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ABSTRACT

ANALYSIS OF BASELINE ASSESSMENTS: EMERGENCY MANAGEMENT ACCREDITATION PROGRAM, 2003-2004

By

Valerie Jean Lucus

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Emergency management is an established system to prepare for, respond to, recover from and mitigate the consequence of disasters. Natural and manmade disasters have increased public interest in the systems and organizations that have evolved to protect the public from their effects. The Emergency Management Accreditation Program (EMAP) was developed as a method to evaluate and accredit emergency management programs. Between January 2003 and December 2004, with funding from the Federal Emergency Management Agency, EMAP conducted baseline assessments of 35 U.S. state and territory emergency management programs. This study was designed to analyze the results of those EMAP baseline assessments. Results suggest these programs focus more on the response phase of emergency management, and less on the recovery and mitigation phases. Additional research suggests programs can more easily achieve accreditation if they have strong executive and financial support and develop ways to document institutional memory.
ANALYSIS OF BASELINE ASSESSMENTS: EMERGENCY MANAGEMENT
ACCREDITATION PROGRAM, 2003-2004

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WE, THE UNDERSIGNED MEMBERS OF THE COMMITTEE,
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ANALYSIS OF BASELINE ASSESSMENTS: EMERGENCY MANAGEMENT
ACCREDITATION PROGRAM, 2003 - 2004

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LIST OF ACRONYMS

ANSI: American National Standards Institute
CAR: Capability Assessment for Readiness
CHEA: Council for Higher Education Accreditation
DHS: Department of Homeland Security
EMAP: Emergency Management Accreditation Program
EMPG: Emergency Management Program Grant
FEMA: Federal Emergency Management Agency
HSPD-8: Homeland Security Presidential Directive 8
IAEM: International Association of Emergency Managers
JCAHO: Joint Commission on Accreditation of Healthcare Organizations
NEMA: National Emergency Managers Association
NEMB-CAP: National Emergency Management Baseline Capability Assurance Program
NFPA: National Fire Protection Association
NGA: National Governor’s Association
TCL: Target Capabilities List
USDE: United States Department of Education
WASC: Western Association of Schools and College
CHAPTER 1

INTRODUCTION

Background

Emergency management has existed in one form or another for centuries as people have attempted to cope with local and regional disasters. As William Waugh noted in his 2000 emergency management text: “The Earth has a history of catastrophes and that history will continue” (Waugh, 2000, p. 9).

The roots of emergency management lie within the basic human survival mechanism, when disasters created chaos and subsequent attempts at order. “The apparent chaos and threatening nature of disasters—as unusual, uncontrollable and many times unpredictable events—facilitated the development of organizational means to restore order and normalcy” (Kirschenbaum, 2004, p. 1).

In the United States, emergency management has been shaped by two policy streams: response to natural disasters—traditionally a local/community response—and civil defense programs. During most of the 20th century, federal involvement in disaster relief efforts became more prevalent as natural disasters became more intense and taxed the abilities of local communities to respond to them. The end of WWII saw civil defense planning dominated by fallout shelters and crisis relocation planning. In 1979, President Jimmy Carter consolidated a system of both formal and informal federal agreements and agencies into the Federal Emergency Management
Agency (FEMA). The intent of the consolidation was to provide a more coordinated federal support system for all hazard disaster response (Drabek, 1991, pp. 3-17).

Institutionalized emergency management programs developed at all levels of private and public agencies as government took a larger role in the actions and activities related to disaster response. Waugh opened his text by noting: “In an era in which the role of government is being reduced and programs are being cut, the scope and practice of emergency management are expanding rapidly . . .” (Waugh, 2000, p. 3). As natural disasters have become more prevalent because of “the enormous expansion of human population and the built environment which put more people and more economic activities in harm’s way” (Abramovitz, 2001, p. 6), there has been increasing scrutiny of the systems and organizations that have evolved to manage their effects and protect the public. The addition of human-caused disasters—hazardous materials, energy shortages and terrorism—have increased the need for individuals to rely on government emergency management programs for their safety and recovery.

Interest in the efficacy and organization of emergency management programs has increased since the terrorist attacks in New York and Washington on September 11, 2001. The National Governor’s Association (NGA) re-adopted their HHS-13 Emergency Management Policy during their Winter 2004 meeting, which states that “Protection of the population of the U.S. against the potentially catastrophic effects of natural and human caused disasters, including criminal and terrorists threats, has long been recognized as requiring a partnership of federal, state, and local governments” (NGA, 2004). The NGA policy continues by noting: “Sound emergency management
requires regular review by state and local government officials of the performance, effectiveness and coordination of a state’s emergency-related program . . . ” (NGA).

**Accreditation and Standards**

Accreditation is a method for documenting that a process or program can demonstrate accountability by conforming to a recognized standard. Program accreditation has been used extensively in the United States in the medical, public safety and education fields. Accreditation is based on a set of standards, defined as a value established by authority, custom, or general consent as a model or example to be followed (Merriam, n.d.). Organizations that set standards tend to be national, such as the American National Standards Institute (ANSI), or international, such as the International Standards Organization (ISO).

National standards related to emergency management were first proposed in 1991 as National Fire Protection Association (NFPA) Standard 1600 by a committee tasked with recommending guidelines for disaster preparedness, response and recovery. In 1995 it was published as a “Recommended Practice for Disaster Management.” It was reviewed and reissued in 2000 as the “Standard for Disaster/Emergency Management and Business Continuity Programs.” The 4 year annual review cycle incorporates input from all stakeholders (NFPA1600, 2004).  

*Applying* a standard to public emergency management programs in the United States was established in 1997 within FEMA’s Capability Assessment for Readiness (CAR) program. CAR was a self-assessment tool for use by state and local government to evaluate their own response capabilities and operational readiness, tied loosely to
EMAP—Emergency Management Accreditation Program

The Emergency Management Accreditation Program (EMAP) began in 1997 as a proposal for creating a means to evaluate emergency management programs for state and local governments. A program is not defined as a specific office or agency, but rather as, “A jurisdiction-wide system that provides for management and coordination of prevention, mitigation, preparedness, response and recovery activities for all hazards” (EMAPd, n.d.). The proposal initiated with the National Emergency Management Association (NEMA), the professional association for the emergency management directors of U.S. states and territories. EMAP was subsequently formalized as collaboration between NEMA, FEMA, IAEM (International Association of Emergency Managers) and others (EMAPc, n.d.). EMAP accreditation is based on the NFPA1600 standards, with proprietary language added to further explain their meaning within the public sector (EMAPc, n.d.).

EMAP is now an independent, nonprofit organization managed by a 10-member commission appointed proportionately by NEMA and IAEM. It is a voluntary process for “state and local government programs responsible for coordinating prevention, mitigation, preparedness, response, and recovery activities for disasters, whether natural or human-caused” to demonstrate “through self-assessment, documentation and peer review, that a program meets national standards for emergency management programs” (EMAPe, n.d.).
Baseline Assessments

EMAP began as a program offering full, voluntary accreditation for emergency management programs in state and local governments, although it was acknowledged that few government entities would be able to achieve accreditation immediately. FEMA recognized the value in the EMAP process—a collaborative approach and an established set of national criteria—and agreed to fund a baseline assessment of the emergency management program in each of the 56 U.S. states and territories.

In 2003, this FEMA initiative—the National Emergency Management Baseline Capability Assurance Program (NEMB-CAP)—was launched as “a baseline measurement of the emergency management capabilities and to help the emergency management community at all levels to improve its ability to prepare for and respond to emergencies and disaster of all kinds” (FEMAa, n.d.). NEMB-CAP would involve a “multi-year effort to assess, analyze, evaluate and collectively frame state emergency management capabilities against a common national set of criteria” (DHSa, 2004). The baseline assessments began in January 2003 and are expected to be completed in 2005.

Statement of the Problem

NFPA 1600 provides a set of nationally recognized standards for emergency management programs; in May 2004 the NFPA 1600 was endorsed by the 9/11 Commission as a voluntary “National Preparedness Standard” for private companies; the EMAP standards build on the NFPA 1600 standards; the EMAP process has been endorsed by FEMA within the NEMP-CAP program; and EMAP is the process of using its standards to accredit emergency management programs in the public sector.
EMAP accreditation demonstrates that an emergency management program is prepared to perform the necessary acts to meet the public’s need to be informed and protected from the broad range of natural and man-made disasters. Conducting these baseline assessments is the first step in guiding programs toward consistent, quality standards. Analyzing the data from the EMAP baseline assessments will define the next steps in what will certainly be a long and complex implementation process.

Purpose of the Study

Within the NEMB-CAP, FEMA agreed to support “evaluations of state emergency management capabilities against a common standard, for the purpose of establishing a nationwide baseline of emergency response and preparedness capabilities” (FEMA, 2003.). Further, FEMA intended that this program “provide information about emergency management and response and preparedness capabilities so that strengths and weaknesses can be identified and addressed, future progress can be evaluated against a known baseline and to help target assistance to areas of greatest need” (FEMAa, n.d.). “Once all states have been assessed . . . the aggregate findings will be tabulated and analyzed, and the finding used to develop a nationwide baseline framework of, and final report on, state-level emergency management capabilities” (FEMA, 2003.).

The purpose of this study, therefore, is to examine the results of the EMAP baseline assessments conducted during 2003 and 2004 (35 of 56). Research questions were advanced to define accreditation and standards, to analyze successful accreditation programs for their common characteristics, and to fully describe EMAP’s history and relationship to FEMA and the NFPA 1600. The results of the
baseline assessments were analyzed—specifically the rates of compliance with each of the 54 EMAP standards—against the four emergency management phases. Further discussion includes specific operational issues that support a program’s ability to achieve full accreditation. Recommendations include revisiting this study once all the baseline assessments have been conducted, and creating a database of “best practices” for programs going through the accreditation process.

**Importance of the Study**

The NEMA 2004 Biennial Report begins with this statement:

Emergency management is one of the most important functions of state government in its duty and responsibility to its citizens to protect lives and property against disasters and to help them recover when a disaster strikes. While the organization structures of these state agencies vary, the fundamental responsibility remains the same: save lives and reduce loss (NEMA, 2004).

NEMB-CAP is the first attempt to seek a baseline evaluation of the capabilities of state emergency management programs. This study is the first to analyze the results from those baseline assessments. Dewayne West, Director of Emergency Services for Johnston County, North Carolina, an EMAP Commissioner and current President for IAEM said: “This will give us a way to actually put some numbers to that (our performance), to say ‘this is why we are not good in this area and this is what we need to address.’ I think it is going to be valuable information” (West, personal communication, 11/09/2004).

**Limitations of the Study**

There are two limitations to this study. One was only having 60% (35 of 56) of the state baseline assessments completed. The results cannot be complete or comprehensive until the baseline assessment process has concluded and the full results
analyzed. The other limitation was the restricted use of the statistics to meet the confidentiality requirements established by EMAP. The EMAP Commission granted permission to conduct this study as a means to provide the emergency management community a product they can use in further analyzing their programs and “in a manner that does not conflict with the objectives and intent of EMAP . . . .” The use of the data was restricted to assure that individual state confidentiality was maintained, and noted that they would “advise directors that this information— with findings unattributable to any particular program—is being released for research purposes.”

Once reviewed, the Commission approved this final paper with this statement:

“Several members noted that the data and discussion in your paper are likely to serve as important information for the emergency management community. Your work is appreciated.” The full texts of both memorandums are included in Appendix A.
CHAPTER 2

LITERATURE REVIEW

The purpose of this study is to examine the results from the first 2 years of the baseline assessments conducted by the Emergency Management Accreditation Program (EMAP). Several research questions were advanced for study, and those questions guided the review of the literature. The following pages are organized around those research questions and the literature that was reviewed in an effort to find answers.

Accreditation and Standards

Accreditation is both a process and a product. The process involves a self and peer evaluation, a decision by an accrediting organization, a periodic review and reaccreditation after a certain time period. It is voluntary and designed to stimulate continuous improvement while demonstrating accountability with a set of professional standards or best practices. Its product is a public statement of the program’s ability to conform to a recognized standard. Standards, therefore, are the basis for an accreditation—and a standard is a model used as a measure of quality.

There are various models for accreditation and standards. The two accreditation models discussed below represent well-established programs in the medical and education fields. The standards upon which EMAP is based were developed by a standards development organization, the National Fire Protection
Association (NFPA), which is in turn accredited by the American National Standards Institute (ANSI)—both of which are discussed below. Emergency management is based on four phases first described in the early 1970s, which are the foundation for all emergency management programs. EMAP itself is examined—its history, development of its criteria, relationship with FEMA and its accreditation process. Finally, a short discussion about a current national initiative closely related to the EMAP process—the Interim National Preparedness Goal.

Accreditation and Standard Developing Programs

Healthcare

The Joint Commission of Accreditation of Healthcare Organizations (JCAHO) began in 1910 with the efforts of one doctor to develop a voluntary system to standardize hospital care and improve service by tracking patient treatment. This led to the founding of the American College of Surgeons and publication of a ‘minimum standard’ for hospitals. In 1918, the first survey of 692 hospitals found that only 82 actually met that standard. By 1950, as the standard of care improved, over 3200 hospitals had been accredited (JCAHO, n.d.).

In 1952, collaboration between the American College of Surgeons, the American College of Physicians, the American Hospital Association, the American Medical Association, and the Canadian Medical Association created an independent, non-profit organization to provide voluntary accreditation, and the Joint Commission on Accreditation of Hospitals was formed. The name was changed to the Joint Commission on Accreditation of Healthcare Organizations in 1987 to reflect its “expanded scope of activities” (JCAHO, n.d.).
JCAHO accreditation was—and still is—a voluntary process. However, when Congress passed the Social Security Amendment of 1965, it included “a provision that hospitals accredited by JCAH are ‘deemed’ to be in compliance” with Medicare conditions (JCAHOb, n.d.). Hospitals not seeking JCAHO accreditation could not receive Medicare reimbursement unless they went through a stringent Federal examination of their practices. The effect was to move JCAHO accreditation from voluntary to mandatory in the minds of most healthcare administrations.

Today, JCAHO evaluates and accredits more than 15,000 health care organizations and programs in the United States—in addition to hospitals, they accredit ambulatory care and assisted living facilities, laboratories and office-based surgery suites (JCAHOa, n.d.). The national standards upon which JCAHO bases its accreditations are developed and updated with input from health care professionals, health care organizations, consumers and employers. Standards define “performance expectations for activities that effect the safety and quality of patient care—that is: areas in which good performance is likely to lead to good outcomes” (JCAHO, 2004).

JCAHO accreditation is accomplished through a rigorous on-site review and survey process that is organized around patient care (e.g., infection control) and the functions of the organization (e.g., emergency response). To be accredited, an organization or program must substantially comply with JCAHO standards (JCAHO, 2004). Once accredited, a health care organization must remain continuously in compliance and reapply for accreditation every 3 years (JCAHO).
Accreditation of educational institutions has existed in the United States for over 100 years (Eaton, n.d.) as a voluntary and very internal process of ‘quality control’ and a recognized need to “establish minimum standards for admission and transferability of academic credits” (Glidden, 1996). Accreditation was conducted by numerous accrediting institutions set up by specific disciplines and professions. When the GI Bill was established to provide federal funds for education after World War II, distribution of those funds was based on the accreditation status of an institution. The Higher Education Act of 1965 then established a process for providing federal financial assistance to students in higher education, based on the accredited status of their school (Glidden).

When that Act was reauthorized in 1992, Congress questioned the ability of the existing accreditation system to deal with the widespread abuse and fraud from questionable (e.g., correspondent) institutions, and created its own entity in each state to review institutions applying for federal student education funds. In response to this threat to apply federal control, an alliance of accrediting associations developed and implemented the Council for Higher Education Accreditation (CHEA) (Glidden, 1996).

Today, there are 19 accrediting organizations (CHEA, 2004, p. 1) that grant regional or national accreditation status to over 6,000 institutions (CHEAb, n.d.), each of which is recognized by two governing entities: The United States Department of Education (USDE) requires local institutions to have accreditation from one of those 19 organizations for their students to receive federal student aid funds; CHEA requires
those same institutions to meet standards that assure and strengthen academic quality and the ability to accept and transfer college credit (CHEA, 2002, p. 3). USDE accreditation is based on 10 standards related to items such as admission practices and fiscal capability. CHEA accreditation is based on 5 standards related to academic quality (CHEAa, n.d.). It is somewhat of a symbiotic relationship.

One of the accrediting organizations recognized by both USDE and CHEA is the Western Association of Schools and Colleges (WASC), one of 6 regional associations that accredit public and private schools, colleges and universities in the United States. WASC is further divided into three Commissions that accredit all pre- and post-secondary educational level institutions. WASC was formed in 1962 and works with educational institutions in California, Hawaii and the Pacific Basin (WASC, n.d.).

The current WASC standards are built around a framework of Core Commitments (to institutional capacity and educational effectiveness) defined by 4 overall standards that were redesigned in 2000 after a 5 year discussion and drafting process. There are slightly different documentation requirements for schools seeking USDE approval for federal student loans, but the overall process for accreditation is the same (WASC, 2001). WASC accreditation is granted when an institution can demonstrate it meets all those standards, has conducted a self review that includes extensive documentation of adherence to those standards, and undergone an evaluation by teams of external evaluators. Reaccreditation or site revisit is done every 3 years (WASC).
American National Standards Institute

The American National Standards Institute (ANSI) was founded in 1918 by 5 engineering societies (the American Institute of Electrical Engineers, the American Society of Mechanical Engineers, the American Society of Civil Engineers, the American Institute of Mining and Metallurgical Engineers, the American Society for Testing Materials) and 3 government agencies (the US Department of War, the US Department of the Navy, and the US Department of Commerce). The goal was to create a national body to “coordinate standards development and serve as a clearinghouse for the work of standards developing agencies” (ANSIa, n.d.). Their first national standard, issued a year later, concerned standardization of pipe threads. Its first major project was to coordinate national safety codes related to accident prevention (ANSI).

Today, ANSI is a private, non-profit organization supported by a variety of public and private sector organizations to administer and coordinate the United States voluntary standardization and conformity assessment system (ANSIa, n.d.). ANSI does not develop standards itself, but accredits a number of ‘standards developing organizations’ that build national consensus standards (ANSIc, n.d.). Groups that are accredited by ANSI use accepted procedures to develop standards that meet specific hallmarks, which include “openness, balance, consensus and due process” (ANSId, n.d.). There are approximately 200 standard developers accredited by ANSI, and more than 10,000 published national standards (ANSId.).

Among the ‘standards developing organizations’ accredited by ANSI to develop specific standards are groups such as the American Dental Association (image
receptors in dentistry); the Building Owners and Managers Association (floor measurement), the Uniform Code Council (item numbering and product identification standards), and the National Fire Protection Association (ANSIb, n.d.).

**National Fire Protection Association**

The National Fire Protection Association (NFPA) was founded in 1896 as “a small group of concerned professionals gathered in Boston to address inconsistencies in the design and installation of fire sprinkler system” (NFPAc, n.d.). Fire protection sprinklers as a technology were widely installed and successfully integrated in building design, but there were so many manufacturers and methods of installation, the inconsistencies were beginning to worry major insurers and underwriters (NFPAb, n.d.). Today, the NFPA has more than 75,000 members and has published 300 fire, building and life safety codes and standards. Their mission is to be a leader in promoting “scientifically based consensus codes and standards” for fire prevention and other hazards (NFPAa, n.d.).

One of those 300 standards, NFPA 1600, was first proposed as a national standard in 1991 by a committee tasked with recommending guidelines for disaster preparedness, response and recovery. In 1995 it was published as a “Recommended Practice for Disaster Management”. It was reviewed and reissued in 2000 as the “Standard for Disaster/Emergency Management and Business Continuity Programs”. The review cycle incorporates input from stakeholders and the 2004 version was approved as an ANSI standard on January 16, 2004 (NFPA, 2004). The normal four-year review cycle for NFPA 1600 has been shortened because of the current interest in this standard, and the next version is expected to be released in 2007.
On January 20, 2004, the Intelligence Reform and Terrorism Prevention Act of 2004 were signed into law containing this statement:

(b) SENSE OF CONGRESS ON PRIVATE SECTOR PREPAREDNESS- It is the sense of Congress that the Secretary of Homeland Security should promote, where appropriate, the adoption of voluntary national preparedness standards such as the private sector preparedness standard developed by the American National Standards Institute and based on the National Fire Protection Association 1600 Standard on Disaster/Emergency Management and Business Continuity Programs. (House, 2004)

On May 19th, 2004, the Department of Homeland Security Secretary Tom Ridge, speaking before the 9/11 Commission, agreed with their recommendation that the ANSI/NFPA1600 standards be recognized as a voluntary ‘National Preparedness Standard’ and adopted by the private sector in the United States (DHSa, 2004). Similar standards are being considered for the international community by the International Organization for Standardization based in Geneva, Switzerland (EIIP, 2004).

The Four Phases of Emergency Management

The NFPA 1600 standards address the historically agreed-upon four phases of emergency management. The four phases are usually depicted as a circle where the four elements of mitigation, preparedness, response, and recovery flow from one phase to the next, reflecting the continuity of the emergency management process, as shown in Figure 1. This model was developed by the National Governors Association in the early 1970s and was adopted by FEMA soon after its creation in the early 1980s (Wilson, 2000, p.80.)

FEMA defines each of these phases as follows: Mitigation includes activities that eliminate or reduce the occurrence or effects of a disaster (e.g., hazard
Preparedness is planning how to respond when an emergency or disaster occurs and working to marshal the physical and human resources to respond effectively (e.g., establishing authorities, planning, training, exercising, acquiring and maintaining resources) (FEMAc); Response is providing immediate emergency assistance to victims and try to reduce the likelihood of further damage (e.g., alerting and warning, search and rescue, emergency medical care, security, providing shelter, restoring vital services, removing debris) (FEMAc); Recovery is the short-and long-term actions necessary to return all systems to normal or near-normal conditions (e.g. continuing to restore vital services, shoring up or demolishing buildings, redevelopment of damaged areas) (FEMAc).

A fifth phase was added to these definitions with the release of the National Response Plan in January, 2005, and incorporated into the National Preparedness Goal discussed later in this chapter. Prevention is defined as “Actions taken to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions
taken to protect lives and property. It involves applying intelligence and other information to a range of activities . . . “ (DHSb, 2004). The addition of this phase is still being integrated into emergency management and will not be discussed in this study.

Emergency Management Accreditation Program (EMAP)

EMAP was conceived in a white paper report presented at the 1997 National Emergency Managers Association (NEMA) Annual Conference. NEMA is the professional association for state emergency management directors, established in 1974 by state directors interested in exchanging “information on common emergency management issues that threatened their constituents” (NEMA, 2001). The 1997 white paper presented the rationale for emergency management standards and accreditation within state and local government, and resulted in a study asking whether or not accreditation was feasible. The minutes of the 1998 NEMA Board of Directors meeting record the result of the study that national standards and an accreditation process for emergency management was feasible (NEMAa, 1998). The minutes also state:

While noting some states’ concerns, President McKinney affirmed his support for standards. He suggested that standards be flexible, voluntary and administered by a neutral commission. While implementing standards cost states, it would also reduce disaster costs and give states greater control over federal disaster programs. He noted that FEMA supported establishing standards hopefully by the year 2000. He suggested a pilot program perhaps based on the RPI report, NFPA 1600 or CAR be incorporated in the development of the national standard. (NEMAc, 1998)

The 1998 NEMA general assembly subsequently voted for NEMA to undertake development of an accreditation program (NEMAb, 1998). An independent
non-profit organization was established as the Emergency Management Accreditation Program (EMAP) and an oversight Commission was appointed jointly by FEMA, NEMA and IAEM.

In September 1999, during a workshop hosted by North Carolina’s Division of Emergency Management to develop a methodology and structure for EMAP standards, “the group agreed not to alter the NFPA 1600 standards in any way, but to develop a structure for the EMAP standards that builds upon the NFPA standards and enhance and tailor them through explanatory notes” (FEMA/NEMA, 1999).

**EMAP Standards**

The NFPA 1600 standards were chosen as the basis for EMAP because of NFPA’s reputation as a leader in providing and advocating consensus codes and standards (NFPAa, n.d.), and EMAP’s goal to strengthen a community’s capacity to respond to disasters and bring their capabilities in line with nationally accepted standards (EMAPc, n.d.).

When EMAP began accepting applications for accreditation, its standards were based on the 2000 version of NFPA 1600 (54 standards) and that version was used throughout 2004. Beginning in January, 2005, the standards reflect the 2004 version of NFPA 1600 (58 standards). The differences between the two sets of standards reflect some language changes and the creation of new standards by splitting existing standards. A crosswalk between the 2000 version and the 2004 version of the NFPA 1600 standards can be found in Appendix D. NFPA standards are usually only available if purchased, however NFPA 1600 is currently available at no cost from the NFPA, FEMA, NEMA and IAEM websites. The EMAP proprietary language that
expands on those standards is only available when a jurisdiction registers to begin the accreditation process and pays the appropriate fees.

As recommended during the 1998 NEMA board meeting, EMAP was structured to use the NFPA standards as they were written, with additional language to further explain and expand the meaning of the standard within the public sector. For example, NFPA 1600, standard 3-5.3 (NFPA, 2000) reads: *A current inventory of internal and external resources shall be maintained.* The corresponding EMAP standard quotes the NFPA 1600 standard in its entirety, and then adds the following as an explanation: *For the purposes of EMAP, the jurisdiction maintains a program resource inventory and has established a process that provides for the expeditious identification and procurement of external resources and assistance.*

The EMAP standards discussed in this paper include 54 standards within the following 14 program elements:

1. Program Management and Program Elements (6 standards): Requires the program to be institutionalized, have a designated program coordinator, and an advisory committee to provide input into the program (NFPA).
2. Laws and Authorities (2 standards): The program complies with applicable legislation and regulations, and has a strategy for addressing those needs (NFPA).
3. Hazard Identification and Risk Assessment (2 standards): Hazards, their likelihood and impact are considered for both natural and human-caused events (NFPA).
4. Hazard Mitigation (3 standards): A strategy to eliminate or mitigate the effects of hazards is in place, based on the previous set of standards (NFPA).

5. Resource Management (4 standards): Objectives are developed to identify resources necessary for emergency operations. These objectives address voluntary donations and the need for mutual aid (NFPA).

6. Planning (8 standards): The entity has these documented plans: strategic, emergency operations/response, mitigation, recovery, continuity of operations (NFPA).

7. Direction, Control and Coordination (6 standards): An incident management system is in place and utilized for incidents (NFPA).

8. Communication and Warnings (4 standards): There are communication systems and procedures that are regularly tested (NFPA).

9. Operations and Procedures (6 standards): Operational procedures exist, including SOP’s, maps, safety plans, a way to transition into recovery, and continuity of government (NFPA).

10. Logistics and Facilities (2 standards): Services, facilities, materials and resources can be identified, located, distributed and accounted for (NFPA).

11. Training (5 standards): Training needs are assessed and developed to support the program, including training in the entity’s incident management system (NFPA).
12. Exercises, Evaluations and Corrective Actions (3 standards): Exercises are conducted to evaluate plans and procedures, corrective actions are established and tracked (NFPA).

13. Crisis Communication, Public Education and Information (2 standards): Processes are in place to disseminate information internally and externally, including public awareness programs, and to develop/participate in joint information centers (NFPA).

14. Finance and Administration (1 standard): Financial and administrative procedures are in place to support the program before, during, and after an emergency or disaster (NFPA).

EMAP accreditation is based on the emergency management program showing it has the capability and related elements in place to deal with the jurisdiction’s known hazards and threats. For a jurisdiction to be fully accredited, it must demonstrate it can fully comply with all elements in each of these 54 standards (EMAPa, n.d.).

EMAP and FEMA

In 1997, FEMA introduced the Capability Assessment for Readiness (CAR) program to fulfill a commitment made to the US Senate Committee on Appropriations to develop “a system of emergency management performance criteria and measures” (FEMA, 1997). This program was driven by concerns about rising Federal disaster costs and an attempt to encourage states to develop the capability to manage disasters on their own.

The CAR was designed to give each state a method of conducting a self-assessment of its emergency management capabilities and use the results to identify
their strengths and weaknesses and establish priorities for improvement. Embedded in the CAR were the core elements described as “important ingredients developed by the National Fire Protection Association (NPFA 1600) and termed *Emergency Management Standards*” (FEMAd, n.d.).

The CAR was meant to be the assessment piece for the Emergency Management Planning Grant (EMPG) program, which provides grants for local governments to provide a foundation for basic emergency management capabilities and encourage the growth of comprehensive emergency management programs (NEMA, 2001). EMPG was developed by combining several existing funding streams into a single process that would allow states the flexibility to allocate funds to their areas of greatest need. The first EMPG grants were made in 2000 (Grant Community, n.d.). In most states, that meant direct grants from state governments to their local jurisdictions to fund some parts of their local emergency management programs.

In 2003, FEMA’s CAR program was rolled into a joint initiative between FEMA and the Department of Homeland Security (DHS) called the National Emergency Management Baseline Capability Assurance Program (NEMB-CAP), which is “currently sponsoring evaluations of state emergency management capabilities against a common standard, for the purpose of establishing a nationwide baseline of emergency response and preparedness capabilities” (FEMA, 2003, n.d.).

While the CAR was a designed as a self reporting tool for local governments, which consisted of a cursory self-assessment of their program’s compliance with the program elements mentioned earlier in this chapter (FEMAb, n.d.), EMAP requires the program to conduct a more detailed self-assessment of the standards included within
those program elements, and then verifies the self-assessment through a peer-based, on-site evaluation.

The instrument NEMP-CAP authorized for these baseline assessments uses “the nationally recognized Emergency Management Accreditation Program (EMAP) Standard and associated assessment processes” (FEMAa, n.d.). In short, while each state had informally completed a readiness and capability self assessment with the CAR, FEMA provides funds for EMAP to verify their capabilities with a formal evaluation and peer assessment program to develop a baseline against future improvement. Once that baseline is established, FEMA can evaluate progress against the known baseline, and, presumably, target federal assistance to the areas of greatest common need.

EMAP accreditation process

The process for EMAP accreditation is similar to all accreditation programs. After registering and receiving instructions, each program conducts a self-evaluation based on the standards. The EMAP Candidate’s Guide to Accreditation describes the self-assessment phase as one where “the program reviews each of the 54 EMAP standards and considers whether it complies with that standard, and if so, what documentation it will point to as evidence of that compliance” (EMAP, 2003, p. 2). Written documentation is required, although personal interviews can be used to supplement the written documentation, and direct observation by the assessor team is allowed to verify “the existence of materials, supplies, equipment, facilities and other tangible items” (EMAP, p. 8).
Once the self-assessment is completed and accepted by EMAP, a peer-assessment is scheduled. EMAP assessors apply and are accepted based on a set of qualifications that include 5 years of experience in a state or local government emergency management position (EMAPf, n.d.). A more detailed, step-by-step process for the EMAP accreditation process is described in Appendix C.

EMAP’s baseline assessment process for state programs began in January 2003 and is expected to be concluded in 2005. Accreditation registration is open and available to “all state, territorial, tribal, county and municipal government programs responsible for disaster prevention, mitigation, preparedness, response and recovery” (EMAPd, n.d.).

**EMAP Baseline Assessments**

Beginning with the NEMB-CAP initiative in 2003, all states were encouraged to undergo this baseline assessment of their emergency management programs. There was not an expectation that all states would be able to achieve full accreditation immediately, but a state could use the baseline assessment for that purpose if they chose. As of December 2004, 35 of 56 states and territories had completed a baseline assessment. As of May 2005, full accreditation was granted to four states (Arizona, District of Columbia, Florida, and North Dakota), and conditional accreditation was granted to four states (Montana, Pennsylvania, Virginia and Illinois) (EMAPe, n.d.). Registration for local (county/municipal) accreditation was opened in the Fall of 2003. As of September 2005, two municipalities had been granted conditional accreditation—the consolidated city/county of Jacksonville/Duval (Florida) and the East Baton Rouge Parish (Louisiana) (EMAPb, n.d.).
The Homeland Security Presidential Directive 8: National Preparedness (HSPD-8) was issued on December 17, 2003. It included provisions for the development of a National Preparedness Goal “to help ensure the preparedness of the nation to prevent, respond to and recover from threatened and actual domestic terrorist attacks, major disasters and other emergencies” (White House, 2003). Further, HSPD-8 required that the National Preparedness Goal “establish measurable readiness priorities and targets . . . ” along with “readiness metrics and elements that support the national preparedness goal including standards for preparedness assessments and strategies and a system for assessing the Nation’s overall preparedness . . . ” (White House).

The Interim National Preparedness Goal was issued on March 31, 2005, and defines a system of “capabilities-based planning” where “the intent is to establish capability baselines for operational missions and track resource allocation against them” (OJPb, 2005). That planning is based on National Planning Scenarios and a set of 36 “essential capabilities that should be developed and maintained . . . (OJPb)” which are referred to as the Target Capabilities List (TCL). A few of the 36 capabilities included in the TCL are (#7) Economic and Community Recovery, (#8) Emergency Operations Center Management, (#12) Fatality Management, (#18) Interoperable Communications, (#21) Mass Prophylaxis, (#24) On-Site Incident Management, (#30) Search and Rescue, and (#34) Volunteer Management and Donations. (OJPb)
In an online forum in May 2005, Corey D. Gruber, Director of the Office for Policy, Initiatives and Assessments, Department of Homeland Security Office of State and Local Government Coordination and Preparedness said: “We are strong proponents of NFPA 1600/EMAP and are working with the EMAP team to help us in development of preparedness assessments. We think the peer review process has tremendous merit” (EIIP, 2005).
CHAPTER 3
METHODOLOGY

The methodology and design of this study applies a program evaluation perspective to this investigation. The intention was to evaluate the findings from the baseline assessments conducted by the Emergency Management Accreditation Program (EMAP). The overall goal of program evaluation is to provide feedback to the professionals who wish to offer services, design new programs, or make changes in existing programs (Posavac, 1997). Within the overall goal of providing feedback, specific objectives may include assessment of needs, verification that the planned programs are providing the intended services, outcomes assessment, and efficiency evaluation (Martella, 1999). Once service programs are developed, it is crucial to determine whether they serve the identified population and have been implemented as they were intended (Martella). Researchers use process evaluation methods to achieve this objective, which include four phases: (a) establishing the boundaries of the evaluation; (b) selecting the evaluation methods; (c) collecting and analyzing information; and (d.) reporting the findings (Herman, 1987).

The boundaries for this evaluation were established as the program baseline assessments that were conducted during 2003 and 2004. The evaluation method chosen was an examination and analysis of the compliance rates for those programs as defined by the standards embodied within EMAP. The information was collected and
analyzed after first gaining permission from the EMAP Commission to use the
statistics from the baseline assessments, which they did on July 26, 2004. The text of
the approval letter is included in Appendix A. The data provided by EMAP were
delivered as an spreadsheet with two columns: The first column was the standard
number (reflecting the 2000 version of the NFPA 1600 standards); the second column
was a number reflecting how many of the 35 states completing the baseline assessment
had been found compliant with that standard. With this data, the table in Appendix E
was created to display the percentage of compliance with each standard. That
information was also used to create other tables useful to this evaluation.

Once completed, this table was shared with 15 emergency management
practitioners chosen on the basis of their involvement with the EMAP process. Names
and titles, dates and other details of the interviews can be found in Appendix B. The
intent with each interview was to discuss this revolutionary program with leading
professionals in the emergency management field to collect their comments and
opinions on the EMAP program and the process for attaining accreditation. The
interviewees included state emergency management directors, members of the EMAP
Commission, state accreditation managers, members of the NFPA1600 technical
committee, and EMAP trained peer assessors. Interviews with these professionals
were conducted in person and by phone. The interviews were documented and
confirmed with each interviewee.

While discussing the results and sharing their impressions and observations,
each interviewee was asked to consider these questions: “What might increase the
percentage of compliance with these standards?” and “What might make it easier for
the states to achieve EMAP accreditation?” The report of the findings is presented in the next chapter.
CHAPTER 4
RESULTS AND DISCUSSION

This chapter begins with a discussion comparing EMAP with other accreditation programs. Although EMAP evaluates each of its standards individually, an explanation of the four phases of emergency management includes a process sorting those standards into one of the four phases. The discussion moves to an analysis of the compliance rates within those four phases and suggests an imbalance in the overall focus of these emergency management programs. A discussion of operational issues that affect a program’s ability to achieve accreditation was gathered from interviews with emergency management professionals as listed in Appendix B.

EMAP in Context

Standards have not been applied to this field previously and doing so will be a lengthy and complex process. During the interviews conducted with the emergency management professionals, questions and concerns about the accreditation process were raised by both the programs and the assessors. Questions were also raised about the subjectivity of the assessors, a complaint common to all peer reviews. Concern was expressed that the language in the standards was too broad and open to interpretation or too complex in some multi-part standards. Historically, there has

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1 Note. All individuals referenced in this chapter were personally interviewed. Dates, titles and other details of those interviews may be found in Appendix B.
always been resistance to new standards and there are reasons for these first steps into
formal accreditation to be difficult. However, they are not insurmountable as a
comparison with two well-established accreditation programs demonstrates.

When FEMA agreed to fund the EMAP baseline assessments, it was not
unreasonable to assume that few states would be able to achieve full accreditation
immediately considering the rapid growth and professionalization of the emergency
management field in the past 20 years. Lucien Canton, an EMAP assessor and the
former Director of Emergency Services for the City/County of San Francisco, CA,
sees the concept of accreditation as a significant paradigm shift for most emergency
management programs. “We are talking about a program that grew up on its own,” he
said. “It started as a Civil Defense program and evolved from there.”

Bob Andrews, former president of IAEM, expanded on the rapid changes in
emergency management in the October 2000 issue of the Bulletin, published by the
International Association of Emergency Managers: “Emergency management’s
voyage through the 21st century is likely to be at warp speed. Changes to our
profession, already evident, will be coming faster and impacting deeper—forever
changing and expanding the profile of emergency management” (IAEM, 2000, p. 7).
Formal accreditation of emergency management programs is likely to be one of those
changes.

Full acceptance and utilization of any program of standards and accreditation
does not happen immediately. In the healthcare model discussed in Chapter 2,
acceptance of the need for accreditation within the healthcare profession took half a
century. JCAHO began as a voluntary process in 1910 and the first attempts at an
accreditation survey were not impressive—only 82 of 692 hospitals surveyed in 1918 met the standards. As the concept of healthcare standards and accreditation gained acceptance, the rates of compliance and numbers of hospitals seeking accreditation increased dramatically. Likewise, accreditation of educational institutions through organizations such as WASC began as internal, voluntary processes to guide admission policies and transfer credits among schools, and developed into social and professional pressure for schools to become and remain accredited.

The major motivation for institutionalizing accreditation for healthcare and education came out of national legislation. The Higher Education Act of 1965 allowed schools that were accredited to receive federal funds for education. The Social Security Amendment of 1965 allowed hospitals that were accredited to receive Federal Medicare reimbursements. Accreditation in both these fields is still a voluntary process—driven by legal liability issues and the business need to receive federal dollars.

EMAP is similar to both of these models in that it was created to provide accreditation for compliance with standards that would improve public emergency management programs. There is not yet an official incentive to adopt EMAP accreditation as an industry standard, but that possibility is being widely discussed as increased federal funding for Homeland Security becomes available. The guidelines published for the 2005 Homeland Security Grant Program (successor of the EMPG funds) says “states are encouraged to begin to move toward compliance with the EMAP standards” (OJPa, 2005). Dewayne West, Director of Emergency Services for
Johnston County, North Carolina, an EMAP Commissioner and current President for IAEM expressed the issue this way:

I think what you are going to see more and more is we’ll be held to a certain standard, whether it is there or not. And if we don’t develop a standard to police ourselves and make sure we have a good quality program, somebody else may do it for us. It may not be in a fashion we want it to be. I’d rather be proactive and address our problems than have someone else second guess us who may not have the background and expertise to have all the answers.

**Compliance Rates**

The compliance rates for the EMAP standards within the 35 states that had completed the baseline assessments through December 2004 ranged from 14% to 94%. There was not a single standard that every state was compliant with; nor was there a single standard with which every state fell short of compliance. An analysis of the compliance rates for these standards is discussed in this section.

**Relationship to the Four Phases of Emergency Management**

The four phases of emergency management, as described in Chapter 2, are usually depicted as a circle where the four elements of mitigation, preparedness, response, and recovery flow from one phase to the next, reflecting the continuity of the emergency management process. Briefly, mitigation includes activities to eliminate or reduce the effects of a disaster; preparedness involves planning for the response and gathering resources; response is the immediate emergency assistance; recovery are actions taken to return systems to normal.

While these phases are somewhat simplistic and often overlap, they do “provide functional categories that facilitate administration,” according to Waugh (p. 12). The EMAP standards discussed in this study also overlap, but can be primarily
associated with one of these phases. The table in Appendix F assigns each of the EMAP standards to one of the four phases by comparing the language in each EMAP standard to the FEMA definition of each phase described earlier in this chapter. This method places the primary function of 25 of the standards within the preparedness phase, 16 within the response phase, and six each within the recovery and mitigation phases. One standard (3-14, Finance and Administration) applied equally to all phases and was not included.

**Preparedness Phase**

Most discussions of the four emergency management phases begin with Preparedness, which tends to be the centerpiece of most emergency management programs. Included in this phase are the activities related to developing plans, conducting training and exercises, developing facilities and maintaining physical and human resources in response readiness. Also included in this phase are public information and awareness programs.

The compliance rates for this phase reflect the central position of the preparedness phase in emergency management agencies. Of the 24 standards in this group, the compliance rate for the majority of the standards fell between 40% and 70%. Two standards were above 70%—having a coordinator for the emergency management program, and having a public awareness program in place. Four standards were below 40%. Two of the standards that were below 40%—both concerned with resource management objectives and capability shortfalls—can be partially attributed to interpretation. Eileen Baumgartner, an EMAP assessor and also the team leader and accreditation manager for California’s baseline assessment
expressed the confusion around these standards: “What does resource management objective mean? This one is so unclear.” This confusion was noted by the NFPA 1600 Technical Committee, and the 2004 version contains a more detailed explanation and definition of this standard, which should alleviate some of the uncertainty in future assessments.

Response Phase

Response is certainly the most visible of the four emergency management phases. Being able to respond instantly to any kind of emergency or disaster is not only deeply rooted in the origins of emergency management, but tied emotionally to the core of local communities. Bill Greulich, Coordinator of Emergency Services for the City of Berkeley, CA, refers to this as the need of the citizens to see “red trucks and blue uniforms” (Greulich, personal communication, June 7, 2005). Accordingly, the EMAP program elements within the response phase had the strongest compliance rates. Of the 16 standards grouped into this category, all but one had a compliance rate of over 50%, and seven were over 70%.

The lowest compliance rate in this group (40%) was for the standard that requires the jurisdiction to have both a primary and alternate Emergency Operations Center (EOC) “capable of supporting response and recovery operations” (NFPA, 2000). All jurisdictions have primary EOC’s, but not all have an alternate facility that is fully equipped and ready to operate. The importance of an alternate facility was demonstrated when the new EOC for the City of New York was destroyed when Seven World Trade Center collapsed on 9-11-2001. A subsequent study sponsored by the Multidisciplinary Center for Earthquake Engineering Research reported: “A major
impediment in meeting this sudden emergency need was that there was no pre-established back up facility at which OEM staff and other responding department could conduct operations even on an interim basis” (Kendra, 2002, p 99). As the lessons learned from 9-11 are integrated into public emergency management programs, the compliance with this standard will undoubtedly increase.

Former FEMA Director James Lee Witt, in his book *Stronger in the Broken Places*, said that “response is crisis management in its most stripped down, most basic, most unimaginative form. It’s getting the victims the help they need as fast as you can” (Witt, p. 6). An active and effective response is vital to the successful resolution of any disaster.

**Recovery Phase**

Recovery is characterized by short- and long-term activities to bring the damaged jurisdiction back to normal. Short-term recovery overlaps with response, and includes immediate actions to restore normal functions, (e.g., utilities, transportation routes, temporary living facilities). Long-term recovery can last for months or years and includes new construction, redevelopment plans, disaster assistance programs and government buy-outs of private property. Of the six standards grouped into the recovery phase, all but one had a compliance rate below 50%.

The recovery phase requires proactive planning prior to a disaster, and many jurisdictions do not make this a priority. Bob Fletcher, the former Director of State and Local Preparedness for FEMA, commented on the low compliance rate for the standard requiring a recovery plan (26%), “They just don’t do this. They write a
recovery plan after an incident, but very few have gone out and written a plan about how to execute recovery when the time comes. There is not a lot of precedence for it. They just don’t take the time.”

The recovery phase also includes continuity planning, which has various names in both public and private sectors, e.g., business continuity, continuity of operations, continuity of government. The similarity in all these plans is that they are written to ensure essential functions of the business or government are continued. Continuity planning in the public sector includes succession planning (to ensure leadership will continue), emergency delegation authorities, and safekeeping of vital records (NFPA, 2004). The EMAP standard with the lowest compliance rate (14%) is the one that requires each department or agency with an essential emergency role in the program to have a continuity plan.

The low numbers in continuity plans surprised most of the emergency management professions that were interviewed for this study. Steve Charvat, the Emergency Management Director at the University of Washington, an EMAP assessor and member of the NFPA 1600 Technical Committee said, “I would have assumed that almost everyone had a continuity plan of some kind in place—even something from Y2K that requires regular updating.”

Continuity planning has been standard practice in the private sector for years, and is even more urgent since the events of September 11, 2001. The economic and strategic impact of major disasters on business was one of the reasons behind the recommendation of the 9-11 Commission to adopt NFPA 1600 as a standard for the private sector (EIIP, 2004). The private sector interest in this area is where the real
push for government to develop continuity plans is going to come from, according to Fletcher. “BCP (business continuity planning) is going to wind up being required for any viable business entity and they will end up surpassing government planning.”

**Mitigation Phase**

The least visible phase of emergency management is the one mentioned most by the emergency management professionals interviewed as having the greatest long-term impact on the overall outcome of any disaster—mitigation. FEMA describes mitigation as involving “lasting, often permanent, reduction of exposure to, probability of, or potential loss from hazard events” (FEMAc, n.d.). Of the six standards grouped into the mitigation phase, only one had a compliance rate over 50%, and four had compliance rates below 35%.

A mitigation plan for a jurisdiction begins with a hazard assessment and impact analysis, which is the process that identifies the hazards that could threaten a jurisdiction—natural (geological, meteorological, biological) and human-caused (accidental and intentional). The hazards that present the greatest threat are then weighed against their effect on the jurisdiction—both the probability that the event will occur and the severity of its effect on the people, the environment and the economy. A hazard mitigation strategy is developed from this analysis, and a mitigation plan encompasses all of these steps. The standards related to conducting a hazard assessment and impact analysis had compliance rates of 29% and 20% respectively. The standard requiring a mitigation plan had a 23% compliance rate.

Completing a formal hazard vulnerability assessment is a time consuming but important process that provides overall direction for the emergency management
program. Kay Goss, former Associate Director for Preparedness for FEMA, explained the importance of this step in emergency management planning by saying, “If you are not identifying all your hazards, there are major areas where you will stub your toes. Emergency management is a process and a methodology and you have to do each step.”

One reason suggested for the low compliance rates in this standard was its scope. Emily Bentley, the EMAP Director, points out that this standard requires looking at all hazards and not just natural ones (e.g., earthquakes, hurricanes). Baumgartner noted that focusing primarily on natural hazards in building hazard assessments means not formally looking beyond those to the increasingly more frequent technological (e.g., hazmat releases, prolonged power outages) and manmade (e.g., civil disorder, terrorism) hazards. The Disaster Mitigation Act of 2000 (FEMA, 2000) establishes a method for state and local government entities to receive increased funding for hazard mitigation planning—if they have a mitigation plan. The scope of analysis required for this Act is restricted to natural hazards. Planning that includes increasing the scope of threats would not only help compliance with this standard, but also have long term social and economic benefits for the all entities and jurisdictions. Fletcher said, “There is a benefit to be derived from running every hazard through the gauntlet (of standard 3.3.1/2).”

In the final analysis, disasters cost billions of dollars annually and that amount is increasing every year. Mitigation saves money in the long run. In a 1998 address introducing Project Impact, an initiative to build disaster-resistant communities, President Bill Clinton talked about the benefits of mitigation, “For every dollar we
spend on prevention, we save two or more in future disaster costs” (FEMA, 1998).

His FEMA director at that time, James Lee Witt, concurred: “In the end, though, mitigation—which means to moderate in force or intensity—should be the goal of every crisis manager. Why prepare to clean up more efficiently after a disaster when you can prepare to lessen its effect in the first place” (Witt, 2002, p. 6).

Conclusion—Compliance Rates

Even a cursory examination of compliance rates by the emergency management phase they represent supports the observation that standards related to the response phase have higher compliance rates. This suggests the programs are focusing more of their resources into response, a finding that was not surprising for the professionals interviewed for this study. Goss, part of the team that implemented both the CAR (Capability Assessment for Readiness) and Project Impact FEMA during the Clinton administration, noted that “still the states are focused on response and not even focusing a whole lot on recovery.” Canton’s comment noted the existence of numbers to confirm commonly held knowledge in the emergency management community: “It is one thing to say intellectually, ‘I think they are focused too much on response,’ and another to actually see that happening as we assess them against these standards.”

Operational Issues

As a new process in a field that has received an enormous amount of attention since the events of 9-11-01, EMAP is struggling to resolve operational issues around its development. In addition to looking at the compliance rates, the interviews conducted with emergency management professionals familiar with the EMAP
process looked at the operational issues that interfered with the ability of a state to achieve accreditation. Their comments could be collected into issues around the support and structure of emergency management programs: the importance of executive level support, being able to document institutional memory and consistent financial support.

Executive Level Support

The importance of executive level support for an EMAP accreditation, logistically and financially, is significant. There were three reasons advanced for early and strong executive level support—all connected to the evaluation of the entire jurisdiction or entity. Bentley emphasized during a conference presentation in November 2004 that EMAP looks at a jurisdiction’s whole emergency management program, not just the emergency management agency or office. Canton said: “I wonder how many of these people grasped the idea that this is an evaluation of the program, not the office.”

The first reason for executive level support for this accreditation is to demonstrate the jurisdiction’s basic governmental responsibility to care for its citizens. Most emergency management offices are staffed by emergency/disaster managers who do not have the level of authority necessary to carry out this work independently and rely heavily on executive level support. Henry Renteria, Director of Emergency Services for the California Governors Office of Emergency Services (OES) recalled a conversation during the time he was the OES Director at the City of Oakland, California: “After the (Loma Prieta) earthquake in Oakland, the city manager told me that for us to recovery properly, we had to have three things: money, vision and
political will. Without all of those it won’t happen. And those are things that we (emergency managers) don’t have a lot of control over.”

A second reason for executive level support for the accreditation process is the public relation benefits that accrue to the accredited jurisdiction. According to Mike Martinet, Area G Coordinator, Los Angeles County, California, the major reason executives should support accreditation can be inferred from the report ABC news did in Chicago in May 2003. Looking at the executive level managers in Illinois involved in coordinating the TOPOFF 2 exercise, they widely reported, “that not one Chicago or Cook County official has been trained or accredited in emergency management . . .” (ABC, 2003). “This is why you need this—to keep the jackals off your back,” said Martinet. “Even if it doesn’t mean anything, the PR benefits are invaluable.”

The third reason for executive support is simply because conducting the self-assessment requires extensive logistical and financial support. In reviewing the statistics, Steve Charvat acknowledged the problems inherent to any jurisdiction in conducting an EMAP assessment:

The ones (standards) that aren’t in compliance are the ones that tend to require a whole lot more technical assistance and time. They are the ones where you can’t just hire a contractor to write something up. You need someone in-house that understands your system. You can’t do a good hazard assessment, for example, with a contractor. In this case, a boilerplate doesn’t work.

The effort required to conduct a self-assessment can be daunting. During the Coastal California Emergency Services Association (CESA) meeting on May 19, 2005, Mark Dugan, a FEMA Region IX Coordinator discussed his experience as an observer at one of the early EMAP assessments. He was emphatic that the best results were achieved by approaching the EMAP self-assessment as a formal project management
task. He added that the state did not expect the amount of groundwork required:

“They were surprised at the amount of preparation that was needed. They were told they were going to find all the things that were put aside because they weren’t important.”

Documenting Institutional Memory

Ultimately, compliance with a standard is the heart of any accreditation, and EMAP—like all accreditation programs—asks the entity to gather and present documentation in support of their compliance with each standard. Very often, the knowledge of policy and procedure and the experience with implementing them are just not written down. They are in somebody’s head and passed along by word of mouth. They are part of institutional memory and not part of any formal documentation.

Requiring documentation for procedures that have become part of institutional memory is not always easy. Dale Shipley, the Executive Director of Ohio’s Emergency Management Agency during their baseline assessment, expressed some frustration with the “in writing versus practitioner stuff.” Referring to standard 3-3 (Hazard Identification and Risk Assessment), Shipley and his staff knew that flooding was the primary hazard in Ohio. “The hazard assessment, the risk assessments are in our heads, in the practical knowledge we use on a day to day basis,” he said. Regardless of how time consuming documentation can be, the argument for finding the time to write it all down was stressed by Baumgartner. “While some standards can only be completely verified by watching them work, everything has to be codified in
some manner that allows the information to be distributed to the next team of workers or responders.”

For example, lack of documentation was a reason behind the lower compliance rates in the standard that asks for documentation that the entity has “procedures to locate, acquire, distribute and account for services, personnel, resources, materials and facilities . . . ” (NFPA, 2000). Procurement of resources by whatever means necessary is a staple of most entities and institutions, especially in a disaster. Traditionally, logistics management has been an informal list or part of somebody’s card file—not a structure or policy. Referring to the clerk in the movie and television series M*A*S*H, who could find and acquire anything, Charvat said: “I call it the Radar O’Reilly factor. How do you document something like that?” Baumgartner added: “If it is done, but not written down, it still doesn’t count.”

The bottom line is that creating documentation for a process or procedure that is done on a day to day basis can be time-consuming and expensive. As emergency management programs become more professional, the practice of relying on institutional memory is becoming more and more problematic and does not lend itself to accreditation. The policies and procedures represented in any standard must be documented in some manner that allows the information to be distributed to the next shift or generation of responders. Craig Fugate, Director of Emergency Services for the Florida, discussed the year-long process of collecting the documentation necessary to become one of the first two states to achieve EMAP accreditation: “It made us much more disciplined. It gives you the foundation of documentation, so you’re not relying on someone’s memory of what you did in response to a disaster three years
ago” (Yates, p. 29). And, while there are many processes an emergency manager has no control over (e.g.: executive and financial support), documenting the program is the one area they can control.

The solution rests in a significant paradigm shift for how business is done in emergency management programs. Shipley explained the attitude shift this way:

It (documentation) hasn’t been necessary because it is part of what we know and how we do business. If it isn’t documented, it’s because we haven’t gotten around to it. EMAP is going to provide the impetus for us to change that. It hasn’t been necessary because it is part of what we know and how we do business. Documentation is a lower priority. But, it is taking a higher priority in the homeland security field, because populations and critical assets are taking on a different meaning than they have in the past. Needing to have it all in writing is taking on more importance.

Financial Support

A common and consistent concern expressed throughout the interviews was the lack of funding required to support the programs within emergency management. Refering to the previous comment by Renteria about those elements necessary for a swift and complete recovery after a disaster (money, vision and political will) the lack of strong financial support will limit the ability—and, often, the time and interest—of an emergency management program to develop the full range of plans, personnel and resources necessary to accomplish its goals of protecting the public.

Emergency management, like everything else, competes for both limited government funding and the public attention focused on the disaster du jour. Often, government funding for emergency management activities flows to the states and local jurisdictions with a mandate to accomplish a specific purpose. Those specific areas tend to show strong support and good results. In looking at the compliance rates for
training and exercises, for example, Baumgardner noted that programs with federally funded exercise or training programs are generally robust—e.g. FEMA’s Radiological Emergency Preparedness (REP) program, which provides money for states to conduct joint training and exercises with the nuclear power plants located within their jurisdictions. She commented: “It is hard to do that with an earthquake or flood exercise unless it is in a state that has a well-funded program for those hazards,”

Fletcher added:

They (the states) train when they can and when they have the money and time. They usually do training that flows down from a mandate that comes with the money. The best example of this is the money coming out of DHS and terrorism. Look at what is happening now. All the exercise programs are focusing on terrorism, while the probability of terrorism is extremely low. If there is a program that has the money, because the Federal government requires them to do it and pays, that is what they do. They don’t do flood or earthquake because they don’t get paid to do them, even though the threat is so much higher.

One reason suggested for limited financial support for overall emergency program management is that government funding tends to flow to projects and programs that are institutionalized and familiar instead of programs that are new and unfamiliar—regardless of the difference they make on the end results. In discussing recovery planning for instance, Canton said that “Recovery does not compete with response for resources.” As noted previously, the emphasis on actions related to response often drive the distribution of available funding, even when common sense would dictate that similar money spent on preparedness, recovery and mitigation would greatly decrease the ultimate costs.

Programs also tend to focus more time and effort on those actions that are supported with assistance and funding. In discussing the hazard assessments, Fletcher
said, “I do believe there is a benefit to be derived from running every hazard through the gauntlet (of assessment). They (the states) don’t do that because in spite of the benefits and the payoff in preplanning, they aren’t going to be supported so they don’t do it.” This affects the ability of a state to achieve compliance with all the EMAP standards in one way or another. What incentive is there to spend limited time and resources on projects or programs that are not supported with outside funding?

Conclusion—Operational Issues

The issues discussed concerning operational aspects certainly are not unique to emergency management. Executive level support, documentation and a strong financial base are important features of any successful program. EMAP is a program whose goal and purpose is to protect and support the public. Shipley made this comment when discussing the conflict between available funds and the public needs: “If you have enough money to do all this, it works. If you don’t, you have to prioritize.”

State emergency management programs have traditionally been encouraged by their governing bodies to prioritize their limited human and physical resources into certain areas. Adoption of standards through accreditation promises a more holistic approach toward public policy in disaster and emergency management. If protecting the public is the primary goal of government, both the public and the government are going to have to commit more support, assistance and funding to make sure it happens.
CHAPTER 5
SUMMARY, RECOMMENDATIONS AND CONCLUSION

Summary

The purpose of this study was to look at the early results for the baseline assessments of U.S. states and territories conducted by the Emergency Management Accreditation Program (EMAP) from 2002 through 2004. During that time, baseline assessments were completed for 35 of the 56 U.S. states and territories. The rates of compliance were examined against the four emergency management phases and the operational issues that affect a program’s ability to achieve accreditation.

A review of the literature looked at models for accreditation and standards in the healthcare and education fields. The development and application of standards for emergency management programs culminated with the NFPA 1600 standards, upon which the EMAP standards are based. The development of the EMAP initiative and its relationship to FEMA included funding an EMAP baseline assessment to develop a nationwide baseline of emergency response and preparedness capabilities in all U.S. states and territories.

EMAP granted permission to use the statistics for this study in a manner that would assure individual state confidentiality. Once finalized, a table showing the rates of compliance with each of the 54 standards was shared with emergency management professionals involved in the EMAP baseline assessment programs. Interviews
conducted with those professionals provided the data from which the analysis was
developed.

The analysis of the compliance rates supports the observation that the focus of
these emergency management programs is stronger in areas related to responding to
disasters, as opposed to areas related to recovery from disasters or mitigating the
effects of future disasters. The interviews with emergency management professionals
further highlighted specific operational issues associated with the support and
structure of an emergency management program—executive support, documenting
institutional memory, strong financial backing—which relate directly to a program’s
ability to achieve accreditation.

Recommendations

The EMAP baseline accreditation program is scheduled to be concluded during
2005. Two additional areas are recommended for further study. Once the final
statistics for all 56 U.S. states and territories have been completed, this study should
be updated to include all available data. The baseline assessments for the final 23
states will be completed using the 2004 version of the NFPA 1600 standards, which
were revised in part based on the experience of the earlier assessments. A comparison
of the compliance rates between the two versions would yield information about the
applicability of the language changes and might suggest additional modifications for
the 2007 version of NFPA 1600 currently being discussion.

Of the 35 states that have completed their baseline assessments through
December, 2004, eight have received full or conditional accreditation. Those eight
could provide the basis for guidance and direction to encourage and assist the
remaining states through the accreditation process. Kay Goss, former Associate Director for Preparedness for FEMA, feels this kind of guidance is more easily given and accepted from peers. She said, “We have a lot of states that can mentor and lead and have the vision.” Therefore, a recommendation from this study would be the development of a ‘best practices’ database that could be accessed by each program attempting to improve their emergency management programs, whether they were seeking accreditation or not.

**Conclusion**

Finding a commonly accepted definition for emergency management is difficult. William Waugh, in his 2000 emergency management text, acknowledges this problem by saying:

> A major problem in defining emergency management today is finding the boundaries of the field. In addition to dealing with natural and technological disasters, there are compelling reasons to include public health threats that may affect millions of people . . . environmental issues that may result in tremendous economic loss . . . and even astronomical issues . . . . It is a challenge to find common ground for discussions. (Waugh, 2000, p. 17)

If the most important function of government is to protect the lives and property of its citizens, then the role of an effective and resilient emergency management program is the key to its achievement. Catastrophes are not likely to abate given changing weather patterns, the environmental vulnerability of many of our communities and the political denial of local and regional mitigation opportunities.

Listening to the questions coming out of the catastrophe created by Hurricane Katrina in New Orleans, it is clear that minimal standards were not met at any level of government. Jeb Bush, the Governor of Florida wrote, “Americans are looking to
their leaders for answers to the tragedy, and reassurances that the mistakes made in the response will not be repeated in their own communities.”

EMAP accreditation demonstrates that an emergency management program is prepared to perform the necessary acts to meet the public’s need to be informed and protected from the broad range of natural and man-made disasters. In the future, EMAP accreditation and its resilience to disasters could easily become associated with the economic viability of a community— not to mention being used as one criterion for insurability and bond ratings. Being able to demonstrate a strong and resilient emergency management program through EMAP accreditation should become one of the standard by which communities are evaluated.
APPENDICES
MEMORANDUM

TO: Valerie Quigley
FROM: Emily DeMers, Executive Director
DATE: July 26, 2004
RE: Request for permission to use EMAP data in research project

On behalf of the EMAP Commission, I want to express appreciation for your interest in using EMAP assessment data for your master’s thesis research. The EMAP Commission at its June meeting approved your request in concept and seeks to work with you to accomplish your research objectives in a manner that adheres to principles of confidentiality of program data and appropriate context and representation of findings.

As you know, EMAP has assured jurisdictions participating in baseline assessments that EMAP will not release their information—the compliance information they provide in the Online Assessment Tool as well as the information gathered about their programs while on-site.

In response to the specific data requests in your June 21, 2004, memorandum, EMAP will provide the number of compliance and non-compliance findings as to the 54 EMAP standards in state/territorial reports to date. EMAP will advise directors that this information—with findings unattributable to any particular program—is being released for research purposes. EMAP will provide an update of additional comparable findings data in January 2005.

It is important to EMAP that the analysis of this data is conducted and reported in a manner that does not conflict with the objectives and intent of EMAP, including fostering continuous improvement in emergency management and preparedness capabilities and systems. The EMAP Commission, as part of this permission to use findings data, will require EMAP review of your research findings, thesis, or other report, before any distribution or publication, whether written or electronic, of such findings, thesis, or report.

EMAP appreciates your interest in working with assessment data and your support of EMAP’s goals. I look forward to working with you to achieve an interesting and meaningful product for the emergency management community. Feel free to contact me if you have questions or need more information.
MEMORANDUM

TO: Valerie Lucus
FROM: Emily Bentley, Executive Director
DATE: September 26, 2005

The EMAP Commission on its recent conference call meeting discussed the draft of your thesis provided for review. Commission members Ellis Stanley and Bill Waugh discussed that they had reviewed it, and that their comments and those of EMAP staff were provided to you. I advised that to my knowledge, you have addressed the comments and recommendations EMAP provided in your subsequent draft(s).

The commission asked me to communicate to you that no additional revisions to your thesis are required from the standpoint of accurately representing the context of EMAP standards and assessment.

Several members noted that the data and discussion in your paper are likely to serve as important information for the emergency management community. Your work is appreciated.
APPENDIX B

EMERGENCY MANAGEMENT PROFESSIONALS INTERVIEWED
Wayne Baron (Interviewed on March 18, 2005)  
Homeland Security Strategic Planning Team Leader, North Dakota  
Member, EMAP Standards Committee  
EMAP Assessor  
Accreditation Manager for North Dakota’s EMAP baseline assessment.

Eileen Baumgartner (Interviewed on March 17, 2005)  
Chief of Recovery Programs Branch, California State OES  
Member, EMAP Standards Committee  
EMAP Assessor and EMAP Team Leader  
Accreditation Manager for California’s EMAP baseline assessment

Emily (DeMers) Bentley (Interviewed various dates/times)  
Director, Emergency Management Accreditation Program, Lexington, KY

Lucien Canton, CEM (Interviewed on April 28, 2005)  
Owner, Lucien G. Canton, LLC  
Former Director of Emergency Services, City/County of San Francisco, CA  
EMAP Assessor

Steve Charvat, CEM (Interviewed on April 11, 2005)  
Emergency Management Director, University of Washington, Seattle, WA  
EMAP assessor and EMAP Team Leader  
Member, NFPA 1600 Standards Technical Committee

Mark Duggan (Interviewed on June 13, 2005)  
Emergency Management Specialist, National Preparedness Division  
Region IX, Federal Emergency Management Agency

Robert P. Fletcher, Jr. (Interviewed on April 16, 2005)  
President, Readiness Consulting Services, LLC, Annapolis, MD  
EMAP consultant  
Member, NFPA 1600 Standards Technical Committee  
Former Director of State and Local Preparedness, FEMA

Doug Friez (Interviewed on March 18, 2005)  
State Director, North Dakota Emergency Management  
Member, EMAP Commission

Kay Goss, CEM (Interviewed on March 18, 2005)  
Former Associate Director for Preparedness, FEMA
Dean Larson, PhD, CEM, CSP, CPT, CPEA (Interviewed on June 13, 2005)
  Project Advisor and Instructor, Perdue University Calumet
  Principal Member, NFPA 1600 Standards Technical Committee

Mike Martinet, CEM (Interviewed on Mary 16, 2005)
  Area G Coordinator, County of Los Angeles Office of Emergency
  Management, California.

Henry Renteria, CEM (Interviewed on June 9, 2005)
  Director, Governors Office of Emergency Services, CA
  Former Director of Emergency Services, City of Oakland, CA

Dale Shipley (Interviewed on May 5, 2005)
  Executive Director, Ohio Emergency Management Agency (retired.)

Ellis Stanley, CEM (Interviewed various dates/times)
  General Manager, Emergency Preparedness Department, City of LA, CA
  Chair, EMAP Commission

Dewayne West, CEM (Interviewed various dates/times)
  Director of Emergency Services, Johnston County, NC
  Vice Chair, EMAP Commission
APPENDIX C

EMAP ACCREDITATION PROCESS
EMAP Accreditation Process

1. Registration can be done online, and provides the program with all accreditation materials—e.g., the EMAP standard, the Candidate's Guide to Accreditation, and access to secure areas of the EMAP website. Currently, this step costs $125.

2. Once the documents have been reviewed and the program is ready to pursue accreditation, it submits an application and pays an application fee. The application fee is based on the program’s population area and ranges from $2000 to $7500.

3. The next step is the program’s self-assessment. This involves selecting an accreditation manager, documenting evidence of compliance with each standard, and recording their findings in the EMAP online assessment tool.

4. Once the program has completed the self-assessment, results are submitted to the EMAP office, they are reviewed for completeness by the EMAP staff, and the on-site assessment is scheduled.

5. The on-site assessment is conducted by an assessor team selected by EMAP from its pool of peer assessors. The assessors meet a set of specific requirements, i.e.: five years of working experience in this field, experience in an actual emergency operation, knowledgeable and up-to-date on the principles of comprehensive emergency management. This team travels to the program location to review and verify the information and documentation contained in the state’s application.

6. The results of the on-site assessment are compiled by the assessor team into a report outlining and explaining the compliance/noncompliance with each standard. This report is reviewed by the EMAP Program Review Committee who makes a recommendation for either accreditation (full compliance with all standards), conditional accreditation (all areas of non-compliance can be addressed within nine months), or accreditation denied.

7. The recommendation of the Program Review Committee is then forwarded to the EMAP Commission for concurrence and final action.

8. Accredited programs must maintain compliance by filing an annual report.

9. Programs must apply for reaccreditation every five years.
APPENDIX D

CROSSWALK BETWEEN NFPA 1600 STANDARDS (2000 VERSION) AND
NFPA 1600 STANDARDS (2004 VERSION)
<table>
<thead>
<tr>
<th>Major Program Elements</th>
<th>Description</th>
<th>2000 NFPA1600 standard</th>
<th>2004 NFPA1600 standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Management and Program Elements</td>
<td>written program policy</td>
<td>2-1</td>
<td>4-1</td>
</tr>
<tr>
<td></td>
<td>program coordinator</td>
<td>2-2</td>
<td>4-2</td>
</tr>
<tr>
<td></td>
<td>program committee established</td>
<td>2-3.1</td>
<td>4-3.1</td>
</tr>
<tr>
<td></td>
<td>committee includes stakeholders</td>
<td>2-3.2</td>
<td>4-3.2</td>
</tr>
<tr>
<td></td>
<td>committee provides input</td>
<td>2-3.3</td>
<td>4-3.3</td>
</tr>
<tr>
<td></td>
<td>periodic assessment of program</td>
<td>2-4</td>
<td>4-4</td>
</tr>
<tr>
<td>Laws and Authorities</td>
<td>complies with legislation/regulations</td>
<td>3-2.1</td>
<td>5-2.1</td>
</tr>
<tr>
<td></td>
<td>strategy for addressing needs</td>
<td>3-2.2</td>
<td>5-2.2</td>
</tr>
<tr>
<td>Hazard Identification and Risk Assessment</td>
<td>conduct hazard assessment</td>
<td>3-3.1</td>
<td>5-3.1</td>
</tr>
<tr>
<td></td>
<td>NEW: split 3.3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>conduct hazard assessment</td>
<td>3-3.2</td>
<td>5-3.2</td>
</tr>
<tr>
<td>Hazard Mitigation</td>
<td>implement hazard strategy</td>
<td>3-4.1</td>
<td>5-4.1</td>
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<td></td>
<td>strategy based on hazards in 3-3.1</td>
<td>3-4.2</td>
<td>5-4.2</td>
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<tr>
<td></td>
<td>strategy shall consider</td>
<td>3-4.3</td>
<td>5-4.3</td>
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<tr>
<td>Resource Management</td>
<td>establish performance objectives for hazards in 3-3.1</td>
<td>3-5.1</td>
<td>5-5.1</td>
</tr>
<tr>
<td></td>
<td>NEW: split 3.5.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>identify resource capability shortfalls</td>
<td>3-5.2</td>
<td>5-5.2</td>
</tr>
<tr>
<td></td>
<td>maintain inventory of resources</td>
<td>3-5.3</td>
<td>5-5.4</td>
</tr>
<tr>
<td></td>
<td>address voluntary donations</td>
<td>3-5.4</td>
<td>5-5.5</td>
</tr>
<tr>
<td>Mutual Aid</td>
<td>establish mutual aid agreements</td>
<td>3-5.5</td>
<td>5-6.1</td>
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<td></td>
<td>NEW: split 5.6.1 and moved both into new program element</td>
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<tr>
<td>Planning</td>
<td>develop program plans (below)</td>
<td>3-6.1</td>
<td>5-7.1</td>
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<tr>
<td></td>
<td>a. strategic plan</td>
<td>3-6.2.1</td>
<td>5-7.2.1</td>
</tr>
<tr>
<td></td>
<td>b. operations/response plan</td>
<td>3-6.2.2</td>
<td>5-7.2.2</td>
</tr>
<tr>
<td></td>
<td>c. mitigation plan</td>
<td>3-6.2.3</td>
<td>5-7.2.3</td>
</tr>
<tr>
<td></td>
<td>d. recovery plan</td>
<td>3-6.2.4</td>
<td>5-7.2.4</td>
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<tr>
<td></td>
<td>e. continuity plan</td>
<td>3-6.2.5</td>
<td>5-7.2.5</td>
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<tr>
<td></td>
<td>identify roles and responsibilities</td>
<td>3-6.3.1</td>
<td>5-7.3.1</td>
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<td></td>
<td>establish lines of authority</td>
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<td>5-7.3.2</td>
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<tr>
<td>Direction, Control and Coordination</td>
<td>capability to direct, control, coordinate, response and recovery</td>
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<td>5-8.1</td>
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<td>incident management system (ICS)</td>
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<td>DELETED: standard incorporated into 5.8.2</td>
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<td>DELETED: standard deleted</td>
<td>3-7.4</td>
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<tr>
<td></td>
<td>ICS is communicated to all levels</td>
<td>3-7.5</td>
<td>5-8.3</td>
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<td></td>
<td>procedures/policies for continuity</td>
<td>3-7.6</td>
<td>5-8.4</td>
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<td>Communication and Warning</td>
<td>systems established and tested</td>
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<td>5-9.1</td>
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<td>life safety considerations</td>
<td>3-8.2</td>
<td>5-9.2</td>
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<td>periodic testing</td>
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<td>NEW: added standard referring to interoperability</td>
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<td>operating procedures developed</td>
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<td>life safety considerations</td>
<td>3-9.2</td>
<td>5-10.2</td>
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<td>SOP's for hazards in 3-3-1</td>
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<td>5-10.3</td>
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<td>recovery situation analysis</td>
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<td>continuity of response into recovery</td>
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<td>continuity of operations</td>
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<td>formal training program</td>
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<td>5-12.2</td>
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<tr>
<td>scope and frequency</td>
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<td>5-12.3</td>
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<td>ICS training</td>
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<td>5-12.4</td>
<td></td>
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<tr>
<td>maintain training records</td>
<td>3-11.5</td>
<td>5-12.5</td>
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<td>Exercise, Evaluation and Corrective Action</td>
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<td>evaluation through testing</td>
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<td>5-13.1</td>
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<td>exercises test elements and plans</td>
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<td>corrective actions</td>
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<td>5-12.3</td>
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<td>Crisis Communication and Public Information</td>
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<td>public information program</td>
<td>3-13.1</td>
<td>5-14.1</td>
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<td>NEW: split 3-13.1</td>
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<td>public awareness program</td>
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<td>5-14.3</td>
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<td>5-15.1</td>
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<td>NEW: split 3-14</td>
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APPENDIX E

ANALYSIS OF EMAP BASELINE STATISTICS,
JANUARY 2003 THROUGH DECEMBER 2004
<table>
<thead>
<tr>
<th>A</th>
<th>Major program elements</th>
<th>B</th>
<th>Brief description</th>
<th>C</th>
<th>NFPA 2000 Standard</th>
<th>D</th>
<th>Number compliant</th>
<th>E</th>
<th>Percent compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Management and Program Elements</td>
<td>written program policy</td>
<td>2-1</td>
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<td></td>
<td></td>
<td>23</td>
<td>66%</td>
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</tr>
<tr>
<td></td>
<td>program coordinator</td>
<td>2-2</td>
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<td></td>
<td></td>
<td>33</td>
<td>94%</td>
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<td>2-3.1</td>
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<td></td>
<td></td>
<td>18</td>
<td>51%</td>
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</tr>
<tr>
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<td>committee includes stakeholders</td>
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<td></td>
<td></td>
<td></td>
<td>17</td>
<td>49%</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>committee provides input</td>
<td>2-3.3</td>
<td></td>
<td></td>
<td></td>
<td>18</td>
<td>51%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>periodic assessment</td>
<td>2-4</td>
<td></td>
<td></td>
<td></td>
<td>26</td>
<td>74%</td>
<td></td>
<td></td>
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<td>Laws and Authorities</td>
<td>complies with legislation/regulations</td>
<td>3-2.1</td>
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<td></td>
<td></td>
<td>21</td>
<td>60%</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>strategy for addressing needs</td>
<td>3-2.2</td>
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<td></td>
<td>20</td>
<td>57%</td>
<td></td>
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<td>Hazard ID and Risk Assessment</td>
<td>conduct hazard assessment</td>
<td>3-3.1</td>
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<td></td>
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<td>10</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>conduct impact analysis</td>
<td>3-3.2</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>20%</td>
<td></td>
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<td></td>
<td>implement mitigation strategy</td>
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<td></td>
<td></td>
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<td>20</td>
<td>57%</td>
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<td></td>
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<td>strategy based on hazards</td>
<td>3-4.2</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>34%</td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>strategy shall consider</td>
<td>3-4.3</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>43%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Management</td>
<td>establish performance objectives for hazards in 3-3.1</td>
<td>3-5.1</td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>23%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>identify resource capability shortfalls</td>
<td>3-5.2</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>maintain inventory of resources</td>
<td>3-5.3</td>
<td></td>
<td></td>
<td></td>
<td>23</td>
<td>66%</td>
<td></td>
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</tr>
<tr>
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<td>address voluntary donations</td>
<td>3-5.4</td>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td>63%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>establish mutual aid agreements</td>
<td>3-5.5</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>80%</td>
<td></td>
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<tr>
<td>Planning</td>
<td>develop program plans (see below)</td>
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<td>14</td>
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<tr>
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<td>a. strategic plan</td>
<td>3-6.2.1</td>
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<td></td>
<td>19</td>
<td>54%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. operations/ response plan</td>
<td>3-6.2.2</td>
<td></td>
<td></td>
<td></td>
<td>18</td>
<td>51%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. mitigation plan</td>
<td>3-6.2.3</td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>23%</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>d. recovery plan</td>
<td>3-6.2.4</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>26%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. continuity plan</td>
<td>3-6.2.5</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>14%</td>
<td></td>
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<tr>
<td></td>
<td>identify roles and responsibilities</td>
<td>3-6.3.1</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>20%</td>
<td></td>
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<tr>
<td></td>
<td>establish lines of authority</td>
<td>3-6.3.2</td>
<td></td>
<td></td>
<td></td>
<td>14</td>
<td>40%</td>
<td></td>
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</tr>
</tbody>
</table>

1 Column A divides the standards into the major program elements as defined within EMAP standard.  
2 Column B is a very brief description of that standard.  
3 Column C is the number of the standard being assessed.  
4 Column D is the number of states found compliant with the corresponding standard.  
5 Column E is the percentage of states found compliant with that standard.
<table>
<thead>
<tr>
<th>A</th>
<th>Major program elements</th>
<th>B</th>
<th>Brief description</th>
<th>C</th>
<th>NFPA 2000 Standard</th>
<th>D</th>
<th>Number compliant</th>
<th>E</th>
<th>Percent compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direction, Control and Coordination</td>
<td></td>
<td>capability to direct, control, coordinate response/recovery</td>
<td>3-7.1</td>
<td>21</td>
<td>60%</td>
<td></td>
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<td></td>
<td></td>
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<td>incident management system (ICS)</td>
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<td>77%</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>roles, titles, responsibilities defined</td>
<td>3-7.3</td>
<td>25</td>
<td>71%</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>ICS is scaleable</td>
<td>3-7.4</td>
<td>27</td>
<td>77%</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ICS is communicated to all levels</td>
<td>3-7.5</td>
<td>22</td>
<td>63%</td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
<td>procedures/policies for continuity</td>
<td>3-7.6</td>
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<tr>
<td></td>
<td>Communication and Warning</td>
<td></td>
<td>systems established and tested</td>
<td>3-8.1</td>
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<td>80%</td>
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<tr>
<td></td>
<td></td>
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<td>initiate and distribute warnings</td>
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<td></td>
<td></td>
<td></td>
<td>periodic testing</td>
<td>3-8.3</td>
<td>23</td>
<td>66%</td>
<td></td>
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<tr>
<td></td>
<td>Operations and Procedures</td>
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<td>operating procedures developed</td>
<td>3-9.1</td>
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<td></td>
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<td>life safety considerations</td>
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<td></td>
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<td>SOP’s for hazards</td>
<td>3-9.3</td>
<td>19</td>
<td>54%</td>
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<td></td>
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<td>recovery situation analysis</td>
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<td>continuity of response into recovery</td>
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<td>continuity of operations</td>
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<tr>
<td></td>
<td>Logistics and Facilities</td>
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<td>logistics capability</td>
<td>3-10.1</td>
<td>15</td>
<td>43%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>primary and alternate command facility</td>
<td>3-10.2</td>
<td>14</td>
<td>40%</td>
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<td></td>
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<tr>
<td></td>
<td>Training</td>
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<td>formal training program</td>
<td>3-11.1</td>
<td>20</td>
<td>57%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>training related to required skills</td>
<td>3-11.2</td>
<td>23</td>
<td>66%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>scope and frequency</td>
<td>3-11.3</td>
<td>17</td>
<td>49%</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ICS training</td>
<td>3-11.4</td>
<td>24</td>
<td>69%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>maintain training records</td>
<td>3-11.5</td>
<td>24</td>
<td>69%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exercise, Evaluation and Corrective Action</td>
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<td>evaluation through testing</td>
<td>3-12.1</td>
<td>17</td>
<td>49%</td>
<td></td>
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</tr>
<tr>
<td></td>
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<td></td>
<td>exercises test elements and plans</td>
<td>3-12.2</td>
<td>19</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>corrective actions</td>
<td>3-12.3</td>
<td>12</td>
<td>34%</td>
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<td></td>
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<td></td>
<td>public information program / joint information center</td>
<td>3-13.1</td>
<td>25</td>
<td>71%</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>public awareness program</td>
<td>3-13.2</td>
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<tr>
<td></td>
<td>Finance and Administration</td>
<td></td>
<td>support to program</td>
<td>3-14</td>
<td>31</td>
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</table>
APPENDIX F

RELATIONSHIP OF EMAP STANDARDS TO THE FOUR EMERGENCY MANAGEMENT PHASES
1. Emergency Management Phase: Preparedness

<table>
<thead>
<tr>
<th>Standard No.</th>
<th>Program Element: brief description</th>
<th>Compliance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>Program Management and Program Elements: written program policy</td>
<td>66%</td>
</tr>
<tr>
<td>2-2</td>
<td>Program Management and Program Elements: program coordinator</td>
<td>94%</td>
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<td>2-3.1</td>
<td>Program Management and Program Elements: program committee established</td>
<td>51%</td>
</tr>
<tr>
<td>2-3.2</td>
<td>Program Management and Program Elements: committee includes stakeholders</td>
<td>49%</td>
</tr>
<tr>
<td>2-3.3</td>
<td>Program Management and Program Elements: committee provides input</td>
<td>51%</td>
</tr>
<tr>
<td>2-4</td>
<td>Program Management and Program Elements: periodic assessment of program</td>
<td>74%</td>
</tr>
<tr>
<td>3-2.1</td>
<td>Laws and Authorities: complies with legislation/regulations</td>
<td>60%</td>
</tr>
<tr>
<td>3-2.2</td>
<td>Laws and Authorities: strategy for addressing needs</td>
<td>57%</td>
</tr>
<tr>
<td>3-5.1</td>
<td>Resource Management: establish performance objectives for hazards in 3-3.1</td>
<td>23%</td>
</tr>
<tr>
<td>3-5.2</td>
<td>Resource Management: identify resource capability shortfalls</td>
<td>29%</td>
</tr>
<tr>
<td>3-5.3</td>
<td>Resource Management: maintain inventory of resources</td>
<td>66%</td>
</tr>
<tr>
<td>3-6.1</td>
<td>Planning: develop program plans</td>
<td>40%</td>
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<td>3-6.2.1</td>
<td>Planning: a. strategic plan</td>
<td>54%</td>
</tr>
<tr>
<td>3-6.3.1</td>
<td>Planning: identify roles and responsibilities</td>
<td>20%</td>
</tr>
<tr>
<td>3-6.3.2</td>
<td>Planning: establish lines of authority</td>
<td>40%</td>
</tr>
<tr>
<td>3-10.1</td>
<td>Logistics and Facilities: logistics capability</td>
<td>43%</td>
</tr>
<tr>
<td>3-11.1</td>
<td>Training: formal training program</td>
<td>57%</td>
</tr>
<tr>
<td>3-11.2</td>
<td>Training: training related to required skills</td>
<td>66%</td>
</tr>
<tr>
<td>3-11.3</td>
<td>Training: scope and frequency</td>
<td>49%</td>
</tr>
<tr>
<td>3-11.4</td>
<td>Training: ICS training</td>
<td>69%</td>
</tr>
<tr>
<td>3-11.5</td>
<td>Training: maintain training records</td>
<td>69%</td>
</tr>
<tr>
<td>3-12.1</td>
<td>Exercise, Evaluation and Corrective Action: evaluation through testing</td>
<td>49%</td>
</tr>
<tr>
<td>3-12.2</td>
<td>Exercise, Evaluation and Corrective Action: exercises test elements and plans</td>
<td>54%</td>
</tr>
<tr>
<td>3-12.3</td>
<td>Exercise, Evaluation and Corrective Action: corrective actions</td>
<td>34%</td>
</tr>
<tr>
<td>3-13.2</td>
<td>Crisis Communication and Public Information: public awareness program</td>
<td>83%</td>
</tr>
</tbody>
</table>
### 2. Emergency Management Phase: *Response*

<table>
<thead>
<tr>
<th>Standard No.</th>
<th>Program Element: <em>brief description</em></th>
<th>Compliance Rate</th>
</tr>
</thead>
<tbody>
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<td>3-5.4</td>
<td>Resource Management: <em>address voluntary donations</em></td>
<td>63%</td>
</tr>
<tr>
<td>3-5.5</td>
<td>Resource Management: <em>establish mutual aid agreements</em></td>
<td>80%</td>
</tr>
<tr>
<td>3-6.2.2</td>
<td>Planning: <em>b. operations/response plan</em></td>
<td>51%</td>
</tr>
<tr>
<td>3-7.1</td>
<td>Direction, Control and Coordination: <em>capability to direct, control, coordinate response/recovery</em></td>
<td>60%</td>
</tr>
<tr>
<td>3-7.2</td>
<td>Direction, Control and Coordination: <em>incident management system (ICS)</em></td>
<td>77%</td>
</tr>
<tr>
<td>3-7.3</td>
<td>Direction, Control and Coordination: <em>roles, titles, responsibilities defined</em></td>
<td>71%</td>
</tr>
<tr>
<td>3-7.4</td>
<td>Direction, Control and Coordination: <em>ICS is scaleable</em></td>
<td>77%</td>
</tr>
<tr>
<td>3-7.5</td>
<td>Direction, Control and Coordination: <em>ICS is communicated to all levels</em></td>
<td>63%</td>
</tr>
<tr>
<td>3-8.1</td>
<td>Communication and Warning: <em>systems established and tested</em></td>
<td>80%</td>
</tr>
<tr>
<td>3-8.2</td>
<td>Communication and Warning: <em>initiate and distribute warnings</em></td>
<td>86%</td>
</tr>
<tr>
<td>3-8.3</td>
<td>Communication and Warning: <em>periodic testing</em></td>
<td>66%</td>
</tr>
<tr>
<td>3-9.1</td>
<td>Operations and Procedures: <em>operating procedures developed</em></td>
<td>60%</td>
</tr>
<tr>
<td>3-9.2</td>
<td>Operations and Procedures: <em>life safety considerations</em></td>
<td>54%</td>
</tr>
<tr>
<td>3-9.3</td>
<td>Operations and Procedures: <em>SOP’s for hazards</em></td>
<td>54%</td>
</tr>
<tr>
<td>3-10.2</td>
<td>Logistics and Facilities: <em>primary and alternate command facility</em></td>
<td>40%</td>
</tr>
<tr>
<td>3-13.1</td>
<td>Crisis Communication and Public Information: <em>public information program</em></td>
<td>71%</td>
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</tbody>
</table>

### 3. Emergency Management Phase: *Recovery*

<table>
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<tr>
<th>Standard No.</th>
<th>Program Element: <em>brief description</em></th>
<th>Compliance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-6.2.4</td>
<td>Planning: <em>d. recovery plan</em></td>
<td>26%</td>
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<tr>
<td>3-6.2.5</td>
<td>Planning: <em>e. continuity of operations plan</em></td>
<td>14%</td>
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<tr>
<td>3-7.6</td>
<td>Direction, Control and Coordination: <em>procedures/policies for continuity</em></td>
<td>34%</td>
</tr>
<tr>
<td>3-9.4</td>
<td>Operations and Procedures: <em>recovery situation analysis</em></td>
<td>43%</td>
</tr>
<tr>
<td>3-9.5</td>
<td>Operations and Procedures: <em>continuity of response into recovery</em></td>
<td>54%</td>
</tr>
<tr>
<td>3-9.6</td>
<td>Operations and Procedures: <em>continuity of operations</em></td>
<td>29%</td>
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### 4. Emergency Management Phase: *Mitigation*

<table>
<thead>
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<th>Standard No.</th>
<th>Program Element: <em>brief description</em></th>
<th>Compliance Rate</th>
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<tr>
<td>3-3.1</td>
<td>Hazard Identification and Risk Assessment: <em>conduct hazard assessment</em></td>
<td>29%</td>
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<tr>
<td>3-3.2</td>
<td>Hazard Identification and Risk Assessment: <em>conduct impact analysis</em></td>
<td>20%</td>
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<td>3-4.1</td>
<td>Hazard Mitigation: <em>implement mitigation strategy</em></td>
<td>57%</td>
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<tr>
<td>3-4.2</td>
<td>Hazard Mitigation: <em>strategy based on hazards in 3-3.1</em></td>
<td>34%</td>
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<td>3-4.3</td>
<td>Hazard Mitigation: <em>strategy shall consider</em></td>
<td>43%</td>
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<td>3-6.2.3</td>
<td>Planning: <em>c. mitigation plan</em></td>
<td>23%</td>
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REFERENCES
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