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Analysis of the Baseline Assessments Conducted in 35 U.S. State/Territory Emergency Management Programs: Emergency Management Accreditation Program (EMAP) 2003-2004*

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Abstract

The Emergency Management Accreditation Program (EMAP) is a non profit organization developed to accredit government emergency management programs in the 56 U.S. states and territories. This accreditation model is based on the NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs. In 2003, the Federal Emergency Management Agency funded EMAP to conduct baseline assessments of each U.S. state and territory to assess their emergency management capabilities. Between January 2003 and December 2004, EMAP conducted baseline assessments of 35 U.S. state and territory emergency management programs. This study was designed to analyze the results of those assessments, and suggests most state-level emergency management programs focus more resources on the response phase of emergency management and fewer resources on the recovery and mitigation phases.

KEYWORDS: emergency, disaster, EMAP, FEMA, accreditation, baseline, NFPA1600, recovery, mitigation

*Special thanks to the EMAP Commission for giving me permission to conduct this research; and to Emily Bentley and the rest of the EMAP staff for their assistance and guidance throughout this process.

INTRODUCTION

Emergency management has existed in one form or another for many centuries as people have attempted to cope with local and regional disasters. As human-caused disasters (hazardous materials, energy shortages, terrorism) have expanded and the effects of natural disasters (earthquakes, hurricanes, floods) have become more widespread and damaging, there has been increasing scrutiny of the institutionalized emergency management programs that have evolved to protect the public. The purpose of this research was to examine the non-profit organization developed to accredit government emergency management programs, with particular attention to the baseline assessments underway in the 56 U.S. states and territories.

EMERGENCY MANAGEMENT ACCREDITATION PROGRAM (EMAP)

The National Emergency Management Association (NEMA), the professional association for U.S. state emergency managers, proposed the creation of the Emergency Management Accreditation Program (EMAP) in 1997 as a way to evaluate and accredit emergency management programs within U.S. state and local governments. The program was created as “a jurisdiction-wide system that provides for management and coordination of prevention, mitigation, preparedness, response and recovery activities for all hazards.” EMAP accreditation is based on the only standards available for emergency management programs today, the National Fire Protection Association’s 1600 “*Standard for Disaster/Emergency Management and Business Continuity Programs.*” While using each standard in its entirety, EMAP adds proprietary language to further explain its meaning within the public sector.¹ EMAP is now an independent, nonprofit organization managed by a 10-member commission appointed proportionately by NEMA and IAEM.

EMAP began as a program offering full, voluntary accreditation for emergency management programs in state and local governments. In 2003, the Federal Emergency Management Agency (FEMA) funded EMAP to conduct “a baseline measurement of the emergency management capabilities” of each U.S. state and territory that would “assess, analyze, evaluate and collectively frame state emergency management capabilities against a common national set of criteria.”

States were encouraged to complete this baseline assessment as a way of

¹ 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.

measuring their current emergency management capabilities against a national standard and could choose to use the baseline to apply for full EMAP accreditation. EMAP registration for local (county/municipal) accreditation was opened in the Fall of 2003. As of November 2005, full accreditation has been granted to six states and one county (Arizona, District of Columbia, Florida, North Dakota, Pennsylvania, Virginia, and the city/county of Jacksonville/Duval, Florida), and conditional accreditation has been granted to two states (Montana and Illinois) and one local jurisdiction (East Baton Rouge Parish, Louisiana).

LIMITATIONS

There were three limitations to this study: only 60% (35 of 56) of the state baseline assessments were completed during this study period. The baseline assessments began in January 2003 and are expected to be completed in 2006.

Use of the EMAP statistics was restricted to meet the confidentiality requirements established by EMAP. The EMAP Commission granted permission to conduct this study provided that release of the data was limited to assure that individual state confidentiality was maintained.

During the term of this study, the EMAP standards were based on the 2000 version of NFPA 1600. Beginning in January 2005, the EMAP standards reflect the 2004 version of NFPA 1600. The differences between the two sets of standards reflect some language changes and clarifications, a different numbering system, and the creation of two new standards by splitting existing standards.

METHODOLOGY

The author used a program evaluation approach to evaluate and analyze the findings from the baseline assessments conducted by the EMAP in 2003 and 2004. Permission to use the statistics was granted by the EMAP Commission, and the data were provided as two columns of numbers: The first column was the standard number, and the second column was a number reflecting how many of the 35 states completing the baseline assessment had been found compliant with that standard. These data are shown in Appendix A.

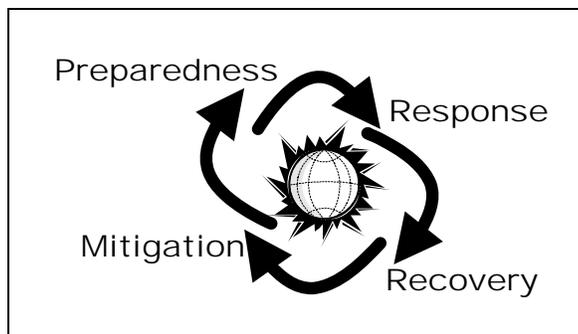
This data table was shared with 15 emergency management practitioners chosen on the basis of their involvement with the EMAP process, and their thoughts and opinions were collected. The interviewees included state emergency management directors, members of the EMAP Commission, state accreditation managers, members of the NFPA1600 technical committee, and EMAP trained peer assessors. Some of their comments are included within the body of this paper.

ANALYSIS

This paper discusses the results of analysis of 54 standards within 14 program elements. The table in Appendix A contains the statistics from the first 35 states and territories to complete the EMAP baseline assessment. The compliance rates 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.

PHASES OF EMERGENCY MANAGEMENT

Additional analysis is possible when the standards are sorted into distinct categories based on their relationship to the four phases of emergency management—preparedness, response, recovery, mitigation—as shown in Appendix B. The four phases are usually depicted as a circle where the four elements flow from one phase to the next, reflecting the continuity of the emergency management process (see figure right). As noted by Wilson (2000), this model was developed by the National Governors Association in the early 1970s and was adopted by FEMA soon after its creation in 1979.



While these phases are somewhat simplistic and often overlap, Waugh (2000) notes that they do “provide functional categories that facilitate administration.” The EMAP standards discussed in this study also overlap, but can be primarily associated with one of these phases. The table in Appendix B 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.

A fifth phase was added to these definitions with the release of the National Response Plan in January 2005. *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....” The addition of this phase is still being integrated into emergency management and was not discussed in this study.

PREPAREDNESS PHASE

Preparedness tends to be the centerpiece of most emergency management programs—evident with 25 of the standards related to this phase. FEMA defines this phase as 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). 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 reflect the central position of the preparedness phase in emergency management agencies. Of the 25 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, Chief of Recovery Programs for the California State Office of Emergency Services, is an EMAP assessor and accreditation manager for California’s baseline assessment. She expressed some of the confusion about the language in this standard. For example, what does *resource management objective* mean? 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 the most visible of the four emergency management phases. FEMA defines response as providing immediate emergency assistance to victims while trying to reduce the likelihood of further damage (e.g., alerting and warning, search and rescue, emergency medical care, providing shelter, restoring vital services, removing debris). Former FEMA Director James Lee Witt, in his book *Stronger in the Broken Places* (2000), 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.”

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 services provided by local communities. Bill Greulich, former 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” for reassurance about their safety.

The EMAP program elements within the response phase had the strongest compliance rates of all the phases. 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”. All jurisdictions have primary EOC’s, but not all have an alternate facility that is fully equipped and ready to operate. The importance of establishing an alternate facility was amply demonstrated when the new EOC for the City of New York was destroyed when Seven World Trade Center collapsed on 9/11. As the lessons learned from 9/11 are integrated into public emergency management programs, the compliance with this standard will undoubtedly increase.

RECOVERY PHASE

Recovery is characterized by short- and long-term activities to bring the damaged jurisdiction back to normal or near-normal conditions (e.g., continuing to restore vital services, shoring up or demolishing buildings, redevelopment of damaged areas). 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%. This phase requires proactive planning prior to a disaster, and many jurisdictions do not make this a priority. Robert Fletcher, an EMAP consultant and the former Director of State and Local Preparedness for FEMA, commented on the low compliance rate for the standard requiring a recovery plan (26%), stating that “They (the states) 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.”

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. All recovery plans should be 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. The EMAP standard with the lowest compliance rate (14%) is the one that requires each state 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. Steven Charvat, the

Emergency Management Director at the University of Washington, an EMAP assessor and member of the NFPA 1600 Technical Committee, expressed some of the confusion by wondering why there wasn't some kind of continuity plan in place – even something from Y2K that just needs regular updating.

Continuity planning has been standard practice in the private sector for years, and has been even more essential since the disastrous hurricanes in the Gulf region. 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. 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 mitigation. Yet it was 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 includes activities that eliminate or reduce the occurrence or effects of a disaster (e.g., hazard identification, seismic reinforcement, or land use planning) FEMA describes mitigation as involving “lasting, often permanent reduction of exposure to, probability of, or potential loss from hazard events.” 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, the 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 these standards was their scope. Emily Bentley, the EMAP Director, points out that these standards require 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 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 the Disaster Mitigation 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.

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 Clinton talked about the benefits of mitigation, stating that every dollar spent on prevention would save two or more dollars in future disaster costs. This position was reinforced in January 2006 by a study conducted by the Applied Technology Council for the National Institute of Building Sciences that focused specifically on the cost benefit of FEMA mitigation grants. Dr. Adam Rose wrote, “Our analysis found that for each dollar spent by FEMA for grants to mitigate the effects of natural hazards, approximately \$4 was saved from what would have eventually been spent on correcting damages.” Brent Woodworth, manager of IBM’s Crisis Response Team, said, “For years, there have been anecdotal reports, but this information gives policymakers the evidence that proves that mitigation is a worthy investment in our nation’s safer future.”

SUMMARY

An analysis of these compliance rates as applied to the four phases of emergency management supports the observation that the focus of these state 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. This suggests many of these state emergency management programs are concentrating more resources into response and fewer resources into preparedness, recovery and mitigation. This was not surprising to the professionals interviewed for this study. Lucien Canton, former Director of Emergency Services for the City and County of San Francisco noted that these numbers 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.”

CONCLUSION

Finding a commonly accepted definition for emergency management is difficult. According to Waugh (2000):

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.

If it can be argued that 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 that 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. During an interview in September 2005, Governor Jeb Bush of Florida said, “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 resulting 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 could easily become one of the standards by which communities are evaluated.

APPENDIX A

Analysis of EMAP Baseline Statistics, January 2003 through December 2004

A ² Major program elements	B ³ Brief description	C ⁴ NFPA 2000 Standard	D ⁵ Number compliant	E ⁶ Percent compliant
Program Management and Program Elements	written program policy	2-1	23	66%
	program coordinator	2-2	33	94%
	program committee established	2-3.1	18	51%
	committee includes stakeholders	2-3.2	17	49%
	committee provides input	2-3.3	18	51%
	periodic assessment	2-4	26	74%
Laws and Authorities	complies with legislation/regulations	3-2.1	21	60%
	strategy for addressing needs	3-2.2	20	57%
Hazard ID and Risk Assessment	conduct hazard assessment	3-3.1	10	29%
	conduct impact analysis	3-3.2	7	20%
Hazard Mitigation	implement mitigation strategy	3-4.1	20	57%
	strategy based on hazards	3-4.2	12	34%
	strategy shall consider	3-4.3	15	43%
Resource Management	establish performance objectives for hazards in 3-3.1	3-5.1	8	23%
	identify resource capability shortfalls	3-5.2	10	29%
	maintain inventory of resources	3-5.3	23	66%
	address voluntary donations	3-5.4	22	63%
	establish mutual aid agreements	3-5.5	28	80%
Planning	develop program plans	3-6.1	14	40%
	a. strategic plan	3-6.2.1	19	54%
	b. operations/ response plan	3-6.2.2	18	51%
	c. mitigation plan	3-6.2.3	8	23%
	d. recovery plan	3-6.2.4	9	26%
	e. continuity plan	3-6.2.5	5	14%
	identify roles and responsibilities	3-6.3.1	7	20%
	establish lines of authority	3-6.3.2	14	40%

² Column A divides the standards into major program elements as defined within EMAP standard.

³ Column B is a very brief description of that standard.

⁴ Column C is the number of the standard being assessed.

⁵ Column D is the number of states found compliant with the corresponding standard.

⁶ Column E is the percentage of states found compliant with that standard.

A ⁷ Major program elements	B ⁸ Brief description	C ⁹ NFPA 2000 Standard	D ¹⁰ Number compliant	E ¹¹ Percent compliant
Direction, Control and Coordination	capability to direct, control, coordinate response/recovery	3-7.1	21	60%
	incident management system	3-7.2	27	77%
	roles, titles, responsibilities defined	3-7.3	25	71%
	ICS is scaleable	3-7.4	27	77%
	ICS is communicated all levels	3-7.5	22	63%
	procedures/policies for continuity	3-7.6	12	34%
Communication and Warning	systems established and tested	3-8.1	28	80%
	initiate and distribute warnings	3-8.2	30	86%
	periodic testing	3-8.3	23	66%
Operations and Procedures	operating procedures developed	3-9.1	21	60%
	life safety considerations	3-9.2	19	54%
	SOP's for hazards	3-9.3	19	54%
	recovery situation analysis	3-9.4	15	43%
	continuity of response into recovery	3-9.5	19	54%
	continuity of operations	3-9.6	10	29%
Logistics and Facilities	logistics capability	3-10.1	15	43%
	primary and alternate command facility	3-10.2	14	40%
Training	formal training program	3-11.1	20	57%
	training related to required skills	3-11.2	23	66%
	scope and frequency	3-11.3	17	49%
	ICS training	3-11.4	24	69%
	maintain training records	3-11.5	24	69%
Exercise, Evaluation and Corrective Action	evaluation through testing	3-12.1	17	49%
	exercises test elements/plans	3-12.2	19	54%
	corrective actions	3-12.3	12	34%
Crisis Communication Public Information	public information program / joint information center	3-13.1	25	71%
	public awareness program	3-13.2	29	83%
Finance and Administration	support to program	3-14	31	89%

⁷ Column A divides the standards into major program elements as defined within EMAP standard.

⁸ Column B is a very brief description of that standard.

⁹ Column C is the number of the standard being assessed.

¹⁰ Column D is the number of states found compliant with the corresponding standard.

¹¹ Column E is the percentage of states found compliant with that standard.

APPENDIX B

Relationship of EMAP Standards to the Four Emergency Management Phases

1. Emergency Management Phase: *Preparedness*

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

2. Emergency Management Phase: *Response*

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

3. Emergency Management Phase: *Recovery*

Standard No.	Program Element: <i>brief description</i>	Compliance Rate
3-6.2.4	Planning: <i>d. recovery plan</i>	26%
3-6.2.5	Planning: <i>e. continuity of operations plan</i>	14%
3-7.6	Direction, Control and Coordination: <i>procedures/policies for continuity</i>	34%
3-9.4	Operations and Procedures: <i>recovery situation analysis</i>	43%
3-9.5	Operations and Procedures: <i>continuity of response into recovery</i>	54%
3-9.6	Operations and Procedures: <i>continuity of operations</i>	29%

4. Emergency Management Phase: *Mitigation*

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

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