EMERGENCY MANAGEMENT-RELATED TERMS & DEFINITIONS GUIDE

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Note:

This is not a comprehensive or exhaustive treatment of emergency management and related terms and definitions. The "Emergency Management-Related Terms and Definitions Guide" was developed as a student handout in an Introduction to Emergency Management college course and has been maintained as time allows in an effort to continue to support collegiate emergency management courses. Suggestions for additions are welcome and can be provided to Dr. Blanchard for consideration via email at: wayne.blanchard@dhs.gov.

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

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** 1992, 3)

Accident: "The word 'accidental' carries with it the connotations of both something that occurs by chance and something non-essential or incidental" (Allinson 1993, 15). "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 p.16).

Accident: "Unintended damaging event, industrial mishap" (**Disaster and Emergency 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: "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)

ACP: Association of Contingency Planners.

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).

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)

Alert: Advisory that hazard is approaching but is less imminent than implied by warning message. See also "warning". (**UN** 1992, 3)

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-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)

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**, p.1400)

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

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

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)

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)

Assessment: "The evaluation and interpretation of measurements and other information to provide a basis for decisionmaking." (**FEMA,** *NIMS* (Draft), August 2007, p. 147)

Assessment: Survey of a real or potential disaster to estimate the actual or expected damages and to make recommendations for prevention, preparedness and response. (**UN** 1992, 15)

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)

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/

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)

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)

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), February 25, 2004, p. 73 (Glossary)

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.

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)

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)

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

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

Business Process Analysis: "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)

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

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

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)

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)

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: "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)

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: "…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: 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: "…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).[1] 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).

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** 1992, FRP Appendix B)

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)

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)

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[1] 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.

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 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 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)

Category 1 hurricane: 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)

Category 2 hurricane: 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)

Category 3 hurricane: 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)

Category 4 hurricane: 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)

Category 5 hurricane: 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*. August 17, 2007 update)

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

CBO: Community Based Organization.

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

CDP: Center for Domestic Preparedness.

CEM: Comprehensive Emergency Management.

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*)

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

CERT: Citizen Emergency Response Team.

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)

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

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.)

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)

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)

CII: Critical Infrastructure Information. (**DHS,** *NIPP*, 2006, p. 101)

CI/KR: Critical Infrastructure/Key Resources. (**DHS,** *NIPP*, 2006, Preface)

CIPAC: Critical Infrastructure Partnership Advisory Council. (**DHS,** *NIPP*, 2006, p. 101)

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 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 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: 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. (**UN** 1992, 17)

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. (**Title 32 CFR 185**)

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**)

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)

CMC: Crisis Management Center, Department of Transportation.

COG: Continuity of Government.

COGCON: Continuity of Government Readiness Conditions. (**White House,** *HSPD-20*)

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)

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*, http://www.dhs.gov/xinfoshare/programs/Copy_of_press_release_0046.shtm

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: "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." (**USCG** *Pub 1*, 2002, p. 60)

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)

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: "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 multiagency 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 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 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), August 2007, p. 24)

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 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)

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 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 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 Environmental Response, Compensation and Liability Act (CERCLA): Public Law 96-510, as amended. More popularly known as "Superfund," CERCLA provides authority for Federal and State governments to respond directly to hazardous substances incidents. (**FEMA** 1992, Appendix C)

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 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)

Conflict Hazards: War, acts of terrorism, civil unrest, riots, and revolutions.

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)

CONPLAN (NRF): Concept Plan. (**DHS**, *NRF Comment Draft*, September 10, 2007, p. 61)

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 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 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), February 25, 2004, p. 73 (Glossary)

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: "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)

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: "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)

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)

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*, August, 2007, p. 60)

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)

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): "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)

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 (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 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 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): "`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 and Continuity of Government (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 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 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,* 61)

COOP: Continuity of Operations.

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)

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)

COP: Common Operating Picture.

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 Program: "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, pp. 18-19)

Corrective Action Program System: "The Corrective Action Program (CAP) System is a webbased 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*, 2007, p. 61)

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)

Counterterrorism: "…usually describes proactive measures, including targeting terrorist personnel and supporters" (as opposed to Antiterrorism). (**Sauter & Carafano** 2005, 261)

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)

CPCC: Continuity Policy Coordination Committee. (**HSC**, *NCPIP*, August 2007, p. 22)

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." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, p.149)

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: 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: "…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: "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 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 situation that, left unaddressed, will jeopardize the organization's ability to do business." (**Ziaukas** 2001, 246; citing other sources)

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 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 Reference Center** 1998)

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: "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(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: "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)

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**, *NIPP*, 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:

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: "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 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/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 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)

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 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 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)

CRS: Community Rating System, National Flood Insurance Program.

CSEPP: Chemical Stockpile Emergency Preparedness Program.

CSG: Counterterrorism Security Group.

CSIA IWG: Cyber Security and Information Assurance Interagency Working Group. (**DHS**, *NIPP* 2006, p. 101)

CSIRT: Computer Security Incident Response Teams. (**DHS**, *NIPP* 2006, p. 101)

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 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)

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-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)

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 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. (**UN** 1992, 19)

DCO: Defense Coordinating Officer.

DCPA: Defense Civil Preparedness Agency.

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.

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 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)

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 and 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)

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*, 61)

Department of Homeland Security: "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), September 10, 2007, p. 1)

Department of Homeland Security (Primary Mission): "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 (Primary Missions): "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)

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)

DFO: Disaster Field Office.

DHS: U.S. Department of Homeland Security.

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 type of radiological dispersal device (RDD) that combines a conventional explosive with radioactive material." (**HSC**, *NCPIP*, August 2007, p. 61)

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: "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 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: 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: 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)[2]

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)[3]

Disaster: The result of (1) the impact of external forces, (2) social vulnerability, or (3) uncertainty. (**Gilbert**, 1991)[4]

Disaster: "the loss of key standpoints in common sense, and difficulty of understanding reality through ordinary mental frameworks" (**Gilbert** 1995, 238).

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[2] *Gesetz uber den katastrophenschutz in Schlesig-Holsteni (LkatSG) vom 9 Dezember 1974*. Wiesbaden, Germany: Kommunal und Schul-Verlag A. Heinig (in German).
[3] Kasastrophen-Vorschrift (1988), Bonn: Deuches Rotesse Kreuz (in German).
[4] *Politique et compexite: Les crises sans ennemi*. Grenoble, France: CRISE. (Cited in Porfiriev 1995, 287).

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 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).[5]

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).

Disasters: "…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)

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[5] 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: "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)

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: "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." (**National Science and Technology Council** 2005, 17)

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[6] 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

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[6] C. Pelanda. 1982. *Disaster and Order: Theoretical Problems in Disaster Research*. Unpublished paper.

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)

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." (**UN Glossary** 1992, 21)

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/society to cope using its own resources." (**UN ISDR** 2002, 24)

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 edition).

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 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 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, 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/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 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. (**UN** 1992, 22)

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)

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: The body of policy and administrative decisions and operational activities which pertain to the various stages of a disaster at all levels. (**UN** 1992, 22)

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** with Stanford 1998, Preface).

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)[7]" (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)

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

[7] K. Hewitt. 1997. *Regions at Risk: A Geographical Introduction to Disasters.* London: Longman.

causes of disaster are to be found not in nature, but in the organization of human societies (**Varley** 1994[8])" (Bolin with Stanford 1998, 5).

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 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)

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** 2001, 3)

Disaster Relief Act of 1974: 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*)

Disaster Response: A sum of decisions and actions taken during and after disaster, including immediate relief, rehabilitation, and reconstruction. (**UN** 1992, 3)

Disaster Risk: "The chance of a hazard event occurring and resulting in a disaster." (**National Science and Technology Council** 2005, 17)

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** 2002, 27)

[8] 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.

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** 2002, 25)

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)[9] 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).

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: "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." (**DHS,** *National Response Framework* (Comment Draft), September 10, 2007 (p. 8)

[Reference: *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]

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,** *National Response Framework* (Comment Draft), September 10, 2007, p. 10)

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)

[9] P.Y. Miller and M.R. Fowlkes. 1984 "In Defense of 'Man-Made' Disaster." *Natural Hazards Observer*, Vol. 8, p. 11.

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)

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/**FEMA, *National Response Framework -- Federal Partner Guide* (Comment Draft), September 10, 2007, p. 20)

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)

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 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)

DOR: Disaster Operations and Recovery Section, Emergency Management Institute, FEMA.

DPA: Defense Production Act of 1950

DRC: Disaster Recovery Center.

DRF: Disaster Relief Fund.

DRG: Domestic Readiness Group.

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)

DSCA: Defense Support of Civil Authorities.

EAS: Emergency Alert System.

ECG: Enduring Constitutional Government. (**White House**, *HSPD-20*, May 9, 2007)

Ecological Disaster: See, "Disaster, Ecological"

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. (**UN** 1992, 26)

EMAC: Emergency Management Assistance Compact.

EMAP: Emergency Management Accreditation Program.

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: "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: "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: "…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. (**U.N**. 1992, 26)

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 Alert System: 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 Assistance: Assistance which may be made available under an emergency declaration. In general, Federal support to State and local efforts to save lives, protect property and public health and safety, and lessen or avert the threat of a catastrophe. Federal emergency assistance may take the form of coordinating all disaster relief assistance (including voluntary assistance) provided by Federal agencies, private organizations, and State and local governments. Or, the Federal

government may provide technical and advisory assistance to affected State and local governments for: the performance of essential community services; issuance of warnings of risks or hazards; public health and safety information, including dissemination of such information; provision of health and safety measures; management, control, and reduction of immediate threats to public health and safety; debris removal; temporary housing; and distribution of medicine, food, and other consumable supplies. (**Stafford Act**)

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 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 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: "A simple definition is that emergency management is the discipline dealing with risk and risk avoidance." (**Haddow and Bullock** 2003, 1)

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: "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 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 (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 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): "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, p. 11)

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 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 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 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 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: "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 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. 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:

> Coordinate the planning process and work cooperatively with other community agencies and private sector enterprises.
>
> Oversee damage assessments during an incident.
>
> 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 in planning, training and exercises." (**DHS**, *NRF Comment Draft*, September 2007, p. 14)

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): 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 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): "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 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 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: 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. (**Stafford Act**)

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: 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 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 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 Teams (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), 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 Teams (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 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 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)

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): "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 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 preincident 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.

EMI: Emergency Management Institute, National Emergency Training Center, FEMA/DHS, Emmitsburg, MD.

Enduring Constitutional Government: "`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)

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 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)

EOP: Emergency Operations Planning

EOP: Executive Office of the President.

ERT: Emergency Response Team.

ESF: Emergency Support Function.

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 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)

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)

Executive Order 12148: "Executive Order 12148, Federal Emergency Management, July 20, 1979, as amended, 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)

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)

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: "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)

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).

FCO: Federal Coordinating Officer.

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 Continuity Directive (FCD): "A document developed and promulgated by DHS, in coordination with the CAG and in consultation with the Continuity PCC, 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)

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). (*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): "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 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)

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 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 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 (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 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 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. (**FRERP**)

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)

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." (**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. The FRP has been replaced by the NRP." (**DHS**, *NRP* (Draft #1), February 25, 2004, p. 75)

FEMA: Federal Emergency Management Agency.

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." (**FEMA**, *National Response Framework -- Federal Partner Guide* (Comment Draft), September 10, 2007, pp. 2-3)

FEMA Core Values: "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 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 Goal: "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: (**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: (FEMA, *Vision for New FEMA*, December 12, 2006, 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 Mission: "The primary mission of 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 manmade disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation. The FEMA Administrator therefore is assigned responsibility to:

• 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 manmade disasters, including catastrophic incidents;

• Partner with State, local, and tribal governments and emergency response providers, other Federal agencies, the private sector, and 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 manmade disasters, including catastrophic incidents;

• 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 manmade disaster;

• 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 manmade disaster;

• 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;

• Under the leadership of the Secretary, coordinate with the Commandant of the Coast Guard, the – Commissioner of Customs and Border Protection, the Assistant Secretary 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;

• 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 manmade disaster; and

• Develop and coordinate the implementation of risk-based, all-hazards strategy for preparedness that builds those common capabilities necessary to respond to natural disasters, acts of terrorism, and other manmade disasters while also building the unique capabilities necessary to respond to specific types of incidents that pose the greatest risk to our Nation.

Among other duties, the Homeland Security Act also assigns certain responsibilities to the Administrator specific to the National Response Plan (NRP) and the National Incident Management System (NIMS), including: building a comprehensive national incident

management system with Federal, State, and local government personnel, agencies, and authorities, to respond to attacks and disasters; consolidating existing Federal emergency response plans into a single, coordinated national response plan; and administering and ensuring the implementation of the National Response Plan, including coordinating and ensuring the readiness of each emergency support function under the National Response Plan ." (**DHS**, *National Response Framework List of Authorities and References* (Draft), Sep. 10, 2007, pp.1-2)

FEMA Mission: "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: "…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**, pp. 1398-1399)

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

FEMA Operations Center (FOC): "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)

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

FIRM: Flood Insurance Rate Map.

FIRST (Federal Incident Response Support Team).

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))

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: " "…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**)**

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)

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.

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.

Flexible (Core Principle of Emergency Management): "Flexible: emergency managers use creative and innovative approaches in solving disaster challenges." (**EM Roundtable**, 2007, p.4)

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 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 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.]

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 Management: Floodplain management means 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)

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.

FOC: FEMA Operations Center. (**HSC**, *NCPIP*, August 2007, p. 62)

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". (**UN** 1992, 4)

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), February 25, 2004, p. 36)

Four Phases: Mitigation, Preparedness, Response and Recovery.

FPC: Federal Preparedness Circular.

FPCs: Federal Preparedness Coordinators. (**FEMA**, *Vision for New FEMA:* Dec. 2006, p. 24)

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) (**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**)

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)

Fusion Centers: "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.

Gale: Wind with a speed between 34 and 40 knots. (**UN** 1992)

GCCs: Government Coordinating Council. (**DHS**, *NIPP*, 2006, p. 4)

GCSC: Government Cross-Sector Council. (**DHS**, *NIPP*, 2006, p. 5)

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)

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)

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**)

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.)

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)

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 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: "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** 1997, 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 potential source of harm." (**International Standards Organization** 1990)

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)[10] 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 drowing) 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: A threatening event, or the probability of occurrence of a potentially damaging phenomenon within a given time period and area. (**UN** 1992, 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** 2002, 24)

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[10] D. Okrent. "Comment on Societal Risk." *Science*, Vol. 208, 1980, pp. 372-375.

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).

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 (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[11]; Flavin 1997[12]). 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).

> "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).

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[11] C. Southwick. *Global Ecology in Human Perspective*. NY: Oxford University Press, 1996.

[12] C. Flavin. "Climate Change and Storm Damage: The Insurance Costs Keep Rising." *World Watch*, Vol. 10, No. 1, 1997, pp. 10-11.

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 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** 1997)

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. (**NDO** 1992)

Hazard Assessment: Identification of hazards in given location. (**D&E Reference 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 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 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…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." (**International Standards Organization** 1990)

Hazard Identification: "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 Identification: The process of recognizing that a hazard exists and defining its characteristics (**Standards Australia/New Zealand**1995).

Hazard Management: "…utilizes individual and collective strategies to reduce and mitigate the impacts of hazards on people and places" (**Cutter** 1993, 2).

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 Probability: The estimated likelihood that a hazard will occur in a particular area.

Hazard Risk: The probability of experiencing disaster damage.

Hazard Vulnerability: The susceptibility of life, property, or the environment to damage if a hazard occurs.

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: "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 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)

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)

HITRAC: Homeland Infrastructure Threat and Risk Analysis Center. (**DHS,** *NIPP*, 2006, p. 101)

HLT: Hurricane Liaison Team.

HMPG: Hazard Mitigation Grant Program.

Homeland: "Fatherland: the country where you were born." wordnet.princeton.edu/perl/webwn

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)

Homeland Infrastructure Threat and Risk Analysis Center. "DHS has established the Homeland Infrastructure Threat and Risk Analysis Center (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." (**Stephan**, June 15, 2005, p. 3)

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 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)

Homeland Security Advisory Council: "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)

Homeland Security Advisory System: "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:

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.

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.

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.

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.

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." (**US Army TRADOC**, 2007, p. 149)

Homeland Security Council: "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." (**HSPD-1)**

Homeland Security Council 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." (**HSPD-1)**

Homeland Security Council 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 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 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): "The NEP 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 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 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 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….

• ***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 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 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 Operations Center (HSOC): "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)

Homeland Security Presidential Directive 5 (HSPD-5): "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)

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: "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 Professionalism: (See "Homeland Security Education")

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 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"]

HSAC: Homeland Security Advisory Council. (**DHS,** *NIPP* 2006, p. 101)

HSAS: Homeland Security Advisory System. (**DHS,** *NIPP* 2006, p. 101)

HSC: Homeland Security Council.

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*)

HSDN: Homeland Security Data Network. (**HSC,** *NCPIP*, August 2007, p. 63)

HSEEP: Homeland Security Exercise and Evaluation Program. (**DHS,** *NIPP* 2006, p. 101)

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)

HSOC: Homeland Security Operations Center. (**DHS**, *NRP* (Draft #1), Feb. 25, 2004, p. 22)

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 (Unlassified 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-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. 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)

HSTA: Homeland Security Threat Advisory. (**HSC,** *NCPIP*, 2007, p. 63)

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**)

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)

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)

IAP: Incident Action Plan.

IC: Incident Commander, under Incident Command System (ICS).

Ice Storm: Intense formation of ice on objects by the freezing, on impact, of rain or drizzle. (**WMO** 1992, 314)

ICEPP: Incident Communications Emergency Policy & Procedures.

ICP: Incident Command Post.

ICS: Incident Command System.

IEMS: Integrated Emergency Management System.

IIMG: Interagency Incident Management Group. (**DHS**, *NRP* (Draft #1), Feb. 25, 2004, p. 21)

IMAAC: Interagency Modeling and Atmospheric Assessment Center.

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)

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,** *NIPP*, 2006, p. 103)

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: "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 Comment Draft*, September 2007, p. 45)

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)

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 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 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): "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): 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): "…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): "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 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 (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 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 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 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: "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: "The entity shall develop an incident management system to direct, control, and coordinate response and recovery operations." (**NFPA 1600**, 2007, 10)

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 Planning Team (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 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: "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 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): "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 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: "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 (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)

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.

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 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)

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)

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 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 Preparedness: (**FEMA**, *Vision for New FEMA*, December 12, 2006, p. 23)

"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 United States.

- 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."

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)

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.)

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)

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)

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)

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)

IPAWS: Integrated Public Alert Warning System**.** (**HSC**, *NCPIP*, August 2007, p. 63)

ISAC (Information Sharing and Analysis Center): (**DHS,** *NIPP* 2006, p. 101)

JFO: Joint Field Office.

JIC: Joint Information Center.

JOC: Joint Operations Center.

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." (**USCG**, *IM Handbook*, 2006, Glossary 25-13)

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 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 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)

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 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 (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)

JTF: Joint Task Force.

JTIF: Joint Terrorism Task Force. (**DHS**, *National Infrastructure Protection Plan*, 2006, p. 101)

Key Resources: "As denied in the Homeland Security Act, '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)

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)

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)

LEPC: Local Emergency Planning Committee.

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)

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)

Major Disaster: Any 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 the Stafford 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)

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 by Objective: "A management approach that involves a five-step 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)

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 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)

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)

MERS: Mobile Emergency Response Support.

Military Support to Civil Authorities (MSCA): Those activities and measures taken by Department of Defense components to foster mutual assistance and support between DoD 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. MSCA is described in DoD Directive 3025.1. The Secretary of the Army is designated as the DoD executive agent for MSCA. (**Title 32 CFR 185**)

Mission Assignment: "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: "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 Essential Functions: "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*, August 2007, p. 64)

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: "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: "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, 1996**)

Mitigation: "…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**, **1997**, *Multi Hazard.…*, xxii).

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: "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: 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: "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. (**UN** 1992, 4)

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 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)

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)

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 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)

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

MS-ISAC: Multi-State Information Sharing and Analysis Center. (**DHS,** *NIPP* 2006, p. 101)

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 (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(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)

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)

[Note: FEMA *NIMS* adds a 12th element (or provision) – "Termination Clause." (FEMA 501/Draft), August 2007, p. 18.]

NADB: National Asset Database. (**DHS,** *NIPP* 2006, p. 32)

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 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*, 64)

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 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: "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: "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 9, 2007)

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: "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 Disaster Medical System (NDMS): 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): "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 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 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." (**White House,** *HSPD-20*, May 9, 2007)

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 and Evaluation Program (NEEP). (HSC, *NCPIP*, August 2007, p. 65)

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 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): "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) 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: "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) 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 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 [critical infrastructure, key resources] 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.)

National Infrastructure Coordinating Center (NICC*).* Part of the NOC, 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)

National Infrastructure Coordinating Center (NICC): "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: "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) 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 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 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): "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)

National Operations Center: "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 Emergency Management Reform Act of 2006**, p. 1409)

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 Planning Scenarios: "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**, *NRF Comment Draft*, 2007, p. 58)

National Planning Scenarios: "…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**, *NRF Comment Draft*, 2007, p. 71)

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 Preparedness Goal: "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)

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)

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 System: "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 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. "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 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*, 2007, p. 2)

National Response Framework (NRF): "Decentralization, disciplined initiative and freedom of action are the greatest strengths of our *National Response Framework*." (**DHS**, *NRF Comment Draft*, 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) 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) Key Principles: "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" (**FEMA**. *National Response Framework -- Federal Partner Guide* (Comment Draft). September 10, 2007, p. 2)

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 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 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 System (NRS): "Pursuant to the NCP, the NRS is a mechanism for coordinating response actions by all levels of government (40 CFR § 300.21) for oil and hazardous substances spills and releases." (**USCG**, *IM Handbook*, 2006, Glossary 25-17)

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 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)

National Security of the United States 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 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 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 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 Special Security Event (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." (**USCG**, *IM Handbook*, 2006, Glossary 25-17)

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): 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 (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, page 1:1)

National Strategy for Homeland Security (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 (Emergency Preparedness and Support): 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 Pandemic Influenza: "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 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 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: "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. The task force can be dispatched and *en route* to its

National Voluntary Organizations Active in Disasters (NVOAD): "NVOAD is a consortium of more than 30 recognized national organizations 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)destination in a matter of hours." (**DHS**, *NRF Comment Draft*, 2007, p. 60)

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*)

Natural Disaster: See "Disaster, Natural"

Natural Hazards: See "Hazard, Natural"

NAWAS: National Alert Warning System**.**

NBIC: National Biosurveillance Integration Center.

NCC: National Coordinating Center for Telecommunications. (**DHS,** *NIPP* 2006, p. 101)

NCIP: National Continuity Implementation Plan.

NCIP: National Critical Infrastructure Protection.

NCIP R&D: National Critical Infrastructure Protection Research & Development. (**DHS,** *NIPP* 2006, p. 102)

NCPIP: National Continuity Policy Implementation Plan.

NCR: National Capital Region.

NCRCG: National Cyber Response Coordination Group. (**DHS,** *NIPP* 2006, p. 102)

NCS: National Communications System. (**DHS,** *NIPP* 2006, p. 102)

NCSA: National Cyber Security Alliance. (**DHS,** *NIPP* 2006, p. 102)

NCTC: National Counterterrorism Center. (**DHS,** *NIPP* 2006, p. 102)

NDMS: National Disaster Medical System.

NEEP (National Exercise and Evaluation Program). **(HSC**, *NCPIP*, August 2007, p. 65)

NEFs: National Essential Functions. (**White House,** *HSPD-20*, May 9, 2007)

NEP: National Exercise Program.

NETC: National Emergency Training Center, FEMA/DHS, Emmitsburg, MD.

NFA: National Fire Academy, United States Fire Administration, FEMA/DHS, Emmitsburg, MD.

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 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)

NGO's: Nongovernmental Organizations.

NHC: National Hurricane Center.

NIAC: National Infrastructure Advisory Council. (**DHS,** *NIPP* 2006, p. 102)

NIAP: National Information Assurance Partnership. (**DHS,** *NIPP* 2006, p. 102)

NIC: National Integration Center. (**FEMA**, *Welcome to the NIC…*, September 11, 2007 update.

NICC: National Infrastructure Coordinating Center. (**DHS,** *NIPP* 2006, p. 102)

NIMS: National Incident Management System.

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

NISAC: National Infrastructure Simulation and Analysis Center. (**DHS,** *NIPP* 2006, p. 102)

NIST: National Institute of Standards and Technology.

NJTTF: National Joint Terrorism Task Force. (**DHS,** *NIPP* 2006, p. 102)

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)

NOC: National Operations Center. (**DHS,** *NIPP* 2006, p. 102)

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-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**, FEMA., *National Response Framework -- Federal Partner Guide* (Comment Draft), September 10, 2007, p. 19)

NPD: National Preparedness Directorate, FEMA

NPG: National Preparedness Goal.

NPIP: National Preparedness Integration Program. (**FEMA**, *Vision for New FEMA*, 2006, p.24)

NRC: National Research Council.

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 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)

NS/EP: National Security and Emergency Preparedness. (**DHS,** *NIPP*, 2006, p. 28)

NSTAC: National Security Telecommunications Advisory Committee. (**DHS,** *NIPP*, 2006, p. 102)

NTHMP: National Tsunami Hazard Mitigation Program

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)

NVOAD: National Voluntary Organizations Active in Disaster.

OI&A: Office of Intelligence and Analysis (Division of DHS Preparedness Directorate). (**DHS,** *NIPP* 2006, p. 102)

OIP: Office of Infrastructure Protection (Division of DHS Preparedness Directorate). (**DHS,** *NIPP*, 2006, p. 102)

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.

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 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 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)

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 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)

OPLAN: Operations Plan.

OSTP: Office of Science and Technology Policy.

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)

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)

PDD: Presidential Decision Directive.

PFO: Principle Federal Official.

PHSAC: President's Homeland Security Advisory Council.

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 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)

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)

PMEFs: Primary Mission Essential Functions. (**White House,** *HSPD-20*, May 9, 2007)

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)

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.]

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. (**44 CFR 206.33**)

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)

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: "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)

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,** *NIPP*, **2006**, p. 104)

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**, *NRP Comment Draft*, September **2007**, 26)

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): "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: 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. (**Michigan DEM**, 1998, 7)

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 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: 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." (**UN** 1992, 4)

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: "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 (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 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)

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*)

Presidential Decision Directive 39: "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)

Presidential Decision Directive 62: "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)

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 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)

Prevention: "Actions to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions 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." (**FEMA** *NIMS* 2007, 156)

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". (**UN** 1992, 5)

Prevention: "Activities to provide outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters." (**UN** ISDR 2002, 25)

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)

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)

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)

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): "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 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*. p. 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 War:

Objective
Mass
Maneuver
Offensive
Economy of Force
Unity of Command
Simplicity
Surprise
Security (**USCG** *Pub 1*, 2002, p. 64-65)

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)

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)

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)

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)

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)

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.

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** 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** 2006, 15)

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)

Public Assistance (PA): 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)

Public Health Security and Bioterrorism Preparedness and Response Act of 2002: "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)

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)

Radiation: Emission or transfer of energy in the form of electromagnetic waves or particles. (**WMO** 1992, 492)

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): "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)

RAMCAP: Risk Analysis and Management for Critical Asset Protection. (**DHS,** *NIPP* 2006, 102)

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)

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)

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: 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 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." (**FEMA**, *National Incident Management System* (FEMA 501/Draft), August 2007, pp. 156-157)

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 (Homeland Security): "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 (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/FEMA,** *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 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)

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 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 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).

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. (**UN** 1992, 5)

REP: Radiological Emergency Preparedness.

REPP: Radiological Emergency Preparedness Program.

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: 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: "…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 ato 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: "The ability at every level to detect, prevent, prepare for and if necessary handle and recover from disruptive challenges." (**Great Britain** 2004, 1)

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/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)

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)

Resource Analysis: The systematic identification and analysis of available resources and authorities for managing these potential resources in an emergency.

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: "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 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 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)

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,** *NIPP*, **2006**, pp. 104-105)

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, **2007**, p. 7)

Response: Those activities and programs designed to address the immediate and short-term effects of the onset of an emergency or disaster. (**FEMA**, **1992**)

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), **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: "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: "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." (**FEMA**, *NIMS Draft*, August 2007, p. 157)

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 Doctrine: Key Principles:

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.

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. (**DHS**, *Introducing the NRF*, 2007, p. 4)

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)

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)

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 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**, *NIPP*, 2006, p. 105)

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: 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: "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).[13] 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 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….

[13] Dean, W. "Risk Assessments and Future Challenges." *FBI Law Enforcement Bulletin*, July 2005.

"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 Alkinson** 1982)

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, and 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. (**UN** 1992, 5)

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 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." (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: "*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: 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 systematic use of available information to characterize risk. (**Salter** 1997–98, 24)

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: "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 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: "…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…,* **1997**, p. xxi).

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 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: "…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: "…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 Aversion: "…the value people place directly on reducing their own and others' risk of death and injury…" (**Smith** 1996, 72).

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 interative, 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: 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: "…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:

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-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 Factors: Frequency of Occurrence
Location
Spatial Area (% of jurisdiction hazard likely to impact)
Duration
Secondary Effects
Seasonality

Speed of onset
Warning availability

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—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 discipline for dealing with uncertainty." (**Kloman** 2001, 24)

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: "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 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 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: 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 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.

4. *Perceived risk:* The rough estimate of real risk made by an untrained member of the general public. (**Thompson**, 1986)

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.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act: "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)

RRCC: Regional Response Coordination Center. (**DHS**, *NRF Comment Draft*, 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)

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[14]

[14] Deyle, French, Olshansky, and Paterson 1998, 124.

Storm Category	Wind Speed (mph)	Storm Surge (ft)
1	74-95	4-5
2	96-110	6-8
3	111-130	9-12
4	131-155	13-18
5	> 155	> 18

SAR: Search and Rescue.

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)

SCCs: Sector Coordinating Councils – "…comprised of private sector representatives." Relate to the National Infrastructure Protection Plan. (**DHS**, *NIPP*, 2006, p. 4)

SCO: State Coordinating Officer.

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 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)

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)

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 Comment Draft*, Sep. 2007, p. 65)

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)

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)

SFLEO: Senior Federal Law Enforcement Official.

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/FEMA,** *National Response Framework -- Federal Partner Guide* (Comment Draft), September10, 2007, p. 18)

[Note: See, also, "Recovery: Short Term"]

SHSP: State Homeland Security Program. (**DHS**, *NIPP*, 2006, p. 102)

SitRep: Situation Report.

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: "The process of evaluating the severity and consequences of an incident and communicating the results." (**NFPA 1600**, 2007, p. 8) [See Situational Awareness]

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)

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)1

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)

SLTGCC: State, Local, and Tribal Government Cross-Sector Council. (**DHS**, *NIPP*, 2006, p. 5)

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 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 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)

Spontaneous Volunteers: (See, "Volunteers, Spontaneous")

SPP: Security and Prosperity Partnership of North America. (**DHS**, *NIPP*, 2006, p. 102)

SSAs: Sector-Specific Agencies, National Infrastructure Protection Plan. See following reference for examples. (**DHS**, *NIPP,* 2006, p. 3)

SSP: Sector-Specific Plan. (**DHS**, *NIPP*, 2006, p. 102)

S&T: Science and Technology Directorate, DHS.

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/**FEMA, *NRF -- Federal Partner Guide* (Comment Draft), September 10, 2007, p. 19)

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: "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 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): "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)

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 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 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)

Steady-State Preparedness: "*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)

STI: State Template Initiative.

STO: State Coordinating Officer.

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)

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 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 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 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 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 safehaven 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: "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 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)

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)

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)

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*, September 2007, p. 71)

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)

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[15]).

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)

SVA: Security Vulnerability Assessment. (**DHS**, *NIPP*, 2006, p. 102)

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[15] Downloaded from web site address: http://www.cyberg8t.com/simeon/glossary.html (definitions from The Simeon Institute are obtained from "unattributed sources").

Tactics: [ICS/NIMS] "Deploying and directing resources during an incident to accomplish the objectives designated by strategy." (**USCG**, *IM Handbook*, 2006, Glossary 25-23)

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)

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): "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)

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)

TCL: Target Capabilities List. (**DHS,** *NIPP*, 2006, p. 102)

Terrorism: "…premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents." (**Department of State)**

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 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)

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**)**

The Framework: National Response Framework. At: http://www.fema.gov/NRF

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." (**FEMA** *NIMS Draft*, 2007, 159)

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)

Tiered Response: "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*, September2007, p. 9)

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)

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)

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).

TSA: Transportation Security Administration. (**DHS,** *NIPP*, September 2006, p. 102)

Type: "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)

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)

UASI: Urban Areas Security Initiative. (**DHS**, *NIPP*, 2006, p. 102)

UC: Unified Command.

UFC: Unified Coordination Group. (**DHS**, *NRP Comment Draft*, September 2007, p. 48)

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)

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): "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**, *NRF 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**, *NRF Comment Draft*, September 2007, p. 21)

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. "A standard method to coordinate command of an incident where multiple agencies have jurisdiction." (**NFPA 1561**, 2002, p. 8)

Unified Command: "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 Coordination Group: 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 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)

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.

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: "…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)

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)

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." (**FEMA**, *NRF -- Federal Partner Guide* (Comment Draft). September 10, 2007, p. 9)

USACE: United States Army Corps of Engineers.

US-CERT: United States Computer Emergency Readiness Team. (**DHS,** *NIPP*, 2006, p. 102)

USFA: United States Fire Administration, FEMA/DHS, Emmitsburg, MD.

USNORTHCOM: United States Northern Command.

UTL: Universal Task List. (**DHS**, *NIPP*, 2006, p. 102)

Vision: "An idealized statement of the best possible future." (**FEMA**, *A Nation Prepared*, 2002, p. 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)

VOAD: Voluntary Organizations Active in Disaster.

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)

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)

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: …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: *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: "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,** *NIPP*, 2006, p. 105)

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 tthat make up a system. Infrastructure systems such as power supply or telecommunications or even all of the infrastructures making up a society as a whold 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: "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: "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).[16] 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).[17] 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[18]; Pelanda 1982[19])." (**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)

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

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[16] Referenced is a chapter in *Natural Disasters: Protecting Vulnerable Communities*, edited by P.A. Merriman and C.W. Browitts (London: Thomas Telford, 1993).

[17] 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).

[18] Sinha, D.K. Ed. 1992. Natural Disaster Reduction to the Nineties: Perspectives, Aspects and Strategies. Calcutta: International Journal Services.

[19] Pelanda, Carlo. 1982. "Disastro e vulnerabilita sociosistemica." *Rassegna Italian di Sociologia* 22:507-532.

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: Ability to withstand damage – expressed on a scale of 0 (no damage) to 10 (total damage). (**UNDRO** 1991)

Vulnerability: Degree of loss (from 0% to 100%) resulting from a potentially damaging phenomenon. (**UN** 1992, 5)

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 (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 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 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: 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 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: 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)

Warning: Dissemination of message signaling imminent hazard which may include advice on protective measures. See also "alert". (**UN** 1992, 5)

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)

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)

WAWAS: Washington Area Warning System.

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: "(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)

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)

WH: White House.

WMD: Weapons of Mass Destruction.

WMD-CST: Weapons of Mass Destruction – Civil Support Team

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