

NFPA® 1660

Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery

2024 Edition

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NFPA® 1660

Standard for

**Emergency, Continuity, and Crisis Management: Preparedness, Response,
and Recovery**

2024 Edition

This edition of NFPA 1660, *Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery*, was prepared by the Technical Committees on Emergency Management and Business Continuity, Mass Evacuation and Sheltering, and Pre-Incident Planning. It was issued by the Standards Council on October 7, 2022, with an effective date of October 27, 2022.

This document has been amended by one or more Tentative Interim Amendments (TIAs) and/or Errata. See “Codes & Standards” at www.nfpa.org for more information.

This edition of NFPA 1660 was approved as an American National Standard on October 27, 2022.

Origin and Development of NFPA 1660

This first edition of NFPA 1660, *Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery*, has been developed as part of the consolidation plan for NFPA’s Emergency Response and Responder Safety (ERRS) standards. At the April 2019 NFPA Standards Council meeting, all ERRS technical committees and NFPA staff were directed to consolidate and unify the ERRS standards with similar content areas. The goal of this effort is to increase usability, reduce errors and conflicts, and ultimately produce higher quality standards.

The 2024 edition of NFPA 1660 integrates NFPA 1600, NFPA 1616, and NFPA 1620 into a single standard that establishes a common set of criteria for emergency management and business continuity programs; mass evacuation, sheltering, and re-entry programs; and the development of pre-incident plans for emergency response personnel.

For the 2024 edition, the technical committees have ensured consistency and continuity throughout the entire document by creating a single set of terminology in Chapter 3. The technical committees have also revised the reference chapters to increase usability.

For more information about the ERRS consolidation project, see nfpa.org/errs.

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Committee Scope: This Committee shall have primary responsibility for documents on preparedness for, response to, and recovery from disasters resulting from natural, human, or technological events.

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Committee Scope: This Committee shall establish a common set of criteria for mass evacuation, mass sheltering and mass re-entry programs, hereinafter referred to as the program.

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Committee Scope: This Committee shall have primary responsibility for documents on the site-specific pre-incident planning for response to fires and other types of emergencies.

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NFPA 1660

Standard for

Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery

2024 Edition

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NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Annex A.

A reference in brackets [] following a section or paragraph indicates material that has been extracted from another NFPA document. Extracted text may be edited for consistency and style and may include the revision of internal paragraph references and other references as appropriate. Requests for interpretations or revisions of extracted text shall be sent to the technical committee responsible for the source document.

Information on referenced and extracted publications can be found in Chapter 2 and Annex Z.

Chapter 1 Administration

1.1 Scope. This standard establishes a common set of criteria for emergency management and business continuity programs; mass evacuation, sheltering, and re-entry programs; and the development of pre-incident plans for personnel responding to emergencies.

1.2 Purpose. The purpose of this standard is to provide the fundamental criteria for all-hazards preparedness, response, and resiliency program management; the fundamental criteria for mass evacuation, sheltering, and re-entry program management; and a process for the development of pre-incident plans to assist personnel with safe and effective incident management.

1.3* Application. This standard can be applied as follows:

- (1) Chapters 1 through 3; Chapters 4 through 10; and Annexes A, B, C, D, E, F, G, H, I, J, K, and Z constitute NFPA 1600.

- (2) Chapters 1 through 3; Chapters 11 through 16; and Annexes A, L, M, N, O, P, Q, R, S, T, U, V, W, X, and Z constitute NFPA 1616.
- (3) Chapters 1 through 3; Chapters 17 through 23; and Annexes A, Y, and Z constitute NFPA 1620.

Chapter 2 Referenced Publications

2.1 General. The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 130, *Standard for Fixed Guideway Transit and Passenger Rail Systems*, 2023 edition.

NFPA 170, *Standard for Fire Safety and Emergency Symbols*, 2021 edition.

NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*, 2022 edition.

NFPA 303, *Fire Protection Standard for Marinas and Boatyards*, 2021 edition.

NFPA 440, *Guide for Aircraft Rescue and Firefighting Operations and Airport/Community Emergency Planning*, 2024 edition.

NFPA 470, *Hazardous Materials/Weapons of Mass Destruction (WMD) Standard for Responders*, 2022 edition.

NFPA 502, *Standard for Road Tunnels, Bridges, and Other Limited Access Highways*, 2023 edition.

2.3 Other Publications.

2.3.1 US Government Publications. US Government Publishing Office, 732 North Capitol Street, NW, Washington, DC 20401-0001.

Title 29, Code of Federal Regulations, Part 1910.146, “Permit-Required Confined Spaces.”

2.3.2 Other Publications.

Merriam-Webster’s Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

2.4 References for Extracts in Mandatory Sections.

NFPA 14, *Installation of Standpipe and Hose Systems*, 2019 edition.

NFPA 101®, *Life Safety Code®*, 2021 edition.

NFPA 470, *Hazardous Materials/Weapons of Mass Destruction (WMD) Standard for Responders*, 2022 edition.

NFPA 1006, *Standard for Technical Rescue Personnel Professional Qualifications*, 2021 edition.

Chapter 3 Definitions

3.1 General. The definitions contained in this chapter shall apply to the terms used in this standard. Where terms are not defined in this chapter or within another chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. *Merriam-Webster’s Collegiate Dictionary*, 11th edition, shall be the source for the ordinarily accepted meaning.

3.2 NFPA Official Definitions.

3.2.1* Approved. Acceptable to the authority having jurisdiction.

3.2.2* Authority Having Jurisdiction (AHJ). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

3.2.3 Shall. Indicates a mandatory requirement.

3.2.4 Should. Indicates a recommendation or that which is advised but not required.

3.2.5 Standard. An NFPA standard, the main text of which contains only mandatory provisions using the word “shall” to indicate requirements and that is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions are not to be considered a part of the requirements of a standard and shall be located in an appendix, annex, footnote, informational note, or other means as permitted in the NFPA manuals of style. When used in a generic sense, such as in the phrases “standards development process” or “standards development activities,” the term “standards” includes all NFPA standards, including codes, standards, recommended practices, and guides.

3.3 General Definitions.

3.3.1 Abandoned Building. A building that is unoccupied/unused with no intention of re-occupying and reusing.

3.3.2 Access/Convenience Stairs. Limited floor-level stair that is located between two or more common floors utilized by a single tenant and distinct from the main building staircase.

3.3.3* Access and Functional Needs. A person’s additional needs before, during, and after an incident in functional areas that might include, but not be limited to, maintaining independence, communication, transportation, supervision, and medical care.

3.3.4 All-Hazards. An approach for prevention, mitigation, preparedness, response, continuity, and recovery that addresses a full range of threats and hazards, including natural, human-caused, and technology-caused.

3.3.5 Anchor Store. A department store or major merchandising center that has direct access to the covered mall but in which all required means of egress is independent of the covered mall.

3.3.6 Animals. Includes household pets, service and assistance animals, working dogs, livestock, wildlife, exotic animals, zoo animals, research animals, and animals housed in shelters, rescue organizations, breeding facilities, and sanctuaries.

3.3.7 Apartment Building. A building or portion thereof containing three or more dwelling units with independent cooking and bathroom facilities.

3.3.8 Area of Refuge. An area that is either (1) a story in a building where the building is protected throughout by an approved, supervised automatic sprinkler system and has not less than two accessible rooms or spaces separated from each other by smoke-resisting partitions; or (2) a space located in a path of travel leading to a public way that is protected from the effects of fire, either by means of separation from other spaces

in the same building or by virtue of location, thereby permitting a delay in egress travel from any level. [101, 2021]

3.3.9* Assembly Occupancy. An occupancy (1) used for a gathering of 50 or more persons for deliberation, worship, entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load.

3.3.10* Assistance Animal. An animal that works, provides assistance, or performs tasks for the benefit of a person with a disability, or provides emotional support that alleviates one or more identified symptoms or effects of a person’s disability.

3.3.11 Atrium. A large-volume space created by a floor opening or series of floor openings connecting two or more stories that is covered at the top of the series of openings and is used for purposes other than an enclosed stairway; an elevator hoistway; an escalator opening; or as a utility shaft used for plumbing, electrical, air-conditioning, or communications facilities. [101, 2021]

3.3.12 Bulk Merchandising Retail Building. A building in which the sales area includes the storage of combustible materials on pallets, in solid piles, or in racks in excess of 3.7 m (12 ft) in storage height.

3.3.13 Business Impact Analysis (BIA). A management level analysis that identifies, quantifies, and qualifies the impacts resulting from interruptions or disruptions of an entity’s resources. The analysis can identify time-critical functions, recovery priorities, dependencies, and interdependencies so that recovery time objectives can be established and approved.

3.3.14* Business Occupancy. An occupancy used for account and record keeping or the transaction of business other than mercantile.

3.3.15 Capability. The ability to perform required actions.

3.3.16 Clean Agent. Electrically nonconductive, volatile, or gaseous fire extinguishant that does not leave a residue upon evaporation.

3.3.17 Combustible Dust. A finely divided combustible particulate solid that presents a flash fire hazard or explosion hazard when suspended in air or the process-specific oxidizing medium over a range of concentrations.

3.3.18 Combustible Particulate Solid. Any solid material composed of distinct particles or pieces, regardless of size, shape, or chemical composition, that presents a fire hazard.

3.3.19 Common. Occurring or appearing frequently; occurring frequently or habitually; usual. Done often; prevalent.

3.3.20 Competence. Demonstrated ability to apply knowledge and skills to achieve intended results.

3.3.21 Competent Person. One who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. [1006, 2021]

3.3.22* Confined Space. A space that is large enough and so configured that an employee can bodily enter and perform assigned work, that has limited or restricted means for entry or exit, and that is not designed for continuous employee occupancy, as defined by 29 CFR 1910.146.

3.3.23 Continual Improvement. Recurring process of enhancing the management program in order to achieve improvements in overall performance consistent with the entity's policy, goals, and objectives.

3.3.24* Continuity. An ongoing process to ensure that the necessary steps are taken to identify the impacts of potential losses and maintain viable continuation of services, recovery strategies, and recovery plans; a term that includes business continuity/continuity of operations (COOP), operational continuity, succession planning, continuity of government (COG), which support the resilience of the entity.

3.3.25 Controlled Atmosphere Warehouse. A facility for storing specialty products, such as fruits, that generally includes sealed storage rooms, with controlled temperature and air content, the most common being an atmosphere containing a high percentage of a gas such as nitrogen.

3.3.26* Covered Mall Building. A building, including the covered mall, enclosing a number of tenants and occupancies, such as retail stores, drinking and dining establishments, entertainment and amusement facilities, offices, and other similar uses, wherein two or more tenants have a main entrance into the covered mall.

3.3.27 Crisis. An issue, event, or series of events with potential for strategic implications that severely impacts or has the potential to severely impact an entity's operations, brand, image, reputation, market share, ability to do business, or relationships with key stakeholders. A crisis might or might not be initiated or triggered by an incident, and requires sustained input at a strategic level to minimize its impact on the entity.

3.3.28 Crisis Management. The ability of an entity to manage incidents that have the potential to cause significant security, financial, strategic, or reputational impacts.

3.3.29 Damage Assessment. A determination of the effects of the incident on humans; on physical, operational, economic characteristics; and on the environment.

3.3.30* Detention and Correctional Occupancy. An occupancy used to house four or more persons under varied degrees of restraint or security where such occupants are mostly incapable of self-preservation because of security measures not under the occupants' control.

3.3.31 Disaster/Emergency Management. An ongoing process to prevent, mitigate, prepare for, respond to, maintain continuity during, and to recover from, an incident that threatens life, property, operations, information, or the environment.

3.3.32* Dormitory. A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room, or a series of closely associated rooms, under joint occupancy and single management, with or without meals, but without individual cooking facilities.

3.3.33* Educational Occupancy. An occupancy used for educational purposes through the twelfth grade by six or more persons for 4 or more hours per day or more than 12 hours per week.

3.3.34 Elevator Evacuation System. A system, including a vertical series of elevator lobbies and associated elevator lobby doors, an elevator shaft(s), and a machine room(s), that provides protection from fire effects for elevator passengers,

people waiting to use elevators, and elevator equipment so that elevators can be used safely for egress. [*101*, 2021]

3.3.35 Emergency Communication. Alerting and warning community members in a defined area of a potential threat to life and property and the actions to be taken in response to the threat.

3.3.36 Emergency Operations Center. A fixed, designated area to be used in supporting and coordinating operations during emergencies.

3.3.37 Emergency Power Supply (EPS). An electric power source of the capacity and quality required for an EPS system.

3.3.38* Emergency Respite. Provision of short-term, temporary relief to those who are caring for family members who might otherwise require permanent placement in a facility outside the home.

3.3.39 Emergency Services Organization (ESO). Any public, private, governmental, or military organization that provides emergency response and other related activities, whether for profit, not for profit, or governmentally owned and operated.

3.3.40* Entity. A person, organization, or group that is responsible for the implementation and/or fulfillment of the requirements and considerations of this standard.

3.3.41 Evacuation. (1) The act or process of evacuating; (2) to leave or remove someone from a dangerous place; (3) to withdraw from the potential area of impact in an organized way, especially for protection; (4) organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

3.3.42* Evacuation Capability. The ability of occupants, residents, and staff as a group either to evacuate a building or to relocate from the point of occupancy to a point of safety.

3.3.43 Evacuation Order. An order issued by a jurisdictional authority requesting, recommending, or requiring the movement of people and animals out of a defined area due to an immediate threat to life and property from an emergency.

3.3.44 Evacuation Warning. Alerting and warning of persons in a defined area of the potential need to evacuate due to a threat to life and property in response to an emergency.

3.3.45 Event. A planned nonemergency activity (e.g., sporting event, concert, parade, mass gathering).

3.3.46* Exercise. A process to assess, train, practice, and improve performance in an entity.

3.3.47 Facility. Permanent, semi-permanent, or temporary commercial or industrial property such as a building, plant, or structure, built, established, or installed for the performance of one or more specific activities or functions including all processes performed therein.

3.3.48* Facility Emergency Action Plan. A plan of designated actions by employers, employees, and other building occupants to ensure their safety from fire and other emergencies.

3.3.49 Fire Alarm System. A system or portion of a combination system that consists of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal-initiating devices and to initiate the appropriate response to those signals.

3.3.50* Fire Barrier. A continuous membrane or a membrane with discontinuities created by protected openings with a specified fire protection rating, where such membrane is designed and constructed with a specified fire resistance rating to limit the spread of fire, and that also restricts the movement of smoke.

3.3.51 Fire Compartment. A space within a building that is enclosed by fire barriers on all sides, including the top and bottom.

3.3.52 Fire Wall. A wall separating buildings or subdividing a building to prevent the spread of fire and having a fire resistance rating and structural stability.

3.3.53* Health Care Occupancy. An occupancy used for purposes of medical or other treatment or care of four or more persons where such occupants are mostly incapable of self-preservation due to age, physical or mental disability, or because of security measures not under the occupants' control.

3.3.54* Hotel. A building or groups of buildings under the same management in which there are sleeping accommodations for more than 16 persons and primarily used by transients for lodging with or without meals.

3.3.55 HVAC. An acronym for heating, ventilation, and air conditioning systems and their related components.

3.3.56* Incident. An event that has the potential to cause interruption, disruption, loss, emergency, disaster, or catastrophe and that can escalate into a crisis.

3.3.57 Incident Action Plan. 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 requirements approved by the incident commander.

3.3.58* Incident Management System (IMS). The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure and designed to aid in the management of resources during incidents.

3.3.59* Industrial Occupancy. An occupancy in which products are manufactured or in which processing, assembling, mixing, packaging, finishing, decorating, or repair operations are conducted.

3.3.60 Interoperability. The ability of diverse personnel, systems, and entities to work together seamlessly.

3.3.61 Joint Information System (JIS). Provides the mechanism to organize, integrate, and coordinate information to ensure timely, accurate, accessible, and consistent messaging across multiple jurisdictions or disciplines with nongovernmental organizations and the private sector and includes the plans, protocols, procedures, and structures used to provide public information.

3.3.62 Key Box. See 3.3.64, Lock Box.

3.3.63 Lift. A mechanically or electrically operated platform used to work at various heights.

3.3.64* Lock Box. A locked container often used to store building entry keys, pre-incident plans, and/or related data.

3.3.65 Lodging or Rooming House. A building or portion thereof that does not qualify as a one- or two-family dwelling,

that provides sleeping accommodations for a total of 16 or fewer people on a transient or permanent basis, without personal care services, with or without meals, but without separate cooking facilities for individual occupants.

3.3.66* Mass Gathering. An event expected to be attended by a sufficient number of people to strain the planning and response resources of the hosting community, state, province, nation, or region.

3.3.67* Mercantile Occupancy. An occupancy used for the display and sale of merchandise.

3.3.68* Mitigation. Activities taken to reduce the impacts from hazards.

3.3.69* Mutual Aid/Assistance Agreement. A prearranged agreement between two or more entities to share resources in response to or during recovery from an incident.

3.3.70 On-Site Emergency Representative. The person responsible for coordinating and implementing the site emergency action plan during an incident.

3.3.71 Pre-Incident Plan. A document developed by gathering general and detailed data that is used by responding personnel in effectively managing emergencies for the protection of occupants, participants, responding personnel, property, and the environment.

3.3.72 Pre-Incident Plan Developer. The individual, group, or agency responsible for developing or maintaining the pre-incident plan.

3.3.73 Preparedness. Ongoing activities, tasks, and systems to develop, implement, and maintain the program.

3.3.74* Prevention. Activities to avoid or stop an incident from occurring.

3.3.75* Process Hazard Analysis. An analysis of a process or system used to identify potential cause and effect relationships and resultant hazards or system failures.

3.3.76* Recovery. Activities and programs designed to return conditions to a level that is acceptable to the entity.

3.3.77* Re-entry. The return of people to a previously evacuated area.

3.3.78* Residential Board and Care Occupancy. A building or portion thereof that is used for lodging and boarding of four or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services.

3.3.79 Resiliency. The ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions.

3.3.80* Resource Management. A system for identifying available resources to enable timely access to resources needed to prevent, mitigate, prepare for, respond to, maintain continuity during, or recover from an incident.

3.3.81* Responding Personnel. Personnel, whether public or private, available to respond to emergencies.

3.3.82* Response. Immediate and ongoing activities, tasks, programs, and systems to manage the effects of an incident

that threatens life, property, operations, an entity, or the environment.

3.3.83 Risk. A measure of the probability and severity of adverse effects that result from exposure to a hazard.

3.3.84 Risk Assessment. The process of threat identification and the analysis of hazards, probabilities, vulnerabilities, and impacts.

3.3.85 Safety Data Sheet (SDS). Formatted information, provided by chemical manufacturers and distributors of hazardous products, about chemical composition, physical and chemical properties, health and safety hazards, emergency response, and waste disposal of the material. [470, 2022]

3.3.86 Sally Port (Security Vestibule). A compartment provided with two or more doors where the intended purpose is to prevent continuous and unobstructed passage by allowing the release of only one door at a time.

3.3.87 Scissor Stair. Two interlocking stairways providing two separate paths of egress located within one stairwell enclosure.

3.3.88* Security Vulnerability Assessment. Security vulnerability assessment methodology identifies and assesses potential security threats, risks, and vulnerabilities and guides the chemical facility industry in making security improvements.

3.3.89* Service Animal. Any dog or miniature horse that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability.

3.3.90* Shelter. A safe, short-term accommodation for persons and animals threatened or displaced by an emergency or disaster that can include overnight accommodations, heat or cooling, meals and water, security, health and medical services, clergy and social services, reunification, child care, showers, and laundry.

3.3.91 Sheltering. Seeking protection in the home, place of employment, or other location when disaster strikes. This can include staying with friends and relatives, seeking commercial lodging, or staying in a mass care facility operated by disaster relief groups in conjunction with local authorities.

3.3.92 Shelter-in-Place. To use a safe area inside a building or structure during an incident.

3.3.93 Site Liaison. An individual who has in-depth operating knowledge of the site or facility.

3.3.94 Situation Analysis. The process of collecting, evaluating, and disseminating information related to the incident, including information on the current and forecasted situation and on the status of resources for management of the incident.

3.3.95 Sky Lobby. An intermediate floor where people can change from an express elevator that only stops at the sky lobby to a local elevator which stops at every floor within a segment of the building.

3.3.96* Smoke Barrier. A continuous membrane, or a membrane with discontinuities created by protected openings, where such membrane is designed and constructed to restrict the movement of smoke.

3.3.97 Smoke Compartment. A space within a building enclosed by smoke barriers on all sides, including the top and bottom.

3.3.98 Social Media. Forms of electronic communication (such as websites) through which people create online communities to share information, ideas, and personal messages.

3.3.99 Spill Prevention Control and Countermeasure (SPCC) Plan. A plan prepared for facilities with a chemical or chemicals that exceed certain capacities in accordance with governmental regulations.

3.3.100* Sprinkler System. For fire protection purposes, an integrated system of underground and overhead piping designed in accordance with fire protection engineering standards that includes one or more water supplies.

3.3.101 Stakeholder(s). Any individual, group, or organization that might affect, be affected by, or perceive itself to be affected by the emergency or outcome of the program or the program's actions.

3.3.102* Standpipe System. An arrangement of piping, valves, hose connections, and associated equipment installed in a building or structure, with the hose connections located in such a manner that water can be discharged in streams or spray patterns through attached hose and nozzles, for the purpose of extinguishing a fire, thereby protecting a building or structure and its contents in addition to protecting the occupants. [14, 2019]

3.3.103* Storage Occupancy. An occupancy used primarily for the storage or sheltering of goods, merchandise, products, vehicles, or animals.

3.3.104 Supply Chain. A network of individuals, entities, activities, information, resources, and technology involved in creating and delivering a product or service from supplier to end user.

3.3.105 Test. Procedure for evaluation with a pass or fail result.

3.3.106* US National Grid (USNG). An alphanumeric point reference system that has been overlaid on the Universal Transverse Mercator (UTM) numerical grid.

3.3.107 Vacant Building. A building that is currently unoccupied/unused and for which there is intention to reoccupy and reuse in the future.

3.3.108 Vital Records. Information critical to the continued operation or survival of an entity.

3.3.109 Whole Community. Encompasses individuals, families, households, communities, the private and nonprofit sectors, faith-based organizations, and all levels of government.

Chapter 4 Program Management (NFPA 1600)

4.1 Administration.

4.1.1* Scope. Chapters 4 through 10 establish a common set of criteria for all-hazards crisis/disaster/emergency management and business continuity/continuity of operations programs, hereinafter referred to as "program."

4.1.2* Purpose. Chapters 4 through 10 provide the fundamental criteria for preparedness and resiliency, including the planning, implementation, execution, assessment, and maintenance of programs for prevention, mitigation, response, continuity, and recovery.

4.1.3* Application. Chapters 4 through 10 apply to public, private, nonprofit, and nongovernmental entities.

4.2 Leadership and Commitment.

4.2.1 The entity leadership shall demonstrate commitment to the program to prevent, mitigate the consequences of, prepare for, respond to, maintain continuity during, and recover from incidents.

4.2.2 The leadership commitment shall include the following:

- (1) Support the development, implementation, and maintenance of the program
- (2) Provide necessary resources to support the program
- (3) Ensure the program is reviewed and evaluated as needed to ensure program effectiveness
- (4) Support corrective action to address program deficiencies

4.2.3 The entity shall adhere to policies, execute plans, and follow procedures developed to support the program.

4.3* Program Coordinator. The program coordinator shall be appointed by the entity's leadership and authorized to develop, implement, administer, evaluate, and maintain the program.

4.4 Performance Objectives.

4.4.1* The entity shall establish performance objectives for the program in accordance with Chapter 4 and the elements in Chapters 5 through 10.

4.4.2 The performance objectives shall address the results of the hazard identification, risk assessment, and business impact analysis.

4.4.3 Performance objectives shall be developed by the entity to address both short-term and long-term needs.

4.4.4 The entity shall define the terms *short term* and *long term*.

4.5 Program Committee.

4.5.1* A program committee shall be established by the entity in accordance with its policy.

4.5.2 The program committee shall provide input or assist in the coordination of the preparation, development, implementation, evaluation, and maintenance of the program.

4.5.3 The program committee shall include the program coordinator and others who have the expertise, the knowledge of the entity, and the capability to identify resources from all key functional areas within the entity.

4.5.4* The program committee shall solicit applicable external representation.

4.6 Program Administration.

4.6.1 The entity shall have a documented program that includes the following:

- (1) Executive policy, including vision, mission statement, roles and responsibilities, and enabling authority
- (2)* Program scope, goals, performance objectives, and metrics for program evaluation

(3)* Applicable authorities, legislation, regulations, and industry codes of practice as required by Section 4.7

(4) Program budget and schedule, including milestones

(5) Program plans and procedures that include the following:

- (a) Anticipated cost
- (b) Priority
- (c) Resources required

(6) Records management practices as required by Section 4.9

(7) Management of change

4.6.2 The program shall include the requirements specified in Chapters 4 through 10, the scope of which shall be determined through an "all-hazards" approach and the risk assessment.

4.6.3* Program requirements shall be applicable to preparedness including the planning, implementation, assessment, and maintenance of programs for prevention, mitigation, response, continuity, and recovery.

4.7 Laws and Authorities.

4.7.1* The program shall comply with applicable legislation, policies, regulatory requirements, and directives.

4.7.2 The entity shall establish, maintain, and document procedure(s) to comply with applicable legislation, policies, regulatory requirements, and directives.

4.7.3* The entity shall implement a strategy for addressing the need for revisions to legislation, regulations, directives, policies, and industry codes of practice.

4.8 Finance and Administration.

4.8.1 The entity shall develop finance and administrative procedures to support the program before, during, and after an incident.

4.8.2* There shall be a responsive finance and administrative framework that does the following:

- (1) Complies with the entity's program requirements
- (2) Is uniquely linked to response, continuity, and recovery operations
- (3) Provides for maximum flexibility to expeditiously request, receive, manage, and apply funds in a nonemergency environment and in emergency situations to ensure the timely delivery of assistance

4.8.3 Procedures shall be created and maintained for expediting fiscal decisions in accordance with established authorization levels, accounting principles, governance requirements, and fiscal policy.

4.8.4 Finance and administrative procedures shall include the following:

- (1) Responsibilities for program finance authority, including reporting relationships to the program coordinator
- (2)* Program procurement procedures
- (3) Payroll
- (4)* Accounting systems to track and document costs
- (5) Management of funding from external sources
- (6) Crisis management procedures that coordinate authorization levels and appropriate control measures
- (7) Documenting financial expenditures incurred as a result of an incident and for compiling claims for future cost recovery
- (8) Identifying and accessing alternative funding sources
- (9) Managing budgeted and specially appropriated funds

4.9* Records Management.

4.9.1 The entity shall develop, implement, and manage a records management program to ensure that records are available to the entity.

4.9.2 The program shall include the following:

- (1) Identification of records (hard copy or electronic) vital to continue the operations of the entity
- (2) Backup of records on a frequency necessary to meet program goals and objectives
- (3) Validation of the integrity of records backup
- (4) Implementation of procedures to store, retrieve, and recover records on-site or off-site
- (5) Protection of records
- (6) Implementation of a record review process
- (7) Procedures coordinating records access

Chapter 5 Planning (NFPA 1600)**5.1* Planning and Design Process.**

5.1.1* The program shall follow a planning process that develops strategies, plans, and required capabilities to execute the program.

5.1.2 Strategic planning shall define the entity's vision, mission, and goals of the program.

5.1.3* A risk assessment and a business impact analysis (BIA) shall develop information to prepare prevention and mitigation strategies.

5.1.4* A risk assessment, a BIA, and a resource needs assessment shall develop information to prepare emergency operations/response, crisis communications, continuity, and recovery plans.

5.1.5* Crisis management planning shall address an event, or series of events, that severely impacts or has the potential to severely impact an entity's operations, brand, image, reputation, market share, ability to do business, or relationships with key stakeholders.

5.1.6* The entity shall include key stakeholders in the planning process.

5.2* Risk Assessment.

5.2.1 The entity shall conduct a risk assessment.

5.2.2 The entity shall identify hazards and monitor those hazards and the likelihood and severity of their occurrence over time.

5.2.2.1 Hazards to be evaluated shall include the following:

- (1) Geological:
 - (a) Earthquake
 - (b) Landslide, mudslide, lahar, subsidence
 - (c) Tsunami
 - (d) Volcano
- (2) Meteorological:
 - (a) Drought
 - (b) Extreme hot or cold temperatures
 - (c) Famine
 - (d) Flood, flash flood, seiche, tidal surge
 - (e) Geomagnetic storm

- (f) Lightning
- (g) Snow, ice, hail, sleet, avalanche
- (h) Wildland fire
- (i) Windstorm, tropical cyclone, hurricane, tornado, waterspout, dust storm, sandstorm, derecho

(3) Biological:

- (a) Foodborne illnesses
- (b)* Infectious/communicable/pandemic diseases

(4) Accidental human-caused:

- (a) Building/structure collapse
- (b)* Entrapment
- (c) Explosion/fire
- (d) Fuel/resource shortage
- (e)* Hazardous material spill or release
- (f) Equipment failure
- (g) Nuclear reactor incident
- (h) Radiological incident
- (i)* Transportation incident
- (j) Unavailability of essential employee(s)
- (k)* Water control structure failure
- (l) Misinformation

(5) Intentional human-caused:

- (a) Incendiary fire
- (b) Bomb threat
- (c) Demonstrations/civil disturbance/riot/insurrection
- (d) Discrimination/harassment
- (e) Disinformation (e.g., rumors, false allegations, accusations)
- (f) Kidnapping/hostage/extortion
- (g)* Geopolitical risks
- (h) Missing person
- (i)* Cybersecurity incidents
- (j) Product defect or contamination
- (k) Robbery/theft/fraud
- (l) Strike or labor dispute
- (m) Suspicious package
- (n)* Terrorism
- (o) Vandalism/sabotage
- (p) Workplace/school/university violence
- (q) Supply chain constraint or failure

(6) Technological:

- (a)* Hardware, software, and network connectivity interruption, disruption, or failure
- (b)* Utility interruption, disruption, or failure

(7) Economic/financial:

- (a) Foreign currency exchange rate change
- (b) Economic recession
- (c) Boycott
- (d) Theft/fraud/malfesance/impropriety/scandal involving currency, monetary instruments, goods, and intellectual property

(8) Strategic:

- (a) Loss of senior executive
- (b) Failed acquisition/strategic initiative

(9) Humanitarian issues

5.2.2.2* The vulnerability of people, property, operations, the environment, the entity, and the supply chain operations shall be identified, evaluated, and monitored.

5.2.3 The entity shall conduct an analysis of the impacts of the hazards identified in 5.2.2 on the following:

- (1) Health and safety of persons in the affected area
- (2) Health and safety of personnel responding to the incident
- (3) Security of information
- (4)* Continuity of operations
- (5) Continuity of government
- (6)* Property, facilities, assets, and critical infrastructure
- (7) Delivery of the entity's services
- (8) Supply chain
- (9) Environment
- (10)* Economic and financial conditions
- (11) Legislated, regulatory, and contractual obligations
- (12) Brand, image, and reputation
- (13) Work and labor arrangements

5.2.4 The risk assessment shall include an analysis of the escalation of impacts over time.

5.2.5* The analysis shall evaluate the potential effects of regional, national, or international incidents that could have cascading impacts.

5.2.6 The risk assessment shall evaluate the adequacy of existing prevention and mitigation strategies.

5.3 Business Impact Analysis (BIA).

5.3.1 The entity shall conduct a BIA that includes an assessment of how a disruption could affect an entity's operations, reputation, and market share, ability to do business, or relationships with key stakeholders and identifies the resources and capabilities that might be needed to manage the disruptions.

5.3.1.1* The BIA shall identify processes that are required for the entity to perform its mission.

5.3.1.2* The BIA shall identify the following resources that enable the processes:

- (1) Personnel
- (2) Equipment
- (3) Infrastructure
- (4) Technology
- (5) Information
- (6) Supply chain

5.3.2* The BIA shall evaluate the following:

- (1) Dependencies
- (2) Single-source and sole-source suppliers
- (3) Single points of failure
- (4) Potential qualitative and quantitative impacts from a disruption to the resources in 5.3.1.2

5.3.2.1* The BIA shall determine the point in time [recovery time objective (RTO)] when the impacts of the disruption become unacceptable to the entity.

5.3.3* The BIA shall identify the acceptable amount of data loss for physical and electronic records to identify the recovery point objective (RPO).

5.3.4* The BIA shall identify gaps between the RTOs and RPOs and demonstrated capabilities.

5.3.5* The BIA shall be used in the development of continuity and recovery strategies and plans.

5.3.6* The BIA shall identify critical supply chains, including those exposed to domestic and international risks, and the timeframe within which those operations become critical to the entity.

5.4 Resource Needs Assessment.

5.4.1* The entity shall conduct a resource needs assessment based on the hazards identified in Section 5.2 and the continuity requirements and their dependencies identified in Section 5.3.

5.4.2 The resource needs assessment shall include the following:

- (1)* Human resources, 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 liabilities

5.4.3* The entity shall establish procedures to locate, acquire, store, distribute, maintain, test, and account for services, human resources, equipment, and materials procured or donated to support the program.

5.4.4* Facilities capable of supporting response, continuity, and recovery operations shall be identified.

5.4.5* Agreements. The need for mutual aid/assistance or partnership agreements shall be determined; if needed, agreements shall be established and documented.

Chapter 6 Implementation (NFPA 1600)

6.1 Common Plan Requirements.

6.1.1* Plans shall address the health and safety of personnel.

6.1.2* Plans shall identify and document the following:

- (1) Assumptions made during the planning process
- (2) Functional roles and responsibilities of internal and external entities
- (3) Lines of authority
- (4) Process for delegation of authority
- (5) Lines of succession for the entity
- (6) Liaisons to external entities
- (7) Logistics support and resource requirements

6.1.3* Plans shall be individual, integrated into a single plan document, or a combination of the two.

6.1.4 The entity shall make sections of the plans available to those assigned specific tasks and responsibilities therein and to key stakeholders as required.

6.2 Prevention.

6.2.1* The entity shall develop a strategy to prevent an incident that threatens life, property, operations, information, and the environment.

6.2.2* The prevention strategy shall be kept current using the information collection and intelligence techniques.

6.2.3 The prevention strategy shall be based on the results of hazard identification and risk assessment, an analysis of impacts, program constraints, operational experience, and a cost-benefit analysis.

6.2.4 The entity shall have a process to monitor the identified hazards and adjust the level of preventive measures to be commensurate with the risk.

6.3 Mitigation.

6.3.1* The entity shall develop and implement a mitigation strategy that includes measures to be taken to limit or control the consequences, extent, or severity of an incident that cannot be prevented.

6.3.2* The mitigation strategy shall be based on the results of hazard identification and risk assessment, an analysis of impacts, program constraints, operational experience, and cost-benefit analysis.

6.3.3* The mitigation strategy shall include interim and long-term actions to reduce vulnerabilities.

6.4 Crisis Management.

6.4.1 The entity shall establish and maintain a crisis management capability to manage issues, events, or series of events, that severely impact or have the potential to severely impact an entity's brand, image, reputation, market share, ability to do business, or relationships with key stakeholders.

6.4.2 The crisis management capability shall include assigned responsibilities and established processes to perform the following:

- (1) Engage senior leadership
- (2) Detect the signals, symptoms, incidents, events, or circumstances that portend an emerging crisis or have the potential to trigger a crisis
- (3) Conduct a situation analysis
- (4) Declare a crisis, alert responsible persons, and activate crisis management plans should the current situation meet established criteria
- (5) Identify issues to be addressed by the responsible persons and senior leadership
- (6) Develop strategies to mitigate the potential impacts of identified issues
- (7) Provide direction and support for the entity's facilities, operations, employees, customers, and others affected by or potentially affected by the crisis
- (8) Coordinate with the entity's crisis communication capability and provide strategic direction, authorize communications strategies, and communicate with stakeholders

6.5 Crisis Communications and Public Information.

6.5.1* The entity shall develop a plan and procedures to disseminate information to and respond to requests for information from the following audiences before, during, and after an incident:

- (1) Internal audiences, including employees
- (2) External audiences, including the media, access and functional needs populations, and other stakeholders

6.5.2* The entity shall establish and maintain a crisis communications or public information capability that includes the following:

- (1)* Central contact facility or communications hub

- (2) Physical or virtual information center
- (3) System for gathering, monitoring, and disseminating information
- (4) Procedures for developing and delivering coordinated messages
- (5) Protocol to clear information for release

6.6 Warning, Notifications, and Communications.

6.6.1* The entity shall determine its warning, notification, and communications needs.

6.6.2* Warning, notification, and communications systems shall be reliable, redundant, and interoperable.

6.6.3* Emergency warning, notification, and communications protocols and procedures shall be developed, tested, and used to alert stakeholders potentially at risk from an actual or impending incident.

6.6.4 Procedures shall include issuing warnings through authorized agencies if required by law as well as the use of pre-scripted information bulletins or templates.

6.6.5* Information shall be disseminated through the media, social media, or other means as determined by the entity to be the most effective.

6.7 Operational Procedures.

6.7.1 The entity shall develop, coordinate, and implement operational procedures to support the program.

6.7.2 Procedures shall be established and implemented for response to and recovery from the impacts of hazards identified in 5.2.2.

6.7.3* Procedures shall provide for life safety, property conservation, incident stabilization, continuity, and protection of the environment under the jurisdiction of the entity.

6.7.4 Procedures shall include the following:

- (1) Control of access to the area affected by the incident
- (2) Identification of personnel engaged in activities at the incident
- (3) Accounting for personnel engaged in incident activities
- (4) Mobilization and demobilization of resources

6.7.5 Procedures shall allow for concurrent activities of response, continuity, recovery, and mitigation.

6.8 Incident Management.

6.8.1* The entity shall develop an incident management system to direct, control, and coordinate response, continuity, and recovery operations.

6.8.1.1* Emergency Operations Centers (EOCs).

6.8.1.1.1* The entity shall establish primary and alternate EOCs capable of managing response, continuity, and recovery operations.

6.8.1.1.2* The EOCs shall be permitted to be physical or virtual.

6.8.1.1.3 On activation of an EOC, communications and coordination shall be established between incident command and the EOC.

6.8.2 The incident management system shall describe specific entity roles, titles, and responsibilities for each incident management function.

6.8.3* The entity shall establish procedures and policies for coordinating prevention, mitigation, preparedness, response, continuity, and recovery activities.

6.8.4 The entity shall coordinate the activities specified in 6.8.3 with stakeholders.

6.8.5 Procedures shall include a situation analysis that incorporates an assessment of the following for the purposes of activating emergency response/operations, business continuity/continuity of operations, crisis management, and/or crisis communications plans and capabilities:

- (1) Casualties and the availability of required personnel resources
- (2) Physical damage to property under the jurisdiction of the entity
- (3) Interruption or disruption of the entity's operations
- (4) Impacts to digital information and vital records
- (5) Actual or potential contamination of the environment
- (6) Actual or potential impacts to brand, image, reputation, market share, ability to do business, or relationships with key stakeholders
- (7) Resources needed to support response, continuity, and recovery activities

6.8.6* Emergency operations/response shall be guided by an incident action plan or management by objectives.

6.8.7 Resource management shall include the following tasks:

- (1) Establishing processes for describing, taking inventory of, requesting, and tracking resources
- (2) Resource typing or categorizing by size, capacity, capability, and skill
- (3) Mobilizing and demobilizing resources in accordance with the established IMS
- (4) Conducting contingency planning for resource deficiencies

6.8.8 A current inventory of internal and external resources shall be maintained.

6.8.9 Donations of human resources, equipment, material, and facilities shall be managed.

6.9 Emergency Operations/Response Plan.

6.9.1* Emergency operations/response plans shall define responsibilities for carrying out specific actions in an emergency.

6.9.2* The plan shall identify actions to be taken to protect people, including people with disabilities and other access and functional needs, information, property, operations, the environment, and the entity.

6.9.3* The plan shall identify actions for incident stabilization.

6.9.4* The plan shall include the following:

- (1) Protective actions for life safety in accordance with 6.9.2
- (2) Warning, notifications, and communication in accordance with Section 6.6
- (3) Crisis communication and public information in accordance with Section 6.5

(4) Resource management in accordance with 6.8.7

(5) Donation management in accordance with 6.8.9

6.10* Continuity and Recovery.

6.10.1 Continuity.

6.10.1.1 Continuity plans shall include strategies to continue critical and time-sensitive processes and as identified in the BIA.

6.10.1.2* Continuity plans shall identify and document the following:

- (1) Stakeholders that need to be notified
- (2) Processes that must be maintained
- (3) Roles and responsibilities of the individuals implementing the continuity strategies
- (4) Procedures for activating the plan, including authority for plan activation
- (5) Critical and time-sensitive technology, application systems, and information
- (6) Security of information
- (7) Alternative work sites
- (8) Workaround procedures
- (9) Vital records
- (10) Contact lists
- (11) Required personnel
- (12) Vendors and contractors supporting continuity
- (13) Resources for continued operations
- (14) Mutual aid or partnership agreements
- (15) Activities to return critical and time-sensitive processes to the original state

6.10.1.3 Continuity plans shall be designed to meet the RTO and RPO.

6.10.1.4 Continuity plans shall address supply chain disruption.

6.10.2 Recovery.

6.10.2.1 Recovery plans shall provide for restoration of processes, technology, information, services, resources, facilities, programs, and infrastructure.

6.10.2.2* Recovery plans shall document the following:

- (1) Damage assessment
- (2) Coordination of the restoration, rebuilding, and replacement of facilities, infrastructure, materials, equipment, tools, vendors, and suppliers
- (3) Restoration of the supply chain
- (4) Continuation of communications with stakeholders
- (5) Recovery of critical and time-sensitive processes, technology, systems, applications, and information
- (6) Roles and responsibilities of the individuals implementing the recovery strategies
- (7) Internal and external (vendors and contractors) personnel who can support the implementation of recovery strategies and contractual needs
- (8) Adequate controls to prevent the corruption or unlawful access to the entity's data during recovery
- (9) Compliance with regulations that would become applicable during the recovery
- (10) Maintenance of pre-incident controls

6.11 Employee Assistance and Support.

6.11.1* The entity shall develop a strategy for employee assistance and support that includes the following:

- (1)* Communications procedures
- (2)* Contact information, including emergency contact outside the anticipated hazard area
- (3) Accounting for persons affected, displaced, or injured by the incident
- (4) Temporary, short-term, or long-term housing and feeding and care of those displaced by an incident
- (5) Mental health and physical well-being of individuals affected by the incident
- (6) Pre-incident and post-incident awareness

6.11.2 The strategy shall be flexible for use in all incidents.

6.11.3* The entity shall promote family preparedness education and training for employees.

Chapter 7 Execution (NFPA 1600)

7.1* Incident Recognition. The entity shall establish and implement a process whereby all appropriate stakeholders have a common reference for the types of incidents that could adversely affect its people, property, operations, or the environment, and ensure it is appropriately referenced throughout the incident management process.

7.2 Initial Reporting/Notification. The entity shall establish and implement a process whereby all appropriate stakeholders can warn, notify, and report an incident that has potential to cause an adverse impact on its people, property, operations, or the environment. (See Section 6.6.)

7.3 Plan Activation and Incident Action Plan.

7.3.1 The entity shall establish and implement a process to assess the impact of the incident on its people, property, operations, or the environment.

7.3.2 The entity shall develop a time frame to activate appropriate planning as detailed in Sections 6.5, 6.9, and 6.10, and coordinate activation when there is a declaration by public officials.

7.4 Activate Incident Management System.

7.4.1 The entity shall execute procedures from the documented plans in accordance with Sections 6.5, 6.8, 6.9, and 6.10.

7.4.2 The entity shall execute its incident management system and activities in support of established objectives and tasks.

7.4.3 On activation of an emergency operations center (EOC), communications and coordination shall be established between incident command and the EOC.

7.5 Ongoing Incident Management and Communications.

7.5.1 The entity shall continually assess the impact of the incident on its people, property, operations, and the environment, and re-evaluate/implement its action plan in accordance with established objectives and tasks.

7.5.2 The entity shall implement the warning, notification, and communications systems to alert stakeholders who are potentially at risk from an actual or impending incident.

7.5.3 Based upon the extent of damage sustained to the entity, all necessary actions to invoke special authorities and request assistance needed to deal with the situation shall be as described in Chapter 4.

7.6 Documenting Incident Information, Decisions, and Actions. The entity shall establish and implement a system for tracking incident information received, decisions made, resources deployed, and actions taken during the incident.

7.7* Incident Stabilization. The entity shall establish criteria for measuring when the incident has been stabilized.

7.8 Demobilize Resources and Termination. The entity shall execute a procedure to terminate the response, demobilize resources, and resume operations when the incident has been stabilized.

Chapter 8 Training and Education (NFPA 1600)

8.1* Curriculum. The entity shall develop and implement a competency-based training and education curriculum that supports all employees who have a role in the program.

8.2* Goal of Curriculum. The goal of the curriculum shall be to create awareness and enhance the knowledge, skills, and abilities required to implement, support, and maintain the program.

8.3 Scope and Frequency of Instruction. The scope of the curriculum and the frequency of instruction shall be identified.

8.4 Incident Management System Training. Personnel shall be trained in the entity's incident management system (IMS) and other components of the program to the level of their involvement.

8.5 Record Keeping. Records of training and education shall be maintained as specified in Section 4.9.

8.6 Regulatory and Program Requirements. The curriculum shall comply with applicable regulatory and program requirements.

8.7* Public Education. A public education program shall be implemented to communicate the following:

- (1) The potential impacts of a hazard
- (2) Preparedness information
- (3) Information needed to develop a preparedness plan

Chapter 9 Exercises and Tests (NFPA 1600)

9.1 Program Evaluation.

9.1.1 The entity shall evaluate program plans, procedures, training, and capabilities and promote continuous improvement through periodic exercises and tests.

9.1.2 The entity shall evaluate the program based on post-incident analyses, lessons learned, and operational performance in accordance with Chapter 10.

9.1.3 Exercises and tests shall be documented.

9.2* Exercise and Test Methodology.

9.2.1 Exercises shall provide a standardized methodology to practice procedures and interact with other entities (internal and external) in a controlled setting.

9.2.2 Exercises shall be designed to assess the maturity of program plans, procedures, and strategies.

9.2.3 Tests shall be designed to demonstrate capabilities.

9.3* Design of Exercises and Tests. Exercises shall be designed to do the following:

- (1) Ensure the safety of people, property, operations, and the environment involved in the exercise or test
- (2) Evaluate the program
- (3) Identify planning and procedural deficiencies
- (4) Test or validate recently changed procedures or plans
- (5) Clarify roles and responsibilities
- (6) Obtain participant feedback and recommendations for program improvement
- (7) Measure improvement compared to performance objectives
- (8)* Improve coordination among internal and external teams and entities
- (9) Validate training and education
- (10) Increase awareness and understanding of hazards and the potential impact of hazards on the entity
- (11) Identify additional resources and assess the capabilities of existing resources, including personnel and equipment needed for effective response and recovery
- (12) Assess the ability of the team to identify, assess, and manage an incident
- (13) Practice the deployment of teams and resources to manage an incident
- (14) Improve individual performance

9.4* Exercise and Test Evaluation.

9.4.1 Exercises shall evaluate program plans, procedures, training, and capabilities to identify opportunities for improvement.

9.4.2 Tests shall be evaluated as either pass or fail.

9.5* Frequency.

9.5.1 Exercises and tests shall be conducted on the frequency needed to establish and maintain required capabilities.

Chapter 10 Program Maintenance and Improvement (NFPA 1600)

10.1* Program Reviews. The entity shall maintain and improve the program by evaluating its policies, program, procedures, and capabilities using performance objectives.

10.1.1* The entity shall improve effectiveness of the program through evaluation of the implementation of changes resulting from preventive and corrective action.

10.1.2* Evaluations shall be conducted on a regularly scheduled basis and when the situation changes to challenge the effectiveness of the existing program.

10.1.3 The program shall be re-evaluated when a change in any of the following impacts the entity's program:

- (1) Regulations
- (2) Hazards and potential impacts
- (3) Resource availability or capability
- (4) Entity's organization
- (5)* Funding changes
- (6) Infrastructure, including technology environment

- (7) Economic and geographic stability
- (8) Entity operations
- (9) Critical suppliers

10.1.4 Reviews shall include post-incident analyses, reviews of lessons learned, and reviews of program performance.

10.1.5 The entity shall maintain records of its reviews and evaluations, in accordance with the records management practices developed under Section 4.9.

10.1.6 Documentation, records, and reports shall be provided to management for review and follow-up.

10.2* Corrective Action.

10.2.1* The entity shall establish a corrective action process.

10.2.2* The entity shall take corrective action on deficiencies identified.

10.3 Continuous Improvement. The entity shall effect continuous improvement of the program through the use of program reviews and the corrective action process.

Chapter 11 Mass Evacuation, Sheltering, and Re-entry Program Management (NFPA 1616)

11.1 Administration.

11.1.1* Scope. Chapters 11 through 16 establish a common set of criteria for the process of organizing, planning, implementing, and evaluating a program for mass evacuation, sheltering, and re-entry.

11.1.1.1 The requirements in Chapters 11 through 16 are based on the existence of a program for all hazards/crisis/disaster/emergency management and business continuity/continuity of operations.

11.1.1.2 An integrated program is defined in Chapters 4 through 10.

11.1.1.3 The integrated program is scalable to meet the needs of mass evacuation, sheltering, and re-entry.

11.1.2 Purpose. Chapters 11 through 16 provide public officials, private stakeholders, emergency management personnel, and emergency responders the essential elements, common terminology, and roles for mass evacuation stages, sheltering, and re-entry phases.

11.1.3 Application. Chapters 11 through 16 apply to public, private, nonprofit, and nongovernmental entities.

11.2 Leadership and Commitment.

11.2.1 The entity leadership shall demonstrate commitment to the program to evacuate, provide shelter, and facilitate re-entry.

11.2.2 The leadership commitment shall include the following:

- (1) Support the development, implementation, and maintenance of the program
- (2) Provide necessary resources to support the program
- (3) Ensure the program is reviewed and evaluated as needed to ensure program effectiveness
- (4) Support corrective action to address program deficiencies

- (5) Lead and support the program and execution of the mass evacuation, sheltering, and re-entry
- (6) Ensure compliance with legal protections afforded to persons with disabilities and other access and functional needs, including access for service and assistance animals

11.2.3 The entity shall adhere to policies, execute plans, and follow procedures developed to support the program.

11.3* Program Coordinator. An individual shall be appointed by the entity's leadership and authorized to develop, implement, administer, evaluate, and maintain the program.

11.4 Program Working Group.

11.4.1* A program working group shall be established by the entity in accordance with its policy.

11.4.2 The program working group shall provide input and/or assist in the coordination of the preparation, development, implementation, evaluation, and maintenance of the program.

11.4.3* The program working group shall include the program coordinator and representation from the whole community.

11.4.4 The program working group shall integrate all elements necessary for mass evacuation, sheltering, and re-entry within the entity and coordinate with other entities affected by these operations.

11.5 Program Administration.

11.5.1 The entity shall have a documented program that includes the following:

- (1) Policy, including roles and responsibilities, and the enabling authority
- (2)* Program scope, goals, performance objectives, and metrics for program evaluation
- (3)* Applicable authorities, legislation, regulations, and industry codes of practice as required by Section 11.8
- (4) Program plans and procedures that include the following:
 - (a) Anticipated program cost
 - (b) Resources required
 - (c) Maintenance schedule
 - (d) Records management practices of the entity as required by Section 11.7

11.5.2* The program shall include an all-hazards approach and risk assessment.

11.6 Performance Objectives.

11.6.1* The entity shall establish performance objectives for the program in accordance with the elements in Chapters 12 through 16.

11.6.2 The performance objectives shall address the results of the hazard identification, the risk assessment, and the requirements analysis.

11.6.3 Performance objectives shall address both short-term and long-term needs of evacuees, including persons with disabilities and other access and functional needs.

11.6.4* The entity shall define *short term* and *long term*.

11.7 Records Management.

11.7.1* The entity shall develop, implement, and manage a records management program to ensure that records are available to the entity following an evacuation.

11.7.2 Records management is designed to aid in the identification, backup, protection, and access to paper-based and electronic records that are vital to the entity and required for mass evacuation, sheltering, and re-entry.

11.7.3 The program shall include the following:

- (1) Identification of records (hard copy or electronic) vital to continue the operations of the entity
- (2) Backup of records as necessary to meet program goals and objectives
- (3) Validation of the integrity of records backup
- (4) Implementation of procedures to store, retrieve, and recover records onsite or offsite
- (5) Storage and protection of records
- (6) Implementation of a record review process
- (7) Procedures coordinating records access within and outside the organization
- (8) Executing a retention policy to archive and destroy records according to operational needs, operating procedures, statutes, and regulations

11.8 Laws and Authorities.

11.8.1* Mass evacuation, sheltering, and re-entry programs are covered by law or voluntary guidelines.

11.8.2* The entity shall implement a strategy for addressing the need for revisions to legislation, regulations, directives, policies, and industry codes of practice.

11.9 Finance and Administration.

11.9.1 The entity shall develop finance and administrative procedures to support the program before, during, and after an evacuation.

11.9.2* There shall be a responsive finance and administrative framework that does the following:

- (1) Complies with the entity's program requirements
- (2) Provides direct linkages to mass evacuation, sheltering, and re-entry operations
- (3) Provides for maximum flexibility while retaining accountability

11.9.3 Finance and administrative procedures shall include the following:

- (1) Accounting systems to track and document costs
- (2) Program procurement procedures

Chapter 12 Planning (NFPA 1616)

12.1 Plan Requirements.

12.1.1 The plan shall address the health and safety of personnel as follows:

- (1)* Identify actions to be taken to protect persons with disabilities, including those with access and functional needs
- (2) Include an accountability system for all response personnel
- (3) Monitor the health and well-being of response personnel
- (4) Establish rehabilitation of personnel

- (5) Ensure security and protection for response personnel
- (6)* Provide appropriate personal protective equipment for response personnel

12.1.2 The plan shall identify and document the following:

- (1) Assumptions made during the planning process
- (2) Responsibilities for carrying out specific actions in a mass evacuation, sheltering, and re-entry; functional roles and responsibilities of internal and external agencies, organization, departments, and positions; lines of authority
- (3) Trigger points to activate the evacuation plan
- (4) Logistics support and resource management requirements
- (5) Operational communications
- (6)* Public information, including warnings, notifications, and communications

12.1.3 The entity shall make sections of the plans available to those assigned specific tasks and responsibilities therein and to key stakeholders as required.

12.2 Plan Assumptions. The plan's assumptions shall be based on the following:

- (1) Research on human behavior and the risk or perception of the threat
- (2) Hazard identification and risk assessment
- (3)* Requirements analysis
- (4) Resource analysis
- (5) Number of people requiring evacuation
- (6) That evacuation will require sheltering and re-entry
- (7) Projections for the number of people requiring sheltering
- (8) Projections for the number of people requiring re-entry
- (9) That animals will be evacuated and sheltered as appropriate and feasible to safeguard human lives and facilitate an evacuation
- (10) Types of vehicles required to transport persons with disabilities and other access and functional needs and animals
- (11) Number of responders required to complete the evacuation process
- (12) Development and implementation of plans and procedures to identify and meet the needs of populations requiring assistance and arranging of transportation for persons with disabilities and other access and functional needs during mass evacuation, sheltering, and re-entry
- (13) Determination of physical requirements for evacuee assembly points, emergency respite stops, and staging and reception areas
- (14) Coordination with local medical facilities to identify plans and resources in the event that these facilities require evacuation into a shelter

12.3* Plan Format.

12.3.1 Plans shall include the following:

- (1) All hazards approach and risk assessment
- (2) Evacuation
- (3) Mass sheltering
- (4) Re-entry

12.3.2 Plans shall be individual documents, integrated into a single plan document, or a combination of the two.

12.4 Planning Process.

12.4.1 A process shall be established that develops, evaluates, and improves capabilities required to implement the program.

12.4.2* The entity shall include key stakeholders and operational entities in the process.

12.4.3 The entity shall develop a set of trigger points on which to base planning efforts, including the following:

- (1) The plan shall be reviewed at least annually.
- (2) The plan shall be reviewed after each incident.

12.4.4* The trigger points shall identify specific actions to be taken based on specific events, threats, or hazards.

12.5* Threat, Hazard Identification, and Risk Assessment.

12.5.1 The entity shall identify the potential threats or hazards that could require evacuation and/or sheltering.

12.5.2 Natural and human-caused hazards specific to the jurisdictions that require evacuation and sheltering shall be considered during the risk assessment.

12.5.3* The entity shall identify the threats and risks associated with mass evacuation, sheltering, and re-entry.

12.5.4 The entity shall develop a safety analysis of the threats, hazards, and risks.

12.6 Requirements Analysis.

12.6.1* The entity shall conduct a requirements analysis for mass evacuation, sheltering, and re-entry that is based upon the threat hazard identification and risk assessment.

12.6.2 The requirements analysis shall include the following:

- (1) Characteristics of the potentially affected population, including persons with disabilities and other access and functional needs
- (2) Existence of mandatory evacuation laws and expected enforcement of those laws
- (3) Characteristics of the incident that trigger consideration for evacuation shall include the following:
 - (a) Weather, season, and environmental conditions
 - (b) Speed of onset
 - (c) Magnitude
 - (d) Location and direction
 - (e) Duration
 - (f) Resulting damages to essential functions
 - (g) Cultural and religious practices
 - (h)* Risk for cascading effects and secondary disasters
 - (i) Capability of transportation routes and systems to transport life-sustaining materials (food, water, medical supplies) into the affected area

12.6.3* The program shall consider the following conditions to determine whether evacuation or sheltering-in-place is appropriate to the situation and the resources available:

- (1) The anticipated impact and duration of the incident
- (2) The distance to appropriate sheltering facilities
- (3) The availability of and access to transportation to those facilities
- (4) The ability to communicate with the affected population within the required timeframe

12.6.4 Factors to be considered in planning for mass evacuation, sheltering, and re-entry shall include the following:

- (1) Establishment of single or unified command
- (2) Development of a joint information system to notify the public and provide an assessment of the time needed to reach people with the information
- (3)* Identification of appropriate sheltering facilities by location, size, types of services available, accessibility, and building safety
- (4) Identification of the modes and routes for evacuee transportation and the time needed to reach them
- (5)* Sources of evacuee support services
- (6) Manpower requirements based on various potential shelters

12.6.5* Sheltering facilities shall be deemed appropriate for temporary occupancy of evacuees for the applicable hazards by the local authority having jurisdiction (AHJ) and conform to the applicable requirements to ensure public health, safety, and general welfare.

12.6.6 Factors to be considered in the planning for re-entry shall include the following:

- (1) Controlling access to restricted areas for security and evacuee safety
- (2) Prioritizing building inspection and permitting
- (3) The availability of and requirements for functioning infrastructure and utilities

12.7 Resource Needs Assessment.

12.7.1 The entity shall conduct a resource needs assessment.

12.7.2 The resource needs assessment shall include the following:

- (1) Human resources, stakeholders, 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, and cost

12.7.3 The entity shall plan to locate, acquire, store, distribute, maintain, test, and account for services, human resources, equipment, and materials procured to support the program.

12.7.4 Facilities with known capabilities and partner agreements shall be pre-identified during the assessment and planning process.

12.7.5 Established mutual aid/assistance or partnership agreements shall be included in the plan.

12.8 Communications and Public Information.

12.8.1 The entity shall develop a plan and procedures to disseminate information related to mass evacuation, sheltering, and re-entry to and respond to requests for information from the following audiences before, during, and after an incident:

- (1) Internal audiences, including employees
- (2) External audiences, including the general population, media, access and functional needs populations, community partners, and other stakeholders

12.8.2 The entity shall establish and maintain a communications and public information plan that considers the following:

- (1) Central contact facility or communications hub
- (2) Physical or virtual information center

- (3) System for gathering, monitoring, and disseminating information
- (4) Procedures for developing and delivering coordinated messages
- (5) Protocol to clear information for release

12.9 Warning, Notifications, and Communications.

12.9.1 The entity shall determine its warning, notification, and communications needs for incidents requiring mass evacuation, sheltering, and re-entry.

12.9.2* Emergency warning, notification, and communications systems shall be reliable; interoperable; and, when feasible, redundant; and take into account persons with disabilities and other access and functional needs.

12.9.3* Emergency communications protocols and procedures shall be developed, tested regularly, and used to alert and warn stakeholders potentially at risk from an actual or impending hazard.

12.9.4* Procedures shall include issuing warnings through authorized agencies if required by law as well as the use of prescribed information bulletins or templates.

12.9.5 The same system used to issue pre-evacuation notifications shall be used to issue evacuation orders.

12.10 Operational Procedure Planning.

12.10.1 The entity shall develop operational procedures to support the plan.

12.10.2 Procedures shall be established for mass evacuation, sheltering, and re-entry.

12.10.3 Procedures shall consider life safety, property conservation, incident stabilization, continuity, and protection of the environment and of cultural heritage artifacts and buildings.

12.10.4 Procedures shall include the following:

- (1) Triggers for use in decision making for shelter-in-place or evacuation
- (2) Triggers for re-entry operations
- (3) Evacuation procedures

12.10.5 The evacuation plan shall consider the following positions based on the size and complexity of the incident:

- (1) Incident commander and deputies
- (2) Command staff
- (3) General staff

12.10.6* Sheltering procedures shall take into consideration the following:

- (1) Evacuee and animal registration
- (2) Facility management
- (3)* Security and building access control
- (4) Parking and traffic control
- (5) Public information, public affairs, and media relations
- (6) Dormitory management
- (7) Medical and mental health services
- (8) Disability-related needs for services, equipment, and accommodations
- (9) Personal assistance services
- (10) Communications and information technology
- (11) Recovery information and resident messaging
- (12) Family reunification
- (13) Reunification of animals to owners

- (14) Risk management and loss control
- (15) Janitorial
- (16) Building maintenance and engineering
- (17) Logistical support
- (18) Bulk distribution
- (19) Donation and volunteer management
- (20) Entertainment/recreation
- (21) Child care
- (22) Animal sheltering
- (23) Laundry service
- (24) Client transportation
- (25) Postal service
- (26) Meal service
- (27) Spiritual care services
- (28) Children's social services
- (29) Charging station and electrical connections for electrical devices (e.g., phones, tablets, and so forth)

12.10.7 Re-entry procedures shall be as given in 12.10.7.1 through 12.10.7.3.

12.10.7.1 Those responsible for managing the evacuation shall ensure the transition to re-entry through performance objectives.

12.10.7.2 The entity shall determine when the area is safe prior to re-entry.

12.10.7.3 The entity shall determine whether the infrastructure is sufficient to support re-entry.

12.10.8 Procedures shall consider concurrent mass evacuation, sheltering, and re-entry operations.

Chapter 13 Implementation (NFPA 1616)

13.1* Incident Recognition.

13.1.1 The entity shall notify the appropriate officials of the emergency or impending emergency.

13.1.2 Plans shall be activated when further actions are warranted.

13.2* Situational Assessments.

13.2.1 Initial Assessment.

13.2.1.1 Depending on the nature of the incident, the initial situational assessment shall include an assessment of the impact to persons, animals, and property, infrastructure status, the availability of resources, and weather conditions.

13.2.1.2 Based on the initial assessment, the entity shall decide whether to evacuate or shelter-in-place.

13.2.2 Assessment and Evaluation. Assessments shall include evaluations of the effectiveness of previous and current actions.

13.3 Notifications and Activation.

13.3.1 Based upon the characteristics of the incident, those responsible for managing the incident shall make the necessary notifications to appropriate resources, directing them where and when to report.

13.3.2 Those responsible for managing the incident shall provide content for public information and warning messages, which will be approved and disseminated using the jurisdic-

tion's established public information and warning policies and procedures.

13.4 Mobilization. Those responsible for managing the incident shall identify and mobilize the appropriate resources to support the initial incident objectives.

13.5 Evacuation Operations.

13.5.1* The entity shall be responsible for managing the evacuation operations.

13.5.2 In implementing the evacuation plan the entity shall consider the following:

- (1) Occurrences that might require evacuation
- (2) Priority of evacuation
- (3) Procedures to request and coordinate required transportation assets from jurisdictional agencies
- (4) Arrangements for transporting evacuees, including persons with disabilities and others with access and functional needs, and their animals
- (5) Evacuation timeline
- (6) Traffic management
- (7) Refueling, safety, and motorist assistance requirements

13.5.3 The entity responsible for managing the evacuation shall continue to monitor media sources, public reports, incident characteristics, and progress of the operation, reflecting changing conditions that impact the incident objectives and incident action plan.

13.5.4 The entity responsible for managing the evacuation shall provide for the safety and health of evacuees and responders during all decision making.

13.5.5* The entity responsible for managing the evacuation shall determine potential resource requirements to ensure that resource management supports evacuation operations.

13.5.6 The entity responsible for managing the evacuation shall continue to provide updated information to the public through the joint information system.

13.5.7* The entity responsible for managing the evacuation shall utilize a record-keeping process for tracking of those persons (including their animals and property) provided transportation, sheltering, or other assistance. (*See Section 11.7.*)

13.5.8 The entity managing the evacuation shall ensure appropriate record keeping of costs and claims associated with the evacuation. (*See Section 11.7.*)

13.6* Sheltering Operations.

13.6.1 The entity shall provide procedures and coordinate components necessary to provide shelter to evacuees.

13.6.2* The entity shall provide for a safe and secure environment for evacuees.

13.6.3 The shelter plan shall address the basic needs of evacuees, including the following:

- (1)* Medical support
- (2) Persons with disabilities and others with access and functional needs support
- (3) Cultural and religious support
- (4) Animals, including pets and service and assistance animals

- (5) Support services, including food, water, first aid, and personal care
- (6) Gender identity in accordance with applicable laws, regulations, and policies

13.6.4 The entity shall provide information on the location and accessibility of shelters.

13.7 Transition to Interim and Recovery Housing. The entity shall ensure processes and procedures for transitioning individuals unable to return home into interim or long-term recovery housing.

13.8 Transition to Re-entry.

13.8.1 The entity responsible for managing the evacuation shall ensure the transition to re-entry.

13.8.2 The entity shall determine when the area is safe prior to evacuees returning.

13.8.3 The entity shall determine whether the infrastructure is sufficient to support re-entry.

13.8.4 The entity shall complete a damage assessment prior to initiating re-entry.

Chapter 14 Training and Education (NFPA 1616)

14.1 Curriculum. The entity shall develop and implement a competency-based training and education curriculum that supports all persons who have a role in the program.

14.1.1 All persons involved shall have a basic understanding of the incident command system (ICS) and how the AHJ will implement the command functions and allocation of resources.

14.1.2 Persons who will fill command functions shall have documented additional competency-based training.

14.2 Goals of the Curriculum. The goals of the curriculum shall be to create awareness and to enhance the knowledge, skills, and abilities required to implement, support, and maintain the program.

14.3 Scope and Frequency of Instruction. The scope of the curriculum and the frequency of instruction shall be identified by the AHJ.

14.4 Record Keeping. Records of training and education shall be maintained as specified in Section 11.7.

14.5 Regulatory and Program Requirements. The curriculum shall comply with applicable regulatory and program requirements.

14.6* Public Education. A public education program shall be implemented to communicate the following:

- (1) Community awareness of potential hazards
- (2) Understanding how and when a declaration of shelter-in-place or evacuation will take place
- (3) Preparation for and safety during shelter-in-place
- (4) Sources of reliable information on evacuation
- (5) Evacuation warnings and orders
- (6) Preparations for and safety during evacuation
- (7) Consequences of refusal to evacuate
- (8) Preparations for and safety during sheltering

- (9) How re-entry information will be determined and communicated to all persons

14.7* Training Delivery. Training delivery to support mass evacuation, sheltering, and re-entry shall be presented by competent personnel.

Chapter 15 Exercises (NFPA 1616)

15.1 Program Evaluation.

15.1.1 The entity shall evaluate program plans, procedures, training, and capabilities and promote continuous improvement through periodic exercises.

15.1.2 The entity shall evaluate the program based on post-incident analyses of mass evacuation, sheltering, and re-entry; lessons learned; and operational performance during exercises in accordance with Chapter 20.

15.1.3 Exercises shall be documented.

15.2* Exercise Methodology.

15.2.1 Exercises shall provide a standardized methodology to practice and interact with other entities (internal and external) in a controlled setting.

15.2.2 Exercises shall be designed to assess the maturity of program plans, procedures, and strategies.

15.3* Design of Exercises. Exercises shall be designed to do the following:

- (1) Ensure the safety of people, animals, property, and the environment involved in the exercise
- (2) Evaluate the program
- (3) Identify planning and procedural opportunities for improvement
- (4) Validate recently changed procedures or plans
- (5) Clarify roles and responsibilities
- (6) Obtain participant feedback and recommendations for program improvement
- (7) Measure improvement compared to performance objectives
- (8) Improve coordination among internal and external teams, organizations, and entities
- (9) Validate training and education effectiveness
- (10) Increase awareness of hazards and the potential impact of hazards
- (11) Identify additional resources and assess the capabilities of existing resources, including personnel and equipment needed for effective mass evacuation, sheltering, and re-entry. The resources need to take into account persons with disabilities and other access and functional needs and owners and their animals.
- (12) Practice the deployment of resources to manage mass evacuation, sheltering, and re-entry
- (13) Assess the ability to manage the mass evacuation, sheltering, and re-entry program
- (14) Improve individual performance

15.4 Exercise Evaluation. Exercises shall evaluate program plans, procedures, training, and capabilities to identify opportunities for improvement.

15.5 Frequency.

15.5.1 Exercises shall be conducted on the frequency needed to establish and maintain required capabilities.

15.5.1.1 Frequency of exercises and resources needed shall be defined in the plan.

15.5.2 The entity shall establish the schedule for exercises.

Chapter 16 Program Maintenance and Improvement (NFPA 1616)

16.1* Program Reviews. The entity shall maintain and improve the program by evaluating its effectiveness using performance objectives and by identifying corrective and preventive action changes based upon assessments and evaluations conducted during exercises and real events.

16.1.1 The entity shall improve effectiveness of the program through incorporation of identified preventive and corrective actions.

16.1.2 The program shall be re-evaluated when a change in any of the following affects the entity's program:

- (1) Regulations
- (2) Hazards and potential impacts
- (3) Resource availability or capability
- (4) The entity's organizational structure or operations
- (5) Funding changes
- (6) Infrastructure, including the technology environment
- (7) Economic stability and demographics

16.1.3* The entity shall review and revise the program based on post-incident analyses of mass evacuation, sheltering, and re-entry; lessons learned; and operational performance during exercises and real events.

16.1.4 The entity shall maintain records of its reviews and evaluations, in accordance with the records management practices developed under Section 11.7.

16.1.5 Documentation, records, and reports shall be provided to management for review and follow-up.

16.2 Corrective Actions.

16.2.1 The entity shall establish a corrective action process.

16.2.2 The entity shall take corrective actions on identified opportunities for improvement.

16.3 Continuous Improvement. The entity shall effect continuous improvement of the program through the use of program reviews and the corrective action process.

Chapter 17 Pre-Incident Planning Process (NFPA 1620)

17.1 Administrative.

17.1.1* Scope. Chapters 17 through 23 provide criteria for developing pre-incident plans for use by personnel responding to emergencies. Not every portion of this standard is applicable to the development of all pre-incident plans.

17.1.2* Purpose. The purpose of Chapters 17 through 23 is to identify a process for the development of pre-incident plans that will assist personnel in effectively managing incidents and

events for the protection of occupants, responding personnel, property, and the environment.

17.1.3 Application.

17.1.3.1 The AHJ determines the location(s) to be pre-incident planned, data to be collected, and extent of documentation and training appropriate for the jurisdiction.

17.1.3.2 The AHJ applies the requirements in Chapters 17 through 23 to the development of a pre-incident plan.

17.1.3.3* When Chapters 17 through 23 are adopted by a jurisdiction, the AHJ sets a date or dates for achieving compliance with the requirements of this standard.

17.1.3.4* The AHJ is permitted to establish a phase-in schedule for compliance with specific requirements of Chapters 17 through 23.

17.1.3.5* Policies and procedures are required to ensure the protection of proprietary or sensitive information.

17.1.4 Units and Formulas.

17.1.4.1 SI Units. Units of measurement in this standard are in accordance with the modernized metric system known as the International System of Units (SI).

17.1.4.2 Primary Values. The inch-pound value for a measurement, and the SI value given in parentheses, shall each be acceptable for use as the primary value units for satisfying the requirements of this standard.

17.2 General.

17.2.1* The pre-incident plan shall be developed in accordance with a format approved by the AHJ.

17.2.2* The pre-incident plan developer shall be competent and familiar with the basic information to be collected and included in the final pre-incident plan.

17.2.3 The pre-incident plan shall be a cooperative effort among the pre-incident plan developer, facility management and operations staff, and responding personnel.

17.2.4 Persons shall be consulted who are able to provide valuable input, including technical experts who do not actually respond to an incident.

17.2.5* The pre-incident plan shall be coordinated with an incident management system.

17.2.6* The pre-incident plan developer shall solicit and document information from responding agencies and personnel regarding their availability and capabilities.

17.2.7 When multiple responding agencies are involved, roles and responsibilities shall be identified in the pre-incident plan.

17.2.8* The development of a pre-incident plan for new facilities and other situations shall begin during the design phase.

17.2.9 In establishing a program for the development of pre-incident plans, the following items shall be considered:

- (1) Potential life safety hazard, including emergency responder safety
- (2) Structure size and operations complexity
- (3) Economic impact
- (4) Importance to the community
- (5) Location and seasonal variations

- (6) Presence of hazardous materials
- (7) Susceptibility to natural disasters

17.3 Pre-Incident Plan Development.

17.3.1 Once a site has been selected for pre-incident planning, the developer shall determine the information required.

17.3.2* To develop a pre-incident plan, the developers shall visit the property to become familiar with its layout, contents, construction, and protection features.

17.4* Data Collection.

17.4.1* The level of detail of the data collected shall be determined by the AHJ for the pre-incident plan.

17.4.1.1* The data shall be collected by consulting with knowledgeable personnel involved with one of the following:

- (1) Site maintenance or operations
- (2) Facility development

17.4.1.2* The data collected shall be evaluated to determine the data that is critical to the user and that shall be included in the pre-incident plan.

17.5* Pre-Incident Plan Preparation. The AHJ shall determine a format that presents the pre-incident plan details in the most concise manner for the user(s).

17.5.1 The pre-incident plan shall be created from the data collection document(s).

17.5.2* A standardized pre-incident plan document shall be utilized throughout the AHJ's response area.

17.5.3 The AHJ shall consider if it is necessary to modify operational procedures to reflect unique site conditions found during preplanning data collection and include those procedures in the pre-incident plan.

17.5.4 Electronic versions of the pre-incident plan document shall be permitted if the following three conditions are met:

- (1) The electronic connection is considered reliable by the AHJ.
- (2) The electronic connection is secured against unauthorized users.
- (3) The electronic version is protected from unauthorized changes.

17.6* Pre-Incident Plan Sketches. The symbols provided in NFPA 170 shall be utilized on pre-incident plan sketches for consistency among pre-incident plan users.

17.7 Pre-Incident Plan Distribution. Copies of the pre-incident plan shall be distributed to responsible personnel as determined by the AHJ.

17.8* Training. The pre-incident planning process shall include a provision for training and education in those portions of the pre-incident plan that involve unique or unusual operations.

17.9* During the Incident. The pre-incident plan shall be available to the incident commander during the incident.

17.10 Post-Incident.

17.10.1 The adequacy and accuracy of the pre-incident plan shall be evaluated after an emergency or event.

17.10.2 The pre-incident plan shall be revised in accordance with 23.2.1.

Chapter 18 Physical and Site Considerations (NFPA 1620)

18.1* General. Physical elements and site considerations shall be classified into the following five groups:

- (1) Construction (*see Section 18.2*)
- (2) Building management systems and utilities (*see Section 18.3*)
- (3) External site conditions (*see Section 18.4*)
- (4) Internal and external security (*see Section 18.5*)
- (5) Fences or other barriers (*see Section 18.6*)

18.2 Construction.

18.2.1* Area, Height, and Age. The entire building size, including overall height, number of stories, square footage, and approximate or actual year of original construction, shall be determined and included in the pre-incident plan.

18.2.2 Building Features.

18.2.2.1 The construction type of the building, including the combustibility of the building, shall be noted or summarized in the pre-incident plan.

18.2.2.2 Data on the following items shall be recorded:

- (1)* Wall construction and insulation
- (2)* Roof construction
- (3)* Floor construction
- (4)* Other pertinent building features
- (5) Floor plan with room identifier and occupancy and use of each room
- (6)* Location, types, and construction of access features
- (7)* Areas where fire, products of combustion, or other contaminants could spread due to a lack of structural barriers
- (8)* Atriums
- (9)* Structural integrity of walls, roofs, and floors
- (10)* Storage arrangements
- (11) Fire command center location, access, and fire rating of the area fire walls

18.3* Building Management Systems and Utilities. Building management systems and utility systems data shall be recorded in the pre-incident plan.

18.3.1* Emergency Contact Information. Emergency contact information shall be recorded in the pre-incident plan for persons responsible for the operation of building systems and utilities and for persons knowledgeable of the supervisory control and data acquisition or similar systems.

18.3.2* Electrical Components, Power Supplies, and Energy Sources.

18.3.2.1 Transformers. The location of transformers filled with combustible and flammable fluids shall be recorded in the pre-incident plan.

18.3.2.2* Electric Utility Rooms. The location of electric utility rooms shall be recorded in the pre-incident plan.

18.3.2.3* Alternative Energy Sources. The location of alternative energy sources shall be recorded in the pre-incident plan.

18.3.2.4 Emergency Power Supply.

18.3.2.4.1* The following features of the emergency power supply (EPS) shall be identified and recorded in the pre-incident plan:

- (1) Location
- (2) Fuel supplies
- (3) Areas served
- (4) Equipment served
- (5) Duration
- (6) Isolation

18.3.2.4.2 An EPS requiring manual action shall be recorded in the pre-incident plan.

18.3.2.4.3 The location of the EPS' disconnecting means shall be recorded in the pre-incident plan.

18.3.2.5 Domestic Water and Process Water. Water shutoff locations shall be recorded in the pre-incident plan, with special consideration given to any equipment or processes that require an uninterrupted supply of water.

18.3.2.6* Compressed and Liquefied Gases. The location of compressors, storage containers, storage tanks, pressure vessels, the nearest shutoff means, and the size of storage tanks, shall be recorded in the pre-incident plan.

18.3.2.7* Steam. The location of steam lines and boilers and associated equipment, as well as shutoff valves for the steam supply, shall be recorded in the pre-incident plan.

18.3.2.8 Fuels.

18.3.2.8.1 Information regarding systems that have the capability of changing over from one fuel source to another shall be recorded in the pre-incident plan.

18.3.2.8.2 The location of all fuel pumps, tanks, regulating equipment, and shutoff valves shall be recorded in the pre-incident plan.

18.3.3* Elevators.

18.3.3.1 Elevator Information. Elevator information shall be recorded in the pre-incident plan.

18.3.3.2* Elevator Lobbies. The pre-incident plan shall note the presence of any fire- or smoke-resistant elevator lobbies.

18.4 External Site Conditions.

18.4.1* Access. The pre-incident plan shall note points of access for responding personnel.

18.4.1.1 The location of key/lock box for rapid access shall be recorded on the pre-incident plan.

18.4.2* Obstacles to Access. Site conditions that would hamper access of emergency equipment, such as height, width, or weight restrictions, shall be noted in the pre-incident plan.

18.5* Internal and External Security.

18.5.1 Security Measures.

18.5.1.1* Internal and external security measures shall be recorded in the pre-incident plan.

18.5.1.2 The pre-incident plan shall include the location of and access to keys, fobs, and RFID cards to enter secure areas.

18.5.1.3 The pre-incident plan shall document the performance of access control systems if primary power is lost.

18.5.2* Security Animals. The use of security animals shall be noted in the pre-incident plan.

18.5.3 Security Systems.

18.5.3.1* Data regarding intruder security systems shall be recorded in the pre-incident plan.

18.5.3.2* Data regarding an on-site security service shall be recorded in the pre-incident plan.

18.6* Fences or Other Barriers. The height, construction, and ingress/egress points of fences or other barriers shall be recorded in the pre-incident plan.

18.7 General Overall Condition.

18.7.1 Exposures. The ground surrounding the site, structure, or building shall be surveyed to identify buildings, structures, equipment, storage, and people that could be exposed by an incident, and the information shall be noted in the pre-incident plan.

18.7.2* Environmental Impact. Information shall be collected on potential environmental contaminants. (*See Sections 21.2.4 through 21.2.10.1.*)

18.8* Communications.

18.8.1* Data regarding communications systems within the facility shall be recorded in the pre-incident plan.

18.8.2* Data regarding the functionality of radio communications shall be recorded in the pre-incident plan.

18.9 Geospatial Position.

18.9.1 Standard Coordinates. Geospatial Positioning System [e.g., U.S. National Grid (USNG)] coordinates shall be utilized to record and specify locations of the facilities, structures, assets, utility components, water supplies, and so forth.

Chapter 19 Occupancy Considerations (NFPA 1620)

19.1 Occupancy. The pre-incident plan shall document the occupancy type and use. (*See Section Y.3.*)

19.2 Life Safety Considerations.

19.2.1 General.

19.2.1.1 The following information shall be noted in the pre-incident plan:

- (1)* Hours of operation
- (2)* Occupant load
- (3)* Occupant accountability
- (4)* Assistance for people with self-evacuation limits
- (5)* Strategies for protecting facility occupants, other than evacuation

19.2.2* Means of Egress. The number of exits, their location, and any special locking conditions, such as delayed release, limited security access, and stairwell locking, shall be noted on the pre-incident plan.

19.3 On-Site Emergency Organization.

19.3.1* Facility Emergency Action Plan. If a facility has an emergency action plan, it shall be obtained for reference during an emergency.

19.3.2* Emergency Response Capabilities. The on-site emergency response capabilities and their coordination with responding personnel shall be incorporated into the pre-incident plan.

19.3.3 Specialized Operations, Processes, and Hazards. Where occupancies contain specialized operations, processes, and hazards that can pose unique challenges in an emergency, the emergency operating procedures and personnel knowledgeable of these conditions shall be documented in the pre-incident plan.

Chapter 20 Water Supplies and Fire Protection Systems (NFPA 1620)

20.1 General. Information on water supplies and fire protection systems shall be included in the pre-incident plan.

20.2* Water Supplies. Water supplies for fire suppression operations and water-based fire protection systems shall be described and identified in the pre-incident plan.

20.2.1* Required Fire Flow. The required fire flow shall be determined by the AHJ.

20.2.2* Available Water Supply.

20.2.2.1 The available water supply shall be included in the pre-incident plan.

20.2.2.2* Where the required fire flow exceeds the available water supply, the pre-incident plan shall address a response to mitigate the deficiency.

20.2.3* Public and Private Water Supply Utility Sources. The source of water supply, whether it is from a public or private water distribution system, shall be recorded in the pre-incident plan.

20.2.4 Static Water Supply Sources.

20.2.4.1 Static water sources, such as ponds, lakes, rivers, tanks, and cisterns, shall be recorded in the pre-incident plan.

20.2.4.2* The pre-incident plan shall include seasonal variation information for bodies of water.

20.2.4.3 The method of drafting from the water source shall be recorded in the pre-incident plan.

20.2.5* Water Storage Tanks.

20.2.5.1 Where a water storage tank is used as a source of water, the water storage capacity shall be recorded in the pre-incident plan.

20.2.5.2* The method of obtaining water from the water storage tank shall be recorded in the pre-incident plan.

20.2.6* Fire Hydrants. The location of fire hydrants shall be recorded in the pre-incident plan.

20.3* Water-Based Fire Protection Systems.

20.3.1* Sprinkler and Water Spray. Water-based systems, including type of system, location and identification of main

riser valves, extent of coverage, and means of manual activation, shall be recorded in the pre-incident plan.

20.3.2* Standpipe Systems. Standpipe systems, including type of system, location and identification of control valves, location of hose valves, and presence of pressure reducing devices (PRV), shall be recorded in the pre-incident plan.

20.3.3* Fire Pumps. Fire pump(s), including location of, and access to, the fire pump and controller; rated capacity; source of water supply; and areas or systems served, shall be recorded in the pre-incident plan.

20.3.4 Fire Department Connection (FDC). Fire department connection(s) (FDC) shall be recorded in the pre-incident plan, including physical location, size, type, locking means, and area/systems supplied.

20.4* Non-Water-Based Fire Protection Systems. Non-water-based fire protection system(s) shall be recorded in the pre-incident plan, including type of system, hazard or area protected, means of activation, location of abort devices, location of control panel, location of agent supply and reserve containers, and personnel hazards following agent release.

20.5* Fire Alarm Systems. Fire alarm systems shall be recorded in the pre-incident plan, including area of coverage, location of fire alarm control unit (FACU) and remote annunciator panels, method of system activation, and method and extent of occupant notification.

20.6* Portable Fire Extinguishers. The pre-incident plan shall note the location and type of large, wheeled equipment or specialized extinguishers or both.

20.7 Smoke Control Systems.

20.7.1 Pressurization-Based Smoke Management Systems. A smoke management system(s) shall be recorded in the pre-incident plan, including location of areas served by system, location of control systems, system operation information, location of manual override controls, and location of supply and discharge arrangement.

20.7.2 Smoke and Heat Vents. Smoke and heat vents shall be recorded in the pre-incident plan, including location and type of activation (manual or automatic).

Chapter 21 Special Considerations (NFPA 1620)

21.1 General. The pre-incident plan shall identify and document special considerations in accordance with this chapter.

21.2* Hazardous Materials.

21.2.1 General. The pre-incident plan shall identify and document hazardous materials recognized by the AHJ that present life safety challenges, operations challenges, or other challenges to emergency responders.

21.2.1.1 Pre-incident plans for hazardous materials shall include the specifications of Sections 21.2.4 through 21.2.10.1.

21.2.2* Transient Conditions. Where hazardous materials exist intermittently, the AHJ shall determine the need to identify and record relevant information for each hazard and the length of time the hazard is expected to be present.

21.2.3* Inventory. Where the storage or use of hazardous materials has been identified as a special hazard, the pre-incident plan shall include the anticipated maximum inventory and bulk storage locations.

21.2.4 Explosives. The use or storage of explosive materials in an occupancy shall require preplanning as determined by the AHJ.

21.2.4.1 The presence, approximate amount, explosive class and division, and location of explosive materials shall be recorded in the pre-incident plan.

21.2.4.2* Materials that have the potential to explode upon exposure to fire, heat, and pressure shall be documented on the pre-incident plan.

21.2.4.3 Isolation and evacuation distances based on the type and quantity of explosives within a facility shall be recorded in the pre-incident plan.

21.2.5* Flammable and Combustible Liquids. Where the AHJ has determined that a facility using, handling, or storing flammable and combustible liquids requires pre-incident planning, the following shall be recorded in the pre-incident plan:

- (1)* Drainage, such as the location where the flammable or combustible liquid will flow and collect if spilled
- (2) Secondary containment, such as the presence of, and capacity of, built-in secondary containment features for the collection of firefighting water and spilled product
- (3)* Specialized extinguishing agents, such as indicated product-specific requirements

21.2.6 Toxic or Biological Agents.

21.2.6.1 The location and quantity of toxic or biological agents shall be documented in the pre-incident plan.

21.2.6.2 The impact of toxic or biological agents on neighboring or downwind occupancies shall be evaluated.

21.2.7* Radioactive Materials.

21.2.7.1 The location and type of radioactive materials and radiation-producing devices shall be recorded in the pre-incident plan.

21.2.7.2 Isolation and evacuation distances, based on the type and quantity of radioactive material within a facility, shall be recorded in the pre-incident plan.

21.2.8* Reactive Chemicals and Materials.

21.2.8.1 Reactive chemicals and materials shall be recorded in the pre-incident plan.

21.2.8.2 Isolation and evacuation distances, based on the type and quantity of reactive chemical and material within a facility, shall be recorded in the pre-incident plan.

21.2.9* Combustible Dusts. Operations that generate, collect, or store combustible dusts shall be recorded in the pre-incident plan.

21.2.10* Special Atmospheres. Any area of an occupancy that contains rooms or equipment storing or using special gases or vapors that can present a hazard to the emergency responders shall be identified in the pre-incident plan.

21.2.10.1 The pre-incident plan shall identify special agents or procedures for emergency response to hazardous material (e.g., metal dusts and water reactive metals).

21.3 Vacant and Abandoned Structures.

21.3.1* General. The pre-incident plan shall identify and document any vacant and abandoned structures recognized by the AHJ that present life safety challenges, operations challenges, or other challenges to emergency responders.

21.3.2 Temporary Conditions. Where vacant and abandoned structures exist temporarily, the AHJ shall determine the need to identify and record relevant information for each hazard and the length of time the hazard is expected to be present.

21.3.3 Physical and Site Considerations. In addition to the building characteristics identified in Chapter 18, the following details shall be considered as part of the pre-incident plan for vacant and abandoned structures:

- (1) Last known type of occupancy
- (2) Open shafts
- (3) Pits and holes due to removal of equipment
- (4) Structural degradation due to weather and vandalism
- (5) Exposed structural members
- (6) Penetrations in barriers such as walls, floors, and ceilings that allow abnormal fire travel
- (7) Combustible contents
- (8) Maze-like configuration
- (9) Blocked, damaged, or missing stairs

21.3.4 Potential Hazards. The following potential hazards shall be considered as part of the pre-incident plan for vacant and abandoned structures:

- (1) Unstable structure
- (2) Fall and trip hazards
- (3) Standing water in basement
- (4) Vermin
- (5) Unexpected occupancy
- (6) Ongoing criminal activity
- (7) Rapid fire growth potential
- (8) Status of utilities (e.g., active, inactive, unknown)
- (9) Holes and penetrations in floors, walls, and roofs
- (10) Fire escape access
- (11) Maze-like configuration
- (12) Previous fires in building
- (13) Unsecured structure

21.3.5* Structure Markings. The presence of structural markings shall be noted in the pre-incident plan.

21.4 Buildings Under Construction.

21.4.1 General. A pre-incident plan shall be developed for buildings under construction as determined by the AHJ.

21.4.2 Temporary Conditions.

21.4.2.1* Where construction features exist temporarily, the AHJ shall determine the need to identify and record relevant information for the following:

- (1) Each hazard present
- (2) Length of time the hazard is expected to be present

21.4.2.2 The AHJ shall make a determination as to the frequency of visits and the pre-incident plan updating required for buildings under construction.

21.4.3* Pre-Fire Plans. The pre-incident plan shall include and reference the fire safety measures found in the pre-fire plan when developed in accordance with NFPA 241.

21.4.4 Building Completion. Once the building is completed and occupied, the pre-incident plan shall be updated.

21.5 Mass Gatherings.

21.5.1 General. A pre-incident plan shall be developed for mass gatherings recognized by the AHJ that present life safety challenges, operations challenges, or other challenges to emergency responders.

21.5.1.1 The AHJ shall identify the need for, and level of detail for, addressing mass gatherings in the pre-incident plan.

21.5.2 Incident Management System. The pre-incident plan shall address the implementation of an incident management system (IMS) for the duration of the event.

21.5.3 Physical and Site Considerations. Where the AHJ has determined that a pre-incident plan is required for mass gatherings, the following items shall be included in the pre-incident plan and coordinated with other applicable agencies:

- (1) Unified command post
- (2) Access and ingress/egress for the following:
 - (a) Attendees
 - (b) First responders
- (3) Evacuation
- (4) Weather
- (5) Emergency medical services (e.g., routine and mass casualties)
- (6) Security
- (7) Traffic
- (8) Crowd management
- (9) Fire protection
- (10) Food operations
- (11) Pyrotechnics
- (12) Aeronautical operations
- (13) Communications
- (14) Fuels (e.g., cooking equipment, internal combustion engines, hot air balloons)
- (15) Safety data sheets (SDS) as determined by the AHJ
- (16) Contingency plans
- (17) Special operations (e.g., technical rescue, hazardous material)
- (18) Temporary structures
- (19) Other items as identified by the AHJ or mass gathering organizer that are necessary for an effective pre-incident plan

21.6 Transportation.

21.6.1* Highways and Interchanges. Pre-incident plans for highways, interchanges, road tunnels, and bridges shall be developed in accordance with NFPA 502.

21.6.2 Rail Lines, Locomotives, and Trains. Pre-incident plans for rail lines, locomotives, and trains shall be developed in accordance with Chapter 9 of NFPA 130.

21.6.3 Airports. Pre-incident plans for airports shall be developed in accordance with NFPA 424 (as incorporated in NFPA 440).

21.6.4 Ports. Pre-incident plans for ports shall be developed in accordance with NFPA 303.

21.6.5* Bakken Crude Oil Response and Emergencies. Pre-incident plans for Bakken crude oil response and emergencies shall assess the potential impact on towns, communities, and facilities where products are moved or handled.

21.6.6 Flammable and Combustible Liquid Spills and Fires. Pre-incident plans for flammable and combustible liquid spills and fires shall be developed in accordance with NFPA 472 (as incorporated in NFPA 470).

Chapter 22 Incident Operations (NFPA 1620)

22.1* General. The pre-incident plan shall address the response to an incident at the facility or site and additional resources as required.

22.2* Incident Notification. The pre-incident plan shall provide critical information for responding personnel at the time of dispatch, as determined by the AHJ.

22.3 Operation Resources.

22.3.1* The pre-incident plan shall indicate the facility's emergency response capabilities and incident management system.

22.3.2* The pre-incident plan developer shall consider the capabilities of initial public emergency response resources in managing emergencies for the protection of the occupants, responding personnel, property, and environment.

22.3.3 Where technical expertise from an outside agency, a building occupant, or a facility management representative is vital to successfully conduct emergency operations, the agency, occupant, or representative shall be considered an on-site emergency representative to the incident commander.

22.3.4 The on-site emergency representative shall be identified by name or job title in the pre-incident plan.

22.3.5 The contact information of the on-site emergency representative shall be included in the pre-incident plan.

22.3.6* Response to incidents that require additional agencies or organizations for other purposes shall be identified and included in the pre-incident plan.

Chapter 23 Pre-Incident Plan Maintenance (NFPA 1620)

23.1 General. Pre-incident plans shall be reviewed and updated at a frequency determined by the AHJ.

23.2 Pre-Incident Plan Update.

23.2.1* Pre-incident plans shall be updated or revised whenever significant changes occur.

23.2.2 Prior editions of the pre-incident plan shall be archived or destroyed in accordance with local policy.

23.2.3 The list of all pre-incident plan recipients maintained by the pre-incident plan developer shall be used for distribution of pre-incident plan updates.

23.3 Site Liaison.

23.3.1 The site liaison shall be responsible for providing site-specific information to the pre-incident plan developer.

23.3.2 The site liaison shall be identified in the pre-incident plan by name or job title, contact information, and who they represent.

Annex A Explanatory Material

Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material, numbered to correspond with the applicable text paragraphs.

A.1.3 NFPA's Emergency Response and Responder Safety (ERRS) Document Consolidation Project is incorporating three former standalone standards (NFPA 1600, NFPA 1616, and NFPA 1620) into a single consolidated standard, NFPA 1660. New editions of NFPA 1600, NFPA 1616, and NFPA 1620 will no longer be published as separate, standalone documents. Where an authority having jurisdiction (AHJ) elects to adopt the latest edition of one or more of the previous standards, the adopting language should refer to the specific chapters of this document as identified in Section 1.3.

The numbers found in parentheses at the end of each chapter title in NFPA 1660 refer to the former standalone documents. These references in the chapter titles within NFPA 1660 are intended to help users crosswalk between the chapters in NFPA 1660 and the former standalone documents.

A.3.2.1 Approved. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials nor does it approve or evaluate testing laboratories. In determining the acceptability of installations or procedures, equipment, or materials, the "authority having jurisdiction" may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The "authority having jurisdiction" may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

A.3.2.2 Authority Having Jurisdiction (AHJ). The phrase "authority having jurisdiction," or its acronym AHJ, is used in NFPA standards in a broad manner because 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.

A.3.3.3 Access and Functional Needs. The definition for *access and functional needs* aligns with the terminology in FEMA's Glossary of Terms.

Access and functional needs are individual circumstances requiring assistance, accommodation, or modification due to any temporary or permanent situation that limits an individual's ability to act in an emergency.

Individuals that could require additional response assistance include, but are not limited to, the following:

- (1) Children
- (2) Seniors
- (3) People with disabilities
- (4) People who live in institutionalized settings
- (5) People from diverse cultures
- (6) People who have limited English proficiency or are non-English-speaking
- (7) People who are transportation disadvantaged

Additional needs for such individuals can include, but are not limited to, the following:

- (1) Mobility
- (2) Communication
- (3) Transportation
- (4) Safety
- (5) Health maintenance

The terminology for this population continues to evolve. Similar terms include *handicapped*, *disabled*, *special needs*, *vulnerable population*, *individuals with medical dependencies*, *specialty care population*, and *vulnerable persons*. (See Annex H.)

A.3.3.9 Assembly Occupancy. Assembly occupancies might include the following:

- (1) Armories
- (2) Assembly halls
- (3) Auditoriums
- (4) Bowling lanes
- (5) Club rooms
- (6) College and university classrooms, 50 persons and over
- (7) Conference rooms
- (8) Courtrooms
- (9) Dance halls
- (10) Drinking establishments
- (11) Exhibition halls
- (12) Gymnasiums
- (13) Libraries
- (14) Mortuary chapels
- (15) Motion picture theaters
- (16) Museums
- (17) Passenger stations and terminals of air, surface, underground, and marine public transportation facilities
- (18) Places of religious worship
- (19) Pool rooms
- (20) Recreation piers
- (21) Restaurants
- (22) Skating rinks
- (23) Special amusement buildings, regardless of occupant load
- (24) Theaters

Assembly occupancies are characterized by the presence or potential presence of crowds with attendant panic hazard in case of fire or other emergency. They are generally open or occasionally open to the public, and the occupants, who are present voluntarily, are not ordinarily subject to discipline or control. Such buildings are ordinarily occupied by able-bodied persons and are not used for sleeping purposes. Special conference rooms, snack areas, and other areas incidental to, and under the control of, the management of other occupancies, such as offices, fall under the 50-person limitation. Restaurants and drinking establishments with an occupant load of fewer than 50 persons should be classified as mercantile occupancies.

A.3.3.10 Assistance Animal. Assistance animals are not required to be individually trained or certified. Dogs are the most common, but not the only type of assistance animal. An assistance animal is not a pet or a service animal.

This definition was developed in accordance with the Fair Housing Act and Air Carrier Access Act.

The AHJ must comply with federal statutory requirements and might have state, tribal, or local requirements to comply with legal protections and requirements for management of animals that do work or provide support for persons with disabilities and others with access and functional needs during mass evacuation, sheltering, and re-entry.

A.3.3.14 Business Occupancy. Business occupancies include the following:

- (1) Air traffic control towers (ATCTs)
- (2) City halls
- (3) College and university instructional buildings, classrooms under 50 persons, and instructional laboratories
- (4) Courthouses
- (5) Dentists' offices
- (6) Doctors' offices
- (7) General offices
- (8) Outpatient clinics (ambulatory)
- (9) Town halls

Doctors' and dentists' offices are included, unless of such character as to be classified as ambulatory health care occupancies. Birth centers should be classified as business occupancies if they are occupied by fewer than four patients, not including infants, at any one time; do not provide sleeping facilities for four or more occupants; and do not provide treatment procedures that render four or more patients, not including infants, incapable of self-preservation at any one time. Service facilities common to city office buildings, such as newsstands, lunch counters serving fewer than 50 persons, barber shops, and beauty parlors, are included in the business occupancy group. City halls, town halls, and courthouses are included in this occupancy group insofar as their principal function is the transaction of public business and the keeping of books and records. Insofar as they are used for assembly purposes, they are classified as assembly occupancies.

A.3.3.22 Confined Space. Examples of confined spaces include tanks, vessels, silos, storage bins, hoppers, vaults, crawl spaces, and pits.

A.3.3.24 Continuity. Other terms for business continuity include *operational continuity* and *continuity of operations (COOP)*. In the public sector, the term *continuity of government (COG)* is also used.

The practice of business continuity planning (BCP) as defined by Chapters 3 through 10 and the practice of COOP as defined within FEMA CGC-1, *Continuity Guidance Circular 1*, are more similar than not. Terminology varies, as well as the emphasis on various aspects of continuity planning. The most significant difference between BCP and COOP lies with objectives, the definition of *critical or essential functions*, and how demand for public sector essential services could change during an incident.

Objectives. The objective of BCP in the private sector is the continuity of business processes to avoid economic impacts including loss of revenue, dissatisfaction of stakeholders

(particularly customers), increased costs, and damage to brand, image, and reputation. The primary focus of COOP in the public sector is the continuity of government including leadership of elected officials, exercise of civil authority, maintenance of public safety, and sustaining the industrial/economic base.

Responsibility for planning. COOP places responsibility for planning on the "senior elected official," "administrative head," and "senior leadership," which is similar to BCP placing responsibility on senior leadership. The business continuity manager and COOP continuity manager share similar responsibilities as do the business and continuity planning teams.

Planning process. Both BCP and COOP have defined a planning process. BCP as defined by Chapters 3 through 10 and industry practices outlines a program development process that aligns with Plan-Do-Check-Act (PDCA). COOP uses the term *standardized continuity program management cycle*, which includes multiple pillars and supporting implementation and continuous improvement methods.

Essential functions and critical processes. The identification and prioritization of essential functions (EFs) and essential supporting activities are at the core of COOP and are clearly differentiated from BCP. COOP defines *national essential functions (NEFs)* (federal government), *primary mission essential functions* (essential functions that support NEFs), *mission essential functions* (enabling an organization to provide vital services, exercise civil authority, maintain public safety, and sustain the industrial/economic base), and *essential supporting activities* (functions that should continue in a continuity activation, but are not recognized as EFs, such as human resources management, security, and facilities management).

An important distinction between governmental COOP and private sector BCP is the planning for enhanced demand for services during times of emergency and recovery (e.g., during a natural disaster, the demand for public health and safety services, restoration and recovery of public infrastructure, and agencies and departments that permit and approve repair and rebuilding spikes). COOP must anticipate the shift in demand for public services, depending on the type of emergency. Most businesses do not have to plan for a demand surge on their services during times of public emergency, unless they provide critical infrastructure or emergency services for the public sector.

Business impact analysis, business process analysis, and time frames. COOP guidance uses the term *business impact analysis (BIA)* to identify "the effects of failing to perform a function or requirement." COOP uses the term *business process analysis (BPA)* to define the methodology of "examining, identifying, and mapping the functional processes, workflows, activities, personnel expertise, systems, data, interdependencies, and facilities inherent in the execution of a function or requirement." BIA in the private sector incorporates a BPA.

COOP specifies that organizations must continuously perform primary mission essential functions (PMEFs) during a continuity activation or resume PMEFs within 12 hours of an event. Mission essential functions must continue throughout or resume rapidly after a disruption of normal activities. BIA does specify the continuity or recovery time frame.

The BIA is at the core of BCP. A BIA is the identification of business processes that are required for the entity to perform its mission and the minimum acceptable level of performance