start of the process.
Reporting formats – Reporting formats depict the content and format of the risk register. The Risk Register is a document on which you will record identified risks and their characteristics.
Tracking – Tracking describes how and when risk information will be documented and reviewed for the benefit of current project, future needs, and lessons learned. Tracking also specifies whether risk management processes will be audited." (**Nielsen**, *Risk Management Planning*, February 5, 2007)

Risk Management Self-Evaluation Framework (RMSEF): "A tool to aid all parties (regulators, shippers, carriers, emergency response personnel, etc) in assessing and managing risk." (**DOT**, *Risk Management Self-Evaluation Framework (RMSEF)*, Office of Hazardous Materials Safety, 2005.

Risk Management Strategy: "Developing a complete Risk Management Strategy means generating an organized approach for treatment of all exposures to risk from the organizational perspective. Following a risk management assessment, following the planning of specific treatments for specific risks, an organization must develop a comprehensive risk management strategy for treating risk that best serves the objectives and goals of the organization as a whole." (**CyberSure**, *Risk Management Strategy,* 2008)

Risk Mapping: "Risk mapping is the process of mapping elements/areas at risk and differentiating between low, medium and high risk areas. This activity is best conducted by involving community members and allowing them to lead the exercise. This exercise may also include mapping resources/infrastructure and describing the state in which these are in." (**ProVention Consortium**, *CRA Toolkit: Glossary of Terms*, 2006)

Risk Mapping: "A risk map is a map of a community or geographical zone that identifies the places and the structures that might be adversely affected in the event of a hazard. The production of a risk map requires consideration of areas and features threatened within the community or geographical zone, consultation with people and groups of varying expertise, and the discussion of possible solutions to reduce risk. The benefits of this technique are that it helps to locate the major hazards; they can create shared criteria for decision-making, they can provide a record of historical events that have had a negative impact on the community, and they identify risks so a community may find solutions or take precautions." (**UNDAP**, *Techniques*, 2008)

Risk Mitigation: "Risk Mitigation covers efforts taken to reduce either the probability or consequences of a threat. These may range from physical measures (protective fences) to financial measures (stockpiling cash, insurance)." (**Risky Thinking**, *Risk Glossary*, 2007)

Risk Monitoring: "Process of following up the decisions and actions within risk management in order to ascertain that risk containment or reduction with respect to a particular hazard is assured." (**European Environmental Agency**, *EEA Multilingual Environmental Glossary*; cites: International Union of Pure and Applied Chemistry. Risk Assessment Terminology. Chemistry International Vol. 23, No. 2. March 2001. John H. Duffus)

Risk Perception: "Slovic (cited in Slaymaker 1995, 3) defines risk perception as 'the 'common sense' understanding of hazards, exposure and risk, arrived at by a community through intuitive reasoning …usually expressed…as 'safe' or 'unsafe'.' He goes on the mention that 'policy decisions are almost always driven by perceived risk among the population affected and among decision makers [and that] these perceptions are commonly at variance with 'technical' risk assessments.'" (**Pearce** 2000, Chapter 3, 18)

Risk Reduction: "Risk Reduction creates safer communities by proactively reducing risk and enhancing the capability of States and local communities to reduce their risk from natural hazards." (**FEMA**, *Vision for New* FEMA, December 12, **2006**, p. 28)

Risk Reduction: "Risk Reduction works to reduce risk to life and property through land use planning, floodplain management, the adoption of sound building practices, and a variety of grant programs that support these activities. Mitigation projects that reduce risk include elevating, relocating, or acquiring properties located in floodplains and returning them to open space, and the reinforcing of buildings in earthquake-prone areas." (**FEMA**, "Fact Sheet – FEMA's Mitigation Directorate," August **2007**, p. 1)

Risk Reduction: "Actions taken to lessen the probability, negative consequences, or both, associated with a risk." (**ISO 22399**, *Societal Security*…, 2007, 6)

Risk Reduction: Long-term measures to reduce the scale and/or the duration eventual adverse effects of unavoidable or unpreventable disaster hazards on a society which is at risk, by reducing the vulnerability of its people, structures, services, and economic activities to the impact of known disaster hazards. Typical risk reduction measures include improved building standards, flood plain zoning and land-use planning, crop diversification, and planting windbreaks. The measures are frequently subdivided into "structural" and "non-structural", " active" and "passive" measures. N.B. A number of sources have used " disaster mitigation" in this context, while others have used "disaster prevention." (**Simeon Institute** 1992)

Risk Reduction Return on Investment. Self-defining.

Risk Tolerance: "Total amount of risk that an organization is prepared to accept, tolerate, or be exposed to at any point in time." (**ISO 22399**, *Societal Security*…, 2007, 7)

Risk Tolerance: "The ability of an organization to survive the losses associated with risks." (**Risky Thinking**, *Risk Glossary*, 2007)

Risk Transfer: "Sharing with another party the burden of loss or benefit or gain for a risk." (**ISO 22399**, *Societal Security*…, 2007, 6)

Risk Treatment: "Process of selection and implementation of measures to modify risk. Note 1: The term 'risk treatment' is sometimes used for the measures themselves. Note 2: Risk treatment measures can include avoiding, optimizing, transferring or retaining risk." (**ISO 22399**, *Societal Security.*…, 2007, 7)

Risk Typologies:

1. *Subjective risk*: The mental state of an individual who experiences uncertainty or doubt or worry as to the outcome of a given event.

2. *Objective risk*. The variation that occurs when actual losses differ from expected losses.

3. *Real risk*. The combination of probability and negative consequence that exists in the real world.

4. *Observed risk:* The measurement of that combination obtained by constructing a model of the real world.

5. *Perceived risk:* The rough estimate of real risk made by an untrained member of the general public. (**Thompson**, 1986)

RISS: Regional Intelligence Sharing projects. (**FEMA**, *IIFOG Ver 3*, Feb 2008, p. 12)

RM: Radiological Monitoring/Monitor. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B-9)

RMA. Office of Risk Management and Analysis, DHS. (**DHS**, Statement of Rufe, July 9, 2008)

RMEC: Regional Military Emergency Coordinator. (**DoD**, *MSCA*, 1993, p. 1)

RMOC: Regional Medical Operations Center. (**Robinson**, *Proceedings.…*, Dec. 2007, p. 5)

RMP: Response Management Plan. (**Dept. of the Army**, *WMD CST Operations*, 2007, p. 2-1)

RMSEF: Risk Management Self-Evaluation Framework. (**DOT**, RMSEF, 2005)

RN: Radiological/Nuclear. (**DHS**, *DNDO Exercises*, 2007)

RNA: Rapid Needs Assessment.

RNCSAA: Radiological and Nuclear Countermeasure System Architectures Analysis. (**DHS**, *HSSTAC (Minutes of February 23-24, 2005 Meeting*) p. 4)

Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). " The Stafford Act authorizes the President to provide financial and other forms of assistance to State and local governments, certain private nonprofit organizations and individuals to support response, recovery and mitigation efforts following Presidential emergency or disaster declarations." (**DHS**, *NRF Comment Draft*, September 2007, p. 38). See also, "Stafford Act." Additional information about the Stafford Act's disaster process and disaster aid programs is available at http://www.fema.gov/hazard/dproc.shtm.

"Pub. L. No. 93-288, 88 Stat. 143 (1974), codified in 42 U.S.C. §§ 5121-5206 (2005), was also amended in the Department of Homeland Security Appropriations Act of 2007, Pub. L. No. 109-295, 120 Stat. 1355 (2006), particularly Title VI, the Post-Katrina Emergency Management Reform Act of 2006 (discussed below). The Stafford Act describes the programs and processes by which the Federal Government provides disaster and emergency assistance to State and local governments, tribal nations, eligible private nonprofit organizations, and individuals affected by a declared major disaster or emergency. The Stafford Act covers all hazards, including natural disasters and terrorist events." (**DHS**, *National Response Framework List of Authorities and References* (Draft), September 10, 2007, p. 2)

Robert T Stafford Disaster Relief & **Emergency Assistance Act: Vesting of Responsibilities:**

"The purpose of this title is to provide a system of emergency preparedness for the protection of life and property in the United States from hazards and to vest responsibility for emergency preparedness jointly in the Federal Government and the States and their political subdivisions. The Congress recognizes that the organizational structure established jointly by the Federal Government and the States and their political subdivisions for emergency preparedness purposes can be effectively utilized to provide relief and assistance to people in areas of the United States struck by a hazard. The Federal Government shall provide necessary direction, coordination, and guidance, and shall provide necessary assistance, as authorized in this title so that a comprehensive emergency preparedness system exists for all hazards. (Robert T. Stafford Act, Title VI -- Emergency Preparedness Sec. 601. Declaration of policy (42 U.S.C. 5195))

[Thus, it is not, as is often stated, the case that emergency management or disaster preparedness, is primarily the responsibility of State and Local government, with the role of the Federal government as a secondary role of supporting and assisting State and local governments. Emergency management/disaster preparedness is a "joint" [equal] responsibility of Federal, State and local political subdivisions.]

Robust Organizations: "The robust organization…is set up to cope with increasing uncertainty in the environment. Accordingly, a high-performing, robust organization has four key characteristics: alertness, agility, adaptability, and alignment. Alertness captures the organization's focus on measuring results and establishing performance expectations. Agility is tied to improved communication and the sharing of decision-making authority throughout the organization. Adaptability stems from a better understanding of customer needs and internal performance incentives. Finally, alignment is created through extensive information and technology. These attributes are believed to be key to enabling organizations to be high performing in the face of deep uncertainty." (**Light**, *Predicting Organizational Crisis Readiness: Perspectives and Practices toward a Pathway to Preparedness*, 2008, p. 17; cites: Paul C. Light, *The Four Pillars of High Performance: How Robust Organizations Achieve Extraordinary Results* (New York: McGraw Hill, 2005))

ROE: Rules of Engagement. (**DA**, *WMD-CST Operations*, December 2007, Glossary-6)

Roentgen: "A unit of exposure to gamma (or X) radiation….An exposure of 1 roentgen results in the deposition of about 94 ergs of energy in 1 gram of soft body tissue. Hence, an exposure of 1 roentgen is approximately equivalent to an absorbed dose of 1 rad in soft tissue." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, Glossary, p. 638)

ROEP: Rules of Exercise Play. (**DHS**, *HSEEP*, Vol. V, 2005, p. 54)

Rogue State: "A country engaged in behavior counter to the norms of international security, such as supporting terrorism or developing weapons of mass destruction." (**NDP**, *Transforming Defense*, 1997, 92)

Roles/Responsibilities, All Levels: DHS Secretary Michael Chertoff, 17Dec07, in response to question: "…how do you make the determination as to whether something ought to be a federal

program emanating out of Washington, D.C., versus finding the best practice out in the community and turning that into a national program?"

"That is a great question, which strikes at the heart of one of the most challenging parts of the job. I think we all recognize -- although it's sometimes hard to know whether people in Washington will share this view -- that the federal government really can't be and shouldn't be the nanny for everything; to take care of everything directly. First of all, it would be astronomically expensive, but beyond that, it would really take the decision-making out of the hands of people who know best of what is the right way to implement things, and put it in a remote bureaucracy in Washington.

"I think the genius of our system is an appropriate level of responsibility for the appropriate task. So let me divide it into **three categories**.

"I think for most of what we do, in terms of protecting and responding and even preventing, a lot of the responsibility has to be in the hands of the **private sector and local communities**. That's because they know what is best and what works best. Now, we can do a couple things. We can lay out some guidance to the right way to do things. We can convey information that gives people a sense of what the threats are and what the challenges are, and what works and what doesn't. We can help facilitate network-sharing. We can even, in some circumstances, put down performance standards, like we're doing with the chemical industry, for example.

"But in the end, we don't want to micromanage. We want to say, here's what you need to be able to do, here's the right way to do it -- or, here's the right kinds of things you have to be able to do, but you decide what is the best way to actually implement it based upon your knowledge and your experience about how to get things done in your community or your business. Now, this…doesn't satisfy those who enjoy or believe that the only way to deal with an issue is what I call "Soviet-style" management, where there's that heavy hand of government on everything. But I do think it's particularly apt in the 21st-century world, which is a world of networking, which is not hierarchical.

"The **second stage** is dealing with matters that ought to be really **state responsibilities**, particularly in the area of prevention where we're dealing, again, with concerns about home-grown terrorism. In many cases, the challenges are what we would call "low-signature threats" -- threats that may not be detectable from spies and satellites, but require community-based policing and community-based knowledge to detect and deter and prevent threats before they come into effect. Because of that, again, we don't want to have the federal government become the choke point to which all this information has to pass before action takes place. That's why we're supporting fusion centers, including fusion centers with responders as well as police officials, so that states and localities can take action quickly to address issues. Now, we want to be able to have visibility into that, we want to share information up and down, but we don't want to slow up the process.

"**Finally,** we do recognize there are some matters that are **national responsibilities,** and those ought to be areas where we do get our hands dirty and our boots on the ground, so that while with respect to the other categories of information our role could be to enable, to assist, to give

information, to set standards, and to help fund, in the area of national priorities, we actually have to be operators, and we have to focus and make sure we can do those operational incidents.

"What do those include? Well, it includes securing our borders; that's why we're putting a lot of effort into that. It includes looking at high-consequence terrorists attacks that could have a national or at least a regional impact; that's where we do use the tools of our intelligence community. It involves really catastrophic responses that overwhelm local and state government; and that's why we're doing planning with the National Guard and the military for the first time in a way we've never done before, so that in that kind of emergency, we really could step in and play a national role.
"I think by keeping a different step of strategies for the appropriate level, we are maximizing our scope and we're minimizing our intrusiveness and the heavy hand of Washington." (**DHS**, *Remarks by Secretary Michael Chertoff to the National Congress for Secure Communities*, 17 Dec 2007)

Roles/Responsibilities, Elected and Appointed Officials: "Elected and appointed officials help their communities prepare for, respond to, and recover from potential incidents. Key responsibilities include:
• Establishing strong working relationships with local jurisdictional leaders and core private-sector organizations, voluntary agencies, and community partners. The objective is to get to know, coordinate with, and train with local partners in advance of an incident and to develop mutual aid and/or assistance agreements for support in response to an incident.
• Leading and encouraging local leaders to focus on preparedness by participating in planning, training, and exercises.
• Supporting participation in local mitigation efforts within the jurisdiction and, as appropriate, with the private sector.
• Understanding and implementing laws and regulations that support emergency management and response.
• Ensuring that local emergency plans take into account the needs of:
    -- The jurisdiction, including persons, property, and structures.
    -- Individuals with special needs, including those with service animals.
    -- Individuals with household pets.
• Encouraging residents to participate in volunteer organizations and training courses." (**DHS**, *NRF*, Jan 2008, 16)

Roles/Responsibilities, Elected and Appointed Officials: "When emergency occurs, the first thing people look for are information, aid, assistance, and direction from their elected and appointed officials. This expectation is more evident in every new emergency as Americans increasingly look to their government to be their 'guardian' in times of disaster. The consequences of a government not being prepared for an emergency can be disastrous, involving potential loss of life, human suffering, damage to homes, businesses, and other property, and the loss of public confidence in government and its leadership." (FEMA, An Introduction to SCM, Sep 1992, 6)

Roles/Responsibilities, Individuals and Households: "Although not formally a part of emergency management operations, individuals and households play an important role in the overall emergency management strategy. Community members can contribute by:

- ***Reducing hazards in and around their homes.*** By taking simple actions, such as raising utilities above flood level or taking in unanchored objects during high winds, people can reduce the amount of damage caused by an incident.
- ***Preparing an emergency supply kit and household emergency plan.*** By developing a household emergency plan and assembling disaster supplies in advance of an event, people can take care of themselves until assistance arrives. This includes supplies for household pets and service animals. See the recommended disaster supplies list at http://www.ready.gov.
- ***Monitoring emergency communications carefully.*** Throughout an emergency, critical information and direction will be released to the public via various media. By carefully following the directions provided, residents can reduce their risk of injury, keep emergency routes open to response personnel, and reduce demands on landline and cellular communication.
- ***Volunteering with an established organization.*** Organizations and agencies with a role in response and recovery are always seeking hardworking, dedicated volunteers. By volunteering with an established voluntary agency, individuals and households become part of the emergency management system and ensure that their efforts are directed where they are needed most.
- ***Enrolling in emergency response training courses.*** Emergency response training, whether basic first aid through the American Red Cross or a more complex course through a local college, will enable residents to take initial response actions required to take care of themselves and their households, thus allowing first responders to focus on higher priority tasks that affect the entire community. (**DHS**, *NRF*, Chapter I: Roles and Responsibilities, Jan 2008, pp. 17-18)

Roles/Responsibilities, Individuals and Households: "…the cornerstone of preparation is individual preparation. Have a plan, know how to get the information about what you need to do in the event that a hurricane looms on the horizon. Have some water and food and medicine and a radio, so if you wind up getting caught in a situation where there aren't supplies for 48 or 72 hours, you have the capability to sustain yourself. None of this is rocket science. It's the same steps you would take to make sure your house is prepared against a fire or some other kind of more predictable problem. And if people will make individual preparations, they make it easier for the responders, who then can first focus on people who can't help themselves, either because they're sick or old or poor. And those people need to get help first. So people who have the wherewithal and the capability to help themselves, I think have a civic responsibility to do it." (**DHS**, *Remarks by Chertoff and Paulison on Hurricane Preparedness*, May 20, 2008)

Roles/Responsibilities, Law Enforcement: "The **Attorney General** is the chief law enforcement officer of the United States. Generally acting through the Federal Bureau of Investigation, the Attorney General has the lead responsibility for criminal investigations of terrorist acts or terrorist threats by individuals or groups inside the United States or directed at U.S. citizens or institutions abroad, as well as for coordinating activities of the other members of the law enforcement community to detect, prevent, and disrupt terrorist attacks against the

United States. This includes actions that are based on specific intelligence or law enforcement information. In addition, the Attorney General approves requests submitted by State Governors pursuant to the Emergency Federal Law Enforcement Assistance Act for personnel and other Federal law enforcement support during incidents. The Attorney General also enforces Federal civil rights laws and will provide expertise to ensure that these laws are appropriately addressed." (**DHS**, *NRF*, Jan 2008, 25)

Roles/Responsibilities, Military: "Many DOD components and agencies are authorized to respond to save lives, protect property and the environment, and mitigate human suffering under imminently serious conditions, as well as to provide support under their separate established authorities, as appropriate. The provision of defense support is evaluated by its legality, lethality, risk, cost, appropriateness, and impact on readiness. When Federal military and civilian personnel and resources are authorized to support civil authorities, command of those forces will remain with the Secretary of Defense. DOD elements in the incident area of operations and National Guard forces under the command of a Governor will coordinate closely with response organizations at all levels." (**DHS**, *NRF*, Jan 2008, 26)

Roles/Responsibilities, Private Sector: "Essential private-sector responsibilities include:

- Planning for the protection of employees, infrastructure, and facilities.
- Planning for the protection of information and the continuity of business operations.
- Planning for responding to and recovering from incidents that impact their own infrastructure and facilities.
- Collaborating with emergency management personnel before an incident occurs to ascertain what assistance may be necessary and how they can help.
- Developing and exercising emergency plans before an incident occurs.
- Where appropriate, establishing mutual aid and assistance agreements to provide specific response capabilities.
- Providing assistance (including volunteers) to support local emergency management and public awareness during response and throughout the recovery process." (**DHS**, *NRF*, Jan 2008, 19-20)

Roles/Responsibilities, State Government: "A primary role of State government is to supplement and facilitate local efforts before, during, and after incidents. The State provides direct and routine assistance to its local jurisdictions through emergency management program development and by routinely coordinating in these efforts with Federal officials. States must be prepared to maintain or accelerate the provision of commodities and services to local governments when local capabilities fall short of demands." (**DHS**, NRF, Jan 2008, 21)

RPA: Requests for Public Assistance. (**FEMA**, *Disaster Assistance*…, October 12, 1999)

RPC: Regional Planning Committee. (**DHS/OEC**, *Statewide Communication Interoperability Plans FAQs*, September 2007, p. 4)

RPO: Recovery Point Objective. (**IIA**, *Business Continuity Management*, 2008, pp. 10-11)

RRCC: Regional Response Coordination Center. (**DHS**, *NRF Comment Draft*, 2007)

RRI: Response to Request for Information. (**DA**, *WMD-CST Operations*, Dec 2007, Glossary-6)

RRS: Readiness Reporting System. (**DHS**, *FCD 1*, Nov 2007, p. 16)

R-RSRT: Regional Rapid Support and Response Team. (**DHS**, *Budget-in-Brief FY 2008*, p. 68)

RRT: Regional Response Team. (**FEMA**, *Region III Annual Report FY 2007*, 2008, 30)

RSFI: Risk Specific Facility Inventory. (**FL DEM**, *CFI-RSFI, SOG, GIS-SOG 2289.01*, 2003)

RSOI: Reception, Staging, Onward Movement, and Integration. (**DA**, *WMD-CST Ops*, 2007, Glossary-6)

RSU: Reunification Services Unit**.** (**FEMA**, *Statement of Paulison, "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath…",* June 26, 2008, p. 13)

RTF: Response Task Force. (**DoD**, *DoD Response to Radiological Accidents*, 1996, p. 10)

RTO: Recovery Time Objective. (**DigitalCare**, *State of Oregon BC Workshop*, 2006, p. 62)

RTO: Regional Training Officer, FEMA.

RTSWGs: Regional Transit Security Working Groups. (**DHS**, *Fiscal Year 2008 Buffer Zone Protection Program Guidance and Application Kit*, February 2008, p. 11)

RUF: Rules for the use of force for domestic support to civil authority missions. (**Center for Law and Military Operations and HQ Marine Corps, Judge Advocate Division**, *ROE v. RUF*, 2006)

Rules for the Use of Force and Weapons for US Forces: "CJCSI 3125.01A, *Military Assistance to Domestic Consequence Management Operations in Response to a Chemical, Biological, Radiological, Nuclear, or High-Yield Explosive Situation*, Enclosure E, establishes a presumption that units deployed to sites of a CBRNE situation will not carry arms. Units may deploy to sites of CBRNE situations with their weapons in storage in the event that the unit is subsequently authorized to carry arms by the SecDef or is deployed from the CBRNE site to an assignment where weapons are authorized. Military commanders are responsible to ensure that weapons and ammunition are properly stored and physically secured. Military members providing security for stored weapons and ammunition at military facilities during CBRNE CM operations may carry their weapons while performing their normal security duties. In accordance with CJCSI 3121.01B, *Standing Rules of Engagement/Standing Rules for the Use of Force for US Forces* (S), mission-specific RUF for CBRNE CM operations are set forth in CJCS Contingency Plan (CONPLAN) 0500-98 (U), Annex C. National and local decisions about force protection conditions (FPCON) may have an impact on the arming policy. The decision to implement a particular FPCON is a command decision and the JTF commander may set a higher FPCON if warranted by threat level assessments for the joint operations area (JOA). FPCON is

based on an assessment of the vulnerability of JTF personnel or facilities, criticality of personnel or facilities, availability of security resources, impact on operations and morale, damage control considerations, and other international or US actions. Because the CBRNE CM mission is most likely in response to a terrorist attack, it is highly likely that deterrent measures may include requesting SecDef authorization to arm the response forces along with taking other additional security measures based on local FPCON." (**JCS/DOD**, *CBRNE CM*, 2006, pp. II-4 and II-5; see, also, **Dept. of the Army**, *WMD-CST Operations*, December 2007, p. A-1)

Rules for the Use of Force for US Forces: "CJCSI 3121.01B, *Standing Rules of Engagement/Standing Rules for the Use of Force for US Forces*, establishes fundamental policies and procedures governing the actions to be taken by US commanders and their forces during all DOD CS [Civil Support] and routine military department functions occurring within the US territory or US territorial seas. SRUF also apply to land HD missions occurring within US territory…. Unless otherwise directed by a unit commander (IAW CJCSI 3121.01B, *Standing Rules of Engagement/Standing Rules for the Use of Force for US Forces*), military personnel have the right under law to use force that is reasonably necessary under the circumstances to defend themselves against violent, dangerous or life-threatening personal attack. In addition, military personnel are authorized to use force to discharge certain duties." (**JCS/DoD**, *Civil Support*, 2007, p. B-1; see, also, **Dept. of the Army**, *WMD-CST Operations*, December 2007, p. A-1)

Rupture Zone: "The area of the Earth through which fault movement occurred during an earthquake. For large quakes, the section of the fault that ruptured may be several hundred miles in length. Ruptures may or may not extend to the ground surface." (**USGS**, *Putting Down Roots*, 2007, Glossary)

Rural Domestic Preparedness Consortium (RDPC): "Recognizing that Emergency Services Sector (ESS) departments and agencies in rural communities across the country face unique challenges, the U.S. Congress authorized the development of the Rural Domestic Preparedness Consortium (RDPC) in 2004, to create and deliver all-hazards training in support of rural homeland security. The RDPC is now offering responder organizations throughout the nation a free resource to bolster critical incident protection and maintain response capabilities: Department of Homeland Security (DHS)-certified hands-on training. Eastern Kentucky University subsequently received funding from DHS to establish such a consortium. In 2006, the Consortium conducted a training needs assessment. The assessment instrument was organized based on the DHS Target Capabilities List with input from law enforcement, fire, EMS, public health, and local officials. From the standpoint of the number of personnel needing training, each discipline named a different Target Capability as its greatest training need: law enforcement (responder safety and health); fire service (citizen preparedness and participation); EMS (CBRNE detection); public health (planning for terrorism events); and, general government (WMD/hazmat response and decontamination). For information at the EKU College of Justice and Safety website, go to: http://www.jsc.eku.edu/news_2007.05.08.asp

SA: Situation/Situational Awareness. (**DA**, *WMD CST Operations*, 2007, p. 2-4)

SAA: State Administrative/Administering Agency. (**FEMA**, *Regional-National CONOPS*, 08, 9)

SAC: Special Agent in Charge, FBI, DOJ. (**HSGAC**, A *Nation Still Unprepared*, 2006, 634)

Safe, Accountable, Flexible, Efficient Transportation Equity Act; A Legacy for Users (SAFETEA-LU), 2005: Signed by President George W. Bush on August 10, 2005. This act states that:

> "The Secretary [of Transportation] and the Secretary of Homeland Security, in coordination with Gulf Coast States and contiguous States, shall jointly review and assess Federal and State evacuation plans for catastrophic hurricanes impacting the Gulf Coast Region and report its findings and recommendations to Congress. …The Secretaries shall consult with appropriate Federal, State, and local transportation and emergency management agencies…and consider, at a minimum, all practical modes of transportation available for evacuations; the extent to which evacuation plans are coordinated with neighboring States; methods of communicating evacuation plans and preparing citizens in advance of evacuations; and methods of coordinating communication with evacuees during plan execution."

In response, the DHS initiated the Nationwide Plan review of 2005-2006. (**DHS**, *Nationwide Plan Review Phase 1 Report*. February 10, 2006, pp. 2-3)

SAFE Port Act: Security and Accountability for Every Port Act of 2006. (**GAO**, Dec 2007)

Safe School Initiative: "Established in collaboration by the U.S. Secret Service and the U.S. Department of Education's Safe and Drug Free Schools Program, the Safe School Initiative (SSI) focuses on prevention and provides useful information about the thinking and behavior of students who commit acts of targeted violence in our nation's schools. One of the key recommendations of the SSI was that schools form multidisciplinary threat assessment teams to assist with identifying, assessing and managing students who may pose a threat of targeted violence. An interactive CD-ROM, titled A Safe School and Threat Assessment Experience: Scenarios Exploring the Findings of the Safe School Initiative, complements the published documents of the Safe School Initiative. The CD is available to law enforcement and school safety personnel across the country and can be ordered via the Department of Education website at http://www.edpubs.org/." (**DHS**, "Fact Sheet: Creating a Culture of Preparedness Among Schools." October 30, 2007.)

SAFECOM: "SAFECOM, a communications program of the Department of Homeland Security's Office for Interoperability and Compatibility (OIC), with its Federal partners, provides research, development, testing and evaluation, guidance, tools, and templates on communications-related issues to local, tribal, state, and Federal emergency response agencies. OIC is managed by the Science and Technology Directorate. As an emergency responder driven program, SAFECOM is working with existing Federal communications initiatives and key emergency response stakeholders to address the need to develop better technologies and processes for the multi-jurisdictional and cross-disciplinary coordination of existing systems and future networks. SAFECOM harnesses diverse Federal resources in service of the emergency response community." (**DHS**, *Welcome to SAFECOM*, accessed October 22, 2007)

Safety: Safety, in the traditional sense, refers to monitoring and reducing the risk of personnel casualties (injuries and deaths) to some acceptable level. (**Shaw** forthcoming)

Safety Culture (REP): "... that assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance." (NRC, *Enforcement Program Annual Report, Calendar Year 2006,* June 6, 2007, page 13)

Safety Officer: "A member of the Command Staff responsible for monitoring and assessing safety hazards or unsafe situations and for developing measures for ensuring personnel safety. The Safety Officer may have assistants." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

Saffir/Simpson Hurricane Scale: A scale for expressing the relative intensity of hurricanes, consisting of five levels of increasing intensity—Categories 1 through 5. (**Notification Manual**)

Saffir/Simpson Hurricane Scale[117]

Storm Category	Wind Speed (mph)	Storm Surge (ft)	Damage	Millibars
1	74-95	4-5	Minimal	> 979
2	96-110	6-8	Moderate	965-979
3	111-130	9-12	Extensive	945-964
4	131-155	13-18	Extreme	920-944
5	> 155	> 18	Catastrtophic	< 920

Sahana (Home of the Free and Open Source Disaster Management System)**:** "Sahana is an integrated set of pluggable, web based disaster management applications that provide solutions to large-scale humanitarian problems in the aftermath of a disaster. Our aspirations are as follows:

- *Primary:* Help alleviate human suffering and help save lives through the efficient use of IT during a disaster
- Bring together a diverse set of actors from Government, Emergency Management, NGOs, INGOs, spontaneous volunteers and victims themselves in responding effectively to a disaster
- Empower the victims, responders, volunteer to better enable them to help themselves and others
- Protect victim data and reduce the opportunity for data abuse
- Provide a Free and Open Source solution end-to-end available to everyone

With the above aspirations, the main applications built into Sahana and problems they address so far are as follows:

[117] Blake, Rappaport, and Landsea. *The Deadliest, Costliest, and Most Intense US Cyclones, 1851-2006*, 2007, 2)

- **Missing Person Registry** - Helping to reduce trauma by effectively finding missing persons
- **Organization Registry** - Coordinating and balancing the distribution of relief organizations in the affected areas and connecting relief groups allowing them to operate as one
- **Request Management System** - Registering and Tracking all incoming requests for support and relief upto fulfillment and helping donors connect to relief requirements
- **Camp Registry** - Tracking the location and numbers of victims in the various camps and temporary shelters setup all around the affected area
- **Volunteer Management** - Coordinate the contact info, skills, assignments and availability of volunteers and responders
- **Inventory Management** - Tracking the location, quantities, expiry of supplies stored for utilization in a disaster
- **Situation Awareness** - Providing a GIS overview of the situation at hand for the benefit of the decision makers. (**Sahana**, *Vision and Objectives*, 2005)

Sanitary Cordon: "A form of quarantine that restricts movement into or out of a region." (**ACLU**, *Pandemic Preparedness*, 2008, 30)

SANS: Ship Arrival Notification System. (**USCG**, *Port Security Assessment Program*)

SAO: State Approving Official. (**FEMA**, *Mission Assignment SOPs Operating Draft*, 2007, 2)

SAR: Search and Rescue. (**HSGAC**, *Hurricane Katrina:* A *Nation Still Unprepared*, 2006, 634)

SAR: Suspicious Activity Reporting. (**DHS**, *IPG FY 2011-2015 Draft* 2008, p. 22)

SAR On-Scene Coordinator (SAR OSC): "The SAR OSC coordinates the SAR mission on-scene using the resources made available by SMC and should safely carry out the SAR Action Plan. The SAR OSC may serve as a Branch Director or Group Supervisor to manage on-scene operations after the SAR mission is concluded and other missions continue, such as search and recovery." (**USCG**, *IM Handbook*, 2006, Glossary 25-21)

SARBOO: Search and Rescue Base of Operations. (**HSGAC**, *Nation Unprepared*, 2006, 634)

SARA: Superfund Amendments and Reauthorization Act of 1986.

Sarin: "Sarin is a human-made chemical warfare agent classified as a nerve agent. Nerve agents are the most toxic and rapidly acting of the known chemical warfare agents. They are similar to certain kinds of pesticides (insect killers) called organophosphates in terms of how they work and what kind of harmful effects they cause. However, nerve agents are much more potent than organophosphate pesticides. Sarin originally was developed in 1938 in Germany as a pesticide. Sarin is a clear, colorless, and tasteless liquid that has no odor in its pure form. However, Sarin can evaporate into a vapor (gas) and spread into the environment. Sarin is also known as GB." (**CDC**, *Facts About Sarin*, May 17, 2004 Update)

SASP: State Agency for Surplus Property.

SARS: Severe Acute Respiratory Syndrome.

Satellite Joint Information Center (JIC): "A satellite JIC is smaller in scale than other JICs. It is established primarily to support the incident JIC and to operate under their direction. These are subordinate JICs, which are typically located closer to the scene. (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, 16)

SAVER: System Assessment and Validation for Emergency Responders. (**DHS**, *SAVER*, 2006)

SBA. Small Business Administration.

SBCCI: Southern Building Code Congress International, Inc.

SBCCOM: Soldier and Biological Chemical Command, U.S. Army.

SBI: Secure Border Initiative, DHS. (**DHS/OIG**, Risk Management Advisory…SBInet, 2006)

SBInet (Secure Border Initiative): A Customs and Border Protection program "intended to improve border control operations, deploying more infrastructure and personnel with modernized technology and tactics. (DHS/OIG, *Risk Management Advisory for the SBInet…,* Nov 2006, p. 2)

SBU: Sensitive but Unclassified. (**DHS**, *Procedural Manual…CVI*, June 2007, p. 4)

SCADA: System Controls and Data Acquisition.

Scalability: "The ability of incident managers to adapt to incidents by either expanding or reducing the resources necessary to adequately manage the incident, including the ability to incorporate multiple jurisdictions and multiple responder disciplines." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 9)

Scalable, Flexible, and Adaptable Operational Capabilities – Third of 5 Key NRF Principles: "As incidents change in size, scope, and complexity, the response must adapt to meet requirements. The number, type, and sources of resources must be able to expand rapidly to meet needs associated with a given incident. The *Framework*'s disciplined and coordinated process can provide for a rapid surge of resources from all levels of government, appropriately scaled to need. Execution must be flexible and adapted to fit each individual incident. For the duration of a response, and as needs grow and change, responders must remain nimble and adaptable. Equally, the overall response should be flexible as it transitions from the response effort to recovery. This *Framework* is grounded in doctrine that demands a tested inventory of common organizational structures and capabilities that are scalable, flexible, and adaptable for diverse operations. Adoption of the *Framework* across all levels of government and with businesses and NGOs will facilitate interoperability and improve operational coordination." (**DHS**, *NRF*, Jan 2008, 10)

SCBA: Self-Contained Breathing Apparatus. (**DA**, *WMD-CST Operations*, 2007, Glossary-6)

SCCs: Sector Coordinating Councils – "…comprised of private sector representatives." Relate to the National Infrastructure Protection Plan. (**DHS**, *NIPP*, 2006, p. 4)

SCEC: Southern California Earthquake Center.

Scenario: "A scenario provides the backdrop and storyline that drive an exercise. The first step in designing a scenario is determining the type of threat/hazard (e.g., chemical, explosive, cyber, natural disaster) to be used in an exercise. The hazards selected for an exercise should realistically stress the capabilities a jurisdiction is attempting to improve through its exercise programs. A hazard should also be a realistic representation of potential threats faced by the exercising jurisdiction. For *discussion-based* exercises, a scenario provides the backdrop that drives *participant* discussion. For *operations-based* exercises, the scenario should provide background information on the incident catalyst of the exercise. For *prevention* exercises, the scenario should include the *Ground Truth*." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Scenario-Based Planning: "A scenario-based plan is developed from a National Planning Scenario; there are currently 15 National Planning Scenarios. These scenarios have been grouped into eight sets. National Planning Scenarios will be developed, updated, or amended as necessary at least every two years. This process will be informed by a risk-based analysis intended to focus planning efforts on the most likely or most dangerous threats to the homeland. Annex I to HSPD-8 specifically addresses this planning approach." (**FEMA**, *Interim IPS* (Draft 2.3), July 3, 2008 copy, p. 2-11)

Scenario-Driven Catastrophic Response Plan Development Process Concept: "The Scenario-Driven Catastrophic Response Plan Development Process, which will be used in the NMSZ Catastrophic Planning effort, is unique. This process places operators in the same room with planners to develop plans based on real-world modeling. In other words, the people who respond to a disaster are integrally involved in writing the plan that they will eventually use. Representatives from the entire spectrum of emergency management, first responders from the local level, state emergency management officials, and the Federal responders that staff the Joint Field Offices and other field offices, collaborate to develop the plan in a manner similar to the way that they work together in responding to an incident.

"The scenario-driven planning concept combines the planning and exercise phases of plan development through a workshop format. Breakout rooms and action rooms are used to develop topic-specific plans. The accelerated process results in functional plans ready for immediate use. Examples of the diverse functional planning areas addressed in the breakout rooms include Direction and Control; Search and Rescue; Temporary Medical Care; Evacuation; Temporary Housing; and Security. The Scenario-Driven Catastrophic Planning process promotes communication and builds stronger relationships between Federal, State, local, and volunteer agencies that ultimately enhances the interoperability of plans. Participants at all levels of government take ownership of the plans, and the operational knowledge and experience captured make those plans more viable." (**FEMA**, *NMSZ Catastrophic Planning Project Overview*, 2007)

Scenario-Driven Exercise/Planning Process versus Traditional Exercise/Planning Process:

- Traditional Exercise Process
  - Exercise Planning
  - Conduct and Evaluate the Exercise
  - Analyze Exercise Data
  - Issue After Action Report
  - Implement Recommendations and Update Plans
    - Can Take Months for Updates, etc.
- Scenario Based Workshops
  - Workshop Planning
  - Conduct the Workshop
  - Issue Functional Plans
  - Implement Functional Plans
    - Less Steps – Faster Results
    - The Scenario-Driven Planning Process produces functional plans "On the Spot." (**FEMA** *Catastrophic Disaster Planning IAEM Conf. Pre*sentation, 12Nov2007, slides 61-62)

Scenario Planning: "One time-tested tool available to companies to deal with the prevailing uncertainty is scenario planning. A powerful risk management technique originally developed by Royal Dutch/Shell to deal with oil production and price shocks, scenario planning involves imagining different versions of the future and mapping out strategic responses should one or more of those versions become reality. The goal of scenario planning is not to predict the future; it is to anticipate more than one possible future and prepare plans to cope with it. Bain & Co., a consulting firm, says scenario planning 'allows users to explore the implications of several alternative futures. This avoids the dangers of single-point forecasts. Having examined the full range of possible futures, a company can more rapidly modify its strategic direction as actual event unfold'." (**Knowledge Wharton**, *Using Scenario Planning*…, December 5, 2001)

Scenario Planning: "Scenario planning is best described as creating stories of equally plausible futures and planning as though any one could move forward. Key indicators are built in to signal movement of one option over another. This is not a new phenomenon but one that has taken on added importance with the volatility of today's environment. The use of scenarios dates back to post-World War II strategy in which the military tried to determine what opponents might do and how the United States would respond." (**Tucker**, *Scenario Planning*, Association Mgmt., 1999)

SCH: Shelter Complex Headquarters. (**OCD**, Abbreviations, 1971, 4) [Program defunct]

SCI: Sensitive Compartmented Information. (**FEMA** *IIFOG Version 3*, Feb 2008, 28)

SCIF: Sensitive Compartmented Information Facility. (**FEMA** *IIFOG Version 3*, Feb 2008, 22)

SCIP: Statewide Communication Interoperability Plan. (**DHS/OEC**, *OEC Slide Presentation*, Communications Interoperability Policy Academy, 2007)

SCIP: Strategy for Catastrophic Incident Planning. (**FEMA**, *Strategic Plan*, Oct.10, 2007, p. 3)

SCM: Survivable Crisis Management. (**FEMA**, *An Introduction to SCM*, September 1992).

SCO: Screeing Coordination Office, Office of Policy, DHS. (**DHS**, *IPG FY 2011*…, 2008, 27)

SCO: State Coordinating Officer.

Screening: A DHS "Functional Area": "Performing physical and information-based screening of cargo and people and their belongings (baggage, conveyance) in order to identify cargo and individuals who may pose a threat and/or are ineligible for access; detecting objects which may pose a threat; granting or verifying a license, privilege, or status (physical or virtual); and, ensuring individual privacy and redress opportunities." (**DHS**, *IPG FY 2011-2015*, 2008, 11)

SDME: Strategic Decision Making Exercise. (**Army War College**, Carlisle, PA)

Sea, Lake, Overland, Surge from Hurricanes (SLOSH) Model: "…a computerized model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS) to estimate storm surge depths resulting from historical, hypothetical, or predicted hurricanes by taking into account a storm's pressure, size, forward speed, forecast track, wind speeds, and topographical data. SLOSH is used to evaluate the threat from storm surge, and Emergency managers use this data to determine which areas must be evacuated. SLOSH output is used by the National Hurricane Program (NHP) when conducting Hurricane Evacuation Studies as a hazard analysis tool for assisting with the creation of state and local hurricane evacuation plans or zones. SLOSH model results are combined with roadway network and traffic flow information, rainfall amounts, river flow, or wind-driven waves to determine a final analysis of at-risk areas. Storm surge also can affect rivers and inland lakes, potentially increasing the area that must be evacuated." (**FEMA**, *SLOSH*, Nov 27, 2007)

Sea Surge: "A rise in sea level that results in the inundation of areas along coastlines. These phenomena are caused by the movement of ocean and sea currents, winds and major storms." (**UNDHA**, *DM Glossary*, 1992, 66; cites OFDA)

SEAR: Special Event Assessment Report. (**DHS**, *Interagency Planning Workshop*, Nov. 29, 2007)

Search and Rescue: "The process of locating and recovering disaster victims and the application of first aid and basic medical assistance as may be required." (**UNDHA**, *DM Glossary*, 1992, 66)

SECDEF: Secretary of Defense. (**OCD**, *Abbreviations and Definitions*, 1971, p. 4)

SECDHS: Secretary of the Department of Homeland Security.

Second Line of Defense Program, DOE: "DOE's Second Line of Defense Program…seeks to prevent smuggling of nuclear warheads overseas." (**DHS/OIG**, *DHS DNDO Progress*, 2007, 10)

Second Stage Review (2SR): "In one of his first actions as Secretary of Homeland Security…Michael Chertoff, on March 2, 2005, the day before he was sworn in as Secretary, announced in testimony before the House Appropriations Subcommittee on Homeland Security that he was "initiating a comprehensive review of the Department's organization, operations, and policies." This effort, he said, would begin "within days." The results of that undertaking, which came to be known as the Second Stage Review or 2SR, were made public in mid-July." (CRS, *Department of Homeland Security Reorganization: The 2SR Initiative*, August 19, 2005, p. i)

"…in July 2005, Secretary of Homeland Security Michael Chertoff announced plans for a reorganization of DHS, including FEMA. Known as the "Second Stage Review," or "2SR," the reorganization transferred emergency preparedness functions from FEMA to a new Preparedness Directorate, among other changes. The Administration began implementation of the reorganization on October 1, 2005. In response to Administration requests, congressional support for the proposal was provided through approval of the FY2006 appropriations legislation." (**CRS**, *Federal Emergency Management and Homeland Security Organization: Historical Developments and Legislative Options*, June 1, 2006)

"…to ensure that our preparedness efforts do have a focused direction, we intend to consolidate all the Department's existing preparedness efforts -- including planning, training, exercising and funding -- into a single directorate led by an under secretary for preparedness. Going forward, FEMA will be a direct report to the Secretary, and it will focus on its historic and vital mission of response and recovery -- a mission that it performs superbly. The importance of this latter capacity was illustrated powerfully as Hurricane Dennis made landfall this past week." (**DHS**, *Secretary Michael Chertoff [DHS] Second Stage Review Remarks*, July 13, 2005)

"The Secretary's six-point agenda will guide DHS in the near term and result in changes that will:

- Increase overall preparedness, particularly for catastrophic events;
- Create better transportation security systems to move people and cargo more securely and efficiently;
- Strengthen border security and interior enforcement and reform immigration processes;
- Enhance information sharing with our partners;
- Improve DHS financial management, human resource development, procurement and information technology; and
- Realign the DHS organization to maximize mission performance….

- Improve National Response and Recovery Efforts by Focusing FEMA on Its Core Functions. FEMA will report directly to the Secretary of Homeland Security. In order to strengthen and enhance our Nation's ability to respond to and recover from manmade or natural disasters, FEMA will now focus on its historic and vital mission of response and recovery." (**DHS**, "Homeland Security Secretary Michael Chertoff Announces Six-Point Agenda for [DHS]," July 13, 2005)

Secondary Hazards: "Those hazards that occur as a result of another hazard or disaster, i.e., fires or landslides following earthquakes, epidemics following famines, food shortages following drought or floods." (**UNDHA**, *DM Glossary*, 1992, 66)

Secretary of Homeland Security: "The Secretary of Homeland Security is the principal Federal official for domestic incident management. Pursuant to the Homeland Security Act of 2002 the Secretary is responsible for coordinating Federal operations within the United States to prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies. The Secretary shall coordinate the Federal Government's resources utilized in response to or recovery from terrorist attacks, major disasters or other emergencies if and when any one of the following four conditions applies: (1*)* a Federal department or agency acting under its own authority has requested the assistance of the Secretary; (2) the resources of State and local authorities are overwhelmed and Federal assistance has been requested by the appropriate State and local authorities; (3) more than one Federal department or agency has become substantially involved in responding to the incident; or (4) the Secretary has been directed to assume responsibility for managing the domestic incident by the President." (**White House**, *HSPD-5*, February 28, 2003)

Secretary's Playbooks (NRF): "…CONPLANs form the basis for the [DHS] Secretary's *Playbooks*, detailed checklists for executives that the Secretary of Homeland Security uses to ensure a coordinated response to domestic incidents. The Secretary's *Playbooks* are designed for the Secretary of Homeland Security, as the principal Federal official for domestic incident management, to monitor the response to the threats described in the 15 National Planning Scenarios, ensure coordination among Federal departments and agencies, detect potential shortfalls in response efforts or interagency coordination and surface anticipated policy issues to Federal department and agency executive leadership and the President for resolution." (**DHS** *NRF Comment Draft*, September 2007, p. 72)

Section: [In ICS/NIMS] "That organization level having functional responsibility for primary segments of an incident such as: Operations, Planning, Logistics and Finance. The Section level is organizationally between Branch and Incident Commander." (**USCG**, *IM Handbook* 2006, Glossary 25-22)

Sector: "A term similar to an ICS Division or Group (either a geographic or functional assignment). Sector is not a part of ICS terminology." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

Sector Coordinating Council: "The private sector counterpart to the GCCs, these councils are self-organized, self-run, and self-governed organizations that are representative of a spectrum of key stakeholders within a sector. SCCs serve as the government's principal point of entry into each sector for developing and coordinating a wide range of CI/KR protection activities and issues." (**DHS**, *NIPP*, 2006, 105)

Sector-Specific Agency: "Federal departments and agencies identified in HSPD-7 as responsible for CI/KR protection activities in specified CI/KR sectors." (**DHS**, *NIPP*, 2006, p. 105)

Sector-Specific Plan: Augmenting plans that complement and extend the NIPP Base Plan and detail the application of the NIPP framework specific to each CI/KR sector. SSPs are developed by the SSAs I close collaboration with other security partners." (**DHS**, *NIPP*, 2006, p. 105)

Secure Border Initiative: "In the fall of 2005, the White House and the department announced the Secure Border Initiative (SBI), a comprehensive multi-year effort to secure the borders and reduce illegal immigration, which included a U.S. Immigration and Customs Enforcement led plan to increase and improve the apprehension, detention, and removal of illegal aliens; a U.S. Citizenship and Immigration Service led plan for expanding the guest worker program and streamlining immigration benefits processes; and a U.S. Customs and Border Protection (CBP) led program to gain control of the nation's land borders." (**DHS/OIG**, *Risk Management Advisory for the SBInet Program Initiation*, November 2006, p. 2)

Securing: The 2nd DHS "Functional Area": "Deploy preventative measures (both tools and techniques) to reduce physical and cyber vulnerabilities and the impact of threats to America's key assets and infrastructure. (e.g. heightened security based on a targeted threat, physical barriers based on an asset's vulnerability, etc.) Strategic use/placement of guards and physical barriers to reduce the vulnerability of an asset/event/person and allowing the lawful entry of individuals into the physical space/area." (**DHS**, *IPG FY 2011-2015 Draft*, 2008, 13

Securing the Cities Initiative (DHS): "…we are now looking in our strategy to go beyond the question of securing our borders, to look at the issue of how do we secure the interior: How do we protect cities, major urban areas in this country from a nuclear or a radiological bomb that was fabricated inside the country? How do we prevent someone from getting a hold of radioactive material in the U.S., making a dirty bomb, and then trying to detonate it in New York, or Chicago, or Los Angeles?...to address that next level of concern, we are unveiling our Securing the Cities Initiative, which is a program to see how we can deploy this kind of detection equipment [Advanced Spectroscopic Portal Program] not only at seaports and ports of entry by land, but in cities and around cities, so we could detect a truck coming into a city with a dirty bomb, even if it didn't cross an international border… we are currently working with the city of New York, with the police department…to begin the process of planning and deploying a pilot of this Securing the Cities system of internal radiation-detection equipment, so we can move to this comprehensive coverage of protection against nuclear threats. That, I think, is one of the highest priorities for this Department and for this administration." (**DHS**, *Remarks by Homeland Security Secretary Michael Chertoff and DNDO Director Vayl Oxford at a Press Conference to Announce Spectroscopic Portal (ASP) Program Contracts*, July 14, 2006)

Securing the Cities Initiative (DHS): "The office that oversees Securing the Cities was created in 2006 with the support of Vice President Cheney, and its $485 million 2008 budget is the largest part of the DHS's shrinking research portfolio, which includes aviation security, explosives and bio-defense." Security Cities share is a reported estimated $90 million. (**Hsu,** *Securing the Cities No Easy Task*, Feb 3, 2008)

Security: Security in the traditional sense refers to monitoring and reducing the risk of human induced events that adversely affect people or property (intrusion of unauthorized personnel, theft, sabotage, assault, etc.), to some acceptable level. (**Shaw** 1999)

Security and Prosperity Partnership (SPP) of North America, Homeland Security Aspect: "The SPP is a US Presidential initiative with DOD equities. The SPP agreement, designed to reduce barriers on trade and facilitate economic growth while improving the security of the continent, was signed on 23 March 2005 by the President of the United States, the Prime Minister of Canada, and the President of Mexico. DHS and the Homeland Security Council are the lead agencies for the agreement's security components, with DOD as a supporting agency. The SPP Action Plan addresses goals and objectives associated with homeland security to include "Protection, Prevention, and Response." One of the goals of the agreement is to "develop and implement a common approach to critical infrastructure protection, response to cross-border terrorist incidents, and as applicable, natural disasters." This includes a dual-binational (US/Canada and US/Mexico) objective on emergency management cooperation to develop and implement joint plans for cooperation in incident response, as well as conduct joint training and exercises in emergency response. This includes the development of a plan to build and strengthen mechanisms, protocols, and agreements for communicating and coordinating emergency response for mutual assistance and cooperation in the event of natural and technological/industrial disasters or malicious acts involving chemical, biological, radiological, nuclear, or high-yield explosives devices and hazards." (**JCS/DOD,** *CBRNE CM*, 2006, IV-16)

Security Vulnerability Assessment (SVA): The Security Vulnerability Assessment (SVA) is a new application of the CSAT [Chemical Security Assessment Tool]. The SVA is a tool used for the evaluation of the potential consequences and vulnerabilities of specific critical Privacy Impact Assessment Update National Protection & Programs Directorate facility assets against a standard set of potential attack scenarios. The CSAT Top-Screen collects information, but not PII, and uses it to identify critical assets selected for the SVA. CSAT uses the SVA results to assign the facility a tier level and identify security gaps that the facility will need to address in the SSP." (**DHS**, *Privacy Impact Assessment Update for the Chemical Security Assessment Tool (CSAT)*, May 25, 2007, pp. 3-4)

SEHS: Special Event(s) for Homeland Security. (**JCS/DoD**, *Civil Support*, 2007, p. GL-11)

Seiche: "A free or standing wave oscillation of the surface of water in an enclosed basin that is initiated by local atmospheric changes, tidal currents or earthquakes." (**UNDHA**, *DM Glossary*, 1992, 66)

Seismic Belt: "An elongated earthquake zone, usually located along the boundaries of tectonic plates." (**UNDHA**, *DM Glossary*, 1992, 67)

Seismic Hazard: "The potential for damaging effects caused by earthquakes. The level of hazard depends on the magnitude of likely quakes, the distance from the fault that could cause quakes, and the type of ground materials at a site." (**USGS**, *Putting Down Roots*, 2007, Glossary)

Seismic Risk: "The chance of injury, damage, or loss resulting from seismic hazards. There is no risk, even in a region of high seismic hazard, if there are no people or property that could be injured or damaged by a quake." (**USGS**, *Putting Down Roots*, 2007, Glossary)

Seismicity: "The distribution of earthquakes in space and time (UNDRO)." (**UNDHA**, *DM Glossary*, 1992, 67)

Seismograph: "An instrument for recording vibratory motion of the ground (OFDA)." (**UNDHA**, *DM Glossary*, 1992, 67)

SEL: Standard Equipment List.

Seminar: "A seminar is an informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., a seminar to review a new Evacuation Standard Operating Procedure)." (**FEMA**, *About HSEEP*, 2008)

Seminar: "Seminars orient *participants* to authorities, strategies, plans, policies, procedures, protocols, resources, concepts, and/or ideas. Seminars provide a good starting point for jurisdictions that are developing or making major changes to their plans and procedures." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Semi-Quantitative Analysis: "In semi-quantitative analysis, qualitative scales are given values. The objective is to produce a more expanded ranking scale than is usually achieved in qualitative analysis, not to suggest realistic values for risk such as is attempted in quantitative analysis. However, since the value allocated to each description may not bear an accurate relationship to the actual magnitude of consequences or likelihood, the numbers should only be combined using a formula that recognizes the limitations of the kinds of scales used. The limitations of the approach are that the numbers chosen may not properly reflect relativities and this can lead to inconsistent or inappropriate outcomes and semi-quantitative analysis may not differentiate properly between risks, particularly when either consequences or likelihood are extreme." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

SEMS: Standardized Emergency Management System (California). (**Little Hoover**, 2007, 8)

Senior Federal Law Enforcement Official (SFLEO): "The SFLEO is an official appointed by the Attorney General during an incident requiring a coordinated Federal response to coordinate all law enforcement, public safety and security operations with intelligence or investigative law enforcement operations directly related to the incident. The SFLEO is a member of the Unified Coordination Group and, as such, is responsible to ensure that allocation of law enforcement requirements and resource allocations are coordinated as appropriate with all other members of the Group. In the event of a terrorist incident, the SFLEO will normally be a senior FBI official, who has coordinating authority over all law enforcement activities related to the incident, both those falling within the Attorney General's explicit authority as recognized in HSPD-5 and those otherwise directly related to the incident itself**.**" (**DHS**, *NRF Draft*, 2007, 65; *NRF*, 2008, 68)

Senior Federal Official (SFO): "An individual representing a Federal department or agency with primary statutory responsibility for incident management. SFOs utilize existing authorities, expertise and capabilities to aid in management of the incident working in coordination with other members of the JFO Coordination Group." (**FEMA**, *Mission Assignment SOPs*, 2007, 60)

Senior Federal Official (SFO): "A SFO is an individual representing a Federal department or agency with primary statutory responsibility for incident management." (**USCG**, *IM Handbook*, 2006, Glossary 25-22)

Senior Leadership Group: "It is comprised of key DHS officials across the major components and intended to provide a forum for the Secretary to obtain critical advice from those with the most direct incident management responsibilities, to communicate decisions, to facilitate the integration and coordination of intradepartmental operational missions, activities, and programs at the headquarters level; and to assist in resolving intradepartmental issues. The group convenes as necessary, such as during an actual incident or major exercise, although the Secretary or the Director of Operations Coordination may convene the group at any time. (**GAO**, *Homeland Security: Guidance from Operations Directorate Will Enhance Collaboration...,* 20Jun07, 17)

Sensible Security: "Sensible security is the level of protection achieved through design, construction, and operation that mitigates adverse impact to systems, facilities, and assets in proportion to their value to society and their likelihood of being affected by natural and/or man-made events." (**TISP**, *Regional Disaster Resilience*, 2006, p. 2)

Sensitive Compartmented Information (SCI): "A restricted access control system. It is a level of access to classified information compartments/programs, and not a level of Classification. The SCI access control system applies to all three levels of classified information (Top Secret, Secret, Confidential). SCI access is usually based upon the sensitivity of the involved sources and/or methods." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 39)

Sensitive Compartmented Information Facility (SCIF): "An accredited area, room, group of rooms, or installation where SCI may be stored, used, discussed, and/or electronically processed. SCIF procedural and physical measures prevent the free access of persons unless they have been formally indoctrinated for the particular SCI authorized for use or storage within the SCIF." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 39)

Sensitivity Analysis: "Sensitivity analysis can help gauge what effects key sources of uncertainty have on outcomes, which provides decision makers with additional data on alternative risk estimates and funding allocations resulting from analyses of varying data, judgments, and assumptions." (GAO, *Homeland Security*: *DHS Improved its Risk-Based Grant Programs' Allocation and Management Methods...,*, March 11, 2008, p. 9)

SEOC: State Emergency Operations Center.

SEP: Special Events Planning.

SEPCTTF: Southeastern PA Counter-Terrorism Task Force. (**FEMA,** *Region III Report 2007*, 30)

September 10 Mentality: "…despite the images of 9/11 -- when the Twin Towers fell, the Pentagon burned, and a field in Shanksville, Pa., was found smoldering and silent -- we see some quarters returning to a "September 10 mentality." There are some who oppose key 9/11 Commission recommendations and congressional mandates such as secure driver's licenses and

travel documents, and some public intellectuals have joined like-minded press pundits in downplaying the threats we still confront…. We must begin by charting a resolute course between hysteria and complacency. "Let us remind ourselves that we are ultimately locked in a battle of ideas, centered on one key question: Is freedom a dangerous luxury that can be denied at will -- or is it the birthright of every person and the ultimate basis for security? Our enemies answer one way; our founding creed tells us otherwise." (**Chertoff and Ridge**, "Homeland Security Confidence." *Sacramento Bee*, March 6, 2008)

SERC: State Emergency Response Commission. (EPA, *Technical Guidance for Hazards Analysis*, 1987, p. 1-4)

Serious Incident Report (SIR): Used "to convey flash traffic to the commander and command post relating to an accident or serious incident within the command." (**DA**, *WMD-CST Operations*, Dec. 2007, p. G-12)

SERRI: Southeast Region Research Initiative. (**ORNL**, *SERRI*, 2008)

SERT: Secretary's Emergency Response Team, HHS. (**FEMA**, *Federal Interim CONPLAN NMSZ,* December 2007, p. B-3)

Service Animal: "Any guide dog, signal dog, or other animal individually trained to provide assistance to an individual with a disability including, but not limited to, guiding individuals with impaired vision, alerting individuals with impaired hearing to intruders or sounds, providing minimal protection or rescue work, pulling a wheelchair, or fetching dropped items." (**FEMA**, *Eligible Costs Related to Pet Evacuations and Sheltering*, 2007)

Service Branch (ICS): "A branch within the Logistics Section responsible for service activities at the incident including the Communications Unit, Medical Unit and Food Unit." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

SE&T: Supplies, Equipment and Training. (OCD, Abbreviations, 1971, p. 4) [Program defunct]

Seven National Priorities, National Preparedness Goal: "These seven priorities reflect a limited number of the cross-cutting initiatives and critical capabilities that should drive near-term planning and resource allocation efforts. The National Priorities are intended to guide the Nation's preparedness efforts to meet its most urgent needs, and fall into two categories: (1) overarching priorities that contribute to the development of multiple capabilities, and (2) capability-specific priorities that build selected capabilities for which the nation has the greatest need:

National Priorities Overarching Priorities
• Implement the National Incident Management System and National Response Plan
• Expanded Regional Collaboration
• Implement the Interim National Infrastructure Protection Plan

Capability-Specific Priorities

• Strengthen Information Sharing and Collaboration capabilities
• Strengthen Interoperable Communications capabilities
• Strengthen CBRNE Detection, Response, and Decontamination capabilities
• Strengthen Medical Surge and Mass Prophylaxis capabilities." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, 2005, p. 6)

Severe Repetitive Loss (SRL) Pilot Program, FEMA National Flood Insurance Program: "The Severe Repetitive Loss (SRL) Pilot Program…provides funding to reduce or eliminate the long-term risk of flood damage to severe repetitive loss residential structures insured under the National Flood Insurance Program (NFIP). The definition of severe repetitive loss as applied to this program was established in section 1361A of the National Flood Insurance Act, as amended (NFIA), 42 U.S.C. 4102a. An SRL property is defined as a **residential property** that is covered under an NFIP flood insurance policy and:
(a) That has at least four NFIP claim payments (including building and contents) over $5,000 each, and the cumulative amount of such claims payments exceeds $20,000; or
(b) For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.
For both (a) and (b) above, at least two of the referenced claims must have occurred within any ten-year period, and must be greater than 10 days apart.
The long-term goal of the SRL program is to reduce or eliminate claims under the NFIP. The SRL program will fund mitigation projects, which will result in the greatest savings to the National Flood Insurance Fund (NFIF) in the shortest period of time, based on a Benefit-Cost Ratio (BCR) using Federal Emergency Management Agency (FEMA)-approved methodology to conduct the Benefit-Cost Analysis (BCA).
Participation in this program is voluntary. The SRL program differs from other FEMA mitigation grant programs in that those property owners who decline offers of mitigation assistance will be subject to increases in their insurance premium rates.
The SRL program was created pursuant to Section 1361A of the National Flood Insurance Act of 1968 (or "the Act"), 42 U.S.C. 4102A, as amended by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, Public Law 108-264, with the goal of reducing flood damages to SRL properties. The Catalog of Federal Domestic Assistance (CFDA) number for the SRL program is 97.110. FEMA published the interim final rule for the SRL program in the *Federal Register* at 72 FR 61720 on October 31, 2007. The regulations are codified at 44 C.F.R. Part 79." (**FEMA**, *Severe Repetitive Loss (SRL) Pilot Program Guidance*, 14Jan2008, p. vii)

Severe Weather: Any atmospheric condition potentially destructive or hazardous form human beings. It is often associated with extreme convective weather (tropical cyclones, tornadoes, severe thunderstorms, squalls, etc.) and with storms of freezing precipitation or blizzard conditions. (**WMO** 1992, 544)

SEWG: Special Events Working Group, DHS. (**DHS**, Statement of Rufe, July 9, 2008, p. 1)

SFHA: Special Flood Hazard Area. (**FEMA**, *SFHA*, 2007)

SFIP: Standard Flood Insurance Policy. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

SFLEO: Senior Federal Law Enforcement Official. (**HSGAC**, A *Nation Unprepared*, 2006, 634)

SFO: Senior FEMA Official. (**FBI**, *USG Interagency Domestic Terror. CONPLAN*, 2001, A-1)

SFPC: Structural Fire Fighters' Protective Clothing.

Shadow Evacuation: "…some people may evacuate even though they are not officially considered to be at risk. Known as an 'evacuationo shadow.' This spontaneious evacuation is prompted when people feel they are in danger and begin to leave in advance of, or in spite of, official instructions to avoid doing so (Wolshon, Hamilton, Wilmot et al., 2005; Mitchell, Cutter, and Edmonds, 2007). Shadow evacuations are not a new phenomenon. During the 1999 Hurricane Floyd evacuations in Florida, it was estimated that about one-half of the 2 million persons who evacuated were shadow evacuees (Ballingrund, 2000)." (Kendra, Evacuating Large Urban Areas, 2008, 5)

Shear Wall: "A structural element which resists lateral forces." (**UNDHA**, *DM Gloss.* 1992, 68)

Shelter: "Physical protection requirements of disaster victims who no longer have access to normal habitation facilities. Immediate post-disaster needs are met by the use of tents. Alternatives may include polypropylene houses, plastic sheeting, geodesic domes and other similar types of temporary housing." (**UNDHA**, *DM Glossary*, 1992, 68)

Shelter-in-Place: "Definition: taking emergency refuge within the nearest designated safe area until notification or determination that the situation has been resolved

"Extended definition: a precaution intended to keep people safe while remaining indoors where the shelter area is preferably a small interior room with no windows and may require efforts of sealing all cracks or openings with tape or other materials

"Annotation: Sheltering-in-place is used when evacuating the public would cause greater risk than staying where they are, or when an evacuation cannot be performed.

"Example: The preferred locations for any shelter-in-place action are interior rooms of the building that have no windows." (**DHS**, *Lexicon*, October 19, 2007, p. 24)

Shelter-in-Place: "Depending on the nature and timing of a catastrophe, emergency managers may warn people of whether it is safer to evacuate or to shelter in place. In an evacuation, people leave their homes and businesses and travel to a safe location away from danger. In some instances, it is safer for people to quickly seek shelter indoors—in homes, schools, businesses, or public buildings—than to try to travel. Shelter-in-place would be used when there is little time to react to an incident and it would be more dangerous to be outside trying to evacuate than to stay indoors for a short period of time. Additional protective actions that the emergency managers may recommend would include turning off air conditioners and ventilation systems and closing all windows and doors. Sheltering-in-place might be used, for example, in the event of a chemical accident. FEMA recommends people have food, water, and medical supplies and be

prepared to stay indoors for at least three days." (**DOT**, *Catastrophic Hurricane Evacuation Plan Evaluation: Report to Congress*, June 1, 2006, p. 2-2)

Sheltering: "Taking shelter is critical in times of disaster. Sheltering is appropriate when conditions require that you seek protection in your home, place of employment, or other location where you are when disaster strikes. Sheltering outside the hazard area would include staying with friends and relatives, seeking commercial lodging, or staying in a mass care facility operated by disaster relief groups in conjunction with local authorities. To effectively shelter, you must first consider the hazard and then choose a place in your home or other building that is safe for that hazard. For example, for a tornado, a room should be selected that is in a basement or an interior room on the lowest level away from corners, windows, doors and outside walls. Because the safest locations to seek shelter vary by hazard, sheltering is discussed in the various hazard sections. These discussions include recommendations for sealing the shelter if the hazards warrant this type of protection." (**FEMA**, *Are You Ready?* May 24, 2007 update, p. 38)

Sheriff: "The Office of the Sheriff plays a distinctive role in the nation's criminal justice and homeland security system and reflects a uniquely American tradition of a law enforcement leader who is elected. Over 99% of the nation's sheriffs are elected and generally serve as the highest law enforcement officer in their respective counties." (**Kamatchus,** "Statement of… on 'Insurrection Act Rider' and State Control of the National Guard"," April 24, 2007, p. 1)

Shielding: "Any material or obstruction which absorbs (or attenuates) radiation and thus tends to protect personnel or materials from the effects of a nuclear (or atomic) explosion. A moderately thick layer of any opaque material will provide satisfactory shielding from thermal radiation, but a considerable thickness of material of high density many be needed for nuclear radiation shielding. Electrically continuous housing for a facility, area, or component, attenuates impinging electric and magnetic fields." (**Glasstone**, *The Effects of Nuclear Weapons* (3rd Ed.), 1977, Glossary, p. 639)

SHMO: State Hazard Mitigation Officer. (**FEMA**, *Call for Issues Status Report*, 2000, xxiii)

SHOC: State Health Operations Center. (Alabama, for example.)

Shock Wave: "The sudden liberation of energy causes a considerable increase of temperature and pressure, so that all the materials present are converted into hot, compressed gases. Since these gases are at very high temperatures and pressures, they expand rapidly and thus initiate a pressure wave, called a 'shock wave,' in the surrounding medium – air, water, or earth. The characteristic of a shock wave is that there is (ideally) a sudden increase of pressure at the front, with a gradual decrease behind it...." (**Glasstone**, *The Effects of Nuclear Weapons* (3rd Ed.), 1977, p. 1)

Short Term Recovery: "Short-term recovery is immediate and overlaps with response. It includes actions such as providing essential public health and safety services, restoring interrupted utility and other essential services, reestablishing transportation routes and providing food and shelter for those displaced by the disaster. Although called "short term," some of these activities may last for weeks." (**DHS,** *National Response Framework -- Federal Partner Guide* (Comment Draft), September10, 2007, p. 18) [Note: See, also, "Recovery: Short Term"]

SHSGP: State Homeland Security Grant Program, DHS.

SHSP: State Homeland Security Program. (**DHS**, *NIPP*, 2006, p. 102)

SIA: Social Impact Assessment. (**ProVention Consortium**, *CRA Toolkit: Glossary*, 2006)

SICCL: State Incident Communication Line. (**FEMA**, *IS 250*, *Emergency Support Function 15 (ESF15) External* Affairs, 2007, p. 6, Acronyms and Abbreviations)

Signals Intelligence (SIGINT): "Intelligence information derived from the interception of transmitted electronic signals." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 39)

Significant Flood Event: A significant event is one with 1,500 or more paid losses, or occasionally one added for other reasons. (**FEMA**, *Significant Flood Events 1978 - November 30, 2007*, Jan 4, 2008 mod.)

SimCell: Simulation Cell. (**DHS**, *HSEEP Volume V: Prevention Exercises* (Draft), Dec 2005)

Simple Triage and Rapid Treatment (START): "The START system, developed by Hoag Hospital and the Newport Beach Fire Department (Newport Beach, CA), helps prepare emergency personnel to quickly organize their resources to handle multi-casualty emergencies. Using START, various agencies and individuals assume predetermined roles in managing the emergency, on-scene personnel quickly evaluate the situation and call in the appropriate extra resources and assign them specific tasks. Because of the planning and training that are the core of the START system, agencies and individuals know what they are expected to do when they arrive at the scene…. The START triage system….relies on making a rapid assessment (taking less than a minute) of every patient, determining which of four categories patients should be in [Minor, Deceased, Immediate, Delayed], and visibly identifying the categories for rescuers who will treat the patients…. If you are the initial START rescuer, you DO NOT stop to do other than the most basic intervention. If you attempt to treat every patient before completing the triage, you cannot assess the rest of the patients and identify the top priorities." (**Critical Illness and Trauma Foundation, Inc.)**

Simulation: "(1) An electronic simulation is a method for predicting the results of implementing a model over time. (2) Simulation of non-participating personnel and agencies is a technique for increasing realism in exercises. (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Simulation Cell: "The SimCell is an exercise area where *controllers* generate and deliver *injects*, and receive player responses to non-participating organizations, agencies, and individuals who would likely participate actively in an actual incident. Physically, the SimCell is a working location for a number of qualified professionals who portray representatives of non-participating organizations, agencies, and individuals who would likely participate during an actual incident." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Simulation Exercise: "Test performed under conditions as close as practicable to real world conditions." (**ISO 22399**, *Societal Security*…, 2007, 7)

Simulation Exercise: "Decision making exercise and disaster drills within threatened communities in order to represent disaster situations to promote more effective coordination of response from relevant authorities and the population." (**UNDHA**, *DM Glossary*, 1992, 68)

Simulators: "Simulators are control staff personnel who role-play as non-participating organizations or individuals. They most often operate out of the *SimCell*, but may occasionally have face-to-face contact with players. Simulators function semi-independently under the supervision of SimCell *controllers*, enacting roles (e.g., as media reporters or next-of-kin) in accordance with instructions provided in the *MSEL*. All simulators are ultimately accountable to the exercise director and *senior controller*." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Single Point of Contact (SPOC): "Executive Order 12372 requires applicants from State and local units of government or other organizations providing services within a State to submit a copy of the application to the State SPOC, if one exists, and if this program has been selected for review by the State. Applicants must contact their State SPOC to determine if the program has been selected for State review. (**DHS**, *Fiscal Year 2008 Buffer Zone Protection Program Guidance and Application Kit*, February 2008, p. 16)

Single Resource: "An individual, a piece of equipment and its associated personnel, or a crew or a team of individuals with an identified work supervisor that can be used at an incident." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 57)

SIOC: Strategic Information and Operations Center, FBI. (**DHS**, *NRF*, 2008, 57)

SIOP: Single Integrated Operational Plan.

SIR: Serious Incident Report. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, p. G-6)

Site Assistance Visit (SAV): "The Site Assistance Visit (SAV) program is another long-running DHS program that has had a measurable impact on the Commercial Facilities Sector, particularly those sites that would be considered places of mass gathering. SAVs identify vulnerabilities, leading to a dialogue betweewn DHS and the facility owners/operators and local authorities concerning means of migigating identified vulnerabilities. As of May 2008, there have been 246 SAVs performed at various commercial facilities across the Nation." (**DHS**, *Statement for the Record, Robert B. Stephan, Assistant Secretary, Infrastructure Protection, National Protection and Programs Directorate…[DHS] before the Committee on…[HLS]*, July 9, 2008, p. 4)

SitMan: Situation Manual. (**FEMA**, IS 120.A, *An Introduction to Exercises*, 2 Feb 2008, p. 34)

SitRep: Situation Report. (**DA**, *WMD-CST Operations*, December 2007, Glossary-6)

Situation Assessment: "Definition: Manage, monitor, evaluate, and anticipate specific threat information in a dynamic incident environment, and communicate contingencies so that appropriate protective operations can be conducted." (**DHS**, *UTL 2.1*, 2005, p. 44)

Situation Assessment: "The evaluation and interpretation of information gathered from a variety of sources (including weather information and forecasts, computerized models, GIS data mapping, remote sensing sources, ground surveys, etc.) that, when communicated to emergency managers and decision makers, can provide a basis for incident management decision making." (**USCG**, *IM Handbook*, 2006, Glossary 25-22/23)

Situation Awareness: "…situation awareness (SA), an internal conceptualization of the current situation, becomes the driving factor in the decision-making process. For novices as well, who may operate using very different decision strategies, understanding the situation frequently poses the major portion of their task. In most settings effective decision making largely depends on having a good understanding of the situation at hand…. Many human errors that are attributed to poor decision making actually involve problems with the SA portion of the decision-making process as opposed to the choice of action portion of the process. Decision makers make the correct decision for their perception of the situation, but that perception is in error. This represents a fundamentally different category of problem than a decision error in which the correct situation is comprehended by a poor decision is made as to the best course of action, and indicates very different types of remediation strategies." (**Endsley**, "The Role of Situation Awareness in Naturalistic Decision Making," 1997, pp. 269-270)

"Concurrent with the growing interest in NDM [Naturalistic Decision Making], situation awareness has developed as a research focus in the past 10 years, largely in the aviation environment, but more recently in many other domains, including the nuclear power industry, automobile driving, air traffic control, medical systems, teleoperations, maintenance, and advanced manufacturing systems. Situation awareness is formally defined as 'the perception of the elements in the environment within a volume to time and space, the comprehension of their meaning and the projection of their status in the near future' (Endsley, 1988, p. 97). Situation awareness therefore involves perceiving critical factors in the environment (level 1 SA); understanding what those factors mean, particularly when integrated together in relation to the person's goals (level 2); and at the highest level, an understanding of what will happen with the system in the near future (Level 3). These higher levels of SA allow decision makers to function in a timely and effective manner." (**Endsley**, "The Role of Situation Awareness in Naturalistic Decision Making," 1997, p. 270)

[Note: See, also, Naturalistic Decision Making.]

Situation Awareness: "The process of evaluating the severity and consequences of an incident and communicating the results." (**NFPA 1600**, 2007, p. 8) [See Situational Awareness]

Situation Board: "Large sheets of paper or white boards that are affixed to walls visible to those working an intelligence/investigations operation. These boards give individuals immediate access to crucial information regarding the incident at hand. They also provide other crisis management team members a commanding view of information as it is processed." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 40)

Situation Manual (SitMan): "A Situation Manual (SitMan*)* is a participant handbook for discussion-based exercises, particularly TTXs. It provides background information on exercise scope, schedule, and objectives. It also presents the scenario narrative that will drive participant discussions during the exercise." (**FEMA**, *About HSEEP*, 2008)

Situation Report: "Often contain confirmed or verified information regarding the specific details relating to the incident." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 157)

Situation Report: "Producing the SITREP is an "emergency coordination" activity…" (**Trainor**, *Searching For a System: Multi-Organizational Coordination in the September 11th World Trade Center Search and Rescue Response,* 2004, p. 24)

Situation Unit (ICS): "A unit within the Planning Section responsible for the collection, organization and analysis of incident status information and for analyzing the situation as it progresses." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 58)

Situational Awareness: "Situational awareness requires continuous monitoring of relevant sources of information regarding actual and developing incidents. The scope and type of monitoring vary based on the type of incidents being evaluated and needed reporting thresholds. Critical information is passed through established reporting channels according to established security protocols. Priorities include:
• *Providing the right information at the right time.* For an effective national response, jurisdictions must continuously refine their ability to assess the situation as an incident unfolds and rapidly provide accurate and accessible information to decisionmakers in a user-friendly manner. It is essential that all levels of government, the private sector (in particular, owners/operators of critical infrastructure and key resources (CIKR)), and NGOs share information to develop a common operating picture and synchronize their response operations and resources.

• *Improving and integrating national reporting.* Situational awareness must start at the incident scene and be effectively communicated to local, tribal, State, and Federal governments and the private sector, to include CIKR. Jurisdictions must integrate existing reporting systems to develop an information and knowledge management system that fulfills national information requirements.

• *Linking operations centers and tapping subject-matter experts.* Local governments, tribes, States, and the Federal Government have a wide range of operations centers that monitor events and provide situational awareness. Based on their roles and responsibilities, operations centers should identify information requirements, establish reporting thresholds, and be familiar with the expectations of decisionmakers and partners. Situational awareness is greatly improved when experienced technical specialists identify critical elements of information and use them to form a common operating picture.

"Reporting and documentation procedures should be standardized to enhance situational awareness and provide emergency management and response personnel with ready access to

critical information. Situation reports should contain verified information and explicit details (who, what, where, when, and how) related to the incident. Status reports, which may be contained in situation reports, relay specific information about resources. Based on an analysis of the threats, jurisdictions issue accessible warnings to the public and provide emergency public information." (**DHS**, *National Response Framework*, Jan 2008, 32-33)

Situational Awareness: "In this section, the term 'situational awareness' means information gathered from a variety of sources that, when communicated to emergency managers and decision makers, can form the basis for incident management decisionmaking." (**Post-Katrina Emergency Management Reform Act of 2006,** p. 1409)

Situational Awareness: "Maintaining situational awareness is essential to assessing emerging incidents as well as conducting operations and ultimately ensuring the effective management of incident response. It demands that we prioritize information and develop a common operating picture, both of which require a well-developed national information management system and effective multi-agency coordination centers to support decision-making during incidents." (**White House**, *National Strategy for Homeland Security*, HSC, October 2007, p. 34)

Situational Awareness: "The maintenance of situational awareness through timely and accurate information is a fifth core principle integral to incident management. It requires continuous sharing, monitoring, verification, and synthesis of information to support informed decisions on how to best manage threats, potential threats, disasters, or events of concern." (**White House**, *National Strategy for Homeland Security*, HSC, October 2007, p. 47)

SLATT: State and Local Anti-Terrorism Training.

SLBM: Sub or Sea Launched Ballistic Missile. (**OCD**, *Abbreviations*, 1971, p. 4)

SLG: Senior Leadership Group. (**DHS**, *DHS Operations Coordination: IM&P: CAP*, 2008)

SLGCP: Office of State and Local Government Coordination and Preparedness, OJP/USDOJ; moved to DHS upon its creation, then to FEMA Preparedness Directorate in 2007 when Preparedness responsibilities were reintegrated back into FEFA pursuant to Post Katrina Emergency Management Reform Act.

SLOSH Model: Sea, Lake, and Overland Surges from Hurricanes Model.

SLTGCC: State, Local, and Tribal Government Cross-Sector Council. (**DHS**, *NIPP*, 2006, p. 5)

SM: Shelter Manager/Management. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B.9)

SM: Student Manual (FEMA Emergency Management Institute).

Smallpox: "Smallpox is a serious, contagious, and sometimes fatal infectious disease. There is no specific treatment for smallpox disease, and the only prevention is vaccination. The *pox* part of *smallpox* is derived from the Latin word for "spotted" and refers to the raised bumps that

appear on the face and body of an infected person. There are two clinical forms of smallpox. Variola major is the severe and most common form of smallpox, with a more extensive rash and higher fever. There are four types of Variola major smallpox: ordinary (the most frequent type, accounting for 90% or more of cases); modified (mild and occurring in previously vaccinated persons); flat; and hemorrhagic (both rare and very severe). Historically, Variola major has an overall fatality rate of about 30%; however, flat and hemorrhagic smallpox usually are fatal. Variola minor is a less common presentation of smallpox, and a much less severe disease, with death rates historically of 1% or less. Smallpox outbreaks have occurred from time to time for thousands of years, but the disease is now eradicated after a successful worldwide vaccination program. The last case of smallpox in the United States was in 1949. The last naturally occurring case in the world was in Somalia in 1977. After the disease was eliminated from the world, routine vaccination against smallpox among the general public was stopped because it was no longer necessary for prevention." (**CDC**, *Smallpox Disease Overview*, 30Dec04 modification)

SMART: Simple, Measurable, Achievable, Realistic, Task-oriented. (**FEMA**, IS 120.A, An Introduction to Exercises, 2Feb2008, p. 37)

SMD: State Management of Disasters Initiative. (**FEMA**, *Public Assistance Program*, 2007)

SME: Small and Medium Enterprise. (**ISO 22399**, *Societal Security*…, 2007, p. v)

SME: Subject Matter Expert. (**DA**, *WMD-CST Operations*, December 2007, Glossary-6)

SNL: Sandia National Laboratories.

SNM: Special Nuclear Material. (**August, Jr**., *Technology-Independent Metrics*…, Jan 2008)

SNP: Special Needs Planning.

SNS: Strategic National Stockpile (CDC, HHS). (**HSGAC**, A *Nation Unprepared*, 2006, 634)

SO: Safety Officer, ICS. (**DHS,** *NIMS*, 2004, p. 13)

Social and Institutional Network Analysis: "Social and Institutional network analysis enables the identification of organisations, their role/importance and people's perceptions of them. It also identifies individuals, groups and organisations that play a role in disaster response and that can support the community." (**ProVention Consortium**, *CRA Toolkit: Glossary of Terms*, 2006)

Social Capital: "consists of the stock of active connections among people: the trust, mutual understanding, and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible."[118] (**DHS**, *The ODP Guidelines*, 2003, 31)

[118] Cites: Cohen, D. and Prusak, L. (2001) *In Good Company. How social capital makes organizations work*, Boston, Ma.: Harvard Business School Press. P. 4.

Social Distancing (Pandemic): "Within the workplace, social distancing measures could take the form of: modifying the frequency and type of face-to-face employee encounters (e.g., placing moratoriums on hand-shaking, substituting teleconferences for face-to-face meetings, staggering breaks, posting infection control guidelines); establishing flexible work hours or worksite, (e.g., telecommuting); promoting social distancing between employees and customers to maintain three-feet spatial separation between individuals; and implementing strategies that request and enable employees with influenza to stay home at the first sign of symptoms." (**DHS**, *Pandemic Influenza -- Preparedness, Response, and Recovery: Guide for CIKR*, 2006, p. 14)

Social Impact Assessment (SIA): "SIA is a method used for examining social change due to external sources, especially specific development projects, but also government policies, technological change, and social processes - anything that has a social impact." (**ProVention Consortium**, *CRA Toolkit: Glossary of Terms*, 2006)

Social Survey: "A survey to provide information to establish the context in which the risk assessment will take place and the criteria against which risk will be evaluated. Decisions concerning whether risk treatment is required may also be based on operational, technical, financial, legal, environmental, humanitarian or other criteria for which additional surveys will be required." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Soft Story: "A building story that has significantly less stiffness than the story above. Some buildings with parking at ground level (and thus fewer walls or columns) or an otherwise open ground story have this condition. The term is sometimes also applied to a story that has less strength than the one above, a condition that is more precisely termed a 'weak story'." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

SOG: Standard Operating Guidelines. (**Florida Division of Emergency Management**, 2003)

SOLIC: Special Operations & Low Intensity Conflict, DOD. (**GAO**, *Maritime Security*, Dec. 2007)

Soman: "Soman is a human-made chemical warfare agent classified as a nerve agent. Nerve agents are the most toxic and rapidly acting of the known chemical warfare agents. They are similar to pesticides (insect killers) called organophosphates in terms of how they work and the kinds of harmful effects they cause. However, nerve agents are much more potent than organophosphate pesticides. Soman was originally developed as an insecticide in Germany in 1944. Soman is also known as "GD." Soman is a clear, colorless, tasteless liquid with a slight camphor odor (for example, Vicks Vapo-Rub®) or rotting fruit odor. It can become a vapor if heated." (**CDC**, *Facts About Soman*, March 7, 2003 Update)

SONS: Spill of National Significance. (**Spill of National Significance Website**, *SONS FAQs*, 2007, p. 1)

SOP: Standing Operating Instructions. (**DA**, *WMD-CST Operations*, Dec. 2007, Glossary-6)

SOP: Standard Operating Procedures. (**DCPA**, *On-Site Assistance Appendices*, 1974, p. B-10)

SOSINK: Southwestern Ohio, Southeastern Indiana, Northern Kentucky. (**DHS/OGT**, 2006, 21)

Source: "Item or activity having a potential for a consequence. Note: In the context of safety, source is a hazard." (**ISO 22399**, *Societal Security*…, 2007, 7)

South Carolina Wind and Hail Underwriting Association: "The South Carolina General Assembly authorized the creation of the South Carolina Wind and Hail Underwriting Association (South Carolina Windpool) in 1971. All admitted property and casualty companies licensed by the South Carolina Department of Insurance are members of and are required to participate in the South Carolina Windpool. The Windpool provides wind and hail coverage in the coastal areas of the state, which are specifically designated by statute." (**GAO**, *Natural Disasters: Public Policy Options.*…, Nov 2007, p. 72)

Southeast Region Research Initiative (SERRI): "SERRI is a groundbreaking program managed by Oak Ridge National Laboratory (ORNL) for the US Department of Homeland Security to assist local, state and tribal leaders in developing the tools and methods required to anticipate and forestall terrorist events and to enhance disaster response. Combining science and technology with validated operational approaches, SERRI will address regionally unique requirements and suggest regional solutions with potential national implications. (**ORNL**, *SERRI*, 2008)

"SERRI will be a national resource for developing a full spectrum of competencies and technological capabilities for community and regional resilience and for enhancing resilience efforts in the Southeast Region." (ORNL, *SERRI) Community and Regional Resilience Initiative: Resilient Communities, Resilient Regions* (Slide Pres.), 13Aug07, slide 2)

Southern Regional Emergency Management Compact (SREMAC): "Many questions were raised about the capability of the federal and non-federal governments to manage the consequences of disasters after Hurricane Andrew destroyed much of the infrastructure in areas around Miami, Florida. Then-Florida Governor Lawton Chiles initiated discussions with other governors through the Southern Governors Association to develop a mutual aid agreement. These discussions concluded with agreement by 17 states, as well as the U.S. Virgin Islands and Puerto Rico, to adopt the *Southern Regional Emergency Management Compact* (SREMAC) in 1993." (**CRS**, *The EMAC*, 2008, p. 6)

Southwestern Ohio, Southeastern Indiana, Northern Kentucky (SOSINK) Expanded Regional Collaboration: "The purpose…is to strengthen regional and interstate relationships by providing new linkages among Southwestern Ohio-Southeastern Indiana-Northern Kentucky (SOSINK) regional partners to achieve six critical outcomes, which are: to create a Regional Emergency Operations Plan (REOP). This will facilitate partners working off identical plans and enhance efforts for the National Infrastructure Protection Plan (NIPP) implementation; to ensure mutual aid compacts are multidisciplinary and multi-jurisdictional (both intrastate and interstate); to link Emergency Operation Centers (EOCs), via electronic/web-based systems, ensuring real time access to threat and resource availability information.

"This will allow the 'common picture' of an incident to be regionally shared; to establish regional participation in the design, production and evaluation of training programs and exercises, ensuring a regional approach to response coordination; to ensure regional collaboration and coordination by holding multi-jurisdictional quarterly meetings to oversee implementation of investments and other priorities; and to collaborate with other Ohio UASI regions." (**DHS/OGT**, *Expanded Regional Collaboration…FY 2004-2006*, 2006, p. 21)

SOW: Statement of Work.

SOW: Switch on Wheels.

SPA: Standard Project Hurricane, USACE. (**HSGAC**, A *Nation Still Unprepared*, 2006, 634)

Span of Control: Span of control is key to effective and efficient incident management. Within ICS, the span of control of any individual with incident management supervisory responsibility should range from three to seven subordinates. The type of incident, nature of the task, hazards and safety factors, and distances between personnel and resources all influence span-of-control considerations." (**DHS**, *NIMS*, 2004, p. 10)

Span of Control: "The number of resources for which a supervisor is responsible, usually expressed as the ratio of supervisors to individuals. (Under NIMS, an appropriate span of control is between 1:3 and 1:7, with optimal being 1:5.)." (**FEMA**, *NIMS Draft*) August 2007, p. 158)

Span of Control [ICS/NIMS]: "A Command and Control term that means how many organizational elements may be directly managed by one person. Span of Control may vary from one to seven, and a ratio of five reporting elements is optimum." (**USCG**, *IM Handbook*, 2006, Glossary 25-23)

Special Event Assessment Rating (SEAR): "In order to ensure the Special Event Data Call properly conducts a preliminary assessment of events, the DHS SEWG has developed a questionnaire for individuals at the state and local level who are users of the system and entering their special event data. Once the data call is closed, the events are run through the risk methodology program, which analyzes response criteria captured by the questionnaire and assesses stages of threat, consequences and vulnerabilities for the event. This results in preliminary Special Event Assessment Rating (SEAR) level results, which are categorized as SEAR Levels 1-5." (**DHS**, *Statement of Rufe*, July 9, 2008, pp. 2-3)

"An event is considered to be a **SEAR Level 1** when it is an event of significant national and/or international importance that may require extensive Federal interagency security and incident management preparedness. Pre-deployment of Federal assets as well as consultation, technical advice and support to specific functional areas in which the state and local agencies may lack expertise or key resources may also be warranted. In order to ensure unified Federal support to the local authorities and appropriate national situational awareness, a Federal Coordinator (FC) will be designated, and an Integrated Federal Support Plan (IFSP) will be developed.

A **SEAR Level 2** event is a significant event with national and/or international importance that may require direct national-level Federal support and situational awareness. The magnitude and

significance of these events calls for close coordination between Federal, state, and local authorities and may warrant limited pre-deployment of USG assets as well as consultation, technical advice and support to specific functional areas in which the state and local agencies may lack expertise or key resources. In order to ensure unified Federal support to the local authorities and appropriate national situational awareness, a Federal Coordinator (FC) will be designated and an Integrated Federal Support Plan (IFSP) will be developed.

On the other hand, **SEAR Level 3, 4 and 5** events do not have a FC identified nor an IFSP generated, however, State and local officials may still solicit resources from Federal agencies at the agencies' expense.

Regardless of the SEAR Level designation assigned, the Federal government can remain involved with the special event. DHS will maintain awareness of all special events through reporting produced by the National Operations Center (NOC). In addition, State and local planners may request support for their events from the Federal Departments and Agencies located near the event." (**DHS**, *Statement of Rufe*, July 9, 2008, p. 3)

Special Event Data Call: "This automated system, allows Special Event planners from States, cities and localities to enter information regarding upcoming special events into a data base. The most recent Data Call which covers Calendar Year 2008 had over 4,000 events entered primarily by State and/or local Planners. This list is the crucial starting point and is the only method that provides DHS and the SEWG with situational awareness." (**DHS**, *Statement of Rufe*, July 9, 2008, p. 2)

Special Events for Homeland Security (SEHS): "Those special events designated as having an impact on homeland security." (**JCS/DoD**, *Civil Support*, 2007, p. GL-11) [Note: Replaced by the Special Event Assessment Report. (**DHS**, *Office of Operations Coordination, Interagency Planning Workshop*, November 29, 2007, slide # 26)

Special Event Homeland Security (SEHS) Levels: "Managed by the Department of Homeland Security, the Interagency Special Events Working Group **(**SEWG) is the core of an interagency process that involves various agencies of the Federal government. Within the Special Events Working Group (SEWG), Federal departments and agencies provide input and recommendations concerning Special Events based on their respective authorities, responsibilities, and fields of expertise. The SEWG is co-chaired by designees from DHS Headquarters, the U.S. Secret Service, FEMA, and the FBI, and is currently composed of representatives from over 40 Federal departments and agencies that have responsibilities and/or association with Special Events security and incident management. The SEWG develops the *Prioritized List of Special Events*, recommends Special Event Homeland Security (SEHS) Levels, and is the single forum that ensures comprehensive and coordinated Federal interagency awareness of and support to designated Special Events.

"The *Prioritized List of Special Events* is the single interagency resource delineating domestic events, activities, or meetings that do not rise to the level of a National Security Special Event (NSSE), but which nevertheless are significant. Using a risk-based approach to weigh vulnerabilities and consequences against threats, the SEWG develops the *Prioritized List of*

Special Events from event recommendations submitted by each state, territory and the District of Columbia. The events are categorized into one of the four SEHS levels using objective criteria including but not limited to: size; threat; symbolic or political significance; duration; location; number and type of attendees; media coverage; dignitary participation; proximity of critical infrastructure; and state and local capabilities. Federal support is scaled according to the SEHS level. SEHS-IV only requires maintaining Federal situational awareness of the event while a wide variety of Federal prevention, protection, and response resources may be provided for SEHS-I events. Events that do not reach the threshold of SEHS-IV are not included on the list. Each SEHS level is defined as:

> 1. SEHS-I: An event of large magnitude and significant national and/or international importance requiring significant Federal support and situational awareness. This designation requires the appointment of a Federal Coordinator and the development of an Integrated Federal Support Plan.
>
> 2. SEHS-II: An event of medium magnitude and average national and/or international importance requiring Federal support and situational awareness. This designation also requires the appointment of a Federal Coordinator and the development of an Integrated Federal Support Plan.
>
> 3. SEHS-III: An event of low magnitude and low national and/or international importance requiring limited Federal support and situational awareness. Monitoring and Federal coordination for support are accomplished through the Homeland Security Operations Center (HSOC) and the SEWG.
>
> 4. SEHS-IV: An event that requires Federal awareness but does not warrant direct Federal support or involvement. DHS may assist state and local jurisdictions by providing training and exercise opportunities through existing and/or tailored programs. The HSOC will maintain awareness of the event." (**MO SEMA** (Department of Public Security), *Missouri Hazard Analysis, Annex Q: Special Events Considerations*, October 2006, p. Q-7). [Note: Replaced by Special Event Assessment Report events. (**DHS**, Office of Operations Coordination, *Interagency Planning Workshop*, November 29, 2007, slide #26).]

Special Event Working Group (SEWG): "The Special Event Working Group (SEWG) is a group of representatives of various federal entities who may be involved in planning for or coordinating federal activities for a special event. To paraphrase, a special event is defined as a function that draws a large public crowd to the host city or venue in combination with political importance and local, regional or international significance. The SEWG was formed in April 2004, to validate a methodology for identifying and categorizing special events (other than those designated as National Special Security Events (NSSE)), and coordinating Federal support to those events.

The mission and purpose of the SEWG is to support a unified interagency planning and coordination effort for Special Events and to ensure coordination of Federal support to the designated event. The SEWG identifies events that may require a coordinated Federal response

and collectively coordinates Federal assets to bridge any capability gaps identified by state and local partners that have not already been addressed by exhausting local mutual assistance agreements….

The SEWG consists of several elements: (1) the five Co-chairs of the SEWG who consist of senior or executive level (GS-15/SES) managers from OPS, the Federal Emergency Management Agency (FEMA), the Federal Bureau of Investigation (FBI), the United States Secret Service (USSS) and DHS Office of Risk Management & Analysis (RMA), (2) the SEWG General Membership itself, and (3) the DHS programmatic, coordination and administrative staff dedicated to SEWG which is housed in OPS.

The membership of the SEWG consists of representatives designated by their respective Federal Departments, Agencies and/or Components. These representatives are traditional federal agencies with missions that are related to Special Events planning, coordination, and execution, and span the four pillars of the National Response Framework: Prevention, Protection, Response and Recovery. Presently, there are upwards of fifty Federal Departments/Agencies and their Components with representatives assigned to the SEWG…" (**DHS**, *Statement of Roger Rufe*, July 9, 2008, pp. 1-2)

Special Flood Hazard Area: "Land in the floodplain within a community subject to one percent or greater chance of flooding in any given year." (**APA**, 2005, p. 84)

Special Flood Hazard Area (SFHA): "SFHA is the…A and V Zones as depicted on the Flood Insurance Rate Map. B, C, and X Zones are outside of the SFHA." (**FEMA**, *Reducing Damage from Localized Flooding – A Guide for Communities*, 2005, viii)

Special Flood Hazard Area (SFHA), NFIP: "The land area covered by the floodwaters of the base flood is the Special Flood Hazard Area (SFHA) on NFIP maps. The SFHA is the area where the NFIP's floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The SFHA includes Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE, and V." (**FEMA**, *SFHA*, 2007)

Special Needs Population: "Pertaining to a population whose members may have additional needs before, during, and after an incident in one or more of the following functional areas: maintaining independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures, who have limited English proficiency, or who are non-English speaking; or who are transportation disadvantaged." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 158)

Special Needs Population Team (FEMA): "FEMA's Special Needs Population Team works with ESF- 6 partners, OFAs and the private sector to support Regional and JFO initiatives when providing services to special needs populations. This team provides support to facilitate the integration of services at the Regional and JFO levels to ensure that mass care and emergency assistance services are in compliance with Federal, State and local requirements, regulations and

laws." (**FEMA**, *Statement of R. David Paulison, Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath – the Federal Response," 26* Jun08, 13)

Special Needs Populations, Evacuation Purposes: "People with special needs are defined by the Governor [TX] as those who are not capable of evacuating themselves. As the modes of transportation needed to evacuate these populations vary, the Task Force further classified the special needs populations into four main categories:
– Hospital Patients
– Nursing Home Patients
– Home Healthcare Clients, including Halfway Houses
– Economically Unable to Evacuate, otherwise unable to self-evacuate, including elderly (not but infirmed), homeless, mentally impaired, chronic substance abusers, international visitors, and those without access to their own vehicle or otherwise financially unable to evacuate." (**Houston-Galveston Area Evacuation and Response Task Force**. *Recommendations Report*. 2006, p. 12)

Special Needs Shelters: "Special needs shelters are distinct shelters or portions of general shelters that are designed to care for people with special needs, including assistance with maintaining the activities of daily living and monitoring minor health and medical conditions. The intent of special needs shelters is to provide an environment in which the health of shelterees with special needs can be sustained with available resources. Medical eligibility for a special needs shelter is based on a leveling system, which accounts for the individual's condition and the skills required to provide care. (**New England Center for Emergency Preparedness**, *Community Planning Guide*, 2007, p. 42)

Special Nuclear Material (SNM): "According to the Nuclear Regulatory Commission, special nuclear material is plutonium, uranium-233, or uranium enriched in the isotopes uranium-233 or uranium-235." (**DHS/OIG**, *DNDO Progress*…, Dec 2007, p. 8)

Special Population: "A targeted group in a disaster-impacted community or area with needs that require specific attention by the crisis counseling program. Special populations include children, adolescents, older adults, elderly persons, members of ethnic and cultural groups, migrant workers, disaster relief workers, persons who are severely mentally ill, persons with disabilities, and homeless persons. Other special populations may be unique to the area being served by the crisis counseling program." (**HHS**, 2003, p. 62)

SPF: Standard Project Flood. (**Galloway**, *A California Challenge*, 2007, v)

Spill of National Significance: "The Oil Pollution Act 90 (OPA 90) was drafted in response to the catastrophic oil spill in Valdez, AK with the intent of improving readiness for the threat of future oil spills. The law required the National Oil and Hazardous Substance Pollution Contingency Plan, also known as the National Contingency Plan (NCP), to be amended to include a section that addressed a Spill of National Significance (SONS). A SONS is defined as: "a spill that, due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and

clean up the discharge" (40 CFR 300.5)." (**Spill of National Significance Website**, *SONS FAQs*, December 14, 2007 Update, p. 1)

SPIREP: Spot Intelligence Report. (**DA**, *WMD-CST Operations*, December 2007, Glossary-6)

SPOC: Single Point of Contact. (**DHS**, *Fiscal Year 2008 Buffer Zone Protection Program Guidance and Application Kit*, February 2008, p. 16)

Spontaneous Evacuation: "Residents or citizens in the threatened areas observe an emergency event or receive unofficial word of an actual or perceived threat and without receiving instructions to do so, elect to evacuate the area. Their movement, means, and direction of travel is unorganized and unsupervised." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (State and Local Guide (SLG) 101), September 1996, p. GLO-5)

Spontaneous Volunteers: (See, "Volunteers, Spontaneous")

SPOR: Secure Policy-oriented Object Router. (**FEMA**, *IPAWS Update*, 2007, slide 29)

SPOT Report: "A concise narrative report of essential information covering events or conditions that may have an immediate and significant effect on current planning and operations that is afforded the most expeditious means of transmission consistent with requisite security." (DOD)

SPP: Security and Prosperity Partnership of North America. (**DHS**, *NIPP*, 2006, p. 102)

SREMAC: Southern Regional Emergency Management Compact, 1993.

SRPP: Strategic Planning and Requirements. (**DHS**, *IPG FY 2011-2015 Draft*, Oct 2008, p. 5)

SRL: Severe Repetitive Loss. (**FEMA**, *FEMA Region III Annual Report FY 2007*, 2008, 25)

SRUF: Standing Rules for the Use of Force for US Forces. (**JCS/DoD**, *Civil Support*, 2007. B-1)

SSA: State Administrative Agency. (FEMA, TEI/TO Course Catalog, 2008, 6)

SSAs: Sector-Specific Agencies, National Infrastructure Protection Plan. See following reference for examples. (**DHS**, *NIPP,* 2006, p. 3)

SSHS: Safir/Simson Hurricane Scale. (Blake, Rappaport, Landsea, 2007, 3)

SSP: Sector-Specific Plan, National Infrastructure Protection Program. (**DHS**, *NIPP*, 2006, p. 102)

SSI: Sensitive Security Information.

S&T: Science and Technology Directorate, DHS.

Stafford Act [See, also, Robert T. Stafford Disaster Relief and Emergency Assistance Act]

Stafford Act: 1) The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. 2) The Stafford Act provides an orderly and continuing means of assistance by the Federal Government to State and local governments in carrying out their responsibilities to alleviate the suffering and damage which result from disaster. The President, in response to a State Governor's request, may declare and "emergency" or "major disaster" in order to provide Federal assistance under the Act. The President, in Executive Order 12148, delegated all functions, except those in Sections 301, 401, and 409, to the Director, of FEMA. The Act provides for the appointment of a Federal Coordinating Officer who will operate in the designated area with a State Coordinating Officer for the purpose of coordinating state and local disaster assistance efforts with those of the Federal Government. (**44 CFR 206.2**)

Stafford Act: "Federal support to State and local jurisdictions takes many forms. The most widely known authority under which assistance is provided for major incidents is the Stafford Act. When it is clear that State or tribal capabilities will be exceeded or may be exhausted, the Governor can request Federal assistance under the Stafford Act. The Stafford Act authorizes the President to provide financial and other forms of assistance to State and local governments, certain private nonprofit organizations and individuals to support response, recovery and mitigation efforts following Presidentially-declared major disasters and emergencies. Most incidents are not of sufficient magnitude to merit a Presidential emergency or major disaster declaration. However, when State and local resources are insufficient, a Governor may ask the President to declare a Federal disaster or emergency. Before making a declaration request, the Governor normally must activate the State's emergency plan and ensure that all appropriate State and local actions have been taken, including:

Surveying the affected areas to determine the extent of private and public damage.

Conducting joint Preliminary Damage Assessments with DHS/FEMA officials to estimate the types and extent of Federal disaster assistance required.

Only the Governor can initiate a request for a Presidential emergency or major disaster declaration. This request is made through the DHS/FEMA Regional Administrator and is based on a finding that Federal assistance is needed because the situation exceeds State and local response capabilities due to its severity and magnitude. The request includes:

Information on the extent and nature of State resources that have been or will be used to address the consequences of the disaster.

A certification by the Governor that State and local governments will assume all applicable non-Federal costs required by the Stafford Act.

An estimate of the types and amounts of supplementary Federal assistance required.

Designation of the State Coordinating Officer.

The Governor addresses the request to the President and forwards it to the DHS/FEMA Regional Administrator, who makes a recommendation to the DHS/FEMA Administrator. The DHS/FEMA Administrator then recommends a course of action to the President. The Governor, appropriate members of Congress and Federal agencies are immediately notified of a Presidential declaration. Federal support to States under the Stafford Act is coordinated by DHS." (**DHS**, *NRF -- Federal Partner Guide* (Comment Draft), September 10, 2007, p. 19)

Stafford Act: "Stafford Act Authorities… The Stafford Act describes the programs and processes by which the Federal Government provides disaster and emergency assistance to State and local governments, Tribal nations, eligible private nonprofit organizations, and individuals affected by a declared major disaster or emergency. The Stafford Act provides for a Presidential declaration of a major disaster or emergency after a Governor's request for assistance if:

- an event is beyond the combined response capabilities of the State and affected local governments; and
- based on joint Federal-State-local assessments, the damages are of sufficient severity and magnitude to warrant assistance under the Stafford Act.

In a particularly rapidly developing or clearly devastating disaster, there may be an expedited declaration.

Further, the President may issue an emergency declaration under the Stafford Act to provide direct emergency assistance without a Governor's request if an incident involves a subject matter that is exclusively or preeminently the responsibility of the United States Government. In such a case, the President will consult the Governor of the affected State, if practicable. Also, after a Presidential declaration has occurred, FEMA may provide accelerated Federal assistance and support where necessary to save lives, prevent human suffering, or mitigate severe damage, even in the absence of a specific request for particular resources or assistance from the Governor. In such cases, the Governor of the affected State will be consulted if practicable, but this consultation will not delay or impede the provision of such accelerated Federal assistance. Prior to a major disaster or emergency declaration, the Stafford Act authorizes FEMA to improve the timeliness of its response by pre-deploying personnel (who may be from any number of Federal agencies) and equipment to reduce immediate threats to life, property, and public health and safety." (**FEMA**, Statement of Paulison, *Hearing on: "Nuclear Terrorism: Providing Medical Care and Meeting Basic Needs in the Aftermath – the Federal Response,"* June 26, 2008, p. 4)

Stafford Act Congressional Intent: "It is the intent of the Congress, by this Act, to provide an orderly and continuing means of assistance by the Federal Government to State and local governments in carrying out their responsibilities to alleviate the suffering and damage which result from such disasters by -
(1) revising and broadening the scope of existing disaster relief programs;
(2) encouraging the development of comprehensive disaster preparedness and assistance plans, programs, capabilities, and organizations by the States and by local governments;
(3) achieving greater coordination and responsiveness of disaster preparedness and relief programs;
(4) encouraging individuals, States, and local governments to protect themselves by obtaining insurance coverage to supplement or replace governmental assistance;

(5) encouraging hazard mitigation measures to reduce losses from disasters, including development of land use and construction regulations; and
(6) providing Federal assistance programs for both public and private losses sustained in disasters. (**FEMA**, *Robert T. Stafford Disaster…Act…*, June 2007, p. 13)

Stafford Act, Post Katrina Emergency Management Reform Act of 2007 Modifications:
"Subtitle E improves existing disaster relief authorities by providing the President additional program flexibility, financial incentives to control costs, and by addressing unique aspects of catastrophic disasters. The subtitle maintains the primacy of state governments and the supporting role of federal assistance under the Stafford Act. The changes:

- Allow for accelerated federal assistance and federal support to save lives, prevent human suffering, mitigating severe damage in the absence of a specific request for assistance;
- Require national disaster recovery and housing strategies to clearly define the roles and responsibilities of federal agencies and other organizations during large scale disasters;
- Provide the President additional flexibilities under the individual assistance program to limit the excessive use of trailers in future disasters. Allows the use of semi-permanent housing in remote areas;
- Increase flexibility and imposes a total assistance cap on mitigation programs. The change institutes a sliding scale program for the post-disaster Hazard Mitigation Grant Program allowing 15 percent for disaster amounts no greater than $2 billion, 10 percent for disaster amounts between $2 - $10 billion, and 7.5 percent for disaster amounts between $10 - $35 billion. Removes the caps on repair or replacement assistance or individual assistance. Allows for utility payment, security deposits, and hook-up charges to be included in individual assistance;
- Allow the President to appoint a multi-state Federal Coordinating Officer;
- Requires the development of capabilities necessary to meet the needs of individuals with disabilities;
- Requires FEMA to develop a voluntary family registry and locator system and to coordinate with the National Center for Missing and Exploited Children in the Center's development of a National Emergency Child Locator Center;
- Requires FEMA in coordination with state and local governments to take into account populations with limited English proficiency, special needs populations, and individuals with disabilities in sharing best practices and maintaining and informational clearinghouse;
- Authorizes the President to provide transportation assistance to return evacuees to their residences;
- Allows the President to provide case management services to victims of major disasters to identify and address unmet needs;
- Allows the President to designate a Small State and Rural Advocate;
- Allows for the repair, restoration and replacement of damaged private non-profit educational facilities;
- Creates a housing pilot program to reduce the need for large scale trailer parks; and
- Creates a public assistance pilot program to create financial incentives to reduce total costs, prevent fraud, and expedite completion of two of the most expensive aspects of federal disaster assistance: debris removal and the reconstruction of public facilities."

(**NEMA**, *Legislative Report on Post-Katrina Emergency Management Reform Act of 2006*, October 10, 2006, pp. 7-8)

Staging Area (ICS): Staging areas are established for temporary location of available resources. Staging Areas will be established by the Operations Section Chief to enable positioning of and accounting for resources not immediately assigned. A Staging Area can be any location in which personnel, supplies, and equipment can be temporarily housed or parked while awaiting operational assignment. Staging Areas may include temporary feeding, fueling, and sanitation services. The Operations Section Chief assigns a manager for each Staging Area, who checks in all incoming resources, dispatches resources at the Operations Section Chief's request, and requests Logistics Section Support, as necessary, for resources located in the Staging Area. Personnel check in with the Resources Unit at the Staging Area, while supplies and equipment are checked in with the Supply Unit. If neither of these functions is activated, resources report to the Staging Area Manager for direction." (**DHS**, *NIMS*, 2004, ICS Annex, p. 96)

Staging Area: "Established for the temporary location of available resources. A Staging Area can be any location in which personnel, supplies, and equipment can be temporarily housed or parked while awaiting operational assignment." (**FEMA**, *NIMS Draft*, August 2007, p. 158)

Staging Area: [ICS/NIMS] "That location where incident personnel and equipment are assigned awaiting tactical assignment. Staging Areas are managed by the OSC." (**USCG**, *IM Handbook* 2006, Glossary 25-23)

Stakeholder: "Stakeholder (interested party) – person or group having an interest in the performance or success of an organization." (**ISO 22399**, *Societal Security*…, 2007, 7)

Stakeholder: "Any individual, group, or organization that might affect, be affected by, or perceive itself to be affected by the emergency." (**NFPA 1600**, 2007, p. 8)

Stakeholders: "Any person, group, or organization affected by and having a vested interest in the incident and/or the response operation." (**USCG**, *IM Handbook*, 2006, Glossary 25-23)

Standard Equipment List (SEL): "A list issued annually to promote interoperability and standardization across the response community at the local, state, and federal levels by offering a standard reference and a common set of terminology. It is provided to the responder community by the Inter-Agency Board for Equipment Standardization and Interoperability (IAB). The SEL contains a list of generic equipment recommended by the IAB to organizations in preparing for and responding to all-hazards." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 9)

Standard Flood Insurance Policy Forms: "The NFIP offers three Standard Flood Insurance Policy forms. These forms provide policyholders with a description of their coverage and other important coverage information"

- Dwelling Policy Form
- General Property Policy Form

- Residential Condominium Building Association Policy (RCBAP) Form. (**FEMA**, *Standard Flood Insurance Policy Forms*, 2006)

Standard Operating Guidelines: "A set of instructions having the force of a directive, covering those features of operations which lend themselves to a definite or standardized procedure without loss of effectiveness." (**FEMA**, *NIMS Draft*, August 2007, p. 158)

Standard Operating Procedure (SOP): "SOPs provide the means to translate organizational tasking into specific action-oriented checklists that are very useful during emergency operations. They tell how each tasked organization or agency will accomplish its assigned tasks. Normally, SOPs include checklists, call- down rosters, resource listings, maps, charts, etc. and give **step-by-step procedures** for notifying staff, obtaining and using equipment, supplies, vehicles, obtaining mutual aid, reporting information to organizational work centers and the emergency operating center (EOC), communicating with staff members that are operating from more than one location, etc." (**FEMA**, *SLG 101*, 1996, p. 1-7)

Standard Operating Procedure (SOP): "Complete reference document or an operations manual that provides the purpose, authorities, duration, and details for the preferred method of performing a single function or a number of interrelated functions in a uniform manner." (**FEMA**, *National Incident Management System* (FEMA 501/Draft) August 2007, p. 158)

Standard Operating Procedure (SOP). "An organizational directive that establishes a course of action or policy." (**NFPA 1561**, 2002, p. 8)

Standard Operating Procedures (SOP): "A complete reference document that details the procedures for performing a single function or a number of interdependent functions." (**DHS**, *National Incident Management System*, March 2004, p. 36)

Standard Project Flood (SPF): "The Standard Project Flood, a "derived discharge" estimate, represents a flood that can be expected from the most severe combination of meteorologic and hydrologic conditions that are considered *reasonably characteristic* of the region. Where floods are predominantly the result of melting snow, the SPF is based on estimates of the most critical combinations of meteorological events (snow, rain, temperature, etc.) considered reasonably characteristic of the region. Since it is based on estimates of typical meteorological events, the Standard Project Flood is not associated with a specific return interval (as is the 100-year flood)." (**Galloway**, *A California Challenge*…, 2007, pp. 15-16)

"The U.S. Army Corps of Engineers indicates that the Standard Project Flood, "is intended as a practicable expression of the degree of protection to be considered for situations where protection of human life and high-valued property is required, such as for an urban levee or floodwall."32 It was the de facto U.S. Army Corps of Engineers standard until the 1980's when the institution of local-federal cost sharing for levee construction began. At that time, it became economically beneficial for communities to build only to the 100-year standard, given that achievement of 100-year protection removed the community behind the levee from the insurance and land-use requirements (and costs) of the National Flood Insurance Program and reduced the size (and the local costs) of the levee construction." (**Galloway**, 2007, 16)

Standard Project Flood (SPF): "The SPF is the flood that can be expected from the most severe combination of meteorologic and hydrologic conditions that are considered reasonably characteristic of the region in which the study basin is located. The SPF, which provides a performance standard for potential major floods, is based on the Standard Project Storm (SPS)." (**USACE**, *Engineering and Design – Hydrologic Engineering Requirements for Reservoirs*, Chapter 7, Flood-Runoff Analysis, 1997, p. 7-2)

Standard Project Storm (SPS): "The SPS is a hypothetical storm having the most severe flood-producing rainfall depth-area-duration relationship and areal distribution pattern that is considered reasonably characteristic of the region in which the drainage area is located. It is developed by studying the major storm events in the region, excluding the most extreme. Development of the SPS may involve transposition and adjustment of a large storm from its observed location to the locality of concern…" (**USACE**, *Water Resources Policies and Authorities…*, 1999, 13-2)

Standards for Civil Preparedness: "…Standards provide guidelines – not a 'bible' – for developing an improving civil preparedness. Local, State, and Regional Civil Preparedness professionals should use them as a primary reference in the preparation and review of Local Program Papers, and in On-Site Assistance projects…. Standards outline the work that each jurisdiction should do to build emergency readiness" (**DCPA**, *Standards for Local Civil Preparedness*, 1978, p. 2)

Standards for Civil Preparedness (1978):

1. Organization and Administration of Civil Preparedness
    1. Statement of Purpose
    2. Joint-Action vs. Individual Jurisdiction Approach
    3. Organizing Local Civil Preparedness Action
    4. Administration of Local Civil Preparedness Program
2. The Local Civil Preparedness Director/Coordinator
    1. Position and Responsibilities of the Local Director/Coordinator
    2. Civil Preparedness Staffing for Jurisdictions of Various Sizes
    3. Selection, Qualifications, and Salary of Local Director/Coordinator
    4. Professional Training and Growth
3. Tangible Components of Emergency Readiness: Local Government Emergency Plans
    1. Need for Local Emergency Plans
    2. Local Planning Process
    3. Hazard Analysis
    4. Organization and Content of Local Government Emergency Plans
    5. Nuclear Civil Protection Planning
        1. Fully-Qualified Emergency Planning Standard
        2. Minimum-Level Emergency Planning Standard
4. Tangible Components of Emergency Readiness: Facilities and Equipment
    1. Emergency Operating Center
    2. Shelter
    3. Radiological Defense

4. Warning System
5. Emergency Communications
6. Emergency Public Information
7. Law Enforcement
8. Fire Service
9. Rescue
10. Emergency Medical
11. Public Works Engineering
12. Emergency Welfare
13. Schools

5. Tangible Components of Emergency Readiness: Trained Personnel
    1. Training Required for Local Government Personnel
    2. Training for Personnel Required to Supplement/Extend Government Capabilities
    3. Training for the Public
6. Intangible Components of Emergency Readiness: Ability to Execute Emergency Plans
    1. Evaluating Local Ability to Execute Plans
        1. Fully-Qualified Readiness Standard
        2. Minimum-Level Readiness Standard

(**DCPA**, *Standards For Local Civil Preparedness* (CPG-1-5), April 1978, pp. iii-iv)

Standards for Local Civil Preparedness: "During the fiscal year [1973], Standards were developed jointly by local, State, and Federal civil preparedness officials, and were distributed as an aid to local officials for improving their ability to save lives and preserve property in all kinds of disasters. In addition, a Summary of the Standards stressing the 'why' of local civil preparedness was prepared and distributed to local officials. The Standards and Summary were prepared in cooperation with the Council of State Governments, the National Association of Counties, the National League of Cities and U.S. Conference of Mayors, and the International City Management Association." (**DCPA**, *Foresight, DCPA Annual Report FY 73*, 1974, p. 11)

Standardization: "A principle of the NIMS that provides a set of standardized organizational structures—such as the Incident Command System (ICS), multi-agency coordination systems, and public information systems—as well as requirements for processes, procedures, and systems designed to improve interoperability among jurisdictions and disciplines in various area, including: training; resource management; personnel qualification and certification; equipment certification; communications and information management; technology support; and continuous system improvement." (**DHS**, *National Incident Management* System, March 2004, p. 2)

Standardized Emergency Management System (SEMS) California: "In 1991, the Oakland Hills fires lasted three days, and destroyed some 1,600 acres, over 2,700 structures and killed 25 people. Damages were estimated at more than $1.68 billion.22 Emergency management experts criticized the handling of the fires because disparate agencies were poorly prepared to work together. In response, State and local officials developed SEMS as a management structure for coordinating and integrating emergency responses that involve multiple agencies and multiple jurisdictions. SEMS was developed to provide a standardized but flexible strategy for coordinating responses and integrating management efforts. SEMS can operate at five levels, though only the levels required to respond to a particular emergency are activated.

- *Field:* Refers to the incident level, where local officials manage responders and resources to meet needs. During large-scale events, there may be multiple field sites.
- *Local:* The local level refers to city, county or special districts. The local level coordinates and manages response within its jurisdiction.
- *Operational Area:* The operational area refers to the boundaries of a county. At the operational area, incident commanders manage response and serve as coordination and communication links between local and regional levels. Operational areas reflect county boundaries, but county officials do not necessarily lead operational area emergency management efforts.
- *Regional:* The State has six emergency management regions. The regional level coordinates information and resource movement among operational areas within the mutual aid region and between operational areas and the State.
- *State:* State resources are managed in response to the needs of other levels. State officials manage and coordinate assistance between the five local and state levels and the federal disaster response system. " (**Little Hoover**, *Safeguarding the Golden State*, 2007, 8-9)

Standardized National Planning Process and Integration System: "There is established a planning process involving three levels of planning: (a) strategic; (b) operational; and (c) tactical. The planning process will result in the development of a family of related planning documents to include strategic guidance statements, strategic plans, concepts of operations, operations plans, and as appropriate, tactical plans." (**White House**, *Annex I, "National Planning," to HSPD-8*, 2007, p. 2)

Standardized Terminology: "Commonly accepted language that is consistent with policies, plans, or procedures in the NIMS and NRP to facilitate multi-agency, multi-disciplinary or multi-jurisdictional communications during an incident." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For Fiscal Year 2007), October 23, 2006, p. 10)

Standing Rules for the Use of Force for US Forces (SRUF): "Normally, force is to be used only as a last resort, and should be the minimum necessary. The use of force must be reasonable in intensity, duration, and magnitude based on the totality of the circumstances to counter the threat. If force is required, nonlethal force is authorized and may be used to control a situation and accomplish the mission, or to provide self-defense of DOD forces, defense of non-DOD persons in the vicinity if directly related to the assigned mission, or in defense of the protected property, when doing so is reasonable under the circumstances. Lethal force is authorized only when all lesser means have failed or cannot reasonably be employed and the circumstances otherwise justify the use of lethal force." (**JCS/DoD**, *Civil Support*, 2007, p. B-2)

STARC: State Area Command, Army National Guard. (**DoD**, *MSCA*, 1993, p. 23)

START: Simple Triage and Rapid Treatment. (Critical Illness and Trauma Foundation, Inc.)

State and Local Anti-Terrorism Training (SLATT): "The…SLATT program's primary objective is the delivery of specialized terrorism/extremism orientation, interdiction,

investigation, and prevention training to law enforcement executives, command personnel, intelligence officers, investigators, analytical personnel, training directors, and prosecutors. Each course is specifically designed to meet the needs of the target audience, from the street level officer to the executive." (**FEMA**, *Technical Assistance: Preparedness & Program Management: Technical Assistance Catalog*, no date, p. 8)

State and Urban Area Homeland Security Strategies: "…State and Urban Area Homeland Security Strategies provide a context for performing the strategic exercise of asking *"How are we organized?"* and *"How are we managing our homeland security programs?"* This evaluation will enable us as a Nation to think about how we build our preparedness programs and capabilities within and across State boundaries…. States and Urban Areas were recently required to update their strategies to bring them into alignment with the seven National Priorities included in the Goal. The updated strategies address the four homeland security mission areas: prevent, protect, respond, and recover." (**DHS/ODP**, *FY 2006 EMPG Program Guidance*, 2005, p. 8)

State and Urban Area Homeland Security Strategies Focus: "The current State and Urban Area Homeland Security Strategies address 2004, 2005, and 2006, and are mostly terrorism focused. In updating their strategies this year, States and Urban Areas should begin the process of evolving their strategies to address not only terrorism, but a broad range of other threats and hazards, founded on a capabilities-based planning approach. In the future, States and Urban Areas will be asked to develop enterprise-wide homeland security strategies for 2007, 2008 and 2009 that reflect the necessary integration and collaboration across all mission areas and support the establishment of the National Preparedness System and realization of the Goal." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, 2005, p. 8)

State and Urban Area Homeland Security Strategies Purpose: "The purpose of Homeland Security Strategies is to:

- Provide a blueprint for comprehensive, enterprise-wide planning for homeland security efforts;
- Provide a strategic plan for the use of related Federal, State, local, and private resources within the State and/or Urban Area before, during, and after threatened or actual domestic terrorist attacks, major disasters, and other emergencies."

(**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, 2005, p. 2)

State and Urban Area Homeland Security Strategy Core Elements: "The core elements of the strategy – the purpose, vision, and goals – rarely change over time." (**DHS/ODP**, *State and Urban Area HS Strategy: Guidance on Aligning Strategies with the NPG*, 2005, p. 28)

State Approving Official (SAO): "The person delegated the authority to request DFA and TA and commits the State cost-share for mission assignments, when applicable." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 60)

State Coordinating Officer (SCO): "The SCO plays a critical role in managing the State response and recovery operations following Stafford Act declarations. The Governor of the affected State appoints the SCO, and lines of authority flow from the Governor to the SCO, following the State's policies and laws. For certain anticipated events in which a Stafford Act declaration is expected, such as an approaching hurricane, the Secretary of Homeland Security or the FEMA Administrator may pre-designate one or more Federal officials to coordinate with the SCO to determine resources and actions that will likely be required, and begin pre-deployment of assets. The specific roles and responsibilities of the SCO include:

> Serve as the primary representative of the Governor for the affected State or locality with the RRCC or within the JFO once it is established.
>
> Work with the Federal Coordinating Officer to formulate State requirements, including those that are beyond State capability, and set priorities for employment of Federal resources provided to the State.
>
> Ensure coordination of resources provided to the State via mutual aid and assistance compacts.
>
> Provide a linkage to local government.
>
> Serve in the Unified Coordination Group in the JFO." (**DHS**, *NRF Comment Draft*, September 2007, p. 50)

State Emergency Management Agency Director: "All States have laws mandating establishment of a State emergency management agency and the emergency operations plan coordinated by that agency. *The Director of the State emergency management agency ensures that the State is prepared to deal with large-scale emergencies and is responsible for coordinating the State response in any major emergency or disaster.* This includes supporting local governments as needed or requested, and coordinating assistance with the Federal Government." (**DHS**, *NRF Comment Draft*, September 2007, p. 19)

State Emergency Plan: "The State Plan which is designated specifically for State-level response to emergencies or major disasters and which sets forth actions to be taken by the State and local governments, including those for implementing Federal disaster assistance." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 61)

State Emergency Response Commission (SERC): "Commission appointed by each State governor according to the requirements of Title Ill of SARA: duties of the commission include designating emergency planning districts, appointing local emergency planning committees (LEPCs), supervising and coordinating the activities of planning committees, reviewing emergency plans, receiving chemical release notifications, and establishing procedures for receiving and processing requests from the public for information. (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, p. A-7)

State Homeland Security Advisor: "The State Homeland Security Advisor serves as counsel to the Governor on homeland security issues and *serves as a liaison between the Governor's office, the State homeland security structure, DHS* and other organizations both inside and outside of the State. The advisor often chairs a committee comprised of representatives of relevant State agencies, including public safety, the National Guard, emergency management, public health and others charged with developing preparedness and response strategies." (**DHS**, *NRF Comment Draft,* September 2007, p. 19)

State Homeland Security Grant Program: (See, also, "Homeland Security Grant Program")

State Homeland Security Program (SHSP): "State Homeland Security Grant Program supports the implementation of the State Homeland Security Strategy to address the identified planning, equipment, training, and exercise needs for acts of terrorism. In addition, SHSP supports the implementation of the National Preparedness Goal, the National Incident Management System (NIMS), and the National Response Plan." (**DHS**, S*tate Contacts & Grant Award Information*, July 18, 2007 Update.)

State Homeland Security Program (SHSP): "The State Homeland Security Program (SHSP) is a primary funding source for building homeland security capabilities that align with the National Preparedness Guidelines (NPG) at the state and local levels. States and localities use SHSP funds to build a wide range of homeland security capabilities. Most capabilities specific to terrorism are also applicable to large-scale natural disasters and public health emergencies. Grant allocations are based on an analysis of risk and effectiveness but each state is assured a minimum allocation. Projects funded under SHSP support building and sustaining capabilities at the state and local levels through planning, equipment, training, and exercise activities and helps states to implement the strategic goals and objectives included in state homeland security strategies." (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*, March 11, 2008, p. 4)

State Incident Communications Conference Line (SICCL): "The SICCL was created primarily to bring States together to share information and discuss issues that have an effect on all of them following an incident. This line is typically used during a multiple State disaster such as a hurricane where impacted States may request support from other States. The SICCL is not a 24/7 line. Instead, it is a scheduled conference call, which would be set up as needed to address issues. In summary, the SICCL is:
• used for the transmission and exchange of information primarily targeted to State and local communicators; and
• typically activated with a multiple State incident, and there is need for cross border coordination." (**FEMA**, *Basic Guidance for PIOs (FEMA 517)*, Nov 2007, 25)

State Management of Disasters Initiative (SMD), FEMA: "Under the State Management of Disasters (SMD) initiative, in some cases an interested and capable State, or Tribal government acting as its own Grantee, may manage the PA field operation, including project eligibility reviews, process control, and resource allocation on small disasters. The participating State voluntarily enters into an Operational Agreement with FEMA, which entrusts many aspects of

program management to the State. FEMA retains obligation authority, ensures compliance with environmental and historic preservation laws, participates in quality control reviews with the State, and provides technical assistance as requested by the State.

"Small disasters are disasters that warrant a major disaster declaration by the President, but are limited in scope and size generally as defined by the following:

- statewide infrastructure damage up to $2 per capita, or
- limited to debris removal and emergency protective measures.

For a State to be eligible to manage a disaster under this initiative, the State must have:

- recent disaster experience;
- adequate State staff;
- an SMD Addendum to the State Administrative Plan for Public Assistance;
- a fiscal accounting system that can track specific projects, prepare for and undergo audit, and be used to evaluate appeals;
- an established record of having met deadlines for grant management activities; and approval by FEMA. (**FEMA**, *Public Assistance Program*, June 2007)

State Preparedness Report: "The Secretary [DHS] shall require that any State applying to the Secretary for a covered grant must submit State Preparedness Report specified in section 652(c) of the Department of Homeland Security Appropriations Act, 2007 (Public Law 109-295)." (**US Congress**, *Implementing the 9/11 Commission Recommendations Act.…*, August 7, 2007, p. 13)

State Template Initiative: "The Template was built by state and local officials - those responsible for preventing, responding to, and recovering from the spectrum of terrorist threats and Homeland Security challenges that face the Nation in the 21st Century. The Template provides a common foundation for identifying and addressing key state and local vulnerability and capability shortfalls. This Template will be a useful tool in our effort to build and sustain the operational means by which we will make the Nation safer, stronger, and better."

"The initiative provides states a foundation for preparing comprehensive and compatible state, local and tribal Homeland Security plans. The *Template* is consistent with and supports implementation of the "*National Strategy for Homeland Security*." It was designed "*from the bottom up*," recognizes that "*one size does not fit all*," and enables the emergency responders and state and local officials who bear the responsibility of preventing terrorist attacks and protecting the Nation and its citizens." (**PHSAC**, *Statewide Template Initiative*, March 2003, p. 1)

Statewide Communication Interoperability Plan (SCIP): "The purpose of a locally-driven SCIP is to establish a future vision for communications interoperability and align emergency response agencies with that vision and the goals, objectives, and initiatives for achieving that vision across the State. DHS understands that different States, regions, and localities are at different stages in enhancing interoperability. As such, elements of many SCIPs will amount to a .plan to plan.. Some States. have processes, procedures, and other plans in place that allow them to easily address SCIP elements. Others do not and will through the SCIP show how they plan to do so in the future. Most States will have elements that have not addressed by the submission deadline and so will describe in the SCIP how they will be addressed in the future….

"The primary audience of SCIPs is officials at local, regional, tribal, and State levels of government responsible for ensuring interoperable communications for the emergency response community. A SCIP should define a strategic vision and set of goals and objectives for improving interoperable communications statewide. It should be a living document, updated as frequently as needed and at least annually, that provides strategic direction and alignment for those responsible for interoperable communications at the local, regional, and State level. The SCIP also must be written with peer reviewers and Federal officials in mind, as the Public Safety Interoperable Communications (PSIC) Grant Program and the Homeland Security Grant Program have required the development of SCIPs" (**DHS/OEC**, *Statewide Communication Interoperability Plan FAQs*, September 2007, p. 1)

STE: Secure Telephone Equipment. (**FEMA** *IIFOG Ver 3*, Feb 2008, 22)

Steady State Plans. "Steady state plans are normally the result of crisis contingency operations that have evolved to a rotational operation. CJCS orders to the supported commander, supporting commanders, and Services initiate such operations. These orders define plan details and requirements to accomplish the mission and authority to deploy forces. Such orders generally identify specific weapons systems, but not the ECS forces needed to sustain the operation." (**Vermont Air National Guard**, *Mobilization Activation*)

Steady-State Preparedness/Readiness: "*A national focus on steady-state readiness is imperative.* The *Framework* [NRF] focuses on preparedness activities that are *directly related to an evolving incident or potential incident.* The *National Preparedness Guidelines* and the *NIPP* focus on *steady-state preparedness or readiness activities* conducted in the absence of a specific threat or hazard. This response *Framework* does not try to subsume all of these larger efforts; instead, it integrates these efforts and brings them to bear in managing incidents." (**DHS**, *NRF Comment Draft*, September 2007, p. 68) [DHS, NIMS, 2004, at p. 33 notes that preparedness for incident management should be developed "on a steady-state" basis, presumably meaning maintained rather than not maintained.]

STI: State Template Initiative.

STO: State Training Officer.

Storm: "1. An atmospheric disturbance involving perturbations of the prevailing pressure and wind fields, on scales ranging from tornadoes (1 km across) to extratropical cyclones (2000-3000 km across).
2. Wind with a speed between 48 and 55 knots (Beaufort scale wind force 10)." (**UNDHA**, *DM Glossary*, 1992, 71)

Storm Surge: "An abnormal rise in sea level accompanying a hurricane or other intense storm, and whose height is the difference between the observed level of the sea surface and the level that would have occurred in the absence of the cyclone. Storm surge is usually estimated by subtracting the normal or astronomic high tide from the observed storm tide." (**NHC**, *Glossary of NHC Terms*, 2007)

Storm Surge: The difference between the actual water level under influence of a meteorological disturbance (storm tide) and the level which would have been attained in the absence of the meteorological disturbance (i.e. astronomical tide). (**WMO** 1992, 584)

STQ: Screening Threshold Quantities. (**DHS**, "Fact Sheet: CFATS" November 2, 2007)

Strategic Decision Making Exercise (SDME): "The SDME is a political-military decision-making collective simulation exercise designed to provide USAWC [US Army War College] students an opportunity to role-play strategic leaders and staffs as they integrate and apply knowledge acquired previously in the USAWC core curriculum… The SDME is a joint and multinational exercise that includes political and military play at the high operational and strategic levels… It is intended to place students in a volatile, uncertain, complex, and ambiguous virtual environment, aided by appropriate information technology tools and models, in which they apply service and joint doctrine within the framework of the interagency, military contingency planning and execution, military resourcing, and multinational coordination processes. Students will develop strategic policy recommendations for employing the diplomatic, informational, military, and economic elements of power, while considering multiple scenarios. Those scenarios include major combat operations, lesser contingencies, stability operations, global terrorism, disaster relief, and humanitarian assistance, and model crises in every Geographic Combatant Command, to include the new US Africa Command.

"The exercise involves the entire USAWC student body, USAWC staff and faculty members, subject matter experts, and invited guests. Students role-play leaders of selected elements of the interagency community at the strategic level which include the Deputy National Security Advisor, the Under Secretary of Defense for Policy, the Under Secretary of State for Political Affairs, and the Deputy Secretary for Homeland Security. In addition, students…assume military leadership and staff roles across the Geographic Combatant Commands and the Joint and Service staffs. Students engage in policy coordination and deputies committee meetings to formulate and implement national security policy that involves the use of all elements of national power. During the SDME, they also execute Congressional testimony, conduct press briefings and short notice interviews with media representatives, and brief senior officials from the government, business, military and academic communities… The SDME is the capstone exercise event for the USAWC students. It serves not only as a critical learning vehicle but also as an instrument to review and refine future decisions regarding the overall USAWC curriculum." (**USAWC**, *Information Paper: The Strategic Decision Making Exercise*, Nov. 8, 2007)

Strategic Goal: "A broad target that defines how the Agency will carry out its mission over a five to seven year period of time." (**FEMA**, *A Nation Prepared – FEMA Strategic* Plan, 2002, p. 60)

Strategic Goals: "Strategic goals are broad, general statements of intent." (**USCG**, *IM Handbook*, 2006, Glossary 25-23)

Strategic Guidance Statement (SGS): "The term 'strategic guidance statement' refers to a document that outlines strategic priorities, broad national strategic objectives, and basic assumptions; describes the envisioned end-state; and establishes the general means necessary to

accomplish that end." (**White House**, *Annex I "National Planning" to HSPD-8*, December 2007, p. 1)

Strategic Guidance Statements (SGS): Strategic Guidance Statements (SGS) are required for each national planning scenario and establish the foundation for the development of each Strategic Plan. SGS will be developed by DHS Office of Operations Coordination and issued by the Secretary of Homeland Security. Strategic Plans are required for each Strategic Guidance Statement; they will define specific Federal interagency roles, responsibilities, mission essential tasks, capabilities and supporting metrics; and provide strategic guidance to support the development of interagency operational level Concept Plans (CONPLAN). Strategic Plans will be developed by DHS Office of Operations Coordination and issued by the Secretary of Homeland Security. (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. iv, footnotes 1 and 2)

Strategic Guidance Statement (SGS): "The Secretary of Homeland Security shall develop a strategic guidance statement for each National Planning Scenario, in coordination with the heads of Federal agencies with a role in homeland security. Additional planning requirements shall be developed as the Secretary, in coordination with Federal agencies with a role in homeland security, deems appropriate. The Incident Management Plan Team (IMPT)[119] shall develop each SGS for the Secretary." (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008 copy, p. 3-1)

Strategic Information Operations Center (SIOC). "The SIOC is the focal point and operational control center for all Federal intelligence, law enforcement, and investigative law enforcement activities related to domestic terrorist incidents or credible threats, including leading attribution investigations. The SIOC serves as an information clearinghouse to help collect, process, vet, and disseminate information relevant to law enforcement and criminal investigation efforts in a timely manner. The SIOC maintains direct connectivity with the NOC [DHS HQ]." (**DHS**, *National Planning and Execution System*, 2007 Draft, p. 3-6)

Strategic Management Perspective: "The strategic management perspective is characterized as a long-term process for developing a continuing commitment to the mission and vision of an organization, nurturing a culture that identifies with and supports the mission and vision, and maintaining a clear focus on the organization's strategic agenda throughout all its decision processes and activities." (Choi, "Emergency Management: Implications from a Strategic Management Perspective." *Journal of HLS and EM*, Vol. 5, Issue 1, Article 1, 2008, 1)

"…although there exist different perspectives on strategic management, most approaches contain several common elements. First, strategic management is characterized by strategic planning but not limited to it. Second, strategic management links planning and budgeting. Third, successful implementation of strategic management requires an assessment of organizational capacities in such areas as managerial capability, power structure, culture, and leadership." (Ibid, 5)

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119 The Incident Management Planning Team (IMPT) is an interagency permanent planning cell staffed by full-time planners; it also functions under a charter that enables it to surge using part-time planners and to reach into Federal agencies to rely on functional subject matter experts.

"Recent emergency management practice demands that more strategic approaches and management should be utilized than before. What benefits can we get from integrating strategic management into emergency management?.... the following aspects can be considered: forward thinking, professionalization, capacity building, goal identification and achievement, increased public support, more funding, and increased accountability." (Ibid, 8)

Strategic National Stockpile (SNS): "CDC's Strategic National Stockpile (SNS) has large quantities of medicine and medical supplies to protect the American public if there is a public health emergency (terrorist attack, flu outbreak, earthquake) severe enough to cause local supplies to run out. Once Federal and local authorities agree that the SNS is needed, medicines will be delivered to any state in the U.S. within 12 hours. Each state has plans to receive and distribute SNS medicine and medical supplies to local communities as quickly as possible…. The medicine in the SNS is FREE for everyone. The SNS has stockpiled enough medicine to protect people in several large cities at the same time. Federal, state and local community planners are working together to ensure that the SNS medicines will be delivered to the affected area to protect you and your family if there is a terrorist attack." (**CDC**, *Strategic National Stockpile*, April 2005, p. 1)

Strategic National Stockpile (SNS): "The SNS is positioned in undisclosed locations throughout the United States and configured to provide a flexible response strategy. Included in the formulary are a dozen 12-hour Push Packages which contain over 50 tons of broad spectrum antibiotics and medical materiel. These assets are pre-configured in deployable containers and strategically located to enable rapid delivery to the site of a national emergency within 12 hours of the federal decision to deploy. The majority of the SNS formulary is maintained in managed inventory. Like the 12-hour Push Packages, these assets are also strategically located around the nation and provide the ability to configure and deliver significant quantities of pharmaceuticals and medical materiel as an initial response if the nature of the public health emergency is well defined, or as follow-on to a "push package" delivery. Delivery of assets from managed inventory are planned to begin arriving within 24 to 36 hours after the federal decision to deploy them. Quantities in the SNS change based on national planning guidance and prioritization, modeling scenarios, and standard inventory management procedures. Some of the contents of the national stockpile include:
■ Enough smallpox vaccine to protect 300 million people, or every man, woman, and child in America;
■ Over 41 million regimens of countermeasures against anthrax;
■ Therapeutic anthrax antitoxins to treat symptomatic patients;
■ Countermeasures to address radiation exposure including over 460,000 combined doses of Calcium-DTPA (Diethylenetriamine pentaacetate) and Zinc-DTPA; and
■ 1.7 million doses of liquid potassium iodide (KI) in a formulation that is more suitable for young children for use in the event of a release of radioiodines.

"The SNS also has been increasing its supply of countermeasures that could be used during an influenza pandemic." (**Trust for America's Health**, *Ready or Not?* 2007. p. 22)

Strategic Objective (ICS): "A written statement describing an intended outcome; a results-oriented objective. (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 58)

Strategic Objective: "…a strategic objective is a specific statement of desired achievement that supports a strategic goal, and sets a target level of performance over time expressed as a tangible, measurable objective, against which actual achievement can be compared." (**DHS**, *Fiscal Year 2007 Homeland Security Grant Program: Investment Justification Reference Guide*, January 2007, P. 54)

Strategic Objective: "A specific step necessary to achieve a strategic goal." (**FEMA**, *A Nation Prepared – FEMA Strategic Plan – Fiscal Years 2003-2008*, 2002, p. 60 (Glossary))

Strategic Objectives of Homeland Security: "The strategic objectives of homeland security in order of priority are to:

• Prevent terrorist attacks within the United States;
• Reduce America's vulnerability to terrorism; and
• Minimize the damage and recover from attacks that do occur." (**White House**, *National Strategy for Homeland Security*, 2002, p. vi)

Strategic Partnership Program Agroterrorism (SPPA) Initiative: "The Department of Homeland Security (DHS), U.S. Department of Agriculture (USDA), Food and Drug Administration (FDA), and the Federal Bureau of Investigation (FBI) will collaborate with private industry and the States in a joint initiative, the Strategic Partnership Program Agroterrorism (SPPA) Initiative. The SPPA Initiative will be a true partnership program, where an industry member or trade association or State may volunteer to participate. To volunteer, the industry or State member must submit a completed response form. Program Objectives:

The federal government members in partnership with industry and State volunteers, plan to:

- Validate or identify sector-wide vulnerabilities by conducting critical infrastructure/key resources (CI/KR) assessments in order to:
    - Identify gaps;
    - Inform Centers of Excellence and Sector Specific Agencies (SSA) of identified research needs; and
    - Catalog lessons-learned.
- Identify indicators and warnings that could signify planning for an attack.
- Develop mitigation strategies to reduce the threat/prevent an attack. Strategies may include actions that either industry or government may take to reduce vulnerabilities.
- Validate assessments conducted by the United States Government (USG) for food and agriculture sectors.
- Gather information to enhance existing tools that both USG and industry employ.
- Provide the USG and the industry with comprehensive reports including warnings and indicators, key vulnerabilities, and potential mitigation strategies.
- Provide sub-sector reports for the USG that combines assessment results to determine national critical infrastructure vulnerability points to support the National Infrastructure Protection Plan (NIPP) and national preparedness goals.

- Establish and/or strengthen relationships between Federal, State, and local law enforcement and the food and agriculture industry along with the critical food/agriculture sites visited. (**FDA**, *Strategic Partnership Program Agroterrorism (SPPA) Initiative*…, August 2005, p. 1)

Strategic Plan: "Strategic plans are tools that assist organizations with defining their missions, goals and objectives; approaches toward achieving goals and objectives; and, methods for measuring the success of a program. Such plans communicate goals and objectives to constituencies, develop a sense of ownership by responsible officials, and provide a mechanism whereby an organization can develop strategies for leveraging scarce resources in a cost effective manner. Like a budget, a strategic plan should be established and built upon each year so that it addresses the changing needs and priorities of the organization." (**City of LA**. *Audit of the City of Los Angeles' Emergency Planning Efforts and Citywide Disaster Preparedness*, 2008, iii)

Strategic Plan: "A long-range planning document that defines the mission of the Agency and broadly identifies how it will be accomplished, and that provides the framework for more detailed annual and operational plans." (**FEMA**, *A Nation Prepared*,, 2002, p. 60 (Glossary))

Strategic Plan: "Is a plan that addresses long-term issues such as impact of weather forecasts, time–phased resource requirements, and problems such as permanent housing for displaced disaster victims, environmental pollution, and infrastructure restoration." (**USCG**, *Incident Management Handbook*, 2006, Glossary, p. 25-23)

Strategic Plan: "The term 'strategic plan' refers to a plan that defines the mission, identifies authorities, delineates roles and responsibilities, establishes mission essential tasks, determines required and priority capabilities, and develops performance and effectiveness measures." (**White House**, *Annex I "National Planning" to HSPD-8*, December 2007, p. 2)

Strategic Planning: "…a framework for carrying out strategic thinking, direction, and action leading to the achievement of consistent and planned results. Seven specific elements comprise this framework: organization mission, strategic analysis; strategy, long-term objectives, integrated programs, financial projections [and] executive summary…. A distinctive aspect of this process is its emphasis on team planning. It is this process that builds organization wide belief and commitment to the strategic plan because the participants have ownership." (**Below**, 1987)

Strategic Planning: Interagency Definition -- "The process by which requirements are generated, long-range goals, priorities, and responsibilities are agreed upon, and performance and effectiveness measures are developed and applied in order to execute National policy." "Responsible Organization: Secretary of DHS under HSPD 5 supported by IMPT." (**DHS**, *Interagency Planning Workshop* (slide #22), November 29, 2007)

Strategic Planning: "Strategic planning involves the adoption of long-range goals and objectives, the setting of priorities, the establishment of budgets and other fiscal decisions, policy development, and the application of measures of performance or effectiveness." (**FEMA**, *NIMS* (FEMA 501/Draft), August 2007, p. 17)

Strategic Planning and Requirements (SRPP): "The Strategic Requirements Planning Process (SRPP) provides a link between the high-level goals and objectives of the DHS Strategic Plan to the programs and activities executed by DHS components. Key products of the SRPP are CORE strategic requirements documents, which are used to identify critical capability gaps and redundancies." (**DHS**, *IPG FY 2011-2015 Draft*, Oct 2008, p. 5)

Strategic Planning for Homeland Security Preparedness: "Definition: The art and science of developing and employing instruments of national and State/territorial power (information, technology, economic, intelligence, and military) in a synchronized and integrated fashion to achieve the objectives of the National Strategy for Homeland Security, the National Preparedness Guidelines, the NRP, and supporting State/territorial and local strategic direction and guidance. Strategic planning uses gap analysis to develop programmatic priorities that address the mission requirements, goals, objectives, milestones, and resources to ensure interoperable and integrated synchronization throughout all levels of government and nongovernmental organizations for all hazards, incident-related prevent, protect, respond and recover activities." (**DHS**, *TCL*, 2007, pp. 21-22)

Strategic Vision for the War on Terror: "From the beginning, the War on Terror has been both a battle of arms and a battle of ideas – a fight against the terrorists and their murderous ideology. In the short run, the fight involves the application of all instruments of national power and influence to kill or capture the terrorists; deny them safe haven and control of any nation; prevent them from gaining access to WMD; render potential terrorist targets less attractive by strengthening security; and cut off their sources of funding and other resources they need to operate and survive. In the long run, winning the War on Terror means winning the battle of ideas. Ideas can transform the embittered and disillusioned either into murderers willing to kill innocents, or into free peoples living harmoniously in a diverse society.

The battle of ideas helps to define the strategic intent of our National Strategy for Combating Terrorism. The United States will continue to lead an expansive international effort in pursuit of a two-pronged vision:
• The defeat of violent extremism as a threat to our way of life as a free and open society; and
• The creation of a global environment inhospitable to violent extremists and all who support them." (**White House**, *National Strategy for Combating Terrorism*, September 2006, p. 7)

Strategy: "Definition: statement for a course of action or actions to be taken in order to achieve objective(s). Annotation: Doctrine encompasses the fundamental principles which guide an organization and "shapes the effort." Policy includes the process implemented through plans and procedures towards realization of doctrine and "guides the effort." Strategy is the course of action to achieve policy goals and 'accomplishes the effort'." (**DHS**, *Lexicon*, Oct. 2007, p. 25)

Strategy: "The general direction selected to accomplish incident objectives set by the Incident Commander." (**DHS**, *National Incident Management System*, March 2004, p. 137)

Strategy: "A description of how a strategic objective will be achieved." (**FEMA**, *A Nation Prepared – FEMA Strategic Plan – Fiscal Years 2003-2008*, 2002, p. 60 (Glossary))

Strategy: "The general plan or direction selected to accomplish incident objectives." (**FEMA**, *NIMS Draft*, August 2007, p. 158)

Strategy: "A goal or set of goals used to manage incident scene operations from which an incident action plan is developed." (**NFPA 1561**, 2002, p. 8)

Strategy: "The general plan or direction selected to accomplish incident objectives." (**USCG**, *IM Handbook*, 2006, Glossary 25-23)

Strategy for Catastrophic Incident Planning: "Achieving a robust and sustainable national capability to rapidly and successfully meet the immense challenges posed by an incident of catastrophic magnitude will require a unified strategy supported by aggressive leadership, joint collaboration, innovative thinking, significant funding, and national resolve. To that end, this Strategy for Catastrophic Incident Planning (SCIP) establishes a comprehensive and ambitious set of unified goals and objectives, and will provide a baseline against which to identify, validate, align and prioritize necessary capability-building initiatives…. There is agreement throughout the emergency management community that the existing plans, policies, procedures, and resources are not fully adequate or appropriate to address the destruction caused by a catastrophic hurricane, an earthquake, or a terrorist attack using a weapon of mass destruction" (**FEMA**, *Strategic Plan*, October 10. 2007, p. 4)

Strategy for Homeland Defense and Civil Support: "Directed by the Strategic Planning Guidance (March 2004), the Strategy for Homeland Defense and Civil Support integrates the objectives and guidance expressed in the National Security Strategy, the National Strategy for Homeland Security, and the National Defense Strategy to guide Department of Defense operations to protect the US homeland." (**DoD**, *Strategy for HD and Civil Support*, 2005, p. 6)

"The *Strategy for Homeland Defense and Civil Support* calls for securing the United States from attack through an active, layered defense in depth. This active layered defense seamlessly integrates US capabilities in the forward regions of the world, in the geographic approaches to US territory, and within the US homeland." (**JCS**, *Homeland Defense*, 2007, I-5)

Strengthen Planning and Citizen Preparedness Capabilities, A National Priority (DHS):

"Objective: Educate, train, organize and involve citizens with emergency preparedness and homeland security efforts by June, 2008.

Objective: Develop a Statewide Citizen Corps Marketing Campaign for implementation by September, 2008.

Objective: Establish a Neighborhood Watch program in every county statewide and expand the program to larger cities/towns by December 2007. (**Tennessee OEM**, *FY 2007 Tennessee Strategy – Goals and Objectives*, p. 4)

Strike-Slip Fault: "A generally vertical fault along which the two sides move horizontally past each other. The most famous example is California's San Andreas Fault." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Strike Team: "A set number of resources of the same kind and type that have an established minimum number of personnel." (DHS, NIMS, 2004, p. 137)

Strike Team: "A set number of resources of the same kind and type that have an established minimum number of personnel, common communications, and a leader." (**FEMA**, *NIMS Draft*, August 2007, p. 158)

Strike Team: [ICS/NIMS] "Are specified combinations of the **same kind and type** of resources with common communications and a leader." (**USCG**, *IM Handbook*, 2006, Glossary 25-23)

Structural Fire Fighters' Protective Clothing (SFPC): "This category of clothing, often called turnout or bunker gear, means the protective clothing normally worn by fire fighters during structural fire fighting operations. It includes a helmet, coat, pants, boots, gloves and a hood to cover parts of the head not protected by the helmet and facepiece. This clothing must be used with full-facepiece positive pressure self-contained breathing apparatus (SCBA). This protective clothing should, at a minimum, meet the OSHA Fire Brigades Standard (29 CFR 1910.156). Structural fire fighters' protective clothing provides limited protection from heat and cold, but may not provide adequate protection from the harmful vapors or liquids that are encountered during dangerous goods incidents." (**DOT**, *Emergency Response Guidebook*, 2004, p. 350)

Structural Flood Mitigation: "Structural system for reduction of the effects of floods using physical solutions, including reservoirs, levees, dredging, diversions, and flood-proofing." (**UNDHA**, *DM Glossary*, 1992, 72)

STU: Secure Telephone Unit. (**FEMA** *IIFOG Ver 3*, Feb 2008, 22)

SU: Surge Account, FEMA.

SUASI: Super Urban Areas Security Initiative. (**DHS**, January 3, 2006 Press Release)

Subduction Zone: "A boundary along which one plate of the Earth's outer shell descends (subducts) at an angle beneath another. A subduction zone is usually marked by a deep trench on the sea floor. An example is the Cascadia Subduction Zone offshore of Washington, Oregon, and northern California. Most tsunamis are generated by subduction-zone earthquakes." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

Subject Matter Expert (SME): "SMEs add functional knowledge and expertise in a specific area or in performing a specialized job, task, or skill to the *exercise planning team*. They help to make the *scenario* realistic and plausible, and ensure jurisdictions have the appropriate *capabilities* to respond." (**FEMA**, *Homeland Security Exercise and Eval Pgm Glossary*, 2008)

Subsidence: "Depressions, cracks, and sinkholes in the earth's surface which can threaten people and property. Subsidence depressions, which normally occur over many days to a few years, may damage structures with low strain tolerances such as dams, factories, nuclear reactors,

and utility lines. The sudden collapse of the ground surface to form sinkholes many tens of yards wide and deep within the span of a few minutes to a few hours, poses an immediate threat to life and property. Such mass-gravity movements commonly continue for days, weeks, months, or even years until the walls stabilize." (**FEMA**, *Hazard Identification*…, 1985, p. A-3)

Subsidence: "Collapse of a considerable area of land surface, due to the removal of liquid or solid underlying or removal of soluble material by means of water." (**UNDHA**, *DM Glossary*, 1992, 72)

Succession: "Designated Successor to Authority. An individual, who by virtue of the position held, is designated by law or executive order to succeed to the position of and act as a particular statutory official in the event of the death, disability, or absence of that official. Such succession to office is on a temporary or interim basis and does not vacate the statutory position currently held by the incumbent." (**USACE**, *Planning and Operations Guidelines, Annex V: Definitions and Common* Terms, 1985, p. V-2)

Sulfur Mustard (Mustard Gas): "Sulfur mustard is a type of chemical warfare agent. These kinds of agents are called vesicants or blistering agents, because they cause blistering of the skin and mucous membranes on contact. Sulfur mustard is also known as "mustard gas or mustard agent," or by the military designations H, HD, and HT. Sulfur mustard sometimes smells like garlic, onions, or mustard and sometimes has no odor. It can be a vapor (the gaseous form of a liquid), an oily-textured liquid, or a solid. Sulfur mustard can be clear to yellow or brown when it is in liquid or solid form." (**CDC**, *Facts About Sulfur Mustard*, March 12, 2003 Modification)

Super Urban Areas Security Initiative (SUASI): "In fiscal year 2006, the department identified 35 areas eligible to apply for and receive funding. These 35 areas encompass 95 cities with populations of 100,000 or more. This year's formula promotes a "super" UASI concept that is designed to build greater regional capabilities across a geographic area." (**DHS**, "DHS Introduces Risk-Based Formula for Urban Areas Security Initiative Grants," January 3, 2006)

Superfund: "The trust fund established initially under the Comprehensive Environmental Response, Compensation, and Liability Act and extended under the Superfund Amendments and Reauthorization Act to provide money that can be used during cleanups associated with inactive hazardous waste disposal sites." (**FEMA** 1992)

Superfund Amendments and Reauthorization Act of 1986 (SARA): "In October 1986… SARA was enacted. Title Ill of SARA is also known as the Emergency Planning and Community Right-to-Know Act. Section 303 of SARA required the NRT to publish guidance to assist local emergency planning committees (LEPCs) with the development and implementation of comprehensive hazardous materials emergency response plans." (**EPA**, *Technical Guidance for Hazards Analysis*, 1987, p. i)

Supervisor (ICS): "The emergency services personnel who have supervisory authority and responsibility over other personnel." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 58)

Supply Chain Management Approach: "DHS/FEMA Logistics has adopted a Supply Chain Management approach to managing Federal Logistics processes. Supply Chain Management focuses on integrating the end-to-end supply chain processes, beginning with planning of customer-driven requirements for materiel and services, delivery to disaster victims as requested by the State or tribe, and ending with replenishment of agency inventories." (**DHS**, *NRF Logistics Management Support Annex*, September 2007 Draft, p. 5)

Supply Unit: "The unit within the Support Branch of the Logistics Section responsible for ordering the equipment and supplies required for incident operations." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 58)

Support Agency. "A federal department or agency designated to assist a specific primary agency with available resources, capabilities, or expertise in support of emergency support response operations, as coordinated by the representative of the primary agency." (**JCS/DoD**, *Civil Support*, 2007, p. GL-12)

Support Annexes (NRF): "…*Support Annexes* describe essential supporting aspects of the Federal response that are common to all incidents, such as financial management, volunteer and donations management and private sector coordination." (**DHS**, *NRF Comment Draft*, Sep 2007, p. 71)

Support Branch (ICS): "A branch within the Logistics Section responsible for providing personnel, equipment and supplies to support incident operations and includes the Supply, Facilities and Ground Support Units. (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 58)

Support Joint Information Center (JIC) "A support JIC is established to supplement the efforts of several Incident JICs in multiple States. It offers additional staff and resources outside of the disaster area. (**FEMA**, *Basic Guidance for PIOs (FEMA 517)*, Nov 2007, p. 16)

Supporting Technologies (NIMS 2005-2006): 5th of five Compliance Assessment Metrics. "Technology and technological systems provide supporting capabilities essential to implementing and continuously refining the NIMS. These include voice and data communications system, information systems, and display systems. These also include specialized technologies that facilitate incident operations and incident management activities in situations that call for unique technology-based capabilities." (**FEMA**, *NIMSCAST Technical Users Guide Version 1.1*. April 30, 2007, p. 28)

Surface Burst: "The explosion of a nuclear (or atomic) weapon at the surface of the land or water at a height above the surface less than the radius of the fireball at maximum luminosity (in the second thermal pulse). An explosion in which the weapon is detonated actually on the surface…is called a *contact surface burst or a true surface burst*." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, Glossary, p. 640)

Surge Account: "An account established by the FEMA Office of Financial Management to provide funds to support pre-declaration disaster activation." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 61)

Surge Capacity: "the ability to expand capabilities in response to sudden or more prolonged Demand…" (**JCAHO**, *Health Care at the Crossroads*, 2003, p. 19)

Surge Capacity Force: "SEC. 624. SURGE CAPACITY FORCE. (a) ESTABLISHMENT.—(1) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Administrator shall prepare and submit to the appropriate committees of Congress a plan to establish and implement a Surge Capacity Force for deployment of individuals to respond to natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents. (2) AUTHORITY. (A) IN GENERAL.—Except as provided in subparagraph (B), the plan shall provide for individuals in the Surge Capacity Force to be trained and deployed under the authorities set forth in the Robert T. Stafford Disaster Relief and Emergency Assistance Act…. (b) EMPLOYEES DESIGNATED TO SERVE.—The plan shall include procedures under which the Secretary shall designate employees of the Department who are not employees of the Agency and shall, in conjunction with the heads of other Executive agencies, designate employees of those other Executive agencies, as appropriate, to serve on the Surge Capacity Force. (c) CAPABILITIES.—The plan shall ensure that the Surge Capacity Force—(1) includes a sufficient number of individuals credentialed in accordance with section 510 of the Homeland Security Act of 2002, as amended by this Act, that are capable of deploying rapidly and efficiently after activation to prepare for, respond to, and recover from natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents; and (2) includes a sufficient number of full-time, highly trained individuals credentialed in accordance with section 510 of the Homeland Security Act of 2002, as amended by this Act, to lead and manage the Surge Capacity Force…." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1419-1420)

Surplus Lines of Insurance: "1Surplus lines' refers to any type of insurance for which there is no available market within a state and which the state allows nonadmitted insurers to offer. A 'nonadmitted' insurer is not licensed to do standard business in the state." (**GAO**, *Natural Disasters; Public Policy Options*…, Nov 2007, p. 12)

Survivable Communications: "The establishment and maintenance of an assured end-to-end communications path during all phases of a nuclear event." (**DHS**, *FCD 1*, Nov. 2007, P-9)

Survivable Crisis Management (SCM): "Survivable Crisis Management (SCM) is an operational capability the Federal Emergency Management Agency (FEMA) seeks to achieve in the States and Territories. The SCM capability FEMA seeks to achieve is the ability of each of the States and Territories to survive a catastrophic emergency and be able to direct, control, and coordinate emergency operations within the State and in coordination and cooperation with other States and the Federal Government. The objective of the SCM initiative is to develop a network of survivable capabilities within each State, nationwide among the States, and between the States and the Federal Government to ensure that States can continue to govern." (**FEMA**, *Survivable Crisis Management Plan Development Guide*, April 1993, p. 5)

Survivable Crisis Management (SCM) Elements:

- Dedicated, Technically Qualified, and Trained People
- Exercised and Tested Plans and Procedures
- Operationally Ready Emergency Facilities
- Operationally Ready Support Equipment
- Operationally Ready Communications
- Safeguarded Vital Records and Databases
- Established Lines of Succession and Delegations of Authority. (**FEMA**, *An Introduction to SCM*, Sep 1993, 3)

Survivable Crisis Management (SCM) Process:

- Assess risks and threats to State or Territory
- Define the required SCM capabilities
- Access existing capabilities in light of requirements.
- Identify deficiencies
- Develop a plan to correct deficiencies and achieve the required capabilities
- Develop contingency plans to deal with deficiencies until they are corrected
- Develop and conduct exercises to evaluate the operational capabilities to people, facilities, and equipment
- Work with FEMA to obtain technical support and Federal civil defense funding assistance.

(**FEMA**, *An Introduction to Survivable Crisis Management*, Sep 1992, 1; **FEMA**, *SCM Plan Development Guide*, 1993, p. 5)

Survivable Crisis Management (SCM) Rationale: "During Hurricane Hugo in 1989, some emergency management structures, as well as governing authorities, were so heavily damaged that massive external resources were required to reconstitute and reconstruct basic crisis management and life-sustaining capabilities. In short, the government itself became the victim. The SCM Initiative is designed to assure the development of a minimum infrastructure of SCM capabilities by each State and Territory that should prevent such a situation from occurring again." (FEMA, *An Introduction to Survivable Crisis Management*, Sep 1992, 6)

"The worst damages to human life, property, and reputation usually are set in motion within the first few hours. If the leaders responsible for managing emergencies and the capabilities needed for them to do so are not ready and survivable when the situations occur, the consequences can be catastrophic. That is why Survivable Crisis Management should be a high priority for the Federal Government and for every State and Territory in the United States." (Ibid, 13)

Survival Planning: Initiated by the FCDA in 1955. "The survivil of populations likely to be the targets of thermonuclear weapons will depend upon balanced evacuation and shelter measures; evacuation – to escape blast, heat, and initial radiation – and shelter, of substantial strength outside the areas of heaviest damage for those who must remain, and lighter shelter beyond the probable target area agaainst radioactive fallout, the lethal secondary effect of a thermon-nuclear ground explosion.

Funds to make an excellent start in survival planning were appropriated by Congress and advanced by FCDA to State and local gogvernments after individual project agreements have been approved by National Headquarters. Because survival planning is new, FCDA has proceeded cautiously. Most of the States and metropolitan areas that have initiated survival studies are working on the first phase of the plan – designing the study, inventorying existing community data, and making preliminary surveys aned analyses….

Survival planning can be done on a single city basis, or statewide, or for a whole cluster of critical target areas involving more than one State….

….Even in the development of proposals for Phase I Survival Plan studies, a large number of political subdivisions have had to face up to the fact that they can neither plan nor operate separately." (**FCDA**, *1955 Annual Report*, 1956, p. 2)

To assist States and their political subdivisions in developing survival plan studies, FCDA compiled and published *Survival Plan Manual*, M-27-1, and *Survival Plan Work Book*, M-27-2. Included in the two publications is a discussion of survey areas that should be covered in each study. These include (1) the location and anyalysis of population, including special assistance groups, institutional requirements, and a portion of the industrial jurisdiction coordination, the continuity of government, communications requirements, capabilities, service coordination, and alerting capabilities; (3) movement, including analysis of movement capabilities and capacities, transportation availability, and trafic control; (4) shelter availability and requirements; (5) reception and care, including assembly and reception area analysis, industrial population reception, institutional requirements and reception area, and a study of the return and/or resettlement analysis; (6) resources, which includes logtistical support and the utilization of Government resources with primary emphasis on the location of manpower, material, and facilities; (7) information and training, which includes romotional analysis and internal alerting capabilities." (**FCDA**,*1955 Annual Report*, p. 24)

Susceptibility: "Once the risk has been determined, the likelihood of an attack being successful can be assessed. In determining the susceptibility of an attack or "vulnerability to attack" it is assumed that the asset has been targeted, that the terrorists have the required weapon(s) and equipment, and that the attack will take place. The susceptibility then measures the probability that the attack would achieve its desired result given the constraints that are in place at the target, including physical constraints, operational constraints, and security measures.

"There are a number of methods that can be used to calculate or estimate susceptibility. These range from simple ratings of security capabilities to complex, simulation-based evaluations of detailed attack scenarios. The most appropriate method will depend on the type of asset and the goals of the risk assessment. In general, however, an appropriate assessment of susceptibility would include an evaluation of physical features, security capabilities, and response capabilities that serve to prevent an attack from being successful. These activities can also be categorized as those that serve to deny, detect, delay, or defend against the attack, and are addressed by other capabilities in the TCL." (**DHS**, *TCL*, 2007, p. 52)

Sustain: "Definition: to support, supply, and maintain the necessary level and duration of activity to achieve a given objective.

"Extended Definition: to maintain operations in the event of an attack, natural disaster, or other type of incident of national significance, either malicious or unintentional; and to provide, on a continual basis, the resources (people, funding, etc.) necessary to build, maintain and employ emergency response capabilities, as well as maintaining civil rights and liberties.

"Annotation: To physically maintain the integrity and operational capacity of the nation's critical systems, infrastructures, and their ability to function properly under any circumstances particularly during a period of recovery associated with and immediately following an adverse event or series of events caused by attack or natural disaster. Maintain effective support at critical or alternate locations in spite of natural or man-made disasters.

"Example: DHS will be a driving force to sustain and/or restore critical infrastructure." (**DHS**, *Lexicon: Terms and Definitions*, October 19, 2007, p. 25)

Sustainable: "A sustainable approach is one that meets the needs of the present without compromising the ability of future generations to meet their own needs." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 58)

Sustainable Communities: "Sustainable communities make more efficient use of their land. They emphasize open space planning where appropriate by promoting greenways, parks, and landscaping. The effective use of open space can prevent development from encroaching upon floodplains, active fault zones, and other hazard areas. Sustainable communities also take advantage of underutilized urban areas and encourage infill and "brownfield" development. Energy and resource conservation are high priorities. Emphasis is placed on public transit and creating mixed-use environments that are less dependent on automobiles. An essential characteristic of a sustainable community is its resilience to natural disasters." (**FEMA**, *Rebuilding For A More Sustainable Future: An Operational Framework*, Nov. 2000, p. 1-3)

Sustainable Communities: …where people and property are kept out of the way of natural hazards, where the inherently mitigating qualities of natural environmental systems are maintained, and where development is designed to be resilient in the face of natural forces…" (**Godschalk, Kaiser, and Berke** 1998, 86)

Sustainable Development: "In its broader sense, sustainability is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. In the context of emergency management, this meaning remains and it is linked to creating places that are less vulnerable to natural and technological hazards and that are resilient to those events. Sustainable hazard management has five components: environmental quality; quality of life; disaster resilience; economic vitality; and inter- and intra-generational equity. Reducing the risk from hazards, reducing losses from disasters and working toward sustainable communities go hand-in-hand" (**Britton** 1998, 1).

Sustainable Development: "…the reconciliation of society's development goals with Planet Earth's environmental limits over the long term." (**Carrido and Hays** 2001, 1)

Sustainable Development: A strategy for improving the quality of life while preserving the environmental potential for the future, of living off interest rather than consuming natural capital. Sustainable development mandates that the present generation must not narrow the choices of future generations but must strive to expand them by passing on an environment and an accumulation of resources that will allow its children to live at least as well as, and preferably better than, people today. Sustainable development is premised on living within the Earth's means. (**National Commission** 1993, 2)

Sustainable Development: "Sustainable development – which meets the needs of the present without compromising the ability of future generations to meet their own needs – is generally understood to require (1) economic growth, (2) protection of the environment, and (3) sustainable use of ecological systems. There is, however, a fourth criterion of equal importance: Sustainable development must be resilient with respect to the natural variability of the Earth and the solar system." (**NSTC** 1996, 4)

Sustainable Development: Development in the present that does not destroy the resources needed for future development (**Simeon Institute** 1998[120]).

Sustainable Development: Sustainable development is that which "meets the needs of the present without compromising the ability of future generations to meet their own needs." (**UN World Commission** 1987, 8)

Sustainable Planner: "The Sustainability Planner acts as a catalyst for sustainability and promotes a sustainable redevelopment component into the overall reconstruction effort. The Sustainability Planner evaluates opportunities for implementing sustainable redevelopment, presents these findings, and helps to build consensus on the appropriate level of effort to be pursued by FEMA, other Federal agencies (OFAs), state and local agencies, and nongovernmental organizations (NGOs)…. The goal of the sustainability initiative is to reduce the potential for disaster losses and to help communities realize opportunities to implement sustainable redevelopment during the recovery process. Although the goals and responsibilities of the Sustainability Planner are in many ways similar to FEMA's overall hazard mitigation goal, it is necessary to draw some distinctions. The Sustainability Planner focuses on developing comprehensive, long-term planning solutions and identifying opportunities to incorporate sustainable and livable community objectives. The mitigation specialist focuses on specific structural or nonstructural mitigation measures, such as buy-out or elevation of structures, National Flood Insurance Program (NFIP) compliance, building code enforcement, flood protection measures, and seismic and wind retrofit. The Sustainability Planner is more involved with comprehensive plans, zoning and subdivision regulations, and watershed and basin planning initiatives. The Sustainability Planner and the mitigation specialist are partners in building more disaster-resistant and sustainable communities, and their respective areas of emphasis complement each other." (**FEMA**, *Rebuilding For A More Sustainable Future: An Operational Framework*, November 1, 2000, p. 1-1, 1-2)

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[120] Downloaded from web site address: http://www.cyberg8t.com/simeon/glossary.html (definitions from The Simeon Institute are obtained from "unattributed sources").

Sustainable Redevelopment: "The term "sustainable redevelopment" refers to applying the concepts and practices of sustainable development to the disaster recovery process. The post-disaster environment presents a unique opportunity to implement sustainability initiatives and to increase the quality of the built environment. If reconstruction is a major element of the recovery process, affected communities are presented with an opportunity to address such issues as the compatibility of development with the environment and natural hazards, the use of renewable resources, and improved community planning and physical design." (**FEMA**, *Rebuilding For A More Sustainable Future: An Operational Framework*, Nov. 2000, p. 1-3)

Sustainability: "Essentially, sustainability means that decisions made today should not reduce the options of future generations, but pass on to them a natural, economic, and social environment that provides a high quality of life." (**FEMA**, *Rebuilding For A More Sustainable Future: An Operational Framework*, November 1, 2000, p. 1-3)

Sustainability Initiative (FEMA): "The goal of the sustainability initiative is to reduce the potential for disaster losses and to help communities realize opportunities to implement sustainable redevelopment during the recovery process…. FEMA's sustainability initiative began formally in November 1998 when the Associate Director for Mitigation encouraged Regional Directors to set up a sustainable redevelopment function in DFOs (see Appendix I). The Associate Director proposed the establishment of a *sustainability desk* as part of the mitigation function in DFOs and/or Disaster Recovery Centers (DRCs). Two pilot efforts were undertaken in Ohio and West Virginia flood declarations (FEMA-DR-1227-OH and FEMA-DR-1229-WV)." (**FEMA**, *Rebuilding For A More Sustainable Future: An Operational Framework*, November 1, 2000, p. 1-2, 1-3)

SVA: Security Vulnerability Assessment. (**DHS**, *NIPP*, 2006, p. 102)

SwA: Software Assurance. (**DHS**, *Software Assurance: A Curriculum Guide*, Oct 2007, Foreword)

Switch on Wheels (SOW): Deployable IPAWS asset. (**FEMA**, *IPAWS Update*, 2007, slide 31)

SWOT Analysis: "SWOT analysis is a tool used in institutional assessments to capture and identify an organization's geographic and programmatic scope of action, its perceived effectiveness and level of acceptance and support by community members and local institutions. The analysis is broken down into Strengths, Weaknesses, Opportunities and Threats." (**ProVention Consortium**, *CRA Toolkit: Glossary of Terms*, 2006)

SWP: State Warning Point (NAWAS). (**FEMA,** *IPAWS Update*, 2007, slide 19)

Symptomology Card: "Symptomology cards are provided to each *actor* used in a *response*-focused exercise. Each card is unique, containing the signs and symptoms the actor will portray, as well as information for medical providers. The actors are instructed to keep these cards with them at all times during the exercise, and to not step out of character except in the event of a real emergency. At a minimum, symptomology cards should include: vital signs; symptoms; trauma injuries; acting instructions (e.g., disorientation, emotional distress); and special needs (e.g.,

language barriers, physical limitations)." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

System: "As stated in the National Preparedness Goal, 'a system is a combination of facilities, equipment, personnel, procedures, and communications integrated into a common organizational structure to achieve a mission or outcome'." (**DHS/ODP**, *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the NPG*, 2005, p. 5)

System Assessment and Validation for Emergency Responders (SAVER): "The mission of the SAVER Program is to

- Provide impartial, practitioner relevant, and operationally oriented assessments and validations of emergency responder equipment.
- Provide information that enables decision makers and responders to better select, procure, use, and maintain emergency responder equipment. Assess and validate the performance of products within a system, as well as systems within systems. Provide information and feedback to the user community through a Web-based database." (DHS, SAVER, 2006, p. 1)

T3 AHIMT: Type 3 All-hazard Incident Management Team. (Zuber, *Type 3 All-hazard Incident Management Teams*, circa 2006-2008) [See "Incident Management Teams, Types"]

TA: Technical Assistance. (**DHS**, *G&T Information Bulletin No. 221*, October 2, 2006)

Tabletop Exercise (TTX): "A tabletop exercise involves key personnel discussing simulated scenarios in an informal setting. TTXs can be used to assess plans, policies, and procedures." (**FEMA**, *About HSEEP*, 2008)

Tabletop Exercise (TTX): "TTXs are intended to stimulate discussion of various issues regarding a hypothetical situation. They can be used to assess plans, policies, and procedures or to assess types of systems needed to guide the *prevention* of, *response* to, or *recovery* from a defined incident. During a TTX, senior staff, elected or appointed officials, or other key personnel meet in an informal setting to discuss simulated situations. TTXs are typically aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and/or achieving a change in attitude. *Participants* are encouraged to discuss issues in depth and develop decisions through slow-paced problem-solving rather than the rapid, spontaneous decision-making that occurs under actual or simulated emergency conditions. TTXs can be breakout (i.e., groups split into functional areas) or plenary (i.e., one large group)." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Tabletop Exercise (TTX): "An activity that involves key personnel discussing simulated scenarios in an informal setting. This type of exercise can be used to assess plans, policies, and procedures or to assess the systems needed to guide the prevention of, response to, and recovery from a defined incident. TTXs typically are aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and achieving changes in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem

solving, rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions." (**FEMA**, *NIMS Compliance Metrics Terms of Reference* (For FY 2007), Oct.23, 2006, pp. 3-4) [See "Exercise Types"]

Tabletop Exercise (TTX): "Test method that presents a limited simulation of a disruption, emergency or crisis scenario in a narrative format in which participants review and discuss, not perform, the policy, methods, procedures, coordination, and resource assignments associated with plan activation." (**ISO 22399**, *Societal Security*…, 2007, 7)

Tabun (GA): Tabun is a man-made chemical warfare agent classified as a nerve agent. Nerve agents are the most toxic and rapidly acting of the known chemical warfare agents. They are similar to pesticides (insect killers) called organophosphates in terms of how they work and what kinds of harmful effects they cause. However, nerve agents are much more potent than organophosphate pesticides…. Tabun is a clear, colorless, tasteless liquid with a faint fruity odor…can become a vapor if heated." (**CDC,** *Facts About Tabun*, March 7, 2003 Update)

TAC: Technical Assistance Contract/Contractors, FEMA Public Assistance Program.

Tactical: "Of or relating to small-scale actions serving a larger purpose; made or carried out with only a limited or immediate end in view." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 40)

Tactical Direction (ICS): "Direction given by the Operations Section Chief which includes the tactics appropriate for the selected strategy, the selection and assignment of resources, tactics implementation, and resource monitoring for each operational period. (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 58)

Tactical Interoperable Communications Plan (TICP): "TICP serves as a planning tool to help sites exercise interoperable communications and to meet the Congressional mandate that grant recipients develop a tactical plan. TICP meets the requirements of Homeland Security Presidential Directive-5, *Management of Domestic Incidents*, and the DHS *National Incident Management System (NIMS)*." (**DHS/ODP**, *ODP TICP FAQs*, September 2005, p. 1)

Tactical Plan: "The term 'tactical plan' refers to the detailed development and identification of individual tasks, actions, and objectives tailored to specific situations and fact patterns at an operational level. Tactical planning is meant to support and achieve the objectives of the operations plan." (**White House**, *Annex I "National Planning" to HSPD-8*, December 2007, p. 2)

Tactical Planning: "Interagency Definition – The detailed development and identification of goals, priorities, objectives, and actions tailored to specific situations and fact patterns at an operational level. Tactical planning is meant to support and achieve the objectives of the operational plan." (**DHS**, *Interagency Planning Workshop*, November 29, 2007, slide #22)

Tactics: [ICS/NIMS] "Deploying and directing resources during an incident to accomplish the objectives designated by strategy." (**USCG**, *IM Handbook*, 2006, Glossary 25-23)

T&EPW: Training and Exercise Plan Workshops. (**FEMA**, *About HSEEP*, 2008)

TAG: Technical Assessment Group. (**DA**, *WMD-CST Operations*, Dec. 2007, Glossary-6)

TAG: The Adjutant Generals. (**FEMA**, *Statement of Glenn Cannon*, November 2007, p. 12)

TAI: Target Area of Interest. (**DA**, *WMD-CST Operations*, December 2007, Glossary-6)

Tailored Resourcing: "A critical aspect of federated planning is *tailored resourcing*. Tailored resourcing offers leaders a high degree of confidence that they can access essential capabilities without maintaining unnecessarily large, unaffordable fleets of equipment and people. Tailoring resources balances the tension between affordability and risk. By employing horizontal and vertical integration with tailored resourcing, leaders can identify opportunities for pooling resources and maximizing the potential utility of a given capability. Tailored resourcing ensures essential resources are available when, where, and as needed (i.e., time, space, and purpose). The Resource Management component of NIMS defines standardized mechanisms and establishes the resource management process to: identify requirements, order and acquire, mobilize, track and report, recover and demobilize, and inventory resources.

- *Availability.* Capability and resource availability fall into four categories: *Organic, Assigned, Earmarked*, and *Potential*.
    - *Organic Capabilities*. Organic capabilities are those that are an integral part of the basic structure of an organization, and are thus immediately responsive to the leadership of that organization. Organization leadership is responsible for developing, sustaining, and employing these organic capabilities.
    - *Assigned Capabilities*. Assigned capabilities are those that supporting entities have agreed to allocate to a supported organization for agreed upon purposes in agreed upon situations. Assignment to supported organizations is automatic once predetermined and pre-agreed situation thresholds are reached. Assignment agreements are regarded as binding.
    - *Earmarked Capabilities*. Earmarked capabilities are those that organizations *intend* to allocate to a supported organization at some future time and situation. Earmarked capabilities are allocated to support other organizations as the situation permits, but their commitment has not been prearranged. These capabilities are often formed into a pool of available resources, none of which have been allocated to a given organization. Resources and assistance available under the Emergency Management Assistance Compact (EMAC) are an example of earmarked capabilities.
    - *Potential Capabilities*. Potential capabilities are those that *might* be allocated to a supported organization in specified circumstances. Potential capabilities should not be regarded as a highly reliable resource. Their accessibility is determined on a case-by-case basis. (**FEMA**, *(Interim) Integrated Planning System (IPS) for Homeland Security (Draft Version 2.3)*, July 3, 2008, pp. 2-3. 3-4)

Tangible Elements of Emergency Operational Capability: "Those elements which can be measured or tallied, including items such as an operational EOC facility; documented emergency plans, including a CSP [Community Shelter Plan]; shelters; trained radiological monitors and

necessary equipment; coverage of outdoor warning devices; and trained fire and police auxiliaries…. Additional items include communications systems not only to local government agencies and other local sites, but also to State CD, and current operational equipment and supply inventory (e.g., location of bulldozers)." (**DCPA**, *On-Site Assistance* (MP 63), 1974, 5)

Target Capabilities List (TCL): "**…**defines 37 specific capabilities that communities, the private sector and all levels of government should possess in order to respond effectively to disasters." (**DHS**, *National Response Framework Comment Draft*, September 10, 2007, 68)

Target Capabilities List (TCL): "The Target Capabilities List describes the capabilities related to the four homeland security mission areas: Prevent, Protect, Respond, and Recover. It defines and provides the basis for assessing preparedness. It also establishes national guidance for preparing the Nation for major all-hazards events, such as those defined by the National Planning Scenarios. The current version of the TCL contains 37 core capabilities. A "Consensus of the Community" approach was used to develop the Target Capabilities List. Stakeholders from Federal, State, local, territorial, and tribal governments, the private sector, and nongovernmental organizations came together in four national workshops and capability working groups to define the capabilities. The Guidelines will serve as a framework to guide operational readiness planning, priority-setting, and program implementation at all levels of government. The Guidelines provide a call to action by all Americans as they consider their personal and shared responsibility to be part of *A Nation Prepared*. The Target Capabilities List provides guidance on building and maintaining capabilities that support the Guidelines" (**DHS,** *TCL*, Sep 2007, p. iii)

"…the TCL does not address capabilities for routine firefighting or law enforcement services, or seasonal flooding. Instead, the TCL addresses capabilities based preparedness to prevent, protect against, respond to, and recover from terrorism, very large-scale disasters, pandemic health emergencies, or other major incidents." (**DHS,** *TCL*, Sep 2007, p. 5)

"The Target Capabilities List should be viewed as a reference document or guide to preparedness. It should not serve as a prescription for program requirements or resource commitments. Most users will not use the TCL document directly and/or may only use one or a subset of capabilities that are relevant to them. They will use those portions of the TCL that are relevant to them or to their specific application through the TCL implementation tools." (**DHS**, *TCL*, 2007, p. 12)

"The TCL is designed to provide the nation with the network of flexible and adaptive capabilities across the country to prevent, protect against, respond to, and recover from incidents similar to those described in the National Planning Scenarios or other scenarios. Planners and officials at all levels will assess and determine their greatest risks within this framework to inform planning efforts and to establish priorities for addressing resource gaps, training, and exercises." (**DHS**, *TCL*, 2007, p. 13)

Target Capabilities List (TCL): "The TCL is a list of *capabilities* that provides guidance on the specific capabilities that Federal, State, tribal, and local entities are expected to develop and maintain to *prevent*, *protect* against, *respond* to, and *recover* from incidents of national

significance, including terrorism or natural disasters, in order to maintain the level of preparedness set forth in the *National Preparedness Goal*." (**FEMA**, *HSEEP Glossary*, 2008)

Target Capabilities List (TCL): "The Target Capabilities List (TCL)

- Defines preparedness
- Defines capabilities required to achieve the four homeland security missions: Prevent, Protect, Respond, and Recover
- Provides the basis for assessing preparedness and to improve decisions related to preparedness investments and strategies
- Defines capabilities and national targets to prepare the Nation for major all- hazards events such as those defined by the National Planning Scenarios
- Assumes shared responsibility for preparedness across local, tribal, State, and Federal agencies, nongovernmental organizations, the private sector, and citizens." (**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 9)

Target Capabilities List (TCL): "A component of the National Preparedness Goal from HSPD-8 which describes and sets targets for the capabilities required to achieve the four homeland security mission areas: Prevent, Protect, Respond, and Recover. The List defines and provides the basis for assessing preparedness. It also establishes national targets for the capabilities to prepare the Nation for major all-hazards events, such as those defined by the National Planning Scenarios. The current version of the TCL contains 37 core capabilities." (**Homeland Security Council,** *National Continuity Policy Implementation Plan*, Aug 2007, 67)

Target Capabilities List Performance Measures: "Performance measures are quantitative or qualitative levels against which achievement of a task or capability outcome can be assessed. They describe how much, how well, or how quickly an action should be performed and are typically expressed in ways that can be observed during an exercise or real event. *The measures and metrics are not standards. They serve as guides and evaluation tools for planning, training, and exercise activities.*" (**DHS**, *TCL*, 2007, p. 8)

Target Capabilities List Phase I Core Capabilities (37): (**DHS,** *TCL*, Sep 2007, p. viii)

Common Capabilities
- Planning
- Communications
- Community Preparedness and Participation
- Risk Management
- Intelligence and Information Sharing and Dissemination

Prevent Mission Capabilities
- Information Gathering and Recognition of Indicators and Warning
- Intelligence Analysis and Production
- Counter-Terror Investigation and Law Enforcement
- CBRNE Detection

Protect Mission Capabilities
- Critical Infrastructure Protection
- Food and Agriculture Safety and Defense
- Epidemiological Surveillance and Investigation
- Laboratory Testing

Respond Mission Capabilities
- On-Site Incident Management
- Emergency Operations Center

Management
Critical Resource Logistics and Distribution
Volunteer Management and Donations
Responder Safety and Health
Emergency Public Safety and Security
Animal Disease Emergency Support
Environmental Health
Explosive Device Response Operations
Fire Incident Response Support
WMD and Hazardous Materials Response and Decontamination
Citizen Evacuation and Shelter-in-Place
Isolation and Quarantine
Search and Rescue (Land-Based)
Emergency Public Information and Warning
Emergency Triage and Pre-Hospital Treatment
Medical Surge
Medical Supplies Management and Distribution
Mass Prophylaxis
Mass Care (Sheltering, Feeding and Related Services)
Fatality Management

Recover Mission Capabilities

Structural Damage Assessment
Restoration of Lifelines
Economic and Community Recovery

(**DHS**, *Target Capabilities List*, September 2007, p. vii)

Target Capability List (TCL) Implementation Project: "The Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA) is underway with an initiative called the Target Capability List (TCL) Implementation Project. The Project is the next step in the Nation's effort to develop, assess, and strengthen prevention, protection, response, and recovery capabilities.

The initial phase of the Project involves developing a series of target capability frameworks to help States and local jurisdictions determine whether they need a given capability to be prepared, and if so, at what level. The **target capability frameworks** build upon the preparedness guidance found in TCL v2.0 (released in September 2007) and each consists of a user-friendly matrix of three charts that define: performance classes (for grouping jurisdictions according to shared risk factors), performance objectives (for determining the capability level for each performance class), and resource requirements (for identifying needs related to plans, personnel, training, equipment, and exercises).

DHS/FEMA is working with stakeholders through a series of Technical Working Group (TWG) sessions to develop the **first six target capability frameworks**. These include Animal Health, Emergency Operations Center Management, Intelligence, Mass Transit Protection, On-Site Incident Management, and WMD/HazMat Rescue and Decontamination.

The TWG sessions are being held this summer in FEMA regional locations and all sessions are comprised of subject matter experts, practitioners, and national associations in the emergency management and homeland security communities to ensure collaboration across the Federal, State, and local levels. Once the TWG sessions are complete, a National Review will be conducted to enable the larger homeland security community to review the target capability frameworks and provide input before a proposed national release. Additional target capability frameworks will be developed in subsequent years, culminating in TCL v3.0 in 2010.

Working with the stakeholder community, DHS/FEMA is confident that this initiative will enhance our Nation's ability to assess preparedness against a national benchmark, leading to a clearer picture of what jurisdictions need to do – individually and collectively – to prepare for acts of terrorism and major disasters. The TCL Implementation Project represents the next step in the Nation's effort to become, "A Nation Prepared." For additional information, please contact the TCL Implementation Project Team at TCL@dhs.gov" (FEMA, TCL Implementation Project, Content for Listserve Distribution, June 13, 2008)

Target Capability Preparedness Levels: "Target preparedness levels represent suggested levels of capability that may be needed to prevent, protect against, respond to, and recover from major events that demand a multi-level, multi-jurisdictional, multi-disciplinary response. Stakeholder working groups suggested Target Capability preparedness levels based on an analysis of the circumstances and consequences described in the National Planning Scenarios and the planning factors." (**DHS**, *TCL*, 2007, p. 9)

National Preparedness Levels for Capabilities

- The Target Capability preparedness levels estimate what may be needed should major events exceed the capacity of any single jurisdiction.
- Responsibility for meeting Target Capability preparedness levels can be shared across government and non-government entities.
- Many of the resource estimates are not standing requirements – they would be assembled when and where they are needed.
- Assessments of current capabilities against target levels can provide an indication of relative preparedness. (**DHS**, *TCL*, 2007, p. 10)

Targeted Infrastructure Protection Program (TIPP): "The Targeted Infrastructure Protection Program provides funding to public and private sector owners and operators of transit infrastructure to improve the Nation's ability to prevent, protect against, respond to, and recover from terrorist attacks." (**ExpectMore.gov**, *FEMA: TIPP*),

TASC: Transformation and System Consolidation. (**DHS,** *IPG FY 2011-2015 Draft*, p. 19)

Task: "A discrete action that enables a function to be accomplished by individuals or organizations." (**Homeland Security Institute**, *HS Strategic Planning MAA*, March 2007, p. 63)

Tasks: "Tasks are specific, discrete actions that individuals or groups must complete or discuss during an exercise to successfully carry out an activity. Successful execution of performance measures and tasks, either sequentially or in parallel, is the foundation for activities, which are, in turn, the *foundation* of *capabilities*." (**FEMA**, *HSEEP Glossary*, 2008)

Task Force: "Any combination of resources assembled to support a specific mission or operational need. All resource elements within a Task Force must have common communications and a designated leader." (**DHS**, *NIMS*, 2004, p. 137)

Task Force: [ICS] "A group of resources with common communications and a leader assembled for a specific mission." (**USCG**, *IM Handbook*, 2006, Glossary 25-23)

Task Force for Emergency Readiness (TFER): "Federal, regional, State, and local plans must be integrated and synchronized to give us a truly *national* response to a future catastrophic incident. To pursue this end, DoD has partnered with DHS to develop the Task Force for Emergency Readiness (or "TFER") initiative. The TFER is under the direct leadership of the Governor's state emergency management structure and teams State civilian planners, National Guard planners, DHS Federal Preparedness Coordinators, and DoD Emergency Preparedness Liaison Officers to:

- Produce State plans tailored to the unique strengths and vulnerabilities of each individual State; and
- Facilitate the integration and synchronization of local, State, Regional, Federal, and private sector incident planning.

The TFER initiative will enable merging bottom-up local/State planning with the Federal top-down approach to integrate the Federal-State planning process, thereby implementing the coordination envisioned by the IPS and achieving a unity of effort that mirrors our nation's principles of self reliance and the federal model of government. In short, each state's TFER will provide a focal point for catastrophic response planning, integrating all relevant capabilities – military and civilian – found within the public and private sectors.

The strength of the TFER is in the fact that it will be a scalable, flexible organization whose responsibilities can be uniquely tailored to fit each State's needs. Typical task force functions might include:

- Completing operational plans for identified catastrophic scenarios;
- Promoting State deliberate planning and coordination;
- Assisting in ensuring local planning capability requirements are addressed;
- Offering a conduit to Federal response planning and capabilities (e.g. FEMA, DoD);
- Aiding State-to-State coordination for regional incidents (e.g., a hurricane);
- Supporting State crisis action planning;
- Implementing exercise lessons learned to improve subsequent planning;
- Informing State emergency manager dialogue and decision-making;
- Supporting multi-level policy coordination; and
- Informing logical, fiscally responsible decisions to address capability or capacity shortfalls.

Initially, the TFER initiative will be tested in select pilot states with the intent of expanding the concept to all States and territories in the United States." (**DOD**, Paul McHale Senate Testimony, June 26, 2008, pp. 20-24)

TAV: Total Asset Visibility.

TCL: Target Capabilities List. (**DHS,** *NIPP*, 2006, p. 102)

TCU: Tribal Colleges and Universities.

TDRM: Total Disaster Risk Management.

T&EPW: Training & Exercise Plan Workshop. (**FEMA,** IS-120 A, *Intro to Ex.,* 23Jan08, 17)

Tearline Report: "Contains information that has been declassified or information that is at a reduced/downgraded Classification level as compared to the original report from which the Tearline report is generated/produced. A Tearline report is produced by redacting, paraphrasing, restating or generating in a new form the classified information contained in the original report in such a manner that the previously classified information is now either declassified or is at a reduced/downgraded Classification level." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 40)

Technical Assistance (TA) (Object Class 2507): A type of Mission Assignment defined as "technical expertise provided by the Federal government to State and/or local jurisdictions when the State has the resources, but lacks the knowledge and/or skills needed to perform the work related to the disaster or emergency. TA is 100-percent federally funded but must be requested and approved by the State.

Example: A mission assignment issued to the U.S. Army Corps of Engineers to provide TA to affected counties in the writing of debris contracts." (**FEMA**, *Mission Assignment*, 2007, p.10)

Technical Assistance Contractors: "FEMA awards nationwide, stand-by technical assistance contracts (TAC) to meet PA [Public Assistance] program needs that typically cannot be met by FEMA staff. PA TAC employees are specialists that provide services such as assessing and estimating disaster damages to complex facilities, and providing insurance adjustment services and historical and environmental reviews. For disasters occurring in FYs 2004, 2005, and 2006, FEMA spent $228.3 million, $1.4 billion, and $94.9 million, through November 2006, respectively, for PA TACs. A contracting officer technical representative located at FEMA Headquarters oversees the master contracts and task monitors at field and regional offices provide site monitoring for TAC employees." (**DHS OIG**, *Fiscal Year 2008 Annual Performance Plan*, 2007, p. 35)

Technical Attack: "An attack that can be perpetrated by circumventing or nullifying hardware or software protection mechanisms, or exploiting hardware or software vulnerabilities, rather than physical destruction or by subverting system personnel or other users." (**DoD**, *CAAP*, 1998)

Technical Canvasses: "Technical canvasses involve canvasses for electronic devices in order to identify witnesses and sources of information. Technical canvasses may involve electronic image capture devices (still, video, CCTV), electronic banking transaction devices (Automated Teller Machine), electronic financial transaction devices (credit card, debit card, social services card, stored value card), electronic travel transaction devices(Metro Card, EZ Pass, airline ticket, railroad ticket), electronic access/egress control devices (identification card reader, proximity card reader, biometric card reader), cell sites, pay phones, internet cafes." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 40)

Technical Specialist (ICS): "Personnel with special skills that can be used anywhere within the ICS organization. No minimum qualifications are prescribed, as technical specialists normally perform the same duties during an incident that they perform in their everyday jobs, and they are typically certified in their fields or professions." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 40)

Technological Accident: "An unexpected incident, failure or loss occurring through the application of practical or mechanical sciences to industry or commerce that poses potential harm to persons, property or the environment." (**European Environment Agency**, *EEA Multilingual Environmental Glossary*, 2007)

TEI: Training and Exercise Integration. (FEMA/NPD/NIC, slide 2)

TEI/TO: Training and Exercise Integration Secretariat, Training Operations, National Preparedness Directorate, FEMA, 2007.

Temporary Housing: "*Temporary Housing* facilities are intended to provide living accommodations for an extended period of time, to include single- and multi-family homes, apartments and manufactured homes." (**FEMA**, *FEMA Recovery Strategy*, August 2006)

TEP: Training and Exercise Plan. (**FEMA**, *National Exercise Division, Homeland Security Exercise and Evaluation Program, Quarterly Newsletter*, Spring 2008, p. 2)

Tephra: "Material ejected from a volcano, with the exception of lava." (**UNDHA**, *DM Glossary*, 1992, 73)

TEPWs: Training and Exercise Plan Workshops. (**FEMA**, *Homeland Security Exercise and Evaluation Program HSEEP Newsletter* (Winter 2008, Issue 7), February 5, 2008, p. 2)

Terminology: "The use of precisely defined terms is critical in any profession....It is not a question of semantics, as some would say, because the terms should be used and understood properly. This does not mean that terms or their meanings should be defined dogmatically; there is always a need to create new terms or modify existing ones. However, great care should be shown in changing meanings… Most terms used over many decades and even centuries are still valid. Some need to be modified because of changing practices but that does not mean drastically altering the meanings of existing and well-defined terms." (**Vego**, "The Problem of Common Terminology," *Joint Force Quarterly*, Vol. 43, 2006, p. 49)

Terrorism: "…premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents." (**Department of State)**

Terrorism: "Definition: premeditated threat or act of violence, against noncombatant persons, property, environmental, or economic targets, to induce fear or to intimidate, coerce or affect a government, the civilian population, or any segment thereof, in furtherance of political, social, ideological, or religious objectives.

"Extended definition: usually conducted by an organization with an identifiable chain of command or conspiratorial cell structure, whose members are considered a sub-national or non-state entity.

"Example: Protecting the United States against acts of terrorism is the Department of Homeland Security's primary focus." (**DHS**, *Lexicon: Terms and Definitions*, October 19, 2007, p. 26)

Terrorism: "Any activity that (1) involves an act that is (a) dangerous to human life or potentially destructive of critical infrastructure or key resources, and (b) a violation of the criminal laws of the United States or of any State or other subdivision of the United States; and (2) appears to be intended to (a) intimidate or coerce a civilian population, (b) influence the policy of a government by intimidation or coercion, or (c) affect the conduct of a government by mass destruction, assignation, or kidnapping." (**DHS**, *NIPP*, 2006, p. 105)

Terrorism: "…the unlawful use of force or violence against persons or property to intimidate or coerce a Government, the civilian population, or any segment thereof, in furtherance of political or social objectives." (**FBI**)

Terrorism: "The calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological." (**FEMA**, *Disaster Dictionary* 2001, 120; citing DoD Joint Pub 1-102)

Terrorism: "The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives. Domestic terrorism involves groups or individuals who are based and operate entirely within the United States and U.S. territories without foreign direction and whose acts are directed at elements of the U.S. government or population." (**FEMA**, *Guide for All-Hazard Emergency Operations…*, 2001, p. 6-G-F-3)

Terrorism: A violent act to attain specific goals. Distinguished from other types of criminal acts by:

Political aims and motives.

Violent or acts that threaten violence.

Far-reaching psychological repercussions beyond immediate victim or target.

Conducted by organization with identifiable chain of command or structure.

Perpetrated by sub-national group or non-state entity. (**Hoffman**, 1998)

Terrorism: "…the calculated use of unexpected, shocking, and unlawful violence against noncombatants (including, in addition to civilians, off-duty military and security personnel in peaceful situations) and other symbolic targets perpetrated by a clandestine member(s) of a

subnational group or a clandestine agent(s) for the psychological purpose of publicizing a political or religious cause and/or intimidating or coercing a government(s) or civilian population into accepting demands on behalf of the cause." (**Library of Congress** 1999, 12)

Terrorism: Simple definition: Violence or threatened violence intended to produce fear or change.

Legal definition: Criminal violence violating legal codes and punishable by the state.

State-sponsored terrorism: National or other groups used to attack other interests.

State terrorism: Power of the government used to repress its people to the point of submission. (**Rosie,** 1987)

Terrorism: "The word *terrorism* emerged during the French revolution of the late 1700s to describe efforts by the revolutionary government to impose its will through widespread violence; the *Academie Francaise* soon defined terrorism as a 'system or rule of terror.'" (**Sauter and Carafano** 2005, 64)

"…*terrorism* usually includes most or all of the following central elements:

- Conducted by subnational groups
- Targeted at random noncombatant victims
- Directed at one set of victims in part to create fear among a larger audience
- Aimed at coercing governments or populations
- Planned to get publicity
- Motivated by political, ideological, or religious beliefs
- Based on criminal actions (actions that would also violate the rules of war)." (p. 66)

Terrorism: "Terrorism, or the threat of terrorism, involves acts of violence used in peace, conflict or war and are acts that shock the senses of reasonable people." (**Simonsen**, 2004)

Terrorism: "Terrorism is a special type of violence. While terrorism often seeks legitimacy as political action, terrorism is a criminal offense under nearly every national or international legal code. Although terrorism has not yet caused the physical devastation and large number of casualties normally associated with traditional warfare, terrorism can produce a significant adverse psychological impact and present a threat greater than a simple compilation of the number of people killed or the quantity of materiel destroyed." (**US Army TRADOC**, 2007, p. 3) "The calculated use of violence or threat of violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological." (**US Army TRADOC**, 2007, p. 151)

Terrorism: "Any activity that: (1) involves an act that (a) is dangerous to human life or potentially destructive of critical infrastructure or key resources and (b) is a violation of the criminal laws of the United States or of any State or other subdivision of the United States; and

(2) appears to be intended (a) to intimidate or coerce a civilian population, (b) to influence the policy of a government by intimidation or coercion, or (c) to affect the conduct of a government by mass destruction, assassination, or kidnapping." (**USCG**, *IM Handbook* 2006 Glossary 25-23)

Terrorism: "The *National Strategy for Homeland Security* characterizes terrorism as any premeditated, unlawful act dangerous to human life or public welfare that is intended to intimidate or coerce civilian populations or governments. This description captures the core concepts shared by the various definitions of terrorism contained in the U.S. Code, each crafted to achieve a legal standard of specificity and clarity. This description covers kidnappings; hijackings; shootings; conventional bombings; attacks involving chemical, biological, radiological, or nuclear weapons; cyber attacks; and any number of other forms of malicious violence. Terrorists can be U.S. citizens or foreigners, acting in concert with others, on their own, or on behalf of a hostile state." (**White House**, *National Strategy For HS*, 2002, p. 2)

Terrorism Early Warning (TEW): "Fusion is a cyclical process that includes the following stages:

- Management/Governance
- Planning and Requirements
- Development
- Collection
- Analysis
- Dissemination, Tasking, and
- Archiving
- Re-evaluation
- Modification of Requirements

The TEW encompasses the above described fusion process and builds toward a "common operating picture" for a national network of sharing terrorist threat- and incidentrelated information and intelligence. The TEW, as reflected within this Resource Book, supports and implements the recommended standards, baseline processes, and road maps for enhanced law enforcement, public safety and homeland security information/intelligence sharing activities previously described in the fusion process, and that have been produced through the auspices of the U.S. Department of Justice (DOJ), Bureau of Justice Affairs (BJA), GLOBAL initiative. This includes the following documents:

• The *National Criminal Intelligence Sharing Plan* (NCISP), updated as of June 2005.
• Homeland Security Advisory Council (HSAC), *Intelligence and Information Sharing Initiative*, December 2004.
• HSAC, *Intelligence and Information Sharing Initiative: Homeland Security Intelligence and Information Fusion*, April 28, 2005.

Terrorism Information: "**(**d) the term "terrorism information" means all information, whether collected, produced, or distributed by intelligence, law enforcement, military, homeland security, or other United States Government activities, relating to (i) the existence, organization, capabilities, plans, intentions, vulnerabilities, means of finance or material support, or activities of foreign or international terrorist groups or individuals, or of domestic groups or individuals

involved in transnational terrorism; (ii) threats posed by such groups or individuals to the United States, United States persons, or United States interests, or to those of other nations; (iii) communications of or by such groups or individuals; or (iv) information relating to groups or individuals reasonably believed to be assisting or associated with such groups or individuals." (**White House**, *EO 13356*, August 27, 2004)

Terrorism Liaison Officer (TLO) Program: "One program that I support is the Terrorism Liaison Officer or TLO. TLO programs can be found in many law enforcement agencies across the nation. I appreciate the fact that the TLO initiatives are "home grown," resulting from the desire of individual agencies to be engaged in the war on terrorism. I also appreciate the roles that you, as intelligence analysts, play in adding value to information gathered by first responders. We at DHS Intelligence and Analysis lead the ITACG that I mentioned before. It incorporates the skills and unique insights of law professionals into the intelligence cycle." (**DHS**, *Keynote Address by Under Secretary Charles Allen at the 2008 IALEIA/LEIU Conference*, April 8, 2008)

Terrorism Liaison Officer Program (DHS & DOJ): "Both the Intelligence Liaison Officers Program and Terrorism Liaison Program demonstrate the effectiveness of this relationship [DHS & DOJ]. Each program is designed to ensure the information contained within fusion centers reaches the street level police officer and firefighter, and just as important, provides them with a pathway for providing information back to the center and through it to the federal government. These programs are administered jointly by, and the training conducted with participation of, grant and technical experts from both Departments." (**DHS,** *Testimony of Principal Deputy Under Secretary for Intelligence and Analysis Jack Tomarchio Before the Senate Committee on Homeland Security and Governmental Affairs Ad Hoc Subcommittee on State, Local and Private Sector Preparedness and Integration, "Focus on Fusion Centers: A Progress Report,"* 17Apr08)

Terrorism Liaison Officers (TLO): "Arizona's Phoenix New Times (7/12, Dickerson) writes, "According to a local source and Department of Justice documents now available online, counter-terrorism officials are training civilians to keep an eye on you. And few states are training Big Brother's informants faster than Arizona. These unpaid spies are called TLOs (Terrorism Liaison Officers). They're taught to report anything from a suspicious tourist video-recording a bridge to the theft of potential bomb-making materials. Even suspicious note-taking warrants their scrutiny. Most TLOs already work as firefighters or federal employees, though our state Department of Homeland Security source says some civilians have joined rank in the Phoenix area. Though the fact that TLOs are so prominently in our midst was news to us, the program has been in progress long enough here to train 250 of the government snoops. This according to our source, a TLO himself." (**DHS News Briefing**, *Bulletin News*, July 12, 2008)

Terrorism Preparedness: "The term 'terrorism preparedness' means any activity designed to improve the ability to prevent, prepare for, respond to, mitigate against, or recover from threatened or actual terrorist attacks." (**US Congress**, *Implementing the 9/11 Commission Recommendations Act of 2007*, August 7, 2007, p. 10)

Terrorism Prevention: "Terrorism prevention consists of those activities that serve to detect and disrupt terrorist threats or actions against the U.S. and its interests, and decrease the

likelihood that a specific terrorist threat or plan will be culminated or executed. It is these activities that have been identified and consolidated to make up the prevention core capabilities." (**DHS**, *HSEEP*, Vol. V, December 2005 Draft, p. 8)

Terrorism Prevention Exercise Program (TPEP) "The Terrorism Prevention Exercise Program (TPEP) is dedicated to providing participants at the Federal, State, tribal, and local levels the tools needed to test and improve their ability to prevent terrorism. Exercises are intended to produce comprehensive and valuable analyses of prevention capabilities in order to ultimately enhance the Nation's ability to prevent terrorism by preparing information-sharing environment partners at the State and local levels to fuse local and National information and intelligence and produce predictive analysis." (**DHS**, *HSEEP, Volume V…,* Dec 2005, p. 2)

Terrorism Prevention Exercise Program (TPEP): TPEP is dedicated to providing participants at the Federal, State, tribal, and local levels the tools needed to demonstrate, evaluate, and improve the capability to prevent terrorism through information- and intelligence-based exercises. TPEP uses *HSEEP* methodology, but focuses on pre-incident operations." (**FEMA**, *HSEEP Glossary*, 2008)

Terrorism Risk Assessment: "TERRORISM RISK ASSESSMENT--With respect to analyzing and assessing the risk of acts of terrorism, the Administrator shall consider—(1) the variables of threat, vulnerability, and consequences related to population (including transient commuting and tourist populations), areas of high population density, critical infrastructure, coastline, and international borders; and (2) the most current risk assessment available from the Chief Intelligence Officer of the Department of the threats of terrorism against the United States." (**Post-Katrina Emergency Management Reform Act of 2006**, p. 1426)

Terrorism Risk Insurance Act (TRIA): "TRIA and TRIEA established the federal government as the backstop reinsurer of certain types of terrorism risk, for most commercial lines carriers, and for certain types of losses: principally, injury to or death of employees, damage to commercial properties and operations due to acts of terrorism committed by foreign nationals. The federal insurance "kicks in" only above specific "retentions" (or deductibles), and even then pays most, but not all, of the claims above that level, up to a designated ceiling. The federal government does not charge for providing this reinsurance beforehand, as a typical private insurer would do, but TRIA and TRIEA do require insurers to repay at least some of the government's claims payouts over an extended period, subject to the discretion of the Treasury Secretary, whose department administers the program." (**FSR**, *Nation Unprepared*, 2007, 60)

Terrorism Risk Insurance Act (TRIA): Congress passed "the Terrorism Risk Insurance Act (TRIA) in November 2002. Since then, TRIA has been reauthorized twice. The latest reauthorization, passed at the end of 2007, extends the law to 2014. TRIA provides a federal backstop for commercial insurance losses from terrorist acts, making it easier for insurers to calculate their maximum losses for such a catastrophe and thus to underwrite the coverage…" (**Insurance Information Institute**, *Catastrophes*, Jan 2007)

Terrorism versus All-Hazards: "In Section 2 we observed that virtually all top level guidance for critical infrastructure planning focuses on threats from terrorist attacks. Specifically, HSPD-7 defines as its purpose:

> 'This directive establishes a national policy for Federal departments and agencies to identify and prioritize United States critical infrastructure and key resources and to protect them from terrorist attacks.'

"Although terrorist threats are obviously acknowledged, this guidance establishes for critical infrastructure mission owners a planning environment that is not aligned with the broader homeland security mission objectives, which incorporate the all-hazards perspective. In particular, HSPD-8 requires "all-hazards preparedness" to connote "preparedness for domestic terrorist attacks, major disasters, and other emergencies." Given that HSPD-8 establishes policies to strengthen our ability to prevent as well as to respond to all hazards, and that critical infrastructures play a vital role in all related activities, the CITF believes that critical infrastructure planning must also incorporate the all-hazards perspective. The CITF also believes that HSPD7 should be modified to establish a more consistent framework of policy guidance." (**HSAC**, *Report of the Critical Infrastructure Task Force*, January 2006, p. 6)

Terrorist: Under U.S. law and sentencing guidelines a terrorist is someone who "appears to be intended to intimidate or coerce a civilian population." (**US Code,** Title 18, Part I, Chapter 113b, Section 2331**)**

Terrorist Objectives: "Make no mistake -- the terrorists seek to destroy not only our lives, but our entire way of life… President Bush captured the essence of what motivates these outstanding men and women [of DHS] when he said, "The terrorists cannot shake our will. America and its allies will act decisively, because we know that the future of civilization is at stake…'" (**DHS**, *Secretary Michael Chertoff U.S. Department of Homeland Security Second Stage Review Remarks*, DHS, July 13, 2005)

Terrorist Screening Center (TSC) FBI: "The Terrorist Screening Center (TSC) was established by Homeland Security Presidential Directive 6 which directed that a center be established to consolidate the government's approach to terrorism screening and to provide for the appropriate and lawful use of terrorist information in screening processes. The TSC began operations on December 1, 2003.
Vision: To establish a dynamic global screening network to support the detection of terrorists.
Mission: Consolidate and coordinate the Government's approach to terrorism screening and facilitate information sharing to protect the Nation and the international community.
What We Do
1. Maintain the U.S. Government's Consolidated Terrorist Watchlist. The Terrorist Screening Center (TSC) maintains a consolidated database of the names and other identifying information for all known or suspected terrorists, known as the Terrorist Screening Database (TSDB). Pursuant to HSPD-6, a known or suspected terrorist is an individual "known or appropriately suspected to be or have been engaged in conduct constituting, in preparation for, in aid of, or related to terrorism." The TSDB contains information on known or suspected terrorists only; it does not contain information on persons who have no nexus to terrorism.

2. Support Agencies that Screen for Terrorists. The TSC supports federal, state, local, territorial, and tribal law enforcement agencies and some foreign governments that conduct terrorist screening by making the TSDB information available to them for screening purposes. TSC's 24-hour call center also supports agencies' terrorist screening processes by determining whether the person being screened is an identity match to the TSDB. TSC supports terrorism screening at agencies like the State Department (passport and visa applications), the Bureau of Customs and Border Protection (border crossings and international flights), the Bureau of Citizenship and Immigration Services (immigration and citizenship applications), and the Transportation Security Administration (domestic flights). The TSC has also made Terrorist Identities Information accessible through the National Crime Information Center (NCIC) system to law enforcement officers, including 870,000 state and local officers nationwide, adding those resources to the fight against terrorism.
Why We Do It: It's a very simple answer: to protect against future terrorist attacks in the United States and its allies." (**FBI**, *Counterterrorism – Terrorist Screening Center*)

Test, Training, and Exercise (TT&E): "Measures to ensure that an agency's continuity plan is capable of supporting the continued execution of the agency's essential functions throughout the duration of a continuity situation." (**DHS**, *FCD 1*, Nov. 2007, P-9)

Testing: "Activity in which some part(s) of the operational continuity plan(s) is/are followed to ensure that the plan(s) contain(s) the appropriate information and produces the desired result." (**ISO 22399**, *Societal Security*…, 2007, 7)

TEW: Terrorism Early Warning.

Texas Landowners' Rights Association v. Harris (1978): "Regarding individual constitutional rights, a landmark decision in the realm of mitigating property damage in flood-prone areas was a 1978 federal district court ruling (sustained on appeal to the Supreme Court) upholding the federal flood insurance program. In *Texas Landowners' Rights Association v. Harris*, plaintiff landowners sued the federal agency administering the national flood insurance program, because the program required that flood-prone communities engage in flood plain land use management for the purpose of mitigating property damage, and denied federal financial assistance in property acquisition (e.g., FHA loans) for the purchase of property in flood-prone areas in which such land use planning did not exist. Since the denial of federally assured financing for property purchases in flood-prone communities not engaged in flood plain management had the effect of reducing property values in these communities, landowners sued the United States on the theory that their lost property value constituted a taking of their property by the federal government. In rejecting this argument, the court thereby upheld government authority to require community and individual disaster mitigation measures as a condition for federal financial assistance in property acquisition and restoration subsequent to a flood-related disaster." (**Burton**, "The Constitutional Roots of All-Hazards Policy, Management, and Law," 2008, p. 9)

Texas Windstorm Insurance Association: "The Texas Windstorm Insurance Association (Texas Windpool) offers windstorm and hail coverage for residential and commercial properties in 14 coastal counties and parts of Harris County (but not Houston). About 25 percent of the state's population lives along the coast. The membership of the Texas Windpool includes every

property insurer licensed to write property insurance in the state. Each company's percentage of participation is based on their statewide sales." (**GAO**, Natural Disasters: Public Policy Options, Nov 2007, p. 67; see, also, pp. 68-69)

TF: Task Force.

TFAH: Trust for America's Health.

TH: Transitional Housing.

The Framework: National Response Framework. At: http://www.fema.gov/NRF

The Infrastructure Security Partnership (TISP): "The Infrastructure Security Partnership (TISP) was established following the tragic events of September 11, 2001, as a national forum for public and private-sector organizations to collaborate on issues regarding the resilience of the nation's critical infrastructure against the adverse impacts of natural and man-made disasters. TISP members—who represent the design, construction, operation, and maintenance communities; local, state, and federal agencies; academe; and other organizations concerned about disaster preparedness, response, and recovery—work together to identify and develop cost-effective solutions by leveraging their collective resources, experience, technical expertise, research and development capabilities, and knowledge of public policy regarding natural and man-made disasters. Since its establishment, membership has grown to more than 100 organizations representing more than 1.5 million individuals and firms." (**TISP**, *Regional Disaster Resilience: A Guide for Developing an Action Plan*, June 2006, p. 1)

Therapeutic Community Hypothesis: "Fritz has postulated from an examination of many previous disaster studies the existence of certain positive or therapeutic effects of community-size disasters. For example, in a paper presented before the Southern Sociological Society in April of 1961, he said the following about the final stage in the development of what he calls the community of sufferers.

> "The structure and forms of interaction adopted by the community of sufferers during this stage can be shown to be both individually and socially therapeutic in nature and effect, in the sense that they:
>
> 1. Resolve and ameliorate pre-existing personal and social conflicts that might endanger the present and future continuity of social life;
>
> 2. Attenuate or prevent the usual disorganizing individual and small group responses to danger, trauma, loss and privation;
>
> 3. Reduce or prevent self-aggressive and anti-social behavior arising from the losses and privations imposed by the disaster; and
>
> 4. Re-motivate the actors in the system to devote their energies to socially reconstructive and regenerative tasks." (Fritz, "The Therapeutic Aspects of Community Disaster, 1961)

The evidence available from the Hurricane Audrey [1958] study does not support Fritz's hypothesis in most of its particulars. For example, the description of the rehabilitation process associated with Audrey and other observations point instead to the following facts.

> 1. While it may have been true that certain interpersonal conflicts which had loomed large to people before the storm were temporarily reduced, it is equally if not more true that new conflicts arose which were more severe in consequence for the social system than those that had existed before. Furthermore, old community and political loyalties seemed to form the axis around which new and serious conflicts developed." (**Bates**, *The Social and Psychological Consequences of a Natural Disaste*r, 1963, p. 61)

Thermal Radiation: "Electromagnetic radiation emitted (in two pulses from an airburst) from the fireball as a consequence of its very high temperature; it consists essentially of ultraviolet, visible, and infrared radiations. In the early stages (first pulse of an air burst), when the temperature of the fireball is extremely high, the ultraviolet radiation predominates; in the second pulse, the temperatures are lower and most of the thermal radiation lies in the visible and infrared regions of the spectrum. For high-altitude bursts (above 100,000 feet), the thermal radiation is emitted as a single pulse, which is of short duration below about 270,000 feet but increases at greater burst heights." (**Glasstone**, *The Effects of Nuclear Weapons*, 3rd Ed., 1977, p. 640)

Third Party Logistics (3PL). (FEMA 2008)

Threat: "The presence of a hazard and an exposure pathway; threats may be natural or human-induced, either accidental or intentional." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 59)

Threat: "*Threat* is the likelihood of a type of attack that might be attempted, or that the scenario will occur." (**DHS**, *FDC 1*, Nov. 2007, B-2)

Threat: "Definition: any entity, action, or occurrence, whether natural or man-made, that has or indicates the potential to pose violence or danger to life, information, operations and/or property. Extended Definition: includes capabilities, intentions, and attack methods of adversaries used to exploit and circumstances or occurrences with the intent to cause harm." (**DHS**, *Lexicon: Terms and Definitions*, October 19, 2007, p. 26)

Threat: "The intention and capability of an adversary to undertake actions that would be detrimental to CI/KR." (**DHS**, *NIPP*, 2006, p. 105)

Threat: "An indication of possible violence, harm, or danger." (**DHS**, *NIMS*, 2004, p. 137)

Threat: "The likelihood of a hazard occurring." (**HHS**, *Medical Surge Capacity and Capability Handbook*, August 2004, p. D-12, Glossary)

Threat: "Potential cause of an unwanted incident, which may result in harm to individuals, a system or organization, the environment or the community." (**ISO 22399**, *Societal Security*…, 2007, 7)

Threat, Terrorism (DHS Model Used in Determining Relative Risk): "Data:

- On-going plot lines [which] reflects DHS analysis of threat information having a nexus with international terrorism or its affiliates.
- Credible reporting
- Relevant investigations to create threat tiers." (**GAO**, *Homeland Security*: *DHS Improved its Risk-Based Grant Programs' Allocation and Management* Methods..., 11Mar08; citing DHS Chief Intelligence Officer and intelligence community data)

Threat Assessment, 1953: "It is accepted that the Soviet Union is now capable of striking any target within the United States. It is assumed for planning purposes that such an attack, if it comes, will consist principally of nuclear weapons delivered by air, and detonated above ground during normal working hours. It is further assumed that high explosive and incendeiary bombs will also be used, that sabotage will be employed, and that biological and chemical weapons will be used. Psychological warfare techniques of all kinds also will be used to disrupt defense programs, impair production, create panic, and weakin our will to resist overt attacks." (**FCDA**, *1953 Annual Report*, p. 9)

Threat Assessment Inquiry: "The primary purpose of a threat assessment is to prevent targeted violence. The threat assessment process is centered upon on analysis of the facts and evidence of behavior in a given situation. The appraisal of risk in a threat assessment focuses on actions, communications, and specific circumstances that might suggest that an individual intends to mount an attack and is engaged in planning or preparing for that event.

In a situation that becomes the focus of a threat assessment inquiry or investigation, appropriate authorities gather information, evaluate facts, and make a determination as to whether a given student *poses* a threat of violence to a target. If an inquiry indicates that there is a risk of violence in a specific situation, authorities conducting the threat assessment collaborate with others to develop and implement a plan to manage or reduce the threat posed by the student in that situation.

Six principles form the foundation of the threat assessment process. These principles are:

- Targeted violence is the end result of an understandable, and oftentimes discernible, process of thinking and behavior.
- Targeted violence stems from an interaction among the individual, the situation, the setting, and the target.
- An investigative, skeptical, inquisitive mindset is critical to successful threat assessment.
- Effective threat assessment is based upon facts, rather than on characteristics or 'traits'.
- An 'integrated systems approach' should guide threat assessment inquiries and investigations.
- The central question in a threat assessment inquiry or investigation is whether a student *poses* a threat, not whether the student has *made* a threat." (**US Secret Service and DOE**, *Threat Assessment in Schools*, 2002)

Threat Index (DHS Model Used in Determining Relative Risk Scores): "The Threat Index accounted for 20 percent of the total risk score, which was calculated by the intelligence community by assessing threat information for multiple years (generally, from 9/11 forward) for all candidate urban areas and categorizing urban areas into one of four tiers. Tier I included those at highest threat, relative to the other areas, and tier IV included those at lowest threat relative to the others. DHS's Office of Intelligence and Analysis performed this review and provided these threat assessments and corresponding threat values for each urban area. In contrast, for the 2006 grant cycle, DHS used total counts of threats and suspicious incidents and incorporated these into its model. The final threat assessments are approved by the intelligence community—the Federal Bureau of Investigation, Central Intelligence Agency, National Counter-Terrorism Center, and the Defense Intelligence Agency—along with the DHS Under Secretary for Intelligence & Analysis and the Secretary of DHS, according to DHS officials." (**GAO**, *Homeland Security*: *DHS Improved its Risk-Based Grant Programs' Allocation and Management Methods, But Measuring Programs' Impact on National Capabilities Remains a Challenge*, 11March08, p. 10)

Threat Level System (**Color-Coded):** The "Color-coded Threat Level System is used to communicate with public safety officials and the public at-large through a threat-based, color-coded system so that protective measures can be implemented to reduce the likelihood or impact of an attack. Raising the threat condition has economic, physical, and psychological effects on the nation; so, the Homeland Security Advisory System can place specific geographic regions or industry sectors on a higher alert status than other regions or industries, based on specific threat information." (**DHS**, *Homeland Security Advisory System*, 2007)

Threat-Vulnerability Integration System (TVIS): Pilot DHS Science & Technology Program "which combines and fuses data in unique ways to create and share knowledge of potential terrorist threats." (DHS/OIG, ADVISE Report, June 2007, p. 5)

Thunderstorm: Sudden electrical discharges manifested by a flash of light (lightning) and a sharp or rumbling sound (thunder). Thunderstorms are associated with convective clouds (Cumulonimbus) and are, more often, accompanied by precipitation in the form of rain showers or hail, or occasionally snow, snow pellets, or ice pellets. (**WMO** 1992, 622)

TIA: Terrorism Incident Annex.

TIB: Toxic Industrial Biological. (**JCS/DOD**, *CBRNE CM* (JP 3-41) 2006, p. GL-5)

TIC: Toxic Industrial Chemical. (**JCS/DOD**, *CBRNE CM* (JP 3-41) 2006, p. GL-5)

TICP: Tactical Interoperable Communications Plan. (**DHS/ODP**, *ODP TICP FAQs*, 2005)

Tidal Bore (Wave): "An abrupt rise of tidal water (caused by atmospheric activities) moving rapidly inland from the mouth of an estuary." (**UNDHA**, *DM Glossary*, 1992, 74)

Tier 1 Critical Infrastructure Assets: "Tier 1 assets encompassed those that if attacked could cause major national or regional impacts similar to those from Hurricane Katrina or 9/11…"

(GAO, *Homeland Security*: *DHS Improved its Risk-Based Grant Programs' Allocation and Management Methods*…, March 11, 2008, p. 12)

Tier 2 Critical Infrastructure Assets: Tier 2 assets are those with potential national or regional impacts if attacked. (GAO, *Homeland Security*: *DHS Improved its Risk-Based Grant Programs' Allocation and Management Methods*…, March 11, 2008, p. 12)

[GAO notes that there the DHS risk model includes more than 2,000 critical infrastructure assets in Tier 1 and Tier 2.]

Tiered Emergency Response System: "In the United States, response to an emergency is primarily a local responsibility…. When local resources are overwhelmed by an event or if specific required technical capabilities are not available, local leaders may implement existing mutual-aid agreements to request additional support from neighboring communities and seek supplemental assistance through county and state emergency management systems…. If the state, including its National Guard (NG), lacks sufficient assets in quantity or technical response capability to mitigate a disaster, the governor may request outside (state or federal) assistance." (**Dept. of the Army**, *WMD – Civil Support Team Operations*, 2007, p. 1-2)

Tiered Response -- Second of Five Key National Response Framework Principles : "Incidents must be managed at the lowest possible jurisdictional level and supported by additional response capabilities when needed. It is not necessary that each level become overwhelmed, or fail, prior to surging resources from another level. Just the contrary, a tiered response will also be a forward-leaning response. Most incidents begin and end locally and are wholly managed at the community level. Many incidents require additional resources or support from across the community, and some require additional support from neighboring communities or the State. A few require Federal support. National response protocols recognize this and are structured to provide additional, tiered levels of support when there is a need for additional resources or capabilities to support and sustain the response and initial recovery. During large-scale events, all levels will take proactive actions to respond, anticipating resources that may be required." (**DHS**, *NRF Comment Draft*, September 2007, p. 9)

Tiger Team: "Tiger Teams (or to use Total Quality Management terminology, Process Action Teams) are formed for a definite duration to accomplish a specific task. They are not permanent, standing organizations." (**USACE**, *Establishing a National Hurricane Response Pgm.,* 6Oct05)

TIH: Toxic Inhalation Hazard. "…a gas or volatile liquid which is known to be so toxic to humans as to pose a hazard to health during transportation, or in the absence of adequate data on human toxicity, is presumed to be toxic to humans because when tested on laboratory animals it has an LC50 value of not more than 5000 ppm." (**DOT**, *Emergency Response Guidebook…Hazardous Materials Incidents*, 2004, pp. 4 and 364)

TIIDE: Terrorism Injuries, Information, Dissemination and Exchange Project.

TIM: Toxic Industrial Material. (**JCS/DOD**, *CBRNE CM* (JP 3-41) 2006, p. GL-5)

Time, Distance, Shielding: "Three basic concepts apply to all types of ionizing radiation. When we develop regulations or standards that limit how much radiation a person can receive in a particular situation, we consider how these concepts might affect a person's exposure….**Time**: The amount of radiation exposure increases and decreases with the time people spend near the source of radiation. In general, we think of the exposure time as how long a person is near radioactive material. It's easy to understand how to minimize the time for external (direct) exposure. Gamma and x-rays are the primary concern for external exposure. However, if radioactive material gets inside your body, you can't move away from it. You have to wait until it decays or until your body can eliminate it. When this happens, the biological half-life of the radionuclide controls the time of exposure. Biological half-life is the amount of time it takes the body to eliminate one half of the radionuclide initially present. Alpha and beta particles are the main concern for internal exposure…. **Distance**: The farther away people are from a radiation source, the less their exposure. How close to a source of radiation can you be without getting a high exposure? It depends on the energy of the radiation and the size (or activity) of the source. Distance is a prime concern when dealing with gamma rays, because they can travel long distances. Alpha and beta particles don't have enough energy to travel very far. As a rule, if you double the distance, you reduce the exposure by a factor of four. Halving the distance, increases the exposure by a factor of four…. **Shielding**: The greater the shielding around a radiation source, the smaller the exposure. Shielding simply means having something that will absorb radiation between you and the source of the radiation (but using another person to absorb the radiation doesn't count as shielding). The amount of shielding required to protect against different kinds of radiation depends on how much energy they have… A thin piece of light material, such as paper, or even the dead cells in the outer layer of human skin provides adequate shielding because **alpha particles** can't penetrate it. However, living tissue inside body, offers no protection against inhaled or ingested alpha emitters….Additional covering, for example heavy clothing, is necessary to protect against beta-emitters. Some **beta particles** can penetrate and burn the skin…Thick, dense shielding, such as lead, is necessary to protect against **gamma rays**. The higher the energy of the gamma ray, the thicker the lead must be. X-rays pose a similar challenge, so x-ray technicians often give patients receiving medical or dental X-rays a lead apron to cover other parts of their body." (**EPA**, *Radiation Protection Basics*, 2007 Update)

Time Unit (ICS): "The unit within the Finance/Administration Section responsible for recording time for incident personnel and equipment." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 59)

"Timing" Risks, Insurance: "…the event happens before sufficient premiums have been collected to fund payment of claims."[121] (**Financial Services Roundtable**, *Nation Unprepared*, 2007, 45)

[121] "The larger the losses from an insured event, the more significant the timing risk. For example, according to information supplied by the Insurance Information Institute, homeowners' losses in Louisiana from Katrina wiped out 25 years of insurance premiums collected in the state. In Mississippi, the damages from Katrina wiped out 17 years of premiums." (**FSR**, *Mega-Catastrophe*, 2007 45)

TIPP: Targeted Infrastructure Protection Program. (**DHS**, *Office of SLGCP FY 2006 Program Budget Review*, May 24, 2005, 15 slides, slide 7)

TIR: Toxic Industrial Radiological. (**JCS/DOD**, *CBRNE CM* (JP 3-41) 2006, p. GL-5)

TISP. The Infrastructure Security Partnership.

Title Ill, SARA: Emergency Planning and Community Right-to-Know Act.

Title 10 Status: "In rare circumstances, the President would federalize National Guard forces for domestic duties under Title 10. In such cases, the forces are no longer under the command of the Governor. Instead, the Department of Defense assumes full responsibility for all aspects of the deployment, including command and control over National Guard forces." (**DHS**, *NRF Comment Draft*, September 2007, p. 38)

Title 32 Status: "National Guard forces employed under State Active Duty or Title 32 status are providing support to the Governor of their State and are not part of Federal military response efforts. When the National Guard is deployed in State Active Duty status, the Governor retains command and control of forces inside his or her State or territory. State Active Duty is based on State statute and policy, and the State is responsible for all costs relating to the deployment. Title 32 Full-Time National Guard Duty refers to Federal training or other duty, other than inactive duty, performed by a member of the National Guard. Title 32 is not subject to *posse comitatus* restrictions and allows the Governor, with the approval of the President or the Secretary of Defense, to order a Guard member to duty to: (1) Perform training and other operational activities. (2) Undertake activities for the military protection of the territory or domestic population 1 of the United States, or of the infrastructure or other assets of the United States determined to be critical to national security, from a threat or aggression against the United States. (3) Conduct homeland defense activities that the Secretary of Defense determines to be 6 necessary and appropriate for participation by the National Guard units or members." (**DHS**, *NRF Comment Draft*, September 2007, p. 37)

Title 10 USC (Armed Forces): "Title 10 USC [US Code] provides guidance on the Armed Forces. Guidance is divided into 5 subtitles. One on general military law and one each for the US Army, US Navy and US Marine Corps, the US Air Force and the RC. Chapter 18 (sections 371-382) of Title 10 USC is entitled and governs Military Support for Civilian LEAs." (**JCS/DoD**, *Civil Support* (JP 3-28), 2007, p. F-2)

Title 14, USC, sections 2, 19, 89, 141, and 143 define the statutory authority of the USCG during HS missions. (**JCS/DoD**, *Homeland Security*, (JP 3-26), 2005, p. A-5)

Title 18, USC, Section 1385, *The Posse Comitatus Act,* 1878.

Title 31, USC, Section 1535, *The Economy Act*.

Title 32 USC (National Guard). "Title 32 USC authorizes the use of federal funds to train NG

members while they remain under the C2 of their respective state governors. In certain limited instances, specific statutory or Presidential authority allows for those forces to perform operational missions funded by the Federal government, while they remain under the control of the governor. Examples of those exceptions include the employment of WMD-CSTs, CD missions, and operations authorized by the President or SecDef under 32 USC 502(f) (i.e., Airport Security Mission in 2001 and Southwest Border Security Mission in 2006)." (**JCS/DoD**, *Civil Support* (JP 3-28), 2007, pp. F-2 and F-3)

Title 36, US Code of Federal Regulations, Part 1236: *Management of Vital Records*, July 1, 2005 Revision.

Title 41, US Code of Federal Regulations, 102743.230 through 74.260**:** *Occupant Emergency Program*, July 1, 2005 Revision.

Title 42 USC, Section 5121 et seq, *The Stafford Act, as amended*.

Title 44 US Code of Federal Regulations, Part 2, Subpart A: *Organization, Functions, and Delegations of Authority*, October 1, 2005.

TLC: Training Leaders Council, DHS.

TMOSA: Temporary Medical-and-Operations Staging Area. (**HSGAC**, *Nation Unprepared*)

TOC: Tactical Operations Center. (**FBI**, USG Interagency Dom. Ter. CONPLAN, 2001, A-1)

Top-Down and Bottom-Up Approaches: "As a former Governor, I am keenly aware of the shared responsibility that exists between the federal, state, and local governments for homeland security. In fact, over the past year I have often said that "when our hometowns are secure, our homeland will be secure." That is not merely rhetoric, but a fundamental principle of the nation's homeland security effort." (DHS, *The Nomination of The Honorable Tom Ridge to be Secretary of the Department of Homeland Security*, January 19, 2003)

Top Management: "Directors and officers of an organization that can ensure effective management systems, including financial monitoring and control systems have been put in place to protect assets, earning capacity and the reputation of the organization." (**ISO 22399**, *Societal Security*…, 2007, 7)

TOPOFF: Top Officials.

TOPOFF 1 Full-Scale Exercise (May 2000): "TOPOFF 2000 was a single, full-scale exercise conducted over 10 days in three venues:

- Denver, CO: Bioterrorism attack (Plague).
- Portsmouth, NH: Chemical attack (Sulfur Mustard).
- National Capital Region: NCR 2000, concurrent but separate exercise (Radiological Dispersal Device).

Exercise TOPOFF (Top Officials) 2000 was a Congressionally mandated, "no-notice" national exercise held in May 2000. It was designed to assess the nation's crisis and consequence management capability by exercising the plans, policies, procedures, systems, and facilities through local, state, and Federal responses to geographically-dispersed terrorist threats and acts. The exercise was co-sponsored by the Department of Justice (DOJ) and the Federal Emergency Management Agency (FEMA), which were designated as the lead agencies for the exercise by the Senate Appropriations Committee in Senate Report 105-235. The exercise was the largest peacetime terrorism exercise ever sponsored by DOJ or FEMA." (Global Security.org. "TOPOFF 1." August 4, 2006 update)

TOPOFF 1 Exercise Lessons Learned: "Top Off 1 showed us that multiple control centers, numerous liaisons, and an increasing number of response teams only complicated coordination and unity of effort…. Top Off 1 also demonstrated that threat information and a common threat picture need to be shared in a timely manner….We also learned a few other lessons as well. Educating, exercising, and equipping crisis and consequence managers and responders remains a national priority…. Just as important, Top Off 1 proved that the response required of a large-scale bio-terrorism incident is significantly different from response to other weapons of mass destruction attacks. Additionally, we saw the fragility in a public health structure that lacked both adequate funding to prepare for a bio-terrorist incident and leadership at the federal level." (**DHS**, "Remarks by Secretary Tom Ridge…on…the TOPOFF 2 Exercises," May 5, 2003, p. 2)

TOPOFF 2 Full-Scale Exercise (May 12-16, 2003): "In order to prepare for potential attacks, DHS held a Federal interagency ''dirty bomb'' exercise as part of the Top Officials–2 Exercise (TOPOFF–2) in Seattle, Washington, May 12–16, 2003. The exercise brought to light a number of issues in Federal radiological emergency response and recovery. One of the most important issues raised was how long-term site restoration and cleanup would be accomplished following an act of radiological terrorism." (**DHS**, *Application of Protective Action Guides for Radiological Dispersal Device (RDD) and Improvised Nuclear Device (IND) Incidents; Notice, Part II*., *Federal Register*, Vol. 71, No. 1, January 3, 2006, p. 174)

TOPOFF 2 Full-Scale Exercise (May 12-16, 2003): "The goals of TOPOFF 2 are to improve the nation's capacity to manage extreme events; create broader frameworks for the operation of expert crisis and consequence management systems; validate authorities, strategies, plans, policies, procedures, and protocols; and build a sustainable, systematic national exercise program to support the national strategy for homeland security." (**FEMA**, "TOPOFF 2" FEMA Press Release, May 5, 2003.)

TOPOFF 3 Full-Scale Exercise (**April 4–8, 2005: "**The U.S. Department of Homeland Security's Top Officials Three Exercise (TOPOFF 3) is a Congressionally mandated exercise designed to strengthen the nation's capacity to prevent, prepare for, respond to, and recover from large-scale terrorist attacks involving weapons of mass destruction (WMDs). The TOPOFF 3 Exercise Program, the most comprehensive terrorism response exercise ever conducted in the United States, is made up of a two-year cycle of seminars, planning events and exercises culminating in a Full-Scale Exercise that simulates a coordinated terrorist attack involving biological and chemical weapons. (**DHS**, "TOPOFF 3 Exercise," April 25, 2006.

TOPOFF 4 Full-Scale Exercise (October 15-20, 2007): "The TOPOFF 4 Full-Scale Exercise builds on knowledge derived from earlier TOPOFF exercises and recent real world events, and contains several new elements:

- Increased coordination with U.S. Department of Defense exercises to combat global terrorism
- Expanded emphasis on prevention – the opportunity to piece together an intelligence "puzzle" and stop an attack before it occurs
- Focus on mass decontamination and large-scale recovery and remediation issues
- Focus on coordinating procedures and communications with a U.S. territory" (**DHS**, "TOPOFF 4: Exercising National Preparedness," Press Release, September 25, 2007.)

TOPOFF 4 Full-Scale Exercise (October 15-20, 2007): "The recent TOPOFF 4 Exercise specifically focused on responding to RDD [Radiological Dispersion Device] attacks in three different geographic areas." (**FEMA**, *Statement for the Record*, 2007, p. 2)

TOPOFF 4 Full-Scale Exercise (October 15-20, 2007): 'This year's Tier I NLE {National Level Exercise] exercise is Top Officials (or TOPOFF) 4, the National Domestic Counterterrorism Exercise Series that is the Nation's premier terrorism preparedness exercise program involving top officials at every level of government, as well as representatives from the international community and private sector. The TOPOFF 4 exercise, to be held October 15-20 of this year, is the cornerstone of the National Exercise Program (NEP) and is a Tier I National Level Exercise for FY 2008.

"The TOPOFF program in general and TOPOFF 4 in particular are centered on U.S. Government-wide strategy and policy-related issues. In this sense, they are designed to address the priorities of the U.S. government in its entirety, and do not focus on individual issues at the department or agency level. To achieve this U.S. government-wide goal, TOPOFF 4 will be organized around *one* of the 15 national planning scenarios – Scenario 11, use of a radiological dispersal device (RDD). TOPOFF 4 will require Federal, State, local, and private sector players to respond to multiple, simultaneous RDD attacks on American soil.

"The exercise will be executed with the participation of all appropriate Cabinet-level secretaries or their deputies, and will include the activation of all necessary operations centers to accurately simulate a truly national response to these major terrorist incidents. This will include the utilization of all five elements of the National Operations Center and the FEMA Region IX and X Regional Response Coordination Centers. In addition, the FEMA Emergency Response Teams and Federal Incident Response Support Teams as well as DHS Situational Awareness Teams will activate in each of the venues and will simulate the establishment of a Joint Field Office in accordance with the latest National Response Framework guidance.

"For TOPOFF 4, approximately 15,000 Federal, State, territorial, and local officials will participate in a robust, full-scale response to a multi-faceted terrorist threat in three primary venues: Guam, Oregon, and Arizona. In each of these venues, exercise participants will be expected to mobilize their prevention and response capabilities, make difficult decisions, and carry out essential emergency response and recovery functions.

"In addition, the TOPOFF 4 exercise will use a single, common scenario in each of the venues to test prevention, response, and recovery capabilities; it will allow for the synchronization of National, Federal, State, local, and private sector plans; it will test a common evaluation standard; and it will incorporate lessons learned, best practices, and corrective actions identified in previous TOPOFF exercises.

"*Partners*: Our partners in this exercise include over 40 agencies, departments, and offices throughout the federal interagency community, the White House (i.e., Homeland Security Council (HSC) and National Security Council (NSC)), representatives from Oregon, Guam, and Arizona, several nongovernmental and private sector organizations, and several international partners. (Australia, Canada, and the United Kingdom have all agreed to participate in the exercise, and more than 30 other countries and international organizations will serve as exercise observers.)

"*Goals*: The goals of TOPOFF 4 are threefold. First and foremost, to assess the Nation's capability to prevent, respond to, and recover from realistic and threat-based acts of terrorism. Second, to examine relationships between Federal, State, local, and Tribal jurisdictions and the private sector in response to a realistic and challenging series of integrated, geographically dispersed terrorist threats and attacks. And third, to use performance-based objectives to evaluate the interaction between Federal, State, local, and private sector emergency preparedness, prevention, response, and recovery plans, policies, and procedures. Achieving each of these goals under the umbrella of one national-level exercise, allows the U.S. government—and its State, local, private sector, and international exercise partners—to test its ability to respond to a major incident, identify gaps in performance and take concrete steps towards improvement of the Nation's ability to prevent, respond to, and recover from terrorist attacks." (**FEMA**, *Statement of Schrader*, October 3, 2007, pp. 5-7)

TOPOFF 4 Full-Scale Exercise (October 15-20, 2007): "TOPOFF 4 was conducted this October as a Full Scale Exercise in three locations: Arizona, Guam and Oregon. In accordance with the NEP, the TOPOFF 4 Full Scale Exercise was designated as a Tier I National Level Exercise for Fiscal Year 2008. This exercise centered on White House directed, government-wide strategy and policy-related issues. It was conducted with the participation of all appropriate Secretaries (or their Deputies), other senior officials, and all necessary operations centers. While the TOPOFF 4 scenario was focused on RDDs [Radiation Dispersal Devices], this exercise reflected USG-wide priorities, not single department or agency programs.

"Building on knowledge derived from earlier Federal-level exercises and recent real world events, TOPOFF 4 contained several new elements including: increased coordination with the Department of Defense, expanded emphasis on prevention – the opportunity to piece together an intelligence "puzzle" and stop an attack before it occurs, as well as the focus on mass decontamination and long-term recovery and remediation issues. The inclusion of Guam as one of the three venues also focused efforts on coordinating procedures and communications with a U.S. territory. TOPOFF 4 was the first exercise in the series to focus on one specific event - RDDs. The selection of this event in all three venues allowed the Federal Government, in coordination with State, Territorial, County and City partners to evaluate capabilities required in

a response to near simultaneous events of a similar type." (**FEMA**, *Statement of Glenn Cannon*, November 15, 2007, pp. 15-16)

TOR: Terms of Reference. (**DSB**, *Report of DSP TF on CHIP*, 2007, p. 6)

Tornado: "Tornadoes are extremely complex wind events that cause damage ranging from minimal or minor to absolute devastation…. In a simplified tornado model, there are three regions of wind:

1. Near the surface, close to the core or vortex of the tornado. In this region, the winds are complicated and include the peak low level wind speeds, but are dominated by the tornado's strong rotation. It is in this region that strong upward motions occur that carry debris upward, as well as around the tornado.
2. Near the surface, away from the tornado's core or vortex. In this region, the flow is dominated by inflow to the tornado. The inflow can be complicated and is often concentrated into relatively narrow swaths of strong inflow rather than a uniform flow into the tornado's core circulation.
3. Above the surface, typically above the tops of most structures, the flow tends to become very nearly circular.

In an actual tornado, the diameter of the core or vortex circulation can change with time, so it is impossible to say precisely where one region of the tornado's flow ends and another begins. Also, the visible funnel cloud associated with and typically labeled the vortex of a tornado is not always the edge of the strong extreme winds. Rather, the visible funnel cloud boundary is determined by the temperature and moisture content of the tornado's inflowing air. The highest wind speeds in a tornado occur at a radius measured from the tornado core that can be larger than the visible funnel cloud's radius. It is important to remember that a tornado's wind speeds cannot be determined just by looking at the tornado." (**FEMA**, *Building Performance Assessment Report: Midwest Tornadoes of May 3, 1999*, July 13, 1999, p. 2-4)

Tornado: A tornado is a violently rotating column of air extending from a thunderstorm to the ground. The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. Damage paths can be in excess of one mile wide and 50 miles long. In an average year, 800 tornadoes are reported nationwide. Every state is at some risk from this hazard." (**FEMA**, "Fact Sheet – Tornadoes," January 2007, p. 1)

Tornado: "Historically, tornadoes have resulted in the greatest loss of life of any natural hazard, the mean annual death toll being 111. Property damage due to tornadoes is in the tens of millions of dollars annually. Most States east of the Rocky Mountains are subject to this hazard." (**FEMA**, *Hazard Identification, Capability Assessment, and Multi-Year Development Plan*, 1985, p. A-2)

Tornado: A violently rotating storm of small diameter; the most violent weather phenomenon. It is produced in a very severe thunderstorm and appears as a funnel cloud extending from the base of a Cumulonimbus to the ground. (**WMO** 1992, 626)

Total Asset Visibility (TAV): "…a system that provides asset and in-transit visibility as well as electronic order management for all primary commodities." (**FEMA**, *FEMA's Logistical Planning Efforts*, 2007)

Total Disaster Risk Management: "The Asian Disaster Reduction Center (ADRC) has been promoting a culture of disaster reduction by advocating disaster reduction as a core part of government policy and raising public awareness in the Asian Region. ADRC and the Asian Disaster Response Unit of the United Nations Office for the Coordination of Humanitarian Affairs Kobe (UN-OCHA/Kobe) have developed the Total Disaster Risk Management (TDRM) as an effective and strategic approach to disaster reduction that is based on many years of experience in coping with natural disasters worldwide, particularly in Asia.

The concept of TDRM centers around two crucial principles: "the involvement of all stakeholders" and "implementation at all phases of disaster risk management," namely the prevention/mitigation, preparedness, response and rehabilitation/reconstruction phases (Figure 2.1). Since damage stems from the combination of hazards, exposure and vulnerability, TDRM, as a holistic approach which covers relevant stakeholders and all phases, is essential in disaster risk management." (**ADRC**, *TDRM: Good Practices* (Chapter 2, *Outline of TDRM*), 2006 p. 2)

Total-System Exercises: "These are locally- tailored exercises involving all key local officials, and EOC and other personnel, and two or more such exercises shall have been held- Total-system exercises are appropriate and useful only when the community has developed its emergency procedures and organization to the point where all elements can be exercised and tested together. Total-system exercises are designed and conducted to meet the following objectives:

(1) Exercising the making of coordinated responses and assignment of resources under simulated peacetime disaster or attack conditions (a fallout-only or a fallout-blast-fire situation, as appropriate in the locality). whether based on a peacetime or attack-caused disaster scenario, the exercise shall include problems for all elements of the local emergency organization, requiring maximum use of existing local capabilities. Half or more of the problems shall be such as to require operational coordination between at least two services. The exercise shall be tailored to the jurisdiction's actual organization and EOC and other procedures.

(2) Exercising decision-making and operations involving all elements of the local emergency organization. This shall involve the entire EOC staff. In addition, it is strongly recommended that all other key elements of the local emergency organization be involved to the maximum extent possible (e.g., selected police and fire units, radiological monitors, shelter managers, Shelter Complex Headquarters staffs, communications personnel,' hospital administrators and staffs, welfare group directors, news media personnel, and others with emergency assignments outside of the EOC). Hospital disaster plans can be exercised in conjunction with the exercise involving other elements of the jurisdiction's emergency organization. In cases where it is not possible to involve the majority of the organization outside the EOC, simulation techniques may be used to represent such groups. However, any capability or organization simulated must actually exist, and evaluators must have reasonable confidence that such group could actually have carried out the functions that were represented by simulation in the exercise. (E.g., if the radiological

monitoring organization is simulated, it must be an actual capability even if radiological monitors were not physically located at monitoring stations of in shelters during the exercise. Confidence that the RM organization could actually have carried out the functions simulated shall be based on previous sub-system exercises or training involving the RN organization.) Thus, total-system exercises differ from many of the Emergency Operations Simulation (EOS) exercises that localities have had in that EOS's often simulate emergency organizations and capabilities that do not exist, or are not fully ready to operate." (**DCPA**, *Standards for Local Civil Preparedness*, 1978, pp. 35-36)

Toxic Industrial Biological (TIB): "This category encompasses any biological material manufactured, used, transported, or stored by industrial, medical, or commercial processes which could cause a potential infectious or toxic threat. It includes those biohazards which are infectious agents or hazardous biological materials that present a risk or potential risk to the health of humans, animals or the environment. The risk can be direct through infection or indirect through damage to the environment. Biohazardous materials include certain types of recombinant DNA [deoxyribonucleic acid]; organisms and viruses infectious to humans, animals, or plants (parasites, viruses, bacteria, fungi, prions, rickettsia); and biologically active agents (toxins, allergens, venoms) that may cause disease in other living organisms or cause significant impact to the environment or community. TIBs are often generated as infectious waste (sharps and body fluid contaminated material) and as biological samples (biopsies, diseases for research, etc.)." (**JCS/DOD**, *CBRNE CM*, (JP 3-41), 2006, p. I-7)

Toxic Industrial Chemical (TIC): "Toxic industrial chemicals are industrial chemicals that are manufactured, stored, transported, and used throughout the world. Toxic industrial chemicals can be in the gas, liquid, or solid state. They can be chemical hazards (e.g., carcinogens, reproductive hazards, corrosives, or agents that affect the lungs or blood) or physical hazards (e.g., flammable, combustible, explosive, or reactive)." (**OSHA**, *Toxic Industrial Chemicals*, accessed November 21, 2007)

Toxic Industrial Chemical Scenario (15 National Planning Scenarios): "The Toxic Industrial Chemical scenario involves a fire and toxic industrial chemical release from a petroleum refinery caused by terrorist attack using rocket-propelled grenades and explosive devices. There are 350 fatalities, 1,000 hospitalized victims, 10,000 evacuated, 1,000 seeking shelter, 25,000 shelter-in-place, and 100,000 self-evacuating. One-half of the structures at the refinery are damaged from explosions." (**DHS**, *TCL,* 2007, p. 206)

Toxic Industrial Radiological (TIR): "TIRs are any hazardous radioactive material manufactured, used, transported, or stored by industrial, medical, or commercial processes. Radioactive waste, such as spent fuel rods and medical radiological material, is a major source of these materials. By far the largest quantities of radioactive waste — in terms of both radioactivity and volume — are generated by the commercial nuclear power and military nuclear weapons production industries, and by nuclear fuel cycle activities to support these industries such as uranium mining and processing. Radioactive waste is classified by origin not on the physical and chemical properties of the waste that could determine its safe management. Radioactive materials can produce toxic or long term health effects to personnel, and can cause

contamination. Damaging effects from radiological materials are caused by neutron, gamma, beta, and alpha ionizing radiation." (**JCS/DOD**, *CBRNE CM* (JP 4-41), 2006, p. I-8)

Toxic Inhalation Hazard (TIH): "Term used to describe gases and volatile liquids that are toxic when inhaled. (Same as PIH)." (**DOT**, *Emergency Response Guidebook*, 2004, p. 364)

Toxics Release Inventory (TRI): "Federal law requires certain facilities that manufacture, process, or use any of 581 toxic chemicals to report annually to EPA and their state on the amount of those chemicals released into the air, water, or soil. It also requires EPA to make this information publicly available through the Toxics Release Inventory (TRI) database. Facilities must either (1) submit a detailed TRI Form R for each designated chemical used in excess of certain thresholds or (2) file a simpler Form-A certifying that they need not do so." (**GAO**, *Toxic Chemical Releases*, November 2007, p. 2)

Toxin: "Toxins are poisons formed as specific secreting products by vegetable or animal organisms such as plants, snakes, spiders, and sea creatures. Toxins act faster and are more stable than live pathogens. Many toxins can be easily produced." (**DA**, *WMD-CST Ops*, 2007, 3-5)

TPEP: Terrorism Prevention Exercise Program. (**DHS**, *HSEEP Quarterly Newsletter*, Mar 07)

TPFDL: Federal Time Phased Force Deployment List, managed by FEMA. (**USACE**, *CDRP, Anchorage*, 2005, p. v)

TPOC: Training Point of Contact. (**FEMA**, *TEI/TO Course Catalog*, 2008, 6)

Tracking and Reporting Resources: "Standardized, integrated process conducted throughout the life-cycle of an incident. This process provides incident managers with a clear picture of where resources are located, helps staff prepare to receive resources, protects the safety of personnel and security of supplies and equipment, and enables the coordination of movement of personnel, equipment, and supplies. (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 59)

TRADOC: US Army Training and Doctrine Command. **DA**, *WMD-CST Ops*, 2007, Glossary-6

Tragedy: "An intensely sad, calamitous, or fatal event or course of events; disaster" (**Funk & Wagnalls** 1996).

> "The word 'tragedy' summons up in one's mind the inevitability not only of this event but of other similar events in the past and more to follow. Responsibility can be successfully abrogated with the application of the label 'tragedy'…One needs to look no further into the cause or causes of this event because it has now been lifted outside of one's power and into the domain of Greek drama and fate. As a tragedy, it was fated to be and the only possible response is to accept it (and others of its kind) as part of the inescapable human situation. The event may be mourned and one may sympathize briefly with the victims. But one is freed (by thinking of it as a tragedy) from the need to examine the conceptual apparatus that led to this outcome" (**Allinson** 1993, 14).

Training: "Planned activities which support and improve individual and organizational performance and effectiveness, such as on-the-job training, career development programs, professional development activities or developmental assignments." (**DHS**, *Training Lexicon*, Version 1.2, Dec 2007, p. 62)

Training: "Building essential response capabilities nationwide requires a systematic program to train individual teams and organizations – to include governmental, nongovernmental, private-sector, and voluntary organizations – to meet a common baseline of performance and certification standards. Professionalism and experience are the foundation upon which successful response is built. Rigorous, ongoing training is thus imperative.25 Individuals and teams, whether paid or volunteer, should meet relevant local, tribal, State, Federal, or professional qualifications, certifications, or performance standards. Content and methods of training must comply with applicable standards and produce required skills and measurable proficiency. FEMA and other organizations offer response and incident management training in online and classroom formats." (**DHS**, *National Response Framework*, Jan 2008, 31)

Training and Education: "…the words 'training' and 'education'… are not the same, there being being a significant denotative difference. While training is more concerned with teaching *what* to think and what the *answers* ought to be, education is all about teaching *how* to think and what the *questions* ought to be: 'Training is focused on the development and performance of specific tasks or skills, and education is oriented toward more generalized and abstract knowledge that may or may not be tied to specific tasks or action.'[122] Training is most frequently used when the goal is to prepare an individual or an organization to execute specified tasks. It often includes repetition of tasks, not unlike an athletic team learning to execute plays. Finally, it is normally the preferred method of learning when the goal is to perform operations in which success, failure, and completion can be clearly measured. Education has more to do with how to think about problems and how to deal with those things that may not lend themselves to categorical solutions. It becomes a matter of intellect, thought, indirect leadership, advice, and consensus building." (**McCausland**, *Developing Strategic Leaders for 21st Century*, 8Feb08, 6)

Training and Exercise Integration (FEMA/NPD/NIC/TEI) Mission: "TEI is responsible for coordinating the training, education, and exercise functions and policies within the NIC, FEMA, DHS, and Federal Interagency. Whereas the NIC serves as the oversight body for the subcomponents, TEI exclusively is concerned with policy coordination and ensuring policy serves to rectify where mission areas overlap, are complimentary, or have gaps."

Training & Exercise Plan Workshop (T&EPW): "The Multiyear Training & Exercise Plan is developed at a Training and Exercise Plan Workshop (T&EPW). The T&EPW usually occurs once a year and brings together key exercise personnel from all area agencies to discuss a program's strategy and scheduling of exercise and training for the coming year." (**FEMA,** IS-120 A, *Intro to Ex.,* 23Jan08, 17)

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[122] Quote is from D. E. McAllister, "Education/Training Discussion," *TRADOC*, January 29, 2001. See also Dianne Jordan, *Evaluation and Implementation of Distance Learning: Technologies, Tools, and Techniques,* Hershey, PA: Idea Group, 2000.

Training and Exercise Integration Secretariat Training Operations (TEI/O), FEMA: "TEI/TO serves the Nation's first responder community, offering more than 100 courses to help build skills that responders need to function effectively in mass consequence events. TEI/TO primarily serves State, local, and tribal entities in 10 professional disciplines, but has expanded to serve private sector and citizens in recognition of their critical role in domestic preparedness. Instruction is offered at the awareness, performance, and management and planning levels. Students attend TEI/TO courses with the basic skills of their profession and learn how to apply them in the context of disaster preparedness, response, and recovery. Course subjects range from weapons of mass destruction (WMD) terrorism, cybersecurity, and agro-terrorism to citizen preparedness. Courses are web based and instructor led and are offered in residence (i.e., at a training facility) or through mobile programs in which courses are brought to locations that request them…. TEI/TO is one of a number of training components located in the NIC. It is the new name given to the former Office of Grants and Training (G&T) Training Division under the reorganization directed in the "Post-Katrina Emergency Management Reform Act" (the Act). On April 1, 2007, components from the DHS Preparedness Directorate, including training programs within G&T, merged with FEMA as directed by the Act. This consolidation formed the new NPD within FEMA. Legacy training organizations from the Preparedness Directorate were consolidated under the umbrella of the newly created NIC, along with existing FEMA training components such as the Emergency Management Institute (EMI). The mission of TEI remains largely the same as it was under the G&T, that is, to make high-quality training available to the first responder community, tailored to enhance the capacity of states and local jurisdictions to prepare for, prevent, deter, and respond and recover safely and effectively from potential manmade and natural catastrophic events, including terrorism. TEI/TO has undergone several name changes since it was organized in 1998 as the Office for Domestic Preparedness (ODP) under the Department of Justice." (**FEMA**, *TEI Secretariat TO Course Catalog*, 2008, p. 1)

Training and Exercise Integration Secretariat Training Operations (TEI/TO) Mission: "The mission of TEI/TO is to make high-quality training available to first responders that enhances their skills for preventing, protecting, responding to, and recovering from manmade and natural catastrophic events." (**FEMA**, *TEI/TO Course Catalog*, 2008, 2)

Training Capability Element (TCL): "Content and methods of delivery that comply with relevant training standards necessary to perform assigned missions and tasks." (**DHS**, *TCL*, 2007, p. 9)

TRANSCOM: Transportation Command. (**HSGAC**, A *Nation Still Unprepared*, 2006, 634)

Transformation: "Transformation requires a combination of technology, intellect and cultural adjustments – adjustments that reward innovation and creativity." (**DOD/JCS**, *The National Military Strategy of the United States of America*, 2004, v)

Transit Security Grant Program (TSGP): "TSGP provides funding to support security enhancements for intercity passenger rail transportation, freight rail, and other security measures. The program addresses three transit modalities: rail transit, intra-city bus transit, and ferry systems." (**DHS/ODP**, *FY 2006 EMPG Program Guidance*, November 2005, p. 10)

Transit Security Grant Program (TSGP): "TSGP supports sustainable, risk-based efforts to protect critical transit infrastructure from terrorism, especially explosives and non-conventional threats that would cause major disruption to commerce and significant loss of life. Funding is provided to owners and operators of the nation's critical transit infrastructure, including rail, intra-city bus, ferry systems, and Amtrak. For the highest risk urban areas, this funding is provided as a regional allocation; for other urban areas, funding is awarded on a competitive basis." (**DHS**, *Fact Sheet: Fiscal Year 2008 Preparedness Grants*, 1Feb2008)

Transitional Shelters: "*Transitional Shelters* are facilities that provide short-term lodging and additional privacy, such as hotels or motels." (**FEMA**, *FEMA Recovery Strategy*, August 2006)

Transparency: "Pandemic preparedness requires transparent communication of accurate information among all levels of government and the public in order to warrant public trust." (**ACLU**, *Pandemic Preparedness*, 2008, 7) "People are more likely to cooperate with reasonable requests when they are confident that government officials are being honest about the probabilities of risk and outcomes, and are willing to acknowledge uncertainty and admit mistakes." (**ACLU**, *Pandemic Preparedness*, 2008, 24)

Transportation Infrastructure Protection Programs (IPP): "Together, the IPP grants fund a range of preparedness activities, including strengthening infrastructure against explosive attacks, preparedness, planning, equipment purchase, training, exercises, security management, and administration costs. IPP programs support objectives outlined in the National Preparedness Guidelines and related national preparedness doctrine, such as the National Incident Management System (NIMS), National Response Framework (NRF), and the National Infrastructure Protection Plan (NIPP) and include…":

- Port Security Grant Program (PSGP)
- Public Transportation Security Grants Program (TSGP)
- Over-the-Road Bus Security Grant Program
- Trucking Security Program (TSP).

(**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*. March 11, 2008, p. 5)

Transportation Security Administration (TSA), DHS, Mission: "The Transportation Security Administration protects the Nation's transportation systems to ensure freedom of movement for people and commerce." (**TSA**, *Mission, Vision, and Core Values*, accessed November 17, 2007)

Transportation Security Operations Center (TSOC): 24/7 TSA Operations Center.

TRC: Telephone Response Centers. (**FEMA**, *Call for Issues Status Report*, 2000, xiii)

Tremor: "A shaking movement of the ground associated with an earthquake or explosion." (**UNDHA**, *DM Glossary*, 1992, 75)

TRF: Transportable Radio Facility. (**EG&G**, *San Diego County Firestorms AAR*, Feb 2008, 43)

TRI: Toxic Release Inventory.

TRIA: Terrorism Risk Insurance Act (Signed into law on November 26, 2002)

TRIEA: Terrorism Risk Insurance Extension Act (2007). (**FSR**, *Nation Unprepared*, 2007, 9) [Note: Extended TRIA to 2014. (**III**, *Catastrophes: Insurance Issues*, Jan 2008)]

Triage: "There are three basic types of triage. Primary triage is the first triage of patients into the medical system (it may occur prehospital), at which point patients are assigned an acuity level based on the severity of their illness/disease. Secondary triage is the reevaluation of the patient's condition after initial medical care… This may occur at the hospital following EMS interventions or after initial interventions in the ED [Emergency Department]. Tertiary triage is the reevaluation of the patients' response to treatment after further interventions and is ongoing during their hospital stay. This is the least practiced and least well-defined type of triage.

"Historically, triage has involved four levels of priority for traumatic injuries:

- Green – delayed treatment – has minor injuries or illness and should not pose a threat to life or limb.
- Yellow – intermediate – has injuries or illness that may result in death or disability but pose no immediate threat to life or limb.
- Red – critical – has injuries or illness that will result in death within the hour unless interventions occur.
- Black – expectant or deceased – is expected to die because of severity of illness or injuries or has died.

"An experienced health care provider should be involved in any decision to classify a patient as "black" during a disaster…all such patients should have access to palliative care (analgesia, sedation, physical and behavioral cares) to the extent possible under the circumstances. Expectant patients should be reassessed regularly for comfort, for improvements in their situation, or in case resources become available unexpectedly.

"Studies have shown that experienced health care providers are generally very accurate at assigning triage levels in the ED on a daily basis,70 though there are no studies to determine to what degree this is true in disasters." (**AHRQ/HHS**, *Mass Medical Care*…, p. 71)

TRO: Transitional Recovry Office, FEMA.

Tropical Cyclone: "A warm-core non-frontal synoptic-scale cyclone, originating over tropical or subtropical waters, with organized deep convection and a closed surface wind circulation about a well-defined center. Once formed, a tropical cyclone is maintained by the extraction of heat energy from the ocean at high temperature and heat export at the low temperatures of the upper troposphere. In this they differ from extratropical cyclones, which derive their energy from horizontal temperature contrasts in the atmosphere (baroclinic effects)." (**NHC**, *Glossary of NHC Terms*, 2007)

Trucking Security Program (TSP): "TSP provides funding to identify and recruit highway professionals (carriers, drivers, first responders, highway workers) to actively participate in an anti-terrorism and security awareness program, as well as implement program training and 24/7 call center support." (**DHS**, *Fact Sheet: FY08 Preparedness Grants*, 1Feb2008)

Trucking Security Program (TSP): Provides funding to continue the "…Highway Watch® Program as a sustainable national program to enhance security and overall preparedness on the Nation's highways. TSP provides competitive grant funds for continued operations of Highway Watch® Program activities which include identifying and recruiting program." (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, U.S. House of Representatives*, March 11, 2008, p. 6)

Trusted Agent: "Trusted agents are the individuals on the *exercise planning team* who are trusted not to reveal the scenarios details to players prior to the exercise being conducted." (**FEMA**, *HSEEP Glossary*, 2008)

TS: Top Secret.

TS: Tropical Storm. (**FEMA**, *DHS/FEMA 2008 Hurricane CONPLAN*, October 2007, p. 7)

TSA: Transportation Security Administration, DHS. (**DHS,** *NIPP*, September 2006, p. 102)

TSC: Terrorist Screening Center. (**DHS**, *IPG FY 2011-2015 Draft*, 2008, p. 30)

TSG: Trans-Enterprise Service Grid. (**FEMA**, *IPAWS Update*, 2007, slide 28)

TSGP: Public Transportation Security Grants Program. (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's …*March 11, 2008, p. 5)

TSGP: Transit Security Grant Program. (**DHS**, *DHS Announces Additional $*260M…, 16Aug07)

TSOC: Transportation Security Operations Center, DHS Transportation Security Admin.

TSP: Telecommunications Service Priority. (APCO, *APCO Homeland Security Commitment*)

TSP: Trucking Security Program. (**DHS**, *Fact Sheet: FY08 Preparedness Grants*, 1Feb2008)

Tsunami: "Tsunamis (pronounced soo-ná-mees), also known as seismic sea waves (mistakenly called "tidal waves"), are a series of enormous waves created by an underwater disturbance such as an earthquake, landslide, volcanic eruption, or meteorite. A tsunami can move hundreds of miles per hour in the open ocean and smash into land with waves as high as 100 feet or more. From the area where the tsunami originates, waves travel outward in all directions. Once the wave approaches the shore, it builds in height. The topography of the coastline and the ocean floor will influence the size of the wave. There may be more than one wave and the succeeding

one may be larger than the one before. That is why a small tsunami at one beach can be a giant wave a few miles away. Most tsunamis are generated by earthquake-induced movement of the ocean floor. If a major earthquake or landslide occurs close to shore, the first wave in a series could reach the beach in a few minutes, even before a warning is issued. Areas are at greater risk if they are less than 25 feet above sea level and within a mile of the shoreline." (**FEMA**, "Fact Sheet – Tsunami," June 2007, p. 1)

Tsunami: "A sea wave of local or distant origin that results from large sea-floor displacements associated with powerful earthquakes, major submarine landslides, or exploding volcanic islands." (**USGS**, *Putting Down Roots in Earthquake Country*, 2007, Glossary)

TT&E: Tests, Training and Exercises. (**DHS**, *FCD 1*, November 2007, p. 2)

TTIC: Terrorist Threat Integration Center. [Superseded by National Counterterrorism Center (NCTC, August 2004).

TTP: Tactics, Techniques, and Procedures. (**DA**, *WMD-CST Operations*, December 2007, p. 4-4)

TTP&E: Tactics, Techniques, Procedures, and Equipment. (**DA**, *WMD-CST Ops*, Dec 2007, 5-3)

TTT: Train the Trainer.

TTX: Tabletop Exercise. (**DHS**, *HSEEP*, Vol. V, p. 43)

Turnout Gear: See "Structural Fire Fighters' Protective Clothing."

TVIS: Threat-Vulnerability Integration System. (**DHS/OIG**, *ADVISE Report*, June 2007, Abbreviations)

Type: "Describes the size, capability, and staffing qualifications of a specific kind of resource." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 59)

Type (Incident Management Teams): "An ICS resource classification that refers to capability. Type 1 is generally considered to be more capable than Types 2, 3, or 4, respectively, because of size, power, capacity, or (in the case of incident management teams) experience and qualifications." (**FEMA**, *NIMS*, 2007, 159)

[Note: See "Incident Management Teams, Types" for more information.]

Typhoon: Name given to a tropical cyclone with maximum sustained winds of 64 knots or more near the centre in the western North Pacific. (**WMO** 1992, 644)

UA: Universal Adversary. (**DHS**, *HSEEP*, Vol. V, December 2005 Draft, p. 20)

UASI: Urban Areas Security Initiative. (**DHS**, *NIPP*, 2006, p. 102)

UASI-NSGP: Urban Areas Security Initiative Nonprofit Security Grant Program, (**DHS**, 2008)

UAWG: Urban Area Working Group. (**DHS**, *ODP NICP FAQs*, May 2005, p. 2)

UC: Unified Command. (**DHS**, *NIMS,* 2004, p. 14)

UCG: Unified Coordination Group. (**FEMA**, *DHS/FEMA Federal Interagency Hurricane Contingency Plan*, October 31, 2007 Draft, p. 2)

UCS: Unified Command Suite. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, p. 4-2)

UEVHPA: Uniform Emergency Volunteer Health Practitioners Act.

UFAS: Uniform Federal Accessibility Standards. (**FEMA**, *FAQ: 2008 Disaster Housing Plan* (News Release), 10 June 2008)

UFC: Unified Coordination Group. (**DHS**, *NRP Comment Draft*, September 2007, p. 48)

UHF: Ultrahigh Frequency. (**DA**, *WMD-CST Operations*, December 2007, Glossary-6)

UJC: Unified Joint Command. (**FEMA**, *Federal Interim Contingency Plan: NMSZ*, 2007, 18)

UN: United Nations.

UNAAF: Unified Action Armed Forces. (**DA**, *WMD-CST Operations*, Dec. 2007, Glossary-6)

Unacceptable Risk: "Level of risk as determined by the risk management process which cannot be mitigated to an acceptable safe level." (**USCG**, *IM Handbook*, 2006, Glossary 25-25)

UNDG: United Nations Development Group.

UNDHA: United Nations Department of Humanitarian Affairs

UNDP: United Nations Development Programme.

UNDP BDPR: United Nations Development Programme, Bureau for Crisis Prevention and Recovery.

UNDRO: United Nations Disaster Relief Organization.

UNEP: United Nations Environment Programme.

UNESCO: United Nations, Education, Scientific and Cultural Organization.

UNICEF: United Nations Children's Fund.

Unidentified Persons: "Includes those persons, both injured and deceased, who require the application of scientific methods to verify their identification." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 40)

UNIDNDR: United Nations International Decade for Natural Disaster Reduction.

Unified Approach: "A major objective of preparedness efforts is to ensure mission integration and interoperability when responding to emerging crises that cross functional and jurisdictional lines, as well as between public and private organizations." (**FEMA**, *NIMS Draft*, 2007, p. 160)

Unified Area Command (UAC): "A unified area command is established when incidents under an area command are multi-jurisdictional." (**USCG**, *IM Handbook*, 2006, Glossary 25-25)

Unified Command (UC): A method for all agencies or individuals who have jurisdictional responsibility, or in some cases who have functional responsibilities at the incident, to contribute to: determination of overall objectives for the incident, and selection of strategies to achieve the objectives.

Unified Command (UC): "UC is an important element in multijurisdictional or multiagency domestic incident management.

> It provides guidelines to enable agencies with different legal, geographic, and functional responsibilities to coordinate, plan, and interact effectively.
>
> As a team effort, UC overcomes much of the inefficiency and duplication of effort that can occur when agencies from different functional and geographic jurisdictions, or agencies at different levels of government, operate without a common system or organizational framework.
>
> All agencies with jurisdictional authority or functional responsibility for any of all aspects of an incident and those able to provide specific resource support participate in the UC structure and contribute to the process of determining overall incident strategies; selecting objectives; ensuring that joint planning for tactical activities is accomplished in accordance with approved incident objectives; ensuring the integration of tactical operations; and approving, committing, and making optimum use of all assigned resources.

"The exact composition of the USC structure will depend on the location(s) of the incident (i.e., which geographical administrative jurisdictions are involved) and the type of incident (i.e., which functional agencies of the involved jurisdiction(x) are required). In the case of some multijurisdictional incidents, the designation of a single IC may be considered to promote greater unity of effort and efficiency." (**DHS**, *NIMS*, 2004, p. 14)

Unified Command (UC): "The primary differences between the single command structure and the UC structure are that

> In a single command structure, the IC is solely responsible (within the confines of his or her authority) for establishing incident management objectives and strategies. The IC is directly

> responsible for ensuring that all functional area activities are directed toward accomplishment of the strategy.
>
> In a UC structure, the individuals designated by their jurisdictional authorities (or by departments within a single jurisdiction) must jointly determine objectives, strategies, plans, and priorities and work together to execute integrated incident operations and maximize the use of assigned resources." (**DHS**, *NIMS*, 2004, p. 16)

Unified Command (UC): "Effective *unified command* is indispensable to all incident response activities and requires a clear understanding of the roles and responsibilities of each participating organization. Success requires *unity of effort,* which respects the chain of command of each participating organization while harnessing seamless coordination across jurisdictions in support of common objectives. Unified command is an important element across multi-jurisdictional or multi-agency incident management activities.

> It provides a structure to enable agencies with different legal, geographic and functional responsibilities to coordinate, plan and interact effectively.
>
> As a team effort, unified command allows all agencies with jurisdictional authority or functional responsibility for the incident to provide joint support through mutually developed incident objectives and strategies established at the command level.
>
> Each participating agency maintains its own authority, responsibility and accountability.

This *Framework* [NRF] employs the *NIMS* structures and tools that enable unified command to be effective in incident management." (**DHS**, *National Response Framework Comment Draft*, September 2007, p. 10)

Unified Command (UC): "The doctrine of *unified command* is applied at the headquarters, regional and field levels to enable diverse agencies to work together effectively. Using unified command principles, participants share common goals and synchronize their activities to achieve those goals. The Federal Government also works to establish *engaged partnership* with States, as well as the private sector. Our national response is more effective when all levels of government work together well before an incident to develop effective plans and achieve a heightened state of preparedness." (**DHS**, *National Response Framework Comment Draft*, Sep. 2007, p. 21)

Unified Command (UC): Term became institutionalized statutorily via the National Security Act of 1947 which authorized establishment of four Unified Commands. (**Ditch**, *Nat'l Response Framework (IAEM Discussion List email*), January 25, 2008)

Unified Command (UC): "Under the ICS [Incident Command System] concept of operations, Unified Command is a unified team effort which allows all agencies with responsibility for an incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This Unified Command effort is accomplished without losing or abdicating agency authority, responsibility, or accountability." (**FEMA** *Disaster Dictionary*, **2001**, p.124; citing ICS Glossary)

Unified Command (UC): "An ICS application used when more than one agency has incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the UC, often the senior person from agencies and/or disciplines participating in the UC, to establish a common set of objectives and strategies and a single IAP." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p. 160)

Unified Command (UC): "Unified Command (UC) is a recognition that the most effective response involves all parties working together to bring their respective expertise to the incident. UC uses a management structure to facilitate cooperation by all sectors with jurisdictional or functional responsibility for resolving the incident. They must work together to develop a common set of objectives and strategies, share information, maximize utilization of resources, and enhance efficiency of the individual response organizations. Joint unified command training should be provided to the public and private sectors. (Jones, *Critical Incident Protocol: A Public and Private Partnership*, 2000, p. 19)

Unified Command (UC): "A standard method to coordinate command of an incident where multiple agencies have jurisdiction." (**NFPA 1561**, 2002, p. 8)

Unified Command (UC): "As a term in the Federal application of the Incident Command System (ICS), defines agencies working together through their designated Incident Commanders at a single Incident Command Post (ICP) to establish a common set of objectives and strategies, and a single Incident Action Plan. This is NOT "unified command" as defined by the Department of Defense." (**US Army TRADOC**, 2007, p. 152)

Unified Command (UC): "An application of ICS used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the Unified Command to establish their designated Incident Commanders at a single ICP and to establish a common set of objectives and strategies and a single Incident Action Plan. This is accomplished without losing or abdicating authority, responsibility, or accountability." (**USCG**, *IM Handbook*, 2006, Glossary 25-25)

Unified Command Plan: "The document, approved by the President, that sets forth basic guidance to all unified combatant commanders; establishes their missions, responsibilities, and force structure; delineates the general geographic area of responsibility for geographic combatant commanders; and specifies function responsibilities for functional combatant commanders." (**DA**, *WMD-CST Operations*, December 2007, Glossary 18)

Unified Command Suite: "A vehicle which is highly mobile, self-contained, stand-alone C-130 air mobile communications platform intended to provide both voice and data communications capabilities to civil support team commanders." (**DA**, *WMD-CST Ops*, 2007, Glossary 18)

Unified Command System (UCS): "The UC involves a management structure to facilitate public and private teamwork to bring together expertise and resources for managing and resolving a critical incident. Involves joint consultation and decision making. (**Jones**, *Critical Incident Protocol*, 2000, 37)

Unified Coordination Group (UCG): Under the National Response Framework, "Using unified command principles, a *Unified Coordination Group* comprised of senior officials from the State and key Federal departments and agencies is established at the JFO. This group of senior officials provides the breadth of national support to achieve shared objectives." (**DHS**, *NRF Comment Draft*, September 2007, pp. 49-50)

"The Unified Coordination Group oversees the development of an exit strategy and demobilization plan. As the need for full-time interagency response coordination at the JFO wanes, the Unified Coordination Group plans for selective release of Federal resources, demobilization, transfer of responsibilities and closeout." (**DHS**, *NRF Comment Draft*, September 2007, p. 42) See, also, p. 68.

Unified Coordination Group (UCG): "…the *Framework* recognizes two senior leaders appointed by the Governor to work in coordination with the Federal JFO team."

- State Coordinating Officer (SCO)
- Governor's Authorized Representative. (**DHS**, *NRF*, 2008, p. 52)

Unified Coordination Group (UCG): "The term Unified Coordination Group replaces the term Joint Coordination Group described in the *NRP*. The JFO is led by the Unified Coordination Group, which is comprised of specified senior leaders representing State and Federal interests, and in certain circumstances tribal governments, local jurisdictions, the private sector, or NGOs." (**DHS**, *NRF FAQs*, Jan 2008, 6)

Unified Coordination Group (UCG): "The Unified Coordination Group leads the JFO. The Unified Coordination Group typically consists of the FCO, SCO, and senior officials from other entities with primary statutory or jurisdictional responsibility and significant operational responsibility for an aspect of an incident. This group may meet initially via conference calls to develop a common set of objectives and a unified action plan to meet them." (**DHS,** *National Response Framework: Stafford Act Support to States*, July 27, 2007, p. 1)

Unified Coordination Staff: "The JFO structure normally includes a Unified Coordination Staff. The Unified Coordination Group determines the extent of staffing based on the type and magnitude of the incident. (See the JFO Standard Operating Procedure for further details on these and other Federal staff positions supporting the field operation.) (**DHS**, *NRF Comment Draft*, September 2007, p. 66)

Unified Defense Exercise: In Jan. 2004, the men and women of USNORTHCOM supported interagency efforts to deter and defeat any possible threats against persons attending the Super Bowl. The following month, USNORTHCOM conducted Exercise Unified Defense 04. This major exercise allowed the USNORTHCOM, Fifth Army, Joint Task Force Alaska and associated units to practice the homeland defense and defense support to civil authorities missions. Unified Defense 04 involved the Department of Homeland Security and more than 50 federal, state and local organizations primarily in Texas, Alaska, Colorado, Virginia and the National Capital Region." (**USNORTHCOM**, *US Northern Command History*)

Unified Effort: "Unified Effort is the combination and integration of Federal, State, local, and tribal governments and organizations; the private sector; and international partners' operations and investments to plan, prepare, coordinate, execute, and assess those actions necessary to prevent, protect, respond, and recover from threats to the citizens, infrastructure and homeland of the United States." (**DHS**, Chapter 2, *Capstone Doctrine Pub 1 Draft*, 2008, 2)

Unified Effort: "On September 11th, 2001, moments after the Twin Towers fell, and the Pentagon burned, and the passengers of Flight 93 made their heroic goodbyes, we knew that another challenge was upon us, and that a unified effort was key to our security. And so, fear and frustration from that day turned quickly to resolve and resolve turned into action. The protection of our people became the highest charge of our Nation. We moved quickly to shore up vulnerabilities that were uncovered on that tragic day--and to prevent others from being uncovered in the future." (**DHS**, *Remarks…*[DHS Sec.] *Ridge at…Port of Portland*, 4May04)

Unified Incident Management: "*Unified Command:* Also referred to as Unified Incident Management. An application of ICS/IMS used when there is more than one agency with incident jurisdiction. Agencies work together through their designated Incident Commanders or Managers at a single location to establish a common set of objectives and strategies, and a single incident action plan." (**HHS**, *Medical Surge Capacity and Capability Handbook*, 2004, p. 2-12)

Unified Joint Command (UJC): "U.S. Central Command (CENTCOM) is a "unified joint command," which has developed from the concept of the Rapid Reaction Task Force initiated by President Ronald Reagan. Central Command is under the direct command of only three men: U.S. President George W. Bush, the Secretary of Defense Donald Rumsfeld, and General Tommy Franks." (2003)

Unified Joint Command (UJC): A construct for a multi-state response. "The chain of command changes…once the Joint Field Office stands up and a Unified Command is established with the state. It takes about three to five days from initial deployment to the establishment of a *fully operational Joint Field Office*. At this point, the Joint Field Offices are in charge of field operations for their respective states and report directly to the Unified Joint Command (UJC)…and the regions convert to a role of support and coordination.

"The UJC serves as a Multiagency Coordination (MAC) Group to support all JFOs conducting earthquake response and recovery operations. Under this architecture, a Joint Field Office (JFO) is established in each impacted state that receives a presidential disaster declaration. The UJC is established in one state, most likely the hardest hit. The UJC will provide direction and control for Federal operations for the entire affected area. Other characteristics:

- Each affected state will have a representative in the UJC.
- Resource allocation and adjudication for the incident is conducted at the UJC.
- All JFOs involved in the incident will report directly to the UJC.
- The UJC senior Federal official—most likely a Principal Federal Official—reports to the FEMA Administrator.

- Regions are responsible for financial management for their assigned states and, otherwise, have a supporting/coordination role. (**FEMA**, *Federal Interim Contingency Plan – Predecisional Draft: New Madrid Seismic Zone*, December 2007, p. 18)

Unit (ICS): "The organizational element having functional responsibility for a specific incident within Planning, Logistics, or Finance/Administration." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 59)

United Nations Department of Humanitarian Affairs: "The United Nations Department of Humanitarian Affairs, established with General Assembly resolution 46/182, was created to 'mobilize and coordinate the collective efforts of the international community, in particular those of the UN system, to meet in a coherent and timely manner the needs of those exposed to human suffering and material destruction in disasters and emergencies. This involves reducing vulnerability, promoting solutions to root causes and facilitating the smooth transition from relief to rehabilitation and development'." (**UN DHA**, 1996)

United Nations Development Programme, Bureau for Crisis Prevention and Recovery: "As mandated by the UN General Assembly, within its broad development mandate the United Nations Development Programme (UNDP) works in areas where natural disasters and violent conflicts undermine sustainable development. The Bureau for Crisis Prevention and Recovery (BCPR) supports efforts to reduce the impact of natural disasters, prevent armed conflicts, and assist in recovery from crises when they occur. BCPR is also responsible for consolidating UNDP's crisis prevention and recovery knowledge and experience, providing a bridge between humanitarian response and the development work of UNDP, and advocating for crisis sensitivity in the context of development policy. In 2001, UNDP's Executive Board strengthened the work of UNDP in crisis situations by creating the Bureau for Crisis Prevention and Recovery (BCPR). One of nine bureaux, BCPR serves as the practice leader for crisis prevention and recovery within UNDP. A repository for tools, methods, and experience, BCPR supports country offices and advises UNDP Senior Management on issues related to conflict prevention and recovery, natural disaster risk reduction and recovery, and cross-cutting issues, such as early recovery and gender equality." (**UNDP BCPR**, *UNDP BCPR Objective of BCPR*, October 15, 2007, p. 1)

United Nations Framework Convention on Climate Change (UNFCCC, 1994): "In 1994, 191 countries signed up to the *UNFCCC* agreeing to both consider what could be done to reduce global warming and to cope with whatever temperature increases are inevitable. The Convention notes that Parties should take what ever actions are necessary, i.e. funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing countries who will have to cope with the adverse effects of climate change especially countries with areas prone to natural disasters (article 4: Commitments, paragraph 8)." (**WWF**, *Natural Security*, 2008, 104)

United Nations International Strategy for Disaster Reduction (ISDR): "The ISDR aims at building disaster resilient communities by promoting increased awareness of the importance of disaster reduction as an integral component of sustainable development, with the goal of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters. Recognizing that natural hazards can threaten any one of us, the ISDR builds on partnerships and takes a global approach to disaster reduction,

seeking to involve every individual and every community towards the goals of reducing the loss of lives, the socio-economic setbacks and the environmental damages caused by natural hazards. In order to achieve these goals, the ISDR promotes four objectives as tools towards reaching disaster reduction for all:

Increase public awareness to understand risk, vulnerability and disaster reduction globally:
The more people, regional organizations, governments, non-governmental organizations, United Nations entities, representatives of civil society and others know about risk, vulnerability and how to manage the impacts of natural hazards, the more disaster reduction measures will be implemented in all sectors of society. Prevention begins with information.
Obtain commitment from public authorities to implement disaster reduction policies and actions:
The more decision-makers at all levels commit themselves to disaster reduction policies and actions, the sooner communities vulnerable to natural disasters will benefit from applied disaster reduction policies and actions. This requires, in part, a grassroots approach whereby communities at risk are fully informed and participate in risk management initiatives.
Stimulate interdisciplinary and intersectoral partnerships, including the expansion of risk reduction networks:
The more entities active in disaster reduction share information on their research and practices, the more useful the global body of knowledge and experience will progress. By sharing a common purpose and through collaborative efforts we can ensure a world that is more resilient to the impact of natural hazards.
Improve scientific knowledge about disaster reduction:
The more we know about the causes and consequences of natural hazards and related technological and environmental disasters on societies, the more we are able to be better prepared to reduce risks. Bringing the scientific community and policy makers together allows them to contribute to and complement each other's work." (**UNISDR**, *Mission, Objectives*, 2007)

UNISDR: United Nations International Strategy for Disaster Reduction.

UNISDR CADRI: United Nations International Strategy for Disaster Reduction, Capacity for Disaster Reduction Initiative.

United Nations Office for Coordination of Humanitarian Affairs: "In December 1991, the General Assembly adopted Resolution 46/182, designed to strengthen the United Nation's response to both complex emergencies and natural disasters. In addition it aimed at improving the overall effectiveness of the UN's humanitarian operations in the field. The resolution also created the high level position of Emergency Relief Coordinator (ERC). This new function would combine into a single UN focal point the functions carried out by representatives of the Secretary-General for major and complex emergencies, as well as the UN's natural disaster functions carried out by the UN Disaster Relief Coordinator, UNDRO. Soon after, the Secretary-General established the Department of Humanitarian Affairs (DHA) and assigned the ERC the status of Under-Secretary-General (USG) for Humanitarian Affairs with offices in New York and Geneva to provide institutional support. Resolution 46/182 also created the Inter-Agency Standing Committee (IASC), the Consolidated Appeals Process (CAP) and the Central Emergency Revolving Fund (CERF) as key coordination mechanisms and tools of the ERC.

As part of the Secretary-General's programme of reform in 1998, DHA was reorganized into the Office for the Coordination of Humanitarian Affairs, OCHA. Its mandate was expanded to include the coordination of humanitarian response, policy development and humanitarian advocacy. OCHA carries out its coordination function primarily through the Inter-Agency Standing Committee, which is chaired by the ERC. Participants include all humanitarian partners, from UN agencies, funds and programmes to the Red Cross Movement and NGOs. The IASC ensures inter-agency decision-making in response to complex emergencies. These responses include needs assessments, consolidated appeals, field coordination arrangements and the development of humanitarian policies." (**UN OCHA**, *A Brief History of OCHA*, 2007, p. 1)

United States Civil Defense Corps: "…civil defense responsibility is shared at the Federal, State, and local levels. The Congress provided a civil defense structure at each of these three levels of government, giving it the collective name of 'United States Civil Defense Corps'." (**FCDA,** *1953 Annual Report*, p. 23)

United States Computer Emergency Readiness Team (US-CERT) DHS. See Department of Homeland Security, US-CERT.

United States Department of Agriculture (USDA): "USDA serves as the primary support agency to DHS/FEMA for disaster relief and CM for firefighting and food. USDA manages and coordinates firefighting activities by providing personnel, equipment, and supplies in support of state and local agencies involved in firefighting operations. During major disasters and emergencies, USDA is responsible for identifying food assistance required, securing needed supplies, and arranging for the transportation of food assistance to affected areas requiring emergency rations." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. 2-21)

United States Fire Administration: "As an entity of the Department of Homeland Security's Federal Emergency Management Agency, the mission of the USFA is to reduce life and economic losses due to fire and related emergencies, through leadership, advocacy, coordination and support. We serve the Nation independently, in coordination with other Federal agencies, and in partnership with fire protection and emergency service communities. With a commitment to excellence, we provide public education, training, technology, and data initiatives." (**FEMA** *About the USFA*)

The U.S. Fire Administration (USFA) was created in 1974 in response to a bleak assessment of fire safety in the United States. The report detailed the loss of nearly 12,000 citizens and 250 firefighters to fires each year. Through firefighter training, public fire-safety education and research, the USFA cut fire-related deaths in half by 1998.

United States Intelligence Community: "A federation of executive branch agencies and organizations that work separately and together to conduct intelligence activities necessary for the conduct of foreign relations and the protection of the national security of the United States. The US Intelligence Community functions as a single corporate enterprise, supporting those who manage the nation's strategic interests – political, economic, and military. The US Intelligence Community is comprised of the following sixteen (16) entities:

- Central Intelligence Agency
- Federal Bureau of Investigation
- National Security Agency
- National Reconnaissance Office
- National Geospatial Intelligence Agency
- Department of State
- Department of Homeland Security
- Department of Energy
- Defense Intelligence Agency
- Army
- Air Force
- Navy
- Marines
- Coast Guard
- Department of Treasury
- Drug Enforcement Administration." (**FEMA**, *IIFOG Version 3 Draft*, Feb 2008, 41)

United States Northern Command. See USNORTHCOM.

Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (Patriot) Act of 2001.

Unity of Command: "The concept by which each person within an organization reports to one and only one designated person." (**Capital Health Region**, Edmonton Canada, *ICS Training SM*, 2007, 59)

Unity of Command: "Unity of command, by which we mean the direction of the efforts of all military forces by one government official, is a time-honored principle of military doctrine. However, no mechanism has been established to permit a governor to direct within his or her state the unified efforts of all military forces that are responding to domestic contingencies. In a catastrophe, this lack could lead to confusion, wasted efforts, and loss of life and property." (**Commission on the National Guard and Reserves**, *Transforming the National Guard and Reserves into a 21st Century Operational Force,* 31Jan08, p. 14)

Unity of Command: "Unity of command means that every individual has a designated supervisor to whom they report at the scene of the incident. These principles clarify reporting relationships and eliminate the confusion caused by multiple, conflicting directives. Incident managers at all levels must be able to control the actions of all personnel under their supervision." (**DHS**, *National Incident Management System*, 2004, p. 11)

Unity of Command: "Concepts of "command" and "unity of command" have distinct legal and cultural meanings for military forces and military operations. For Federal military forces, command runs from the President to the Secretary of Defense to the Commander of the combatant command to the DOD on-scene commander. Military forces will always remain under the operational and administrative control of the military chain of command, and these forces are subject to redirection or recall at any time. The ICS "unified command" concept is distinct from

the military chain of command use of this term. And, as such, military forces do not operate under the command of the Incident Commander or under the unified command structure." (**DHS**, *NRF*, Jan 2008, 11)

Unity of Command: "Each individual involved in incident operations will be assigned to only one supervisor." (**FEMA**, *National Incident Management System Draft*, August 2007. p. 160)

Unity of Effort: "Unity of effort requires that strategies, plans, operations, and future technologies be closely coordinated with partners. We must work as part of a unified interagency team to address threats and to support other agencies in complex interagency operations." (**Castle**, "Supporting Homeland Partners," *JFQ*, Issue 8, 1st Quarter 2008, p. 45)

Unity of Effort: "…respects the chain of command of each participating organization while harnessing seamless coordination across jurisdictions in support of common objectives." (**DHS**, *NRF Comment Draft*, September 2007, p.10)

Unity of Effort Through Unified Command – 4th of Five Key NRF Principles: "Effective *unified command* is indispensable to response activities and requires a clear understanding of the roles and responsibilities of each participating organization. Success requires *unity of effort,* which respects the chain of command of each participating organization while harnessing seamless coordination across jurisdictions in support of common objectives. Use of the Incident Command System (ICS) is an important element across multijurisdictional or multiagency incident management activities. It provides a structure to enable agencies with different legal, jurisdictional, and functional responsibilities to coordinate, plan, and interact effectively on scene. As a team effort, unified command allows all agencies with jurisdictional authority and/or functional responsibility for the incident to provide joint support through mutually developed incident objectives and strategies established at the command level. Each participating agency maintains its own authority, responsibility, and accountability. This *Framework* employs the *NIMS* standardized structures and tools that enable a unified approach to be effective both on scene and at the emergency operations centers." (**DHS**, *NRF*, Jan 2008, pp. 10-11)

Universal Adversary (UA): "The UA is a fictionalized adversary created by compiling known terrorist motivations, doctrine, tactics, techniques, and procedures (TTPs) in live, virtual, and constructive simulations. The UA is based on realistic threats, but it is designed not to compromise actual intelligence. The UA will be utilized for DHS-sponsored exercises, providing participants with a realistic, capabilities-based opponent. Prevention exercises will employ an adaptable, threat-based UA, in some cases represented by physical Red Teams or analytical opponents. The UA reflects real-world uncertainties and unpredictability, and evolving terrorist TTPs. The UA is currently broken into the following five threat groups currently faced by the U.S. within our borders:

> • **The Anti-Globalization Movement** is mostly non-violent, but some anarchist groups and more extreme activists have used violence. The national Memorial Institute for the Prevention of Terrorism (MIPT) has catalogued and attributed 70 terrorist events to Anti-Globalization groups from 1998 through 2004, none of which took place in the United States. The Anti-Globalization movement emerged throughout the 1990s and became a serious security threat, as tens of thousands of demonstrators protested Great Eight (G8)

Economic Summit in Cologne, the World Trade Organization (WTO) in Seattle, and the International Monetary Fund (IMF) / World Bank in Washington. Police were unprepared for the number of protesters, and unprepared for how well they were organized. While people demonstrated in the streets, companies were suffering thousands of cyberattacks. This mobilization, the sophistication of organization, and highly technical cyber skills overwhelmed law enforcement and security personnel.

• **Domestic Right Wing Extremism**, racist, white-power groups, along with militias, have grown in size and prominence throughout the United States. The number of groups is rising, but the top groups were in decline in 2004. MIPT attributes no terrorist events to Domestic Right Wing groups from 1998 through 2004. The violence perpetrated has been mostly criminal and harassment in nature – vandalism, propaganda fliers, and the occasional physical assault. These attacks are not carried out by groups, but by random individuals inspired by groups' rhetoric. The Southern Poverty Law Center's Intelligence Project counted 762 active hate groups and 152 active Patriot groups in 2004.

• **The Environmental / Animal Rights Movement** has emerged as a serious domestic terrorist threat. Various sources have catalogued and attributed 133 terrorist events to Environmental / Animal Rights groups from 1998 through mid-April 2005. Extremists target government agencies, private companies, academic research institutes, and the individuals associated with all three, in direct action to stop animal suffering,4 or to stop the exploitation and destruction of the natural environment.5 More recent attacks have targeted "sprawl."6 Two domestic Environmental / Animal Rights groups are designated as terrorist organizations. The Earth Liberation Front (ELF) and the Animal Liberation Front (ALF) are partner organizations in an increasingly violent Environmental / Animal Rights movement. Neither group has a central leader, central location, or a defined organization. There is no official membership. An individual is considered a member of ELF or ALF based on their belief in the central ideology and their actions.

- **The Global Salafist Jihad (GSJ) Movement** is the predominant threat to the United States. GSJ groups are nontraditional terrorist adversaries driven by a common idea and motivation. It is a movement in which al Qaeda ideologues like bin Laden, al-Zawahiri drive followers to pursue physical jihad. Various sources have catalogued and attributed 225 terrorist events to GSJ groups from 1998 through 2004. Bombings accounted for 141 of these attacks. The second and third most common tactics are Armed Attacks and Kidnappings. Bombings and explosions far outweigh other forms of GSJ groups' attacks, and are happening more frequently and in higher numbers. VBIEDs and IEDs were used in most bomb/explosives attacks.

• **The Lone Actor / Small Group** is a serious threat to United States countermeasures and intelligence capabilities. Acting alone defies infiltration, intervention, or intelligence collection. Various sources have catalogued and attributed 43 terrorist events to Lone Actors or Small Groups from 1998 through 2004. Biological Agents accounted for 14 of the 43 attacks. The second most common attacks are Bombings, accounting for nine attacks, and the third most common attacks are Armed Attacks, with seven." (**DHS**, *HSEEP*, Vol. V, 2005, pp. 11-12)

Universal Task List: "…a menu of some 1,600 unique tasks that can facilitate efforts to prevent, protect against, respond to and recover from the major events that are represented by the National Planning Scenarios. It presents a common vocabulary and identifies key tasks that support development of essential capabilities among organizations at all levels. Of course, no entity will perform every task. Instead, this task list was used to assist in creating the Target Capabilities List." (**DHS**, *NRF Comment Draft*, September 2007, p. 10)

Universal Task List: "The Universal Task List (UTL) is a list of every unique task that was identified from the suite of Common Scenarios developed under the leadership of the Homeland Security Council. The fifteen scenarios address a range of probable threats from terrorists, natural disasters and other emergencies." (**DHS**, *Universal Task List*, **July 2004** Draft, Cover)

Universal Task List: "The Universal Task List (UTL) is an important tool in the Capabilities-Based Planning process being implemented under Homeland Security Presidential Directive 8: National Preparedness by Office for Domestic Preparedness, U.S. Department of Homeland Security. Fifteen National Planning Scenarios (key risk scenarios), developed under the leadership of the Homeland Security Council, are being used as planning tools to define the nature and scope of incidents for which we must prepare. The scenarios were used to define the tasks that need to be performed at every level of government to prevent, respond to, and recover from large-scale incidents. Nationally representative teams identified tasks based on criticality. Most of the tasks identified through the scenario analysis are common across scenarios. All *unique* tasks have been combined into a menu called the UTL. It defines all the tasks that need to be performed by someone in response to an Incident of National Significance, but no single jurisdiction or agency would be expected to perform every task. Subsets of tasks are selected based on specific roles, missions and functions. They serve as the foundation for learning and exercise objectives, as well as for operational planning, evaluations and assessments of performance. The UTL will continue to be refined and expanded as additional activities are addressed, to include those performed by the private sector." (**DHS**, *UTL 2.0*, **Dec 2004**, p. iii)

Universal Task List: "The Universal Task List (UTL) defines what tasks need to be performed by Federal, State, local, and tribal jurisdictions and the private sector to prevent, protect against, respond to, and recover from events defined in the National Planning Scenarios. Version 2.1 identifies approximately 1,600 unique tasks. The UTL is the basis for defining the capabilities found in the Target Capabilities List (TCL) that are needed to perform the full range of tasks required to prevent, protect against, respond to, and recover from incidents of national significance. The fully developed UTL and TCL will provide officials at all levels with a framework for assessing their overall level of preparedness, while targeting resources to address their greatest needs." (**DHS**, *TCL*, **2005** (Version 2.1), p. 2)

Universal Task List: "The Universal Task List (UTL) helps us answer the question: What do we need to do to prevent, protect against, respond to, and recover from threats? The UTL

- Identifies tasks that must be performed
- Defines task interdependence and interrelationship
- Does NOT address how or who performs task

- Provides common language and reference
- Approximately 4,800 tasks." (**FEMA**, *National Preparedness System: Current Prototype & Proposed Implementation Approach*, August 2, 2007, slide 8)

Universal Task List. Common Tasks: "Common tasks are those tasks that cut across the mission areas. They must be performed to achieve more than one or all of the missions. For example, the common tasks include broad planning, coordination, training, and communication tasks…. The common tasks have been grouped into the following functions:

A) Preparedness
B) Resource Management
C) Communications and Information Management
D) Supporting technology" (**DHS**, *UTL 2.1*, 2005, p. 7)

University Affiliate Centers to the Institute for Discrete Sciences (IDS-UACs): A Department of Homeland Security funded Center of Excellence "led by Rutgers University, the University of Southern California, the University of Illinois at Urbana-Champaign, and the University of Pittsburgh. They collaborate with IDS, based at Lawrence Livermore National Laboratory, to conduct research on advanced methods for information analysis and the development of computational technologies to protect the Nation." (**DHS**, *Homeland Security Centers of Excellence*, 20March07)

UNOCHA: United Nations Office for the Coordination of Humanitarian Affairs

Unsolicited Donated Goods: "…the spontaneous outpouring of donated things from individual Americans seeking to respond to media reports of a disaster…. In this guide, we use the term "material donation" to refer to donations of "things," as opposed to cash. Material donations, sometimes referred to as "Gifts In Kind," could consist of any new or used item that is donated to a relief effort." (**InterAction**, *Guide to Appropriate Giving*, 2002)

Urban Analysis Program, FCDA: "To develop effective local operational plans for civil defense in the event of enemy attack, FCDA, prior to the advent of the survival plan studies, provided guidance and encouraged important target areas to make thorough analyses of items such as the most probable target areas, probable damage and casualties, population distribution, industrial installations, communications, transportation systems, evacuation routes, power and water facilities, medical resources, hospitals, schools, jails, zoons, fire-fighting plans, potential assembly areas, feeding and welfare facilities, topography, prevailing winds, possible shelters, and many other items….A total of 46 areas has undertaken such analyses." (**FCDA**, *1956 Annual Report*, 1957, pp. 27-28)

Urban Area Security Initiative (UASI): "In July 2002 the President approved the *National Strategy for Homeland Security*, a road map for the national effort to prevent and respond to acts of terrorism in the United States. The *National Strategy* recognizes the vital role of state and local public safety agencies in providing for the security of our homeland. In February 2003 the President signed into law the Fiscal Year (FY) 2003 Omnibus Appropriations Act which

provides state and local governments with the vital funding they require to participate in the national effort to combat terrorism.

'The U.S. Department of Homeland Security (DHS), Office for Domestic Preparedness (ODP) FY 2003 Urban Areas Security Initiative (UASI) reflects a confluence of important Presidential initiatives designed to enhance the preparedness of the nation to combat terrorism. Whereas most states and municipalities have strengthened their overall capability to respond to acts of terrorism involving chemical, biological, radiological, nuclear or explosive (CBRNE) weapons, there continues to be room for improvement in meeting our national priorities of preventing and responding to terrorist attacks.

"The Office for Domestic Preparedness is providing financial assistance directly to selected jurisdictions through the Fiscal Year (FY) 2003 Urban Areas Security Initiative. This financial assistance is being provided to address the unique equipment, training, planning and exercise needs of large high threat urban areas, and to assist them in building an enhanced and sustainable capacity to prevent, respond to, and recover from threats or acts of terrorism." (**DHS** (DHS Secretary Tom Ridge Forward to FY 2003 UASI Grant Application)

"UASI funding remains primarily focused on enhancing capabilities to address CBRNE, agriculture, and cyber-terrorism incidents; however, in support of national ongoing preparedness initiatives addressing such issues as pandemic influenza and the aftermath of Hurricane Katrina, the allowable scope of UASI Program activities was expanded in FY 2006 to include Catastrophic events, provided that these activities also build capabilities that relate to terrorism. Program Participants may use UASI funding to achieve or enhance all of the 37 target capabilities, as long as they enhance the capability to prevent, protect against, respond to, or recover from acts of terrorism. UASI Program award amounts are determined based on a risk- and effectiveness-based approach. The grant guidance suggests that Urban Areas take an inclusive regional approach and involve contiguous jurisdictions, mutual aid partners, port authorities, rail and transit authorities, State agencies, Citizen Corps Council(s), and Metropolitan Medical Response System(s) (MMRS) in their program activities. Each State develops an Investment Justification detailing the projects they wish to use UASI Program funding to implement. Proposed Investments under the UASI Program should focus on the National Priorities and the most urgent State/local priorities. The UASI Program…has…grown to include 58 urban areas." (**DHS**, *UASI Fact Sheet*, June 2006 Revision, p. 1)

Urban Area Security Initiative (UASI) Grants: "The Urban Area Security Initiative (UASI) addresses the unique multi-disciplinary planning, operations, equipment, training, and exercise needs of high-threat, high-density urban areas, and assists them in building and sustaining capabilities to prevent, protect against, respond to, and recover from threats or acts of terrorism. This program provides funding to high-risk urban areas based on risk and effectiveness. In FY 2008, program participants may use UASI funding to achieve or enhance all of the 37 capabilities outlined in National Preparedness Guidelines and Target Capabilities List, as long as they enhance the capability to prevent, protect against, respond to, or recover from acts of terrorism. Proposed Investments under the UASI program should focus on the National

Priorities and the most urgent state/local priorities." (**FEMA**, *Statement of R. David Paulison, Administrator, on the Fiscal Year 2009 President's Budget Before the Committee on Appropriations Subcommittee on Homeland Security, House of Representatives*, 11Mar08, p. 4)

Urban Area Working Group (UAWG). The UAWG acts "as an executive steering committee to provide overall governance of the homeland security program across the regional area encompassed within the defined urban area. Responsibilities of the UAWG include coordinating development and implementation of all program initiatives (including development of the Urban Area Homeland Security Strategy, investment identification and justification, funding allocation methodologies, in cooperation with the SSA, and any direct services that are delivered by G&T). The UAWG is also responsible for ensuring that all programmatic requirements associated with participation in the UASI Program are fulfilled." (**DHS**, *UASI Fact Sheet*, June 2006, p. 2)

Urban Areas: "…the term "urban areas" refers to the 55 Fiscal Year 2005 Urban Areas Security Initiative program grantees and the 20 major cities selected for the Nationwide Plan Review by DHS based on an analysis of 2004 population, risk, and need." (**DHS**, *NPR Phase 2 Report*, 2006, p. vii)

Urban Areas Security Initiative (UASI): See Urban Area Security Initiative.

Urban Search and Rescue (US&R): "Urban search-and-rescue (US&R) involves the location, rescue (extrication), and initial medical stabilization of victims trapped in confined spaces. Structural collapse is most often the cause of victims being trapped, but victims may also be trapped in transportation accidents, mines and collapsed trenches." (**FEMA**, *Urban Search-and-Rescue (US&R)*, February 28, 2007 update)

Urban Search and Rescue Response System (US&R) Operational Readiness Evaluations: "In order to ensure the efficiency and operational readiness of each task force, FEMA has developed an Operational Readiness Evaluation Process. This program provides for a thorough on-site inspection of all task force components to determine the general readiness of the task force to respond and operate on the scene of a disaster. The objectives of the process include:

- Provide a uniform method to determine the current operational readiness levels of all task forces participating in the National US&R Response System.
- Identify major strengths and shortfalls in the current and planned system of task force development.
- Develop a fair and objective process that can be conducted by local program management, State officials, FEMA, and sponsoring organizations to determine readiness levels.
- Provide feedback to the respective task force regarding the strengths and weaknesses for inclusion into a plan of action for further development and improvement.

"Periodically, a cadre of peer evaluators from other task forces will make an on-site visit to each task force's sponsoring agency. The cadre will compare team equipment with the approved cache list, as well as review legal agreements, administrative documentation, financial records, personnel qualifications, and task force training records. The results of the evaluation are submitted to FEMA Headquarters as part of the task force's permanent record and used to

determine if the task force is operationally certified for a mission assignment." (FEMA, *Urban Search and Rescue Response System In Federal Disaster Operations* (Draft) January 2000)

Urban Search and Rescue (US&R) Task Forces: "The National US&R Response System is a framework for structuring local emergency services personnel into integrated disaster response task forces. The 28 National US&R Task Forces, complete with the necessary tools, equipment, skills and techniques, can be deployed by DHS/FEMA to assist State and local governments in rescuing victims of structural collapse incidents or to assist in other search and rescue missions. Each task force must have all its personnel and equipment at the embarkation point within 6 hours of activation. A task force can be dispatched and en route to its destination in a matter of hours." (**DHS**, *NRF -- Federal Partner Guide* (Comment Draft). September 10, 2007, p. 9)

Urban/Wildland Interface: "A developed area, also known as the "I-zone," occupying the boundary between an urban or settled area and a wildland characterized by vegetation that can serve as fuel for a forest fire." (**APA**, *Planning For A Disaster*…, 2005, p. 85)

URMIA: University Risk Management and Insurance Association.

U.S. Commission on National Security/21st Century (Hart-Rudman Commission): "The "Hart-Rudman Commission was chartered to review U.S. national security requirements for the next century. The Commission's Report, published in September 1999, warned that, in the course of the next quarter century, terrorist acts involving weapons of mass destruction were likely to increase. 'Americans will likely die on American soil, possibly in large numbers,' it said." (**NAPA**, *Addressing the 2009 Presidential Transition at…DHS*, May 2008 Agency Review Draft, p. 9)

USA Patriot Act of 2001, 24 October 2001. "This act enhances domestic security against terrorism. It eases some of the restrictions on foreign intelligence gathering within the US and affords the US intelligence community greater access to information discovered during a criminal investigation." (**JCS/DoD**, *Homeland Security* (JP 3-26), 2005, p. A-4)

USACE: United States Army Corps of Engineers.

USAID OFDA: U.S. Agency for International Development, Office of Foreign Disaster Assistance.

USAonWatch: Incorporated terrorism awareness education into its existing crime prevention mission on Neighborhood watch. (**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*. DHS, slide presentation, slide 6)

USAR: United States Army Reserves. (**DA**, *WMD-CST Operations*, Dec. 2007, Glossary-7)

USAR: Urban Search and Rescue. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 634)

US-CERT: United States Computer Emergency Readiness Team. (**DHS,** *NIPP*, 2006, p. 102)

US-CERT Operations (United States Computer Emergency Readiness Team): "US-CERT is responsible for analyzing and reducing cyber threats and vulnerabilities, disseminating cyber threat warning information, and coordinating incident response activities." (**DHS**, *National Cyber Security Division*, 23Sep06 modification)

USCG: United States Coast Guard. See Department of Homeland Security, USCG.

USDOJ: United States Department of Justice.

US&R: Urban Search and Rescue.

USFA: United States Fire Administration, FEMA/DHS, Emmitsburg, MD.

USFS: U.S. Forest Service.

USG: United States Government.

USGS: United States Geological Survey.

USMTF: U.S. Message Text Format. (**DA**, *WMD-CST Operations*, Dec.2007, Glossary-7)

USNORTHCOM (United States Northern Command): "U.S. Northern Command (USNORTHCOM) was established Oct. 1, 2002 to provide command and control of Department of Defense (DoD) homeland defense efforts and to coordinate defense support of civil authorities. USNORTHCOM defends America's homeland — protecting our people, national power, and freedom of action…. USNORTHCOM's AOR includes air, land and sea approaches and encompasses the continental United States, Alaska, Canada, Mexico and the surrounding water out to approximately 500 nautical miles. It also includes the Gulf of Mexico and the Straits of Florida. The defense of Hawaii and our territories and possessions in the Pacific is the responsibility of U.S. Pacific Command. The defense of Puerto Rico and the U.S. Virgin Islands is the responsibility of U.S. Southern Command. The commander of USNORTHCOM is responsible for theater security cooperation with Canada and Mexico. USNORTHCOM consolidates under a single unified command existing missions that were previously executed by other DoD organizations. This provides unity of command, which is critical to mission accomplishment. USNORTHCOM plans, organizes and executes homeland defense and civil support missions, but has few permanently assigned forces. The command is assigned forces whenever necessary to execute missions, as ordered by the president and secretary of defense. Civil service employees and uniformed members representing all service branches work at USNORTHCOM's headquarters located at Peterson Air Force Base in Colorado Springs, Colo. The commander of USNORTHCOM also commands the North American Aerospace Defense Command (NORAD), a bi-national command responsible for aerospace warning and aerospace control for Canada, Alaska and the continental United States.

"USNORTHCOM's civil support mission includes domestic disaster relief operations that occur during fires, hurricanes, floods and earthquakes. Support also includes counter-drug operations and managing the consequences of a terrorist event employing a weapon of mass destruction.

The command provides assistance to a Lead Agency when tasked by DoD. Per the Posse Comitatus Act, military forces can provide civil support, but cannot become directly involved in law enforcement. In providing civil support, USNORTHCOM generally operates through established Joint Task Forces subordinate to the command. An emergency must exceed the capabilities of local, state and federal agencies before USNORTHCOM becomes involved. In most cases, support will be limited, localized and specific. When the scope of the disaster is reduced to the point that the Lead Agency can again assume full control and management without military assistance, USNORTHCOM will exit, leaving the on-scene experts to finish the job." (**USNORTHCOM**, *About USNORTHCOM*)

USNORTHCOM Command Assessment Element (CAE): "rapidly deployable, tailored package that gives the NORTHCOM Commander operational and tactical level awareness of the operating environment and assessments of needs. The CAE gathers information, develops situational awareness, and conducts assessments with State and local officials." (FEMA, *Statement of Glen Cannon*, November 15, 2007, p. 11)

USNORTHCOM Mission Statement: "Conduct operations to deter, prevent, and defeat threats and aggression aimed at the United States, its territories, and interests within the assigned area of responsibility; and as directed by the President or Secretary of Defense, provide defense support of civil authorities including consequence management operations." (**Keating**, *CDRNORAD-CDRUSNORTHCOM Strategic Guidance*, November 1, 2006, p. 2)

USNORTHCOM Strategic Goals and Objectives:

"Goal *1*: Detect, deter, prevent, and defeat external threats and aggression….
Goal 2: Provide timely and effective defense support of civil authorities….

- Objective 2.1 – Anticipate requests for civil support
- Objective 2.2 – Provide military capabilities at the right place and right time
- Objective 2.3 – Maintain flexible, executable, rapidly adaptable, and regularly-exercised plans
- Objective 2.4 – Support efforts to improve capabilities of mission partners
- Objective 2.5 – Enhance interoperability and information sharing with mission partners

Goal 3: Improve unity of effort with our interagency and international partners…." (**Keating**, *CDRNORAD-CDRUSNORTHCOM Strategic Guidance*, November 1, 2006, pp. 6-8)

USNORTHCOM Supporting and Support Relationship with State Governments: "I want to spend a moment talking about that supporting and supported relationship.

"One of the other elements of our mission at USNORTHCOM is a state engagement program. We feel it is very important to spend a lot of time out on the road…preaching the gospel…of USNORTHCOM's role in our nation's defense, in support of civil authorities, and to support elements of homeland security.

"Our goal is to get to every governor and every state adjutant general and every emergency management director… the message is we are here to support the needs of the Nation; we are here to support the requirements of a state when they're in trouble, when a disaster strikes or

when they have a unique security event occurring….our role is to create those capacities ahead of time so that when a state has a need, they don't have to decide that they're in trouble and then make a call and go through the administrative process and then, a week later, the support shows up. If you look at how we prepared for Hurricane Dean just a few weeks ago when we thought a Category Five hurricane was going to hit Harlingen, Texas, we had people in place well before the event occurred, well before it turned south and began its movement towards Mexico. And they were there to prepare medical evacuation capabilities so that critical care patients could be moved out of the Harlingen and Brownsville area of Texas….so we worked very carefully with our FEMA region partners, our Defense Coordinating Officer, and the state of Texas to ensure that we knew what their needs were and that we went and found those capabilities…. So it's that kind of day-to-day interaction that we've been communicating to the governors, to the adjutants general, and to the emergency management directors of all the states.

"We're there to help them succeed. We're not there to be in charge. We're there to ensure that the Title 10 forces that come are professionally trained, equipped, disciplined, and supportive. We've done a supporting/supported relationship in our military for many years. We understand how to do that. I understand that the governor leads the effort in their state. If the people of a particular state elected a governor and then felt that that governor couldn't take care of them when disaster struck, it's a bad message. Our job is to make sure the state succeeds….And we're prepared and leaning forward to do that. I have an execute order that is signed for the hurricane season that gives me access to about 9,000 military, both in terms of assessors, responders, security forces, logistics capability, rotary-wing lift, and the like, that I can begin to move before an event even occurs. So that's authority that Tim Keating didn't have as we got to Katrina. And certainly it's that authority that we need to consider expanding as we look to the future. So that mission of engagement with the states is critical, and we continue to work on that very, very hard." (**USNORTHCOM,** *Remarks by General Gene Renuart Homeland Defense Symposium, Colorado Springs, 3 Oct 07*)

USNORTHCOM Vision: "United States Northern Command defends America's homeland—protecting our people, national power, and freedom of action." (**Keating**, *CDRNORAD-CDRUSNORTHCOM Strategic Guidance*, November 1, 2006, p. 3)

USPHS: U.S. Public Health Service. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 634)

USPP: United States Park Police.

USTRANSCOM: US Transportation Command. (**DA**, *WMD-CST Operations*, 2007, Glossary-7)

UTC: Universal Time Coordinated. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 634)

UTL: Universal Task List. (**DHS**, *NIPP*, 2006, p. 102)

UTMOST ENDEAVOR: Unclassified code word for WMD-CST deployment and execution order. (**Dept. of the Army**, *WMD-CST Operations*, December 2007, p. 8-2)

VA: Vulnerability Assessment. (**DHS/OIG**, *Water CI/TK SSP Report*, May 2007, p. iii)

Values: "In managing the evolving requirements of preparing and securing the State of California from terrorist acts and natural disasters, OHS embraces the following values in order to accomplish its mission:

- Leadership
- Accountability
- Fairness
- Effective Partnerships
- Customer Focus
- Resourcefulness
- Teamwork
- Integrity (**CA Gov. OHS**, *State of California Homeland Security Strategy 2008*, May 2008, 2)

VDCC: Volunteer and Donation Coordination Center. (**DHS**, *TCL*, 2007, p. 248)

Vector-Borne Diseases: "Diseases spread by vectors, such as insects. Examples include the West Nile virus, Rocky Mountain spotted fever, and malaria." (**TFAH**, *Ready or Not?* 2007, 11)

Vector Control: "Measures taken to decrease the number of disease carrying organisms (vectors) and to diminish the risk of their spreading infectious diseases." (**UNDHA**, *DM Glossary*, 1992, 76)

Venue: "A venue is the primary location of exercise conduct. In *operations-based* exercises, this is typically the facility or site the *scenario* will affect. For example, if a non-persistent chemical agent (e.g., Sarin) is selected as the threat/hazard, the venue should not be an open-air facility (e.g., stadium, park) because of the agent's dissipating characteristics. (Note: The venue used to conduct the exercise does not necessarily have to be the same venue described in the exercise scenario. For example, a stadium parking lot may be used to simulate an airport runway)." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

VEOC: Virtual Emergency Operations Center.

VERT: Veternairy Emergency Response Team. (Valerie Lucus, July 14, 2008 Email)

Vertical Datum: "A vertical datum is a base measurement point (or set of points) from which all elevations are determined. Without a common datum, surveyors would calculate different elevation values for the same location. Historically, that common set of points has been the National Geodetic Vertical Datum of 1929 (NGVD29). However, as a result of advances in technology, an updated vertical datum was created and has been officially adopted by the Federal Government as a new basis for measuring heights: the North American Vertical Datum of 1988 (NAVD88). (**FEMA**, *Vertical Datum: New Mapping Studies Convert…,* July 2007)

VHF: Very High Frequency radios. (**USACE**, Response Planning Guide, 1995, p. 4-1.

Vigilant Guard: "…the Vigilant Guard Regional Exercise Program…is designed by the National Guard Bureau to train and enhance the preparedness of our state level Joint Force Headquarters and Joint Task Forces in their mission to support civilian authorities. Each Vigilant Guard exercise is designed to involve multiple States – ideally all of the States in a FEMA region. Beginning with an August 2005 exercise in Ohio, at FEMA Region 5, we have conducted seven (7) exercises thus far…. These exercises have grown from command post exercises concentrating on the Guard information management tasks to robust State and local full scale play." (**NGB**, *Statement by Major General Steven Saunders,* October 3, 2007, p. 2)

Vigilant Sentry: "Recognizing the threat and national impacts of a mass migration from the Caribbean to the U.S., DHS Secretary Tom Ridge established Homeland Security Task Force Southeast to bring the resources, skills and capabilities of all the involved agencies under one umbrella organization to develop the contingency response plan, Operation Vigilant Sentry. Once completed, this single plan would replace about a half-dozen independent plans in existence. This unification measure launched an intense and unprecedented planning process that involved people from throughout DHS and other impacted federal agencies, including the Departments of State, Defense and Justice." (**US Coast Guard Magazine**, "Operation Able Sentry," June 2004, p. 26)

Vigilant Shield Exercises: "VIGILANT SHIELD 2008 is a Chairman of the Joint Chiefs of Staff-designated, North American Aerospace Defense Command (NORAD) and U.S. Northern Command (USNORTHCOM) sponsored, and U.S. Joint Forces Command-supported Department of Defense exercise for homeland defense and defense support of civil authorities missions. Exercise VIGILANT SHIELD 2008 will be conducted concurrent with TOP OFFICIALS 4 (TOPOFF 4), the nation's premier exercise of terrorism preparedness sponsored by the Department of Homeland Security, and several other linked exercises as part of the National Level Exercise 1-08. *Purpose:* Exercise VIGILANT SHIELD 2008 and National Level Exercise 1-08 will provide local, state, tribal, interagency, Department of Defense, and nongovernmental organizations and agencies involved in homeland security and homeland defense the opportunity to participate in a full range of exercise scenarios that will better prepare participants to prevent and respond to national crises. The participating organizations will conduct a multilayered, civilian-led response to a national crisis." (**US NORTHCOM**, *Fact Sheet – Exercise Vigilant Shield 2008*, 2007)

VIPS: Volunteers in Police Service (**Citizen Corps**, *Citizen Corps Uniting Communities, Preparing the Nation*. DHS, slide presentation, slide 6)

Virtual Emergency Operation Centers (VEOCs): "A 'Virtual Emergency Operations Center' (VEOC) is an EOC that exists solely or partially in cyberspace. A VEOC provides an electronic EOC via a computer network or the Internet. It can consist of anywhere from one workstation to thousands of networked computers dispersed throughout the enterprise and around the globe. The first versions of VEOCs were simple information systems based on fixed and mobile wireless networks. Modern VEOCs utilize the latest Internet technology as well as Virtual Private Networks, and satellite communications." (**Davis Logic**, *VEOCs*, 2005)

Virtual Joint Information Center (JIC): A virtual JIC is established when a physical co-location is not feasible. It connects PIOs through e-mail, cell/land-line phones, faxes, video teleconferencing, web-based information systems, etc. For a pandemic incident where PIOs at different locations communicate and coordinate public information electronically, it may be appropriate to establish a virtual JIC. (**FEMA**, *Basic Guidance for PIOs*, Nov 2007, 16)

Vision: "An idealized statement of the best possible future." (**FEMA** *A Nation Prepared* 2002, 60)

Vision Statement: "To develop a society more resilient to natural disasters, where sustained planning, investment and action results in more sustainable communities." (**Canadian Risk and Hazards Network** 2005, 11)

Visualization: "Visualization refers to techniques that allow data to be understood by seeing patterns that are detected by statistical methods, such as pattern recognition methods, and/or simply understood by seeing how geospatial relationships look on a map [or video]." (**Altevogt**, *Research Priorities in Emergency Preparedness and Response for Public Health Sys.* 2008, 19)

Vital Records: "Electronic and hardcopy documents, references, and records that are needed to support essential functions during a continuity situation. The two basic categories of vital records are (1) emergency operating records and (2) rights and interests records." (**DHS**, *FCD 1*, Nov. 2007, P-9)

Vital Records Categories: "Categories of vital records include the following;

Emergency Operating Records. These include records and databases essential to the continued functioning or the reconstitution of an agency during and after a continuity event. Examples of these records are emergency plans and directives, orders of succession, delegations of authority, staffing assignments, and related policy or procedural records. These records provide an agency's continuity personnel with the guidance they need to conduct operations during a continuity situation and to resume normal operations at the conclusion of that situation. Agencies must identify and preposition Emergency Operating Records needed to continue essential functions.

Rights and Interests Records. These include records critical to carrying out an agency's essential legal and financial functions, and vital to the protection of the legal and financial rights of individuals who are directly affected by that agency's activities. These records include those with such value that their loss would significantly impair the execution of essential agency functions, to the detriment of the legal or financial rights and entitlements of the agency and the affected individual(s). Examples of these records are accounts receivable files; contracting and acquisition files; official personnel records; Social Security, payroll, retirement, and insurance records; and property management and inventory records. Any Rights and Interests Records considered critical for continued performance of essential functions should be included in the Emergency Operating Records and maintained at the appropriate alternate continuity facility." (**DHS**, *FCD 1*, Nov. 2007, p. I-1)

VMAT: Veterinary Medical Assistance Team. (**HSGAC**, A *Nation Still Unprepared*, 2006, 634)

VOAD: Voluntary Organizations Active in Disaster. (**HSGAC**, *Nation Unprepared*, 2006, 634)

VOIP: Voice Over Internet Protocol.

Volcanic Eruption: "The discharge (aerially explosive) of fragmentary ejecta, lava and gases from a volcanic vent." (**UNDHA**, *DM Glossary*, 1992, 76)

Volcano: "A volcano is a vent through which molten rock escapes to the earth's surface. When pressure from gases within the molten rock becomes too great, an eruption occurs. Eruptions can be quiet or explosive. There may be lava flows, flattened landscapes, poisonous gases, flying rock and ash, or landslides and mudflows. Because of their intense heat, lava flows are great fire hazards. Lava flows destroy everything in their path, but most move slowly enough that people can move out of the way. Fresh volcanic ash, made of pulverized rock, can be abrasive, acidic, gritty, gassy, and odorous. While not immediately dangerous to most adults, the acidic gas and ash can cause lung damage to small infants, to older adults, and to those suffering from severe respiratory illnesses. Volcanic ash also can damage machinery, including engines and electrical equipment. Ash accumulations mixed with water become heavy and can collapse roofs." (**FEMA**, "Fact Sheet – Volcanoes," June 2007, p.1)

Volcanic Dust: Dust of particles emitted by a volcano during an eruption. They may remain suspended in the atmosphere for long periods and be carried by the winds to different regions of the Earth. (**WMO** 1992, 662)

Voluntary Agencies: "Non-governmental agencies or organizations that exist in many countries throughout the world. Some possess personnel trained to assist when disaster strikes. Some volags have capabilities that extend from the local to national and international levels." (**UNDHA**, *DM Glossary*, 1992, 77)

Voluntary Agency Coordinator: "A designated individual who shares information with voluntary agencies about Federal and State activities, and assembles reports on voluntary Federal agency activities, during a major disaster or emergency. Each FEMA Region has a designated voluntary Federal agency coordinator." (**FEMA**, *Mission Assignment SOPs Draft*, 2007, p. 61)

Voluntary Evacuation: "This is a warning to persons within a designated area that a threat to life and property exists or is likely to exist in the immediate future. Individuals issued this type of warning or order are NOT required to evacuate, however it would be to their advantage to do so." (**FEMA**, *Guide For All-Hazard Emergency Operations Planning* (State and Local Guide (SLG) 101), September 1996, GLO-6)

Voluntary Organization: "Any charted or otherwise duly recognized tax-exempt local, State, or national organization or group which has provided or may provide needed services to the State, local governments, or individuals in coping with an emergency or a major disaster." (**FEMA**, *Mission Assignment SOPs Operating Draft*, July 2007, p. 61)

Voluntary Organizations Active in Disaster (VOAD): "An umbrella organization of voluntary agencies, organized at the State level, whose representatives meet to prepare for disasters. During the response phase of disaster operations, each individual VOAD Federal agency functions independently." (**FEMA**, *Mission Assignment SOPs Draft*, July 2007, p. 62)

Volunteer: "Any individual accepted to perform services by an agency, which has authority to accept volunteer services when the individual performs services without promise, expectation, or receipt of compensation for services performed." (**DHS**, *National Preparedness Goal*, December 2005 Draft, p. A-4; cites, *NIMS*, March 2004)

Volunteer: "For purposes of NIMS, a volunteer is any individual accepted to perform services by the lead agency (which has authority to accept volunteer services) when the individual performs services without promise, expectation, or receipt of compensation for services performed. See 16 U.S.C. 742f(c) and 29 CFR 553.101." (**FEMA**, *NIMS Draft*, Aug 2007, 160)

Volunteer Services: "There are statutory exceptions to the general statutory prohibition against accepting voluntary services under 31 U.S.C. 1342 that can be used to accept the assistance of volunteer workers. Such services may be accepted in "emergencies involving the safety of human life or the protection of property." Additionally, provisions of the Stafford Act, 42 U.S.C. 5152(a), 5170a(2), authorize the President to use the personnel of private disaster relief organizations and to coordinate their activities." (**DHS**, *NRP* (Draft #1), Feb 25, 2004, p. 71)

Volunteers (Affiliated): "*Affiliated volunteers* are attached to a recognized voluntary or nonprofit organization and are trained for specific disaster response activities. Their relationship with the organization precedes the immediate disaster, and they are invited by that organization to become involved in a particular aspect of emergency management." (**Points of Light Foundation**, ~2003, p. 5)

Volunteers (Convergent): "A volunteer is *someone who willingly offers his/her services without expectation of financial compensation.* Volunteers that spontaneously offer their help in the wake of a disaster are known as *convergent volunteers.*" (**CA Governor's OES**, *They Will Come*, 2001, p. 3)

Volunteers (Spontaneous): "…spontaneous volunteers, are individuals who offer to help or self-deploy to assist in emergency situations without fully coordinating their activities. They are considered "unaffiliated" in that they are not part of a disaster relief organization. Although unaffiliated volunteers can be significant resources, because they do not have preestablished relationships with emergency response organizations, verifying their training or credentials and matching them with the appropriate service areas can be difficult." **DHS**, *Overview: ESF and Support Annexes…NRF*. September 2007, p. 59.)

Volunteers (Unaffiliated): "*Unaffiliated volunteers* are not part of a recognized voluntary agency and often have no formal training in emergency response. They are not officially invited to become involved but are motivated by a sudden desire to help others in times of trouble. They come with a variety of skills. They may come from within the affected area or from outside the area. (Also known as: "convergent," "emergent," "walk-in," or "spontaneous.")" (**Points of Light Foundation**, ~2003, p. 5)

VRPPs Vulnerability Reduction Purchasing Plans, DHS. (**DHS**, *Fiscal Year 2008 Buffer Zone Protection Program Guidance and Application Kit*, February 2008, pp. 10-11)

VTC: Video Teleconference. (**HSGAC**, *Hurricane Katrina:* A *Nation Still Unprepared*, 2006, 634)

Vulnerable Populations and Emergency Preparedness: "In emergency preparedness "at-risk individuals," "vulnerable populations," and "special needs populations" are terms often used interchangeably to characterize groups whose needs are not fully addressed by traditional health and social service providers. They include people with physical and intellectual disabilities, limited or non-English speakers, persons who are geographically or culturally isolated, substance abusers and addicts, people who live in poverty or rely on public assistance, people without private transportation or who rely on public transportation, the homeless, the elderly and children." (**Trust for America's Health**, *Ready or Not? 2007*, p. 79)

Vulnerable Populations Collaboration Group (CDC):

Vulnerability: "People and things are vulnerable to natural hazards, in that they are susceptible to damage and losses. In this respect, vulnerability determines the losses [to disaster] to a greater degree than does hazard." (**Alexander**, No Date, 1)

Vulnerability: "Often misunderstood, vulnerability is not synonymous with ethnicity or race, but rather it varies as a function of attributes such as age (young and old), literacy, language, functional health/disability status, isolation, culture, and social networks." (**Altevogt**, *Research Priorities in Emergency Preparedness and Response for Public Health Systems*, Jan 2008, 15)

Vulnerability: "…the characteristics of a person or group in terms of their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard. It involves a combination of factors that determine the degree to which someone's life and livelihood is put at risk by a discrete and identifiable event in nature or in society." (**Blaikie** et al., 9)

Vulnerability: The likelihood that a person will be negatively affected by environmental hazards refers to his or her *vulnerability* (**Bolin/Stanford** 1998, 9).

Vulnerability: A measure of the extent to which a potential event is likely to deplete or damage available resources such that the reestablishment of usual living conditions cannot be achieved within a reasonable period. In this sense vulnerability may be measured as a ratio of damaged to undamaged resources. (**Buckle** 1995, 11)

> "Buckle (1995, 11) adds the concept of resilience to the definition of vulnerability. He identifies potential social, economic, and environmental effects and introduces the notion that vulnerability is associated with an ability to recover (which is not always apparent in other definitions…" (**Pearce** 2000, Chapter 2, 23)

Vulnerability: "…A measure of the degree and type of exposure to risk generated by different societies in relation to hazards (**Cannon** 1994, 16)."

> Vulnerability is a characteristic of individuals and groups of people who inhabit a given natural, social and economic space, within which they are differentiated according to their varying position in society into more or less vulnerable individuals and groups. It is a complex characteristic produced by a combination of factors derived especially (but not entirely) from class, gender and ethnicity. Differences in these socio-economic factors result in hazards having a different degree of impact. (**Cannon** 1994, 19)

Vulnerability: "1. The susceptibility of a nation or military force to any action by any means through which its war potential or combat effectiveness may be reduced or its will to fight diminished. 2. The characteristics of a system that cause it to suffer a definite degradation (incapability to perform the designated mission) as a result of having been subjected to a certain level of effects in an unnatural (manmade) hostile environment. 3. In information operations, a weakness in information system security design, procedures, implementation, or internal controls that could be exploited to gain unauthorized access to information or an information system." (**D**A, *WMD-CST Operations*, December 2007, Glossary 18-19)

Vulnerability: *Vulnerability* is the susceptibility of human settlements to the harmful impacts of natural hazards. Impacts of concern include injuries and deaths to human populations; damage to personal property, housing, public facilities, equipment, and infrastructure; lost jobs, business earnings, and tax revenues, as well as indirect losses caused by interruption of business and production; and the public costs of planning, preparedness, mitigation, response, and recovery. (**Deyle** et al. 1998, 121)

Vulnerability: 1) undefended against, open to attack, disease and hazards 2) degree of potential loss of people and goods from a damaging phenomenon. Vulnerability to hazards is the cause of disasters. (**D&E Reference Center** 1998)

Vulnerability: "Definition: weakness, condition or quality of being open to exploitation, or exposed to natural or man-made threats, harm or attack. Extended definition: considered weaknesses of design, location, security posture, operation, or any combination thereof, that render an asset susceptible to disruption, destruction, or exploitation. Annotation: Vulnerability can occur in building characteristics, equipment properties, personnel behavior, locations of people/equipment/buildings, and/or operational and personnel practices. Example: Protecting America's critical infrastructure and key resources will not only make the United States more secure from terrorist attack, it will also reduce its vulnerability to natural disasters, organized crime, and computer hackers." (**DHS**, *Lexicon*, October 13, 2007, p. 27)

Vulnerability: "A weakness in the design, implementation, or operation of an asset, system, or network that can be exploited by an adversary, or disrupted by a natural hazard or technological failure." (**DHS,** *National Infrastructure Protection Plan*, 2006, p. 105)

Vulnerability: "…determinations of vulnerability are important since they include not only exposure and sensitivity, but resilience." (**DHS**, *Target Capabilities List*, 2007, p. 13)

Vulnerability: "Risk is derived from a factual event or condition and the probability of its occurrence multiplied by the consequences it produces. Vulnerability more often involves a combination of factors that make up a system. Infrastructure systems such as power supply or telecommunications or even all of the infrastructures making up a society as a whole can be analyzed for their vulnerability. Vulnerability is a measure of how well a system can cope with or sustain a risk." (**Dymon** 2005, 8)

Vulnerability: The vulnerability concept is used to characterize a system's lack of robustness or resilience with respect to various threats, both within and outside the boundaries of the system….the term vulnerability…describe[s] the properties of an industrial system that may weaken its ability to survive and perform its mission in the presence of threats….The properties of an industrial system; its premises, facilities, and production equipment, including its human resources, human organization and all its software, hardware, and net-ware, that may weaken or limit its ability to endure threats and survive accidental events that originate both within and outside the system boundaries. (**Enarson** and Rausand 1998, 535-36)

Vulnerability: "Vulnerability (or Risk) – The degree to which people, property, the environment, or social and economic activity – in short, all elements at risk – are susceptible to injury, damage, disruption, or loss." (**FEMA**, *Hazards Analysis for Emergency Mgmt.,* 1983, 5)

Vulnerability: "Any weakness that can be exploited by an aggressor or, in a non-terrorist threat environment, make an asset susceptible to hazard damage." (**FEMA** (BDHS), **2004**)

Vulnerability: "[The] susceptibility to injury or damage from hazards." (**Godschalk** 1991, 132)

Vulnerability: "The degree of loss to a given element at risk, or set of such elements resulting from the occurrence of a natural phenomenon of a given magnitude and expressed in a scale from 0 (= no damage) to 1 (= total loss) – UNDRO." (**Gunn** 1990, 374)

Vulnerability: "Vulnerability has been variously defined as the threat of exposure, the capacity to suffer harm, and the degree to which different social groups are at risk (Cutter 1996)….Perhaps equally important is the notion that vulnerability varies by location (or space) and over time – it has both temporal and spatial dimensions….There are many types of vulnerability of interest to the hazards community, but three are the most important: individual, social, and biophysical. Individual vulnerability is the susceptibility of a person or structure to potential harm from hazards….social vulnerability…describes the demographic characteristics of social groups that make them more or less susceptible to the adverse impacts of hazards. Social vulnerability suggests that people have created their own vulnerability, largely through their own decisions and actions….Biophysical vulnerability…examines the distribution of hazardous conditions arising from a variety of initiating events such as natural hazards…chemical contaminants, or industrial accidents." (**Hill and Cutter** 2001, 14-15)

Vulnerability: "Vulnerability is a set of prevailing or consequential conditions composed of physical, socioeconomic and/or political factors that adversely affect ability to respond to events. Vulnerabilities can be physical, social, or attitudinal and can be primary or secondary in nature. Strategies that lower vulnerability also reduce disaster risk." (**Jegillos** 1999, 12)

Vulnerability: "…defined as the difference between response capacity and service demand." (**Johnson** 2004, 12)

Vulnerability: "Evaluation made on the extent or frequency of exposure to an identified risk. May be classified as Highly Vulnerable, Vulnerable, or Not Vulnerable. Establishes significance of risks and the potential impact to the ongoing business functions. Important factor to be considered in establishing priorities in mitigation activities." (**Jones**, *Critical Incident Protocol*, 2000, 37)

Vulnerability: "Risk…should not be confused with vulnerability, which refers to the resources and coping abilities of a specific community to a specific hazard…Vulnerability is a reflection of the community's coping resources and may vary within the smaller social and economic groups which form a large community." (**Lindsay** 1993, 68)

Vulnerability: Vulnerability of any physical, structural or socioeconomic element to a natural hazard is its probability of being damaged, destroyed or lost. Vulnerability is not static but must be considered a dynamic process, integrating changes and developments that alter and affect the probability of loss and damage of all the exposed elements. (**Maskrey** 1989, 1)

Vulnerability: "Vulnerability is defined as the susceptibility of life, property, or the environment to damage if a hazard occurs." (**May**, p. 6)

Vulnerability: "For some, particularly natural and physical scientists, vulnerability is defined as proximity or exposure to natural hazards or the probability of a disastrous occurrence (including the potential for losses owing to triggering agents) (see Reynolds 1993).[123] Engineers, in contrast, define vulnerability as the ability of a built structure to resist the strain or force exerted by natural or other disaster agents (Norton and Chantry 1993).[124] Sociologists, anthropologists and other social scientists define vulnerability as the amount of coping capacity, or the degree to which social, cultural, political and economic factors limit the ability to take steps to mitigate, prepare for, respond to, or recover from disaster (see Blaikie and others 1994; Sinha 1992a[125]; Pelanda 1982[126])." (**McEntire** 1999, 5)

Vulnerability: "…vulnerability is the reactive or dependent component of disaster which is comprised of both the negative and positive attributes from the physical and social environments that increase risk and susceptibility and/or limit resistance and resilience to triggering events…" (**McEntire** 1999, 5)

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[123] Referenced is a chapter in *Natural Disasters: Protecting Vulnerable Communities*, edited by P.A. Merriman and C.W. Browitts (London: Thomas Telford, 1993).
[124] Referenced is chapter by Norton and Chantry in *Natural Disasters: Protecting Vulnerable Communities*, edited by P.A. Merriman and C.W. Browitts (London: Thomas Telford, 1993).
[125] Sinha, D.K. Ed. 1992. Natural Disaster Reduction to the Nineties: Perspectives, Aspects and Strategies. Calcutta: International Journal Servicies.
[126] Pelanda, Carlo. 1982. "Disastro e vulnerabilita sociosistemica." *Rassegna Italian di Sociologia* 22:507-532.

Vulnerability: "…the potential for loss or the capacity to suffer harm from a hazard…can generally be applied to individuals, society, or the environment" (**Mitchell** 1997, 10).

Vulnerability: "The susceptibility of people, property, industry, resources, ecosystems, or historical buildings and artifacts to the negative impact of a disaster." (**Pearce** 2000, Chapter 5, p. 37). Is "a function of people, place, preparedness, and time…" (Ibid., p. 44)

Vulnerability: "Vulnerability can be defined as the propensity to incur loss." (**Puente** 1999, 296)

Vulnerability: The degree of susceptibility and resilience of the community and environment to hazards, the characteristics of a community or system in terms of its capacity to anticipate, cope with, and recover from events. (**Salter** 1997–98, 28)

Vulnerability: The extent to which a community, structure, service, or geographic area is likely to be damaged or disrupted by the impact of a particular disaster hazard, on account of their nature, construction, and proximity to hazardous terrain or a disaster-prone area. For engineering purposes, vulnerability is a mathematical function defined as the degree of loss to a given element at risk, or set of such elements, expected to result from the impact of a disaster hazard of a given magnitude. It is specific to a particular type of structure, and expressed on a scale of 0 (no damage) to 1 (total damage). For more general socio-economic purposes and macro-level analyses, vulnerability is a less-strictly-defined concept. It incorporates considerations of both the intrinsic value of the elements concerned and their functional value in contributing to communal well-being in general and to emergency response and post-disaster recovery in particular. In many cases, it is necessary (and sufficient) to settle for a qualitative classification in terms of "high", "medium", and "low"; or explicit statements concerning the disruption likely to be suffered. (**Simeon Institute**)

Vulnerability: "Degree of loss (from 0% to 100%) resulting from a potentially damaging phenomenon." (**UNDHA,** *DM Glossary*, 1992, 77)

Vulnerability: Ability to withstand damage – expressed on a scale of 0 (no damage) to 10 (total damage). (**UNDRO** 1991)

Vulnerability: "Vulnerability represents the interface between exposure to the physical threats to human well-being and the capacity of people and communities to cope with those threats. Threats may arise from a combination of social and physical processes." (**UNEP**, *GEO-3: Global Environment Outlook*, Chapter 3, Human Vulnerability to Environmental Change, p. 302)

Vulnerability: "Vulnerability to disasters is a status resulting from human action. It describes the degree to which a society is either threatened by or protected from the impact of natural hazards. This depends on the condition of human settlements and their infrastructure, the way in which public policy and administration are engaged in disaster management, the level of information and education about hazards and how to deal with them." (**UN ISDR** 2001)

Vulnerability: "A set of conditions and processes resulting from physical, social, economical and environmental factors, which increase the susceptibility of a community to the impact of hazards." (**UN ISDR** 2002, 24)

Vulnerability: "Vulnerability is…the most elusive component of the hazard-vulnerability-coping capacity-risk (losses)-recovery cycle. It needs to be defined as *"vulnerability of what", "vulnerability to what"* at *"what scale"* to mention but the most important aspects." (**Villagran**. (UNU-EHS), *Vulnerability: A Conceptual and Methodological Review*, 2006, p. 5)

Vulnerability (Homeland Security): "Homeland security involves a systematic, comprehensive, and strategic effort to reduce America's vulnerability to terrorist attack. We must recognize that as a vibrant and prosperous free society, we present an ever-evolving, ever-changing target. As we shore up our defenses in one area, the terrorists may exploit vulnerabilities in others. The *National Strategy for Homeland Security*, therefore, outlines a way for the government to work with the private sector to identify and protect our critical infrastructure and key assets, detect terrorist threats, and augment our defenses." (**White House**, *National Strategy for HS*, 2002, 2)

Vulnerability (Infrastructure): "The characteristics of an installation, system, asset, application, or its dependencies that could cause it to suffer a degradation or loss (incapacity to perform its designated function) as a result of having been subjected to a certain level of threat or hazard." (**DoD**, *Defense Critical Infrastructure Program (DCIP)*, August, 2005, p. 14)

Vulnerability and Consequences (DHS Model Used in Determining Relative Terrorism Risk Scores): "Vulnerability and Consequences accounted for 80 percent of the total risk score and were represented by the following four indices:

- Population Index (40 percent): This variable included nighttime population and military dependant populations for states and urban areas, based upon U.S. Census Bureau and Department of Defense inputs. In addition, for urban areas, population density, commuters, and visitors were also factored into this variable, using data from private entities.

- Economic Index (20 percent): This variable considered the economic value of the goods and services produced in either a state or an urban area. For states, this index was calculated using U.S. Department of Commerce data on their percentage contribution to Gross Domestic Product. For UASI urban areas, a parallel calculation of Gross Metropolitan Product was incorporated.

- National Infrastructure Index (15 percent): This variable focused on over 2,000 Tier I and Tier II critical infrastructure/key resource assets that were identified by DHS's Office of Infrastructure Protection. Tier I assets or systems are those that if attacked could trigger major national or regional impacts similar to those experienced during Hurricane Katrina or 9/11. Tier II assets are other highly consequential assets with potential national or regional impacts if attacked.

- National Security Index (5 percent): This variable considered the presence of three key national security factors: whether military bases are present in the state or urban area; how many critical defense industrial base facilities are located in the state or urban area; and the total number of people traversing international borders. Information on these inputs comes from the Department of Defense and DHS." (**GAO**, *Homeland Security*: *DHS Improved its Risk-Based Grant Programs' Allocation and Management Methods, But Measuring Programs' Impact on National Capabilities Remains a Challenge*, 11 March 2008, p. 10)

Vulnerability Analysis: Identifies what is susceptible to damage. Should provide information on extent of the vulnerable zone; population, in terms of size and types that could be expected to be within the vulnerable zone; private and public property that may be damaged, including essential support systems and transportation corridors; and environment that may be affected.

Vulnerability Analysis: "The objectives of a vulnerability analysis of an industrial system may comprise:

- To identify potential threats to the system
- To verify that the vulnerability of the system is acceptable
- To verify that the system's security actions and installations, and safety functions are adequate
- To evaluate the cost-effectiveness of a proposed action to improve the vulnerability
- To aid in establishing an emergency preparedness plan
- As a design tool—to design a robust system

"In a vulnerability analysis we work with open system models, where risk factors both inside and outside the physical boundaries of the system are taken into account. A vulnerability analysis and a risk analysis of the same company will therefore produce quite different sets of accidental events….

"A traditional risk analysis is mainly limited to accidental events taking place within the physical boundaries of the system, and the threats studied are often limited to technological hazards within these boundaries….The actions to mitigate, restore and restart the activities after an accident are normally not part of a risk analysis….A vulnerability analysis focuses on the whole disruption period until a new stable situation is obtained….The focal point of a vulnerability analysis is the (business) survivability of the system." (**Einarsson and Raussand** 1998)

Vulnerability Analysis: The process of estimating the vulnerability to potential disaster hazards of specified elements at risk. For engineering purposes, vulnerability analysis involves the analysis of theoretical and empirical data concerning the effects of particular phenomena on particular types of structures. For more general socio-economic purposes, it involves consideration of all significant elements in society, including physical, social and economic considerations (both short and long-term), and the extent to which essential services (and traditional and local coping mechanisms) are able to continue functioning. (**Simeon Institute** 1998)

Vulnerability Analysis: "Vulnerability Analysis is a systematic investigation of the characteristics of a person or group and their situation that influence their capacity to anticipate,

cope with, resist and recover from the impact of natural hazard." (**ProVention Consortium**, *CRA Toolkit: Glossary of Terms*, 2006)

Vulnerabilities Analysis Matrix: "A practical and diagnostic tool in the form of a simple matrix which measures vulnerabilities and capacities in three broad and interrelated areas (i.e., physical/material, social/organizational, and motivational/attitudinal) Other factors are added to the matrix to reflect a complex reality such as disaggregation by gender or economic factors, changes over time, different scales etc.). The benefits of the matrix are that it is practical and broad-based, linking the many different aspects of vulnerabilities and capacities. Limitations to the approach include that on its own the matrix does not provide indicators of vulnerabilities and capacities but only an overarching framework, and that applied alone, it tends to underestimate the significance of natural hazards by concentrating on human aspects of disaster." (**UNDAP**, *Techniques Used in Disaster Risk Assessment*, 2008)

Vulnerability Assessment: Evaluation of the likely degree of loss to a risk or a set of hazards. (**D&E Reference Center** 1998)

Vulnerability Assessment: …characterizes the exposed populations and property and the extent of injury and damage that may result from a natural hazard event of a given intensity in a given area. (**Deyle**, French, Olshansky and Paterson 1998, 121).

Vulnerability Assessment: Vulnerability assessment, the second level of hazard assessment, combines the information from the hazard identification with an inventory of the existing (or planned) property and population exposed to a hazard. It provides information on who and what are vulnerable to a natural hazard within the geographic areas defined by hazard identification; vulnerability assessment can also estimate damage and casualties that will result from various intensities of the hazard." (**Deyle** et al. 1998, 129)

Vulnerability Assessment: "Definition: Determine the exposure, weaknesses, and/or susceptibility to attack of assets and systems. A vulnerability assessment is a systematic process to measure the susceptibility of a sector, segment, region, or individual site to attack. Through a vulnerability assessment, areas of weakness and potential actions that would exploit those weaknesses are identified, and the effectiveness of additional security measures is assessed." (**DHS**, *Universal Task List Version 2.1*, 2005, p. 42)

Vulnerability Assessment: A vulnerability assessment presents "the extent of injury and damage that may result from a hazard event of a given intensity in a given area. The vulnerability assessment should address impacts of hazard events on the existing and future built environment." (**FEMA** 2001 (August), 7)

Vulnerability Assessment: Vulnerability assessment estimates the number of people exposed to hazards (including special populations such as the elderly, hospitalized, disabled, and concentrated populations such as children in schools), the property exposed, and the critical facilities exposed (such as medical care facilities, bridges, sewage treatment and water pumping and treatment plants, power plants, and police and fire stations. (**Godschalk**, Kaiser, and Berke 1998, 98-99.)

Vulnerability Assessment: "Vulnerability assessments include risk/hazard information, but also detail the potential population at risk, the number of structures that might be impacted, or the lifelines, such as bridges or power lines (Platt 1995), that might be damaged. Vulnerability assessments describe the potential exposure of people and the built environment. The concept of vulnerability incorporates the notion of differential susceptibility and differential impacts." (**Hill and Cutter**, 2001, 16)

Vulnerability Assessment: "Some emergency managers include geophysical and topographical factors in the vulnerability assessment process, while others include them in the risk assessment process. For example, Picket and Block (1991, 278-79), following the work of Terrence Haney, discuss the development of an earthquake hazard vulnerability model that utilizes data from five key areas: (1) geophysical, (2) topographical, (3) transportation and utility infrastructure, (4) structural facilities (buildings and bridges), and (5) demographic factors. Pearce et al. (1993, 4) argue that the consideration of geophysical and topographical factors belongs in the risk assessment process. For example, an analysis that concludes that the existence of a fault-line increases the likelihood of an earthquake occurring is part of risk assessment; however, the proximity of the community to the fault-line may increase or decrease the vulnerability of the population. Related to this argument is Anderson's (1992) suggestion that emergency planners should give special consideration to the growing vulnerability of metropolitan areas. Anderson makes an important point, as often the consequences of disasters in metropolitan areas are related to how geographic and topographic information has been considered. If, for example, such information is perceived to be part of risk assessment, then proximity to a fault-line would lead to mitigation measures that could address the need to reduce risk by zoning against construction near the line, expropriating existing properties, and so on. If, on the other hand, such information is perceived to be part of vulnerability assessment, then the issue becomes not one of reducing the likelihood of experiencing an earthquake but of how to decrease one's vulnerability by residing in an earthquake-resistant building, improving the infrastructure, or whatever." (**Pearce** 2000, Chapter 2, 24-25)

Vulnerability Mapping: "Vulnerability mapping involves mapping geographical areas, resources and people or households in vulnerable areas likely to be impacted/affected by hazards." (ProVention Consortium, CRA Toolkit: Glossary of Terms, 2006)

Vulnerability Reduction Purchasing Plan: "A VRPP — or Vulnerability Reduction Purchasing Plan — is an itemized list of the specific equipment that the responsible jurisdiction proposes to procure to mitigate the vulnerabilities identified in the BZPP for a given site. The VRPP must include the appropriate AEL number of the equipment to be procured, the proposed vendor, quantity, unit price, and shipping and handling/delivery costs. All items found in the VRPP must be identified in Section 8.4 of the BZPP; however, Section 8.4 may include additional recommended equipment purchases that will not be funded by DHS under the BZPP Program. Both the state and the responsible jurisdiction must sign off on the VRPP before it is sent to DHS, which has final approval over all equipment purchases." (**DHS**, *BZPP Update*…, March, 1, 2005 Draft, p. 7)

Vulnerability Trends: "Our global environment is changing rapidly, and many of those changes increase our exposure and render us more vulnerable to risks and hazards. These trends also place

greater demands on Federal, State and local authorities to be prepared and capable of managing emergencies resulting from hazards of all kinds.

- Our population is growing…
- We depend more every day on complex and interdependent systems…
- The pace of events around us is accelerating…
- There is a growing public reliance on government for crisis support…
- There is a growing need to effectively and efficiently use public resources…
- Global political conditions remain unstable – while the risks of global war have diminished, the number of regional and local political disputes has grown. Proliferation of conventional, nuclear, chemical, and biological weapons technologies and sophisticated delivery systems increase the potential for attack from a variety of sources. These risks make it prudent for us to maintain our preparedness to meet attack emergencies of all kinds. These factors make up the complex environment of any emergency that a jurisdiction may experience. They put a high premium on all-hazard preparedness and the ability to deal with the consequences of emergencies regardless of their cause. They also raise the prospect of severe consequences for failure to be ready when the next emergency occurs. They place new emphasis on the ability of government response capabilities to survive and perform in any emergency. They are key reasons for the high priority FEMA places on achieving nationwide Survivable Crisis Management." (**FEMA**, *An Introduction to Survivable Crisis Management*, 1992, 10)

Vulnerability Assessment (Infrastructure): "A systematic examination of the characteristics of an installation, system, asset, application, or its dependencies to identify vulnerabilities." (DoD, Defense Critical Infrastructure Program, August 2005, p. 14)

Wait-And-See Principle: "A reactive method of dealing with the environment that places the burden of proof on those who would conserve. (Opposite: the precautionary principle)." (**European Environment** Agency, EEA *Environmental Glossary*; cites: European Community Biodiversity Clearing-House Mechanism. Glossary of terms related to the CBD)

War on Terrorism: "The War on Terrorism is a national response to high-profile violence conducted by small but potent movements of violent extremists seeking to destabilize and disempower national governments. Their targets are nations whose policies and presence in Islamic countries prevents the realization of their vision of a global 'virtual Caliphate' of Islamic governments in predominantly Muslim countries around the world. Other non-state organizations using terrorism or organized political violence for local or global ends that are inimical to U.S. national interests adds to the challenge." (Department of State. *Counterinsurgency in the 21st Century--Creating a National Framework*, Bureau of Political-Military Affairs, Sep 11, 2006)

Warden Service: "Now to show you how we control our people, I have prepared some charts to show you the control we have set up over people. It is known as the 'warden service'. It is a very simple service and it is a service where the operators stay at home. …The basis of our warden service is on the multiples of 10 – 10 beats to a post, 10 posts to a district, and as many districts as you need in a zone. The chief warden is at the control center with a sone warden at each of the zone control centers, a warden headquarters for each district, and a small headquarters for each post…. The warden should be someone who lives on that beat and who is highly respected, whose people have confidence in him. There are many things he should de

prebomb. He should make a map of his beat. He should know exactly where the houses are. He should know where the fire hydrants are. He should know if trees are apt to blow over and block a street. He should know if there are any people seriously ill so if he has to evacuatge the area they can be moved. He shoule know where the shelter is for each one of theese houses because if it is an area of heavy desteruction, that information is most important…. He must know aht the condtions are in each area as to first aid; how many people in the area have had first aid training and know what to do…." (**Huebner**, *Civil Defense*, 1953, p. 28)

Warm Site: "An alternate facility that is equipped with some hardware, and communications interfaces, electrical and environmental conditioning which is capable of providing backup after additional provisioning, software or customization is performed." (**DHS**, *FCD 1*, 2007, P-10)

Warm Zone (HazMat): "Area between Hot and Cold zones where personnel and equipment decontamination and hot zone support take place. It includes control points for the access corridor and thus assists in reducing the spread of contamination. Also referred to as the contamination reduction corridor (CRC), contamination reduction zone (CRZ), yellow zone or limited access zone in other documents. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472)." (**DOT**, *Emergency Response Guidebook*, 2004, p. 365)

Warming: "The term 'warning' refers to any text, voice, video, or other information provided by an authorized official to provide direction to the public and/or private sector about an ongoing emergency situation that requires immediate actions to protect life, health, and property. A warning requires immediate actions to protect life, health, and property and is typically issued when there is a confirmed threat posing an immediate danger to the public." (**DHS**, *TCL*, 2007, p. 421)

WARN: Web Alert Relay Network (**FEMA**, *IPAWS System Enhancements*, Sep 12, 2007)

Warning: A warning is issued by the National Weather Service to let people know; that a severe weather event is already occurring or is imminent. People should take immediate safety action. (**Simeon Institute** 1992)

Warning: Dissemination of message signaling imminent hazard which may include advice on protective measures. See also "alert". (**UN**, *Internationally Agreed Glossary of Basic Terms Related to Disaster Management*, 1992, p. 77)

Warning Time Assessment, 1953: "It is assumed that civil defense officials will receive some warning of an impending air attack. Although complete surprise is possible, it is assumed that approximately 15 minutes warning can now be given to the public….Surprise is most likely to be achieved in an attack by guided missiles launched from submarines" (**FCDA,** *1953 Annual Report*, 11)

Warnings: "A warning prompts people to take immediate actions that save lives, reduce injuries and protect property. Natural and manmade hazards create disasters when they kill and injure people, destroy and damage property, and cause further economic and emotional problems by instilling a sense of unease and uncertainty into society. Such losses can and have been reduced

when people receive an alert of what is likely to happen soon, or notification of what is happening and advice about what to do in response to the hazard. With such knowledge, people can take appropriate action to get out of harms way, to reduce losses, to reduce uncertainty, and to speed recovery. Thus a warning must provide the information and motivation for people to take informed action." (**PPW**, *Protecting America's Communities,* 2004, p. 3)

WARNOs: Warning Orders. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, p. 4-7)

Washington (DC) Area Warning System (WAWAS):

- Owned/operated by FEMA; delegated operations to DC government
- Connects 119+ Federal, State & local agencies in the National Capital Region. (**FEMA**, *IPAWS Update*, 2007, slide 19)

Washington Metropolitan Area Warning System (WAWAS): "The Washington Area Warning System (WAWAS), is a portion of the NAWAS, but is not tied directly to the NAWAS. It is operated and maintained by the FEMA Operations Center. While the NAWAS is Nationwide, the WAWAS is dedicated to the Washington, DC, metropolitan area. On a day-to-day basis, the DC Office of Emergency Management manages the WAWAS due to the amount of local information disseminated across the system. OPM uses the WAWAS to pass duty information to the various Federal departments and agencies located in the Washington, DC, area in the event of bad weather or other business affecting government operations." (**HSC**, *NCPIP*, 67)

Watch: A watch is issued by the National Weather Service to let people know that conditions are right for a potential disaster to occur. It does not mean that an event will necessarily occur. People should listen to their radio or TV to keep informed about changing weather conditions. A watch is issued for specific geographic areas, such as counties, for phenomena such as hurricanes, tornadoes, floods, flash floods, severe thunderstorms, and winter storms. (**Simeon Institute** 1992)

Water Resources Development Act of 2007: Public Law 110-114**.** Authorizes the National Levee Safety Program. (**Hecker and Bronowicz**, *The National Levee Safety Program*, *12*Dec07)

Water Sector, National Infrastructure Protection Program: "There are approximately 160,000 public drinking water utilities and more than 16,000 wastewater utilities in the United States. About 84 percent of the U.S. population receives its potable water from these drinking water utilities and more than 75 percent has its sanitary sewage treated by these wastewater utilities. The drinking water and wastewater sector (Water Sector) is vulnerable to a variety of attacks, including contamination with deadly agents and physical and cyber attacks. If these attacks were to occur, the result could be large numbers of illnesses or casualties or denial of service that would also affect public health and economic vitality. Critical services such as firefighting and health care (hospitals), and other dependent and interdependent sectors such as energy, transportation, and food and agriculture, would suffer negative impacts from a denial of Water Sector service." (**DHS &** EPA, *Water Critical Infrastructure and Key Resources Sector Specific Plan as input to the National Infrastructure Protection Plan*, May 2007)

Watershed: "Watershed means an area of any size that drains into a lake, stream, or other body of water; also known as "basin" or "catchment area." (FEMA, *Reducing Damage from Localized Flooding – A Guide for Communities*, 2005, viii)

Watershed: "All land within the confines of a drainage divide. This is also called a "catchment" or "drainage basin". All surface water has a common outlet." (**UNDHA**, *DM Glossary*, 1992, 78)

Watershed Management: "The implementation of a plan or plans for managing the quality and flow of water within a watershed, the naturally defined area within which water flows into a particular lake or river or its tributary. The aims of watershed management are holistic and concern the maintenance of water quality, the minimization of storm water runoff, the preservation of natural flood controls such as wetlands and pervious surface, and the preservation of natural drainage patterns. Watershed management is, in many ways, an enlargement of most of the concerns that underlie floodplain management." (**APA**, 2005, p. 85)

WAWAS: Washington Area Warning System. (**FEMA**, *IPAWS Update*, 2007, slide 19)

Weapon Of Mass Destruction (WMD): "As defined in Title 18, U.S.C. § 2332a: (1) any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than 4 ounces, or missile having an explosive or incendiary charge of more than one-quarter ounce, or mine or similar device; (2) any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals or their precursors; (3) any weapon involving a disease organism; or (4) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life." (**USCG**, *IM Handbook*, 2006, Glossary 25-26)

Weapons of Mass Destruction (WMDs): "Weapons that are capable of killing a lot of people and/or causing a high-order magnitude of destruction, or weapons that are capable of being used in such a way as to cause mass casualties or create large-scale destruction. WMDs are generally considered to be nuclear, biological, chemical, and radiological devices, but WMDs can also be high-explosive devices." (**DHS**, *FCD 1*, Nov. 2007, P-10)

Weapons of Mass Destruction (WMD): "(1) Any explosive, incendiary, or poison gas (i) bomb, (ii) grenade, (iii) rocket having a propellant charge of more than 4 ounces, (iv) missile having an explosive or incendiary charge of more than one-quarter ounce, or (v) mine or (vi) similar device; (2) any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals or their precursors; (3) any weapon involving a disease organism; or (4) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life (18 U.S.C. 2332a)." (**DHS,** *NIPP*, 2006, p. 105)

Weapons of Mass Destruction (WMD): "The atomic bomb and chemical warfare are weapons of mass destruction most efficiently used on large targets, such as our standard metropolitan areas, with their high concentrations of population and industry. Biological warfare can be efficiently used against both urban and rural areas and populations." (**FCDA**, *1953 Annual Report*, 10)

Weapons of Mass Destruction (WMD): "Any weapon or device that is intended, or has the capability, to cause death or serious bodily injury to a significant number of people through the release, dissemination, or impact of toxic or poisonous chemicals or their precursors, a disease organism, or radiation or radioactivity." (**FEMA**, *Devolution of Operations Plan Template*)

Weapons of Mass Destruction: "Any destructive device that is intended or capable of causing death or serious injury to a large number of people through the release, dissemination, or impact of toxic or poisonous chemicals or their precursors, disease-causing organisms, radiation or radioactivity or conventional explosives sufficient for widespread lethality. (**Jones**, *Critical Incident Protocol*, 2000, 37)

Weapons of Mass Destruction vs. Agents of Mass Injury: "Chemical, biological, and radiological agents should not be regarded as weapons of mass destruction, but potential agents of mass injury. In this respect, they differ completely from nuclear weapons. The link between injury caused by CBR agents and loss of life can be broken or mitigated by the provision of equipment, organization and training for emergency responders." (World Association for Disaster and Emergency Medicine. "The Provision of Care for Victims of Chemical, Biological, Radiological, and Nuclear Releases…," Jan-Feb 2008, pp. 95-96)

Weapons of Mass Destruction Civil Support Team (WMD-CST): "The WMD-CSTs are NG units designed to provide a specialized capability to respond to a CBRNE incident primarily in a *Title 32 USC* operational status within the United States and its territories as established by *Title 10 USC*. Responding under the authority of the governor, they provide significant capabilities to assist local and state agencies that may be overwhelmed by an intentional or unintentional release of CBRNE or natural or man-made disasters. The WMD-CSTs also have the capability to provide support for smaller-scale incidents where specific technical capabilities are required. The WMD-CST may also be federalized and deployed as a part of a federal response to an incident in or outside the WMD-CST assigned state." (**DA**, *WMD CST Operations*, 2007, p. 1-3)

Weapons of Mass Destruction Civil Support Team (WMD-CST): "Joint National Guard (Army National Guard and Air National Guard) team established to deploy rapidly to assist a local incident commander in determining the nature and extent of a weapons of mass destruction attack or incident; provide expert technical advice on weapons of mass destruction response operations; and help identify and support the arrival of follow-on state and federal military response assets. Also called WMDCST." (**JCS/DoD**, *Civil Support* (JP 3-28), 2007, p. GL-12)

Weapons of Mass Destruction Civil Support Teams: "In a commencement address at the U.S. Naval Academy in May 1998, President Bill Clinton announced that the nation would do more to protect its citizens against the growing threat of chemical and biological terrorism. As part of this effort, he said, the Department of Defense would form 10 teams to support state and local authorities in the event of an incident involving weapons of mass destruction.

"The WMD Civil Support Teams were established to deploy rapidly to assist a local incident commander in determining the nature and extent of an attack or incident; provide expert technical advice on WMD response operations; and help identify and support the arrival of follow-on state and federal military response assets. They are joint units and, as such, can

consists of both Army National Guard and Air National Guard personnel, with some of these units commanded by Air National Guard lieutenant colonels.

“The mission of Weapons of Mass Destruction Civil Support Teams (WMD-CST) is to support local and state authorities at domestic WMD/NBC incident sites by identifying agents and substances, assessing current and projected consequences, advising on response measures, and assisting with requests for additional military support.

“The WMD civil support teams are able to deploy rapidly, assist local first-responders in determining the nature of an attack, provide medical and technical advice, and pave the way for the identification and arrival of follow-on state and federal military response assets. They provide initial advice on what the agent may be, assist first responders in that detection assessment process, and are the first military responders on the ground, so that if additional federal resources are called into the situation, they can serve as an advance party that can liaise with the Joint Task Force Civil Support.

“The units provide critical protection to the force, from the pre-deployment phase of an operation at Home Station through redeployment. They ensure that strategic national interests are protected against any enemy; foreign or domestic, attempting to employ chemical, biological, or radiological weapons - regardless the level of WMD/NBC threat. They are a key element of the Department of Defense's overall program to provide support to civil authorities in the event of an incident involving weapons of mass destruction in the United States. They maintain the capability to mitigate the consequences of any WMD/NBC event, whether natural or man-made. They are experts in WMD effects and NBC defense operations. These National Guard teams provide DoD's unique expertise and capabilities to assist state governors in preparing for and responding to chemical, biological, radiological or nuclear (CBRN) incidents as part of a state's emergency response structure. Each team consists of 22 highly skilled, full-time National Guard members who are federally resourced, trained and exercised, and employs federally approved CBRN response doctrine.

“These units derive their origins in guidance from the US Congress which stated the need to "establish and equip small organizations in each of the 44 states not receiving initial RAID (Rapid Assessment and Initial Detection) element in 1999 to provide limited chemical/biological response capability".

“With RAID teams renamed WMD-CST, the first 10 teams were based in Colorado, Georgia, Illinois, California, Massachusetts, Missouri, New York, Pennsylvania, Texas and Washington; with each team being originally fielded in each of the 10 Federal Emergency Management Agency regions. An additional 17 teams, were announced in January 2000….

“The WMD Civil Support Teams are unique because of their federal-state relationship. They are federally resourced, federally trained and federally evaluated, and they operate under federal doctrine. But they will perform their mission primarily under the command and control of the governors of the states in which they are located. They will be, first and foremost, state assets. Operationally, they fall under the command and control of the adjutant generals of those states.

As a result, they will be available to respond to an incident as part of a state response, well before federal response assets would be called upon to provide assistance.

"If the situation were to evolve into an event that overwhelmed state and local response assets, the governor could request the president to issue a declaration of national disaster and to provide federal assistance. At that point, the team would continue to support local officials in their state status, but would also assist in channeling additional military and other federal assets in support of the local commander....

"WMD-CST units must undergo 15 months of individual and unit training. Following this, and as mandated by Congress, each WMD-CST units is evaluated for operational certification by the Secretary of Defense. Each team has two large pieces of equipment, a mobile analytical laboratory that it deploys with, that is utilized for field analysis of chemical or biological agents, and they also have a uniform command suite that has the ability through multiplexing systems to provide interoperability of communications to the various and sundry responders who may be on scene.

"On November 15, 2001, Secretary of Defense Donald H. Rumsfeld announced the stationing plan for five additional National Guard Weapons of Mass Destruction Civil Support Teams (WMD-CST) authorized in the National Defense Authorization Act for fiscal 2001…bringing the total number of National Guard WMD-CSTs to 32….

"On March 9, 2004, the Department of Defense announced that it had notified Congress of the fielding plan for 12 additional...WMD-CSTs. Congress had directed the establishment of 23 additional teams in the National Defense Authorization Act for FY03 and funded the establishment of the first 12 in the Defense Appropriations Act for FY04….

"On November 22, 2004, the Department of Defense announced that it had notified Congress of the fielding plan for 11 new…WMD-CSTs. The fielding and certification of these final 11 teams will bring the total number of WMD-CSTs to 55…." (**Global Security.org**, *Weapons of Mass Destruction Civil Support Teams*, 2007; See, also, **DA**, *WMD-CST Operations*, Dec. 2007)

Weapons of Mass Destruction Civil Support Teams, National Response Categories: "The three response categories and their deployment standards are as follows:

- **Priority (gold).** Priority response (gold) requires the deployment of an advanced party of the WMD-CST no later than 90 minutes after the official time of notification (N) and deployment of the remaining WMD-CST no later than N + 3 hours to support a response anywhere within the Nation.
- **Ready (silver).** Ready response (silver) requires units to focus on preparing for possible priority response missions outside their home state. WMD-CSTs in this phase, once directed, must deploy to the event no later than N + 24 hours.
- **Standby (bronze).** Standby response (bronze) requires units to focus on areas such as training requirements and leave. WMD-CSTs in this category, once directed, must prepare for and deploy no later than N + 72 hours.

WMD-CSTs that are not mission-capable (black) are unavailable for deployment." (**DA**, *WMD-CST Operations*, December 2007, p. 2-1)

Weapons of Mass Destruction Medical Countermeasures (WMD MCM) Subcommittee: "This Subcommittee is the focal point for U.S. Government interagency efforts to prioritize and coordinate medical countermeasure acquisition programs. The WMD MCM Subcommittee considers a wide range of variables in their deliberations. These include the credibility and immediacy of the threat as determined by DHS material threat assessments (MTAs) and models of potential target populations and the settings in which the medical countermeasure would be used. It also evaluates the availability and suitability of current medical countermeasures and the products in the research and development pipeline. It considers utilization policies for potential medical countermeasures including the dosing schedule, the feasibility of deployment in a public health emergency and product shelf life and storage requirements. These factors, with others, form the basis of the U.S. Government's requirements. The Subcommittee is made up of Assistant Secretary-level officials from HHS, DoD, and DHS. Four Working Groups and a Steering Group serve the Subcommittee; these are the Chemical, Biological, Radiological/Nuclear, and Product Development Tools Working Groups and the Steering and Integration Group (STIG)." (**HHS**, *Pandemic and All-Hazards Preparedness Act Progress Report*, November 2007, Appendix 2, WMD MCM Subcommittee)

Weapons of Mass Effect (WME): "Weapons of mass effect, or WME, are weapons capable of inflicting grave destructive, psychological and/or economic damage to the United States. These include chemical, biological, nuclear, radiological, or explosive weapons." (**HSAC,** *Weapons of Mass Effect Task Force on Preventing the Entry of Weapons of Mass Effect Into the United States*, January 10, 2006, p. 3)

[**Note**: Due to concerns over confusion spawned by attempts to draw distinctions between the terms "weapons of mass destruction" and "weapons of mass effect," as well as "CBRN" or "CBRNE" (chemical, biological, radiological, nuclear, high-explosive) the Department of Homeland Security ceased referring to "weapons of mass effect" in 2006.[127]]

Web Alert Relay Network (WARN): "The WARN pilot project provides emergency operations staffs with web-based collaboration tools and alert and warning capabilities. The WARN pilot project is also working to develop a two-way messaging framework based on international standards that supports emergency messages generated and sent by authorized emergency officials at the Federal, State, region, county, parish, or tribal level. In addition, the WARN pilot provides opt-in capabilities for the public in pilot locations to receive alert and warning messages on their computers, cell phones, pagers, and other devices." (**FEMA**, *IPAWS System Enhancements*, Sep 12, 2007)

WebEOC: "**…**a common piece of software for situational awareness and resource tracking used in the emergency management community…" (**Libby**, *Statement of,* July 19, 2007, p. 4)

WebEOC: "WebEOC is a web-based information management system that provides a single access point for the collection and dissemination of emergency or event-related information. It

[127] Email communication from DHS Lexicographer, December 11, 2007.

was designed to aid decision making by providing authorized users real-time information in a user-friendly format. WebEOC can be used during the planning, mitigation, response and recovery phases of any emergency. It can also be used by agencies during day-to-day activities to manage routine, non-emergency related operations. Web EOC integrates data, video, messaging, and many other types of information. It distributes that information both to individual terminals and to projection screens. It also allows for remote access via the Internet for authorized users. Being able to share real time information with other agencies in the region can allow for more rapid deployment of the regional resources available to emergency managers." (**Mid-America Regional Council**, *Emergency Services & Homeland Security*, 2007)

Western Training School (Civil Defense), St. Mary's CA: Opened by FCDA October 8, 1951 to serve 11 States. (**FCDA**, *Annual Report 1951*, 1952, p. 23)

Wetlands: "A wetland is a sponge which soaks up extra water and then releases it slowly into a watershed or river system. When you remove it you remove this safety valve." (Richard Boon, Wildlife and Environment Society of South Africa, quoted in **WWF**, *Natural Security*, 2008, 55)

Wetlands: Those areas which are inundated or saturated by surface or ground water with a frequency sufficient to support, or that under normal hydrologic conditions does or would support, a prevalence of vegetation or aquatic life typically adapted for life in saturated or seasonally saturated soil conditions. Examples of wetlands include, but are not limited to, swamps, fresh and salt water marshes, estuaries, bogs, beaches, wet meadows, sloughs, potholes, mud flats, river overflows, and other similar areas. This definition includes those wetland areas separated from their natural supply of water as a result of activities such as the construction of structural flood protection methods or solid-fill road beds and activities such as mineral extraction and navigation improvement. This definition is intended to be consistent with the definition utilized by the U.S. Fish and Wildlife Service in the publication entitled, Classification of Wetlands and Deep Water Habitats of the United States (**Cowardin** et al., 1977). (**FEMA** 1992)

WFO: Weather Forecast Office. (**HSGAC**, *Katrina:* A *Nation Still Unprepared*, 2006, 634)

WH: White House.

WHO: World Health Organization.

WIFSS: Western Institute for Food Safety & Security, Agroterrorism Preparedness Curriculum for Frontline Responders. (**FEMA**, *TIE/TO Course Catalog*, 2008, 52)

Wildland: "An area in which development has not occurred with the exception of some minimal transportation infrastructure such as highways and railroads, and any structures are widely spaced and serve largely recreational purposes." (**APA**, 2005, p. 85)

WLF: Department of Wildlife and Fisheries. (**HSGAC**, A *Nation Still Unprepared*, 2006, 634)

WMD: Weapons of Mass Destruction. (**DA**, *WMD-CST Operations*, Dec.2007, Glossary-7)

WMD-CST: Weapons of Mass Destruction, Civil Support Team. (**DA**, *WMD-CST Ops*, 2007, Glossary-7)

WME: Weapons of Mass Effect.

WMO: World Meteorological Organization

Workshop: "A workshop resembles a seminar, but is employed to build specific products, such as a draft plan or policy (e.g., a Training and Exercise Plan Workshop is used to develop a Multi-year Training and Exercise Plan)." (**FEMA**, *About HSEEP*, 2008)

Workshop: "The workshop, a type of *discussion-based* exercise, represents the second tier of exercises in the *building-block approach*. Although similar to *seminars*, workshops differ in two important aspects: increased *participant* interaction, and a focus on achieving or building a product (e.g., plans, policies). A workshop is typically used to: test new ideas, processes, or procedures; train groups in coordinated activities; and obtain consensus. Workshops often use breakout sessions to explore parts of an issue with smaller groups." (**FEMA**, *Homeland Security Exercise and Evaluation Program Glossary*, 2008)

Worst Case Planning: "Worst-case planning is required. Planning must mesh "worst-case" considerations with an analysis of the risks involved. Emergency planners generally use "worst-case" planning for those coastal areas that are most likely to be seriously impacted by hurricane force winds and storm surge. During Hurricane Hugo, the planning horizons for the *inland* areas were found to be too limited… Energy emergency planners must continue to include risk analysis and the likelihood of "worst-case" scenarios in the planning process to ensure a balanced view of their preparedness efforts and the potential risks involved." (**Badolato**, *Hurricane Hugo: Lessons Learned in Energy Emergency Preparedness*, 1999, pp. 1-2)

Worst Case Scenario Planning: "A major reason why most current plans (which continue to evolve) are useless is that they assume the worst case scenario. Worst case scenario planning encourages counterproductive overreactions in which law-enforcement techniques and drastic anti-civil liberties measures are used as the first resort, rather than the last resort. Although it is widely recognized that there were three flu pandemics in the past century (1918, 1957, and 1968), and that another pandemic seems inevitable at some point, all plans assume the "worst case," i.e., that the model to plan for is 1918, and not the more recent and less catastrophic pandemics of 1957 and 1968. This means there is little or no planning for measures to help the population in lesser and more frequent, emergencies." (**ACLU**, *Pandemic Prep*., 2008, 19)

Worst Case Scenario Planning: "Every disaster recovery expert understands the importance of stressing the potential of the worst-case scenario when speaking to clients. No matter how much easier it is to gloss over the possibility, thinking the probability is too low, organizations can't afford to ignore the chance. It's vital that all disaster recovery plans address the worst-case scenario. You must have a plan for how the company will react to the disaster and begin to rebuild…. No one likes to contemplate the worst-case scenario. However, it's the responsibility of the IT pros who've developed DR plans to prepare users and organizations to survive anything we can perceive may happen. Careful, clear-headed thinking before a disaster enables everyone

to perform the necessary functions both within and outside of the company if the worst-case scenario does occur." (**Talon**, "Planning for the Worst Case," *TechRepublic*, June 29, 2005)

WOT: War on Terrorism. (**Dept. of the Army**, *WMD-CST Operations*, Dec. 2007, p. 3-8)

WRM: Water Reactive Materials. (**DOT**, *Emergency Response Guidelines*, 2004, p. 4)

WSCC: Waster Sector Coordinating Council, National Infrastructure Protection Program, DHS.

WUI: Wildland Urban Interface. (**III**, *Catastrophes: Insurance Issues*, Jan 2008)

WYO: Write Your Own (FEMA, NFIP)

X Zone: "X Zone relates to newer Flood Insurance Rate Maps, which show B and C Zones (see above) as X Zone. The shaded X Zone corresponds to a B Zone and the unshaded X Zone corresponds to a C Zone." (FEMA, *Reducing Damage from Localized Flooding*, 2005, viii)

XDR-TB: Extensively Resistant Tuberculosis.

XOL: Excess-of-loss catastrophe reinsurance contracts. (**Cummins**, *Pricing XOL*…, 1998, 1)

X-Ray: "ionizing electromagnetic radiation emitted during the transition of an atomic electron to a lower energy state or during the rapid deceleration of a charged particle." (**Commonwealth of Australia**, *Recommendations for Limiting Exposure to Ionizing Radiation*, 1995, p. r-36)

Y2K: Year 2000.

Yokohama Strategy and Plan of Action for a Safer World (Yokohama Strategy): "*The Yokohama Strategy and Plan of Action for a Safer World* (Yokohama strategy), conceived at the World Conference on Natural Disaster Reduction in Yokohama in 1994, stressed that every country had the sovereign and primary responsibility to protect its people, infrastructure and national, social or economic assets from the impact of natural disasters. The importance given to socio-economic vulnerability in disaster risk analysis underlined the crucial role of human actions in reducing the vulnerability of societies to natural hazards and related technological and environmental disasters." (**UN ISDR**, *Living With Risk*, 2002, Chapter One, p. 9)

Yokohama Strategy Principles: "The Yokohama principles are as follows:

1. Risk assessment is a required step for the adoption of adequate and successful disaster reduction policies and measures.
2. Disaster prevention and preparedness are of primary importance in reducing the need for disaster relief.
3. Disaster prevention and preparedness should be considered integral aspects of development policy and planning at national, regional, bilateral, multilateral and international levels.

4. The development and strengthening of capacities to prevent, reduce and mitigate disasters is a top priority area to be addressed so as to provide a strong basis for follow-up activities to IDNDR.
5. Early warnings of impending disasters and their effective dissemination are key factors to successful disaster prevention and preparedness.
6. Preventive measures are most effective when they involve participation at all levels from the local community through the national government to the regional and international level.
7. Vulnerability can be reduced by the application of proper design and patterns of development focused on target groups by appropriate education and training of the whole community.
8. The international community accepts the need to share the necessary technology to prevent, reduce and mitigate disaster.
9. Environmental protection as a component of sustainable development consistent with poverty alleviation is imperative in the prevention and mitigation of natural disasters.
10. Each country bears the primary responsibility for protecting its people, infrastructure, and other national assets from the impact of natural disasters. The international community should demonstrate strong political determination required to make efficient use of existing resources, including financial, scientific and technological means, in the field of natural disaster reduction, bearing in mind the needs of the developing countries, particularly the least developed countries." (**UN ISDR**, *Living With Risk*, 2002, Chapter One, p. 10)

Z: Zulu Time. (**HSGAC**, *Hurricane Katrina:* A *Nation Still Unprepared*, 2006, 634)

Zoonotic/Animal-Borne Diseases: "Animal diseases that can spread to humans and in some cases can become contagious from human to human. Examples include Avian flu, rabies, and SARS." (**Trust for America's Health**, *Ready or Not? 2007*, p. 11)

Zulu Time: "**…**also known as Greenwich Mean Time and UTC; standard time at zero degrees longitude, five hours later than U.S. East Coast time; usually given on a 24-hour clock basis where 7 a.m. is 0700 hours, noon is 1200 hours, 10:30 p.m. is 2030 hours, etc." (**HSGAC**, *Hurricane Katrina:* A *Nation Still Unprepared*, 2006, 634)

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