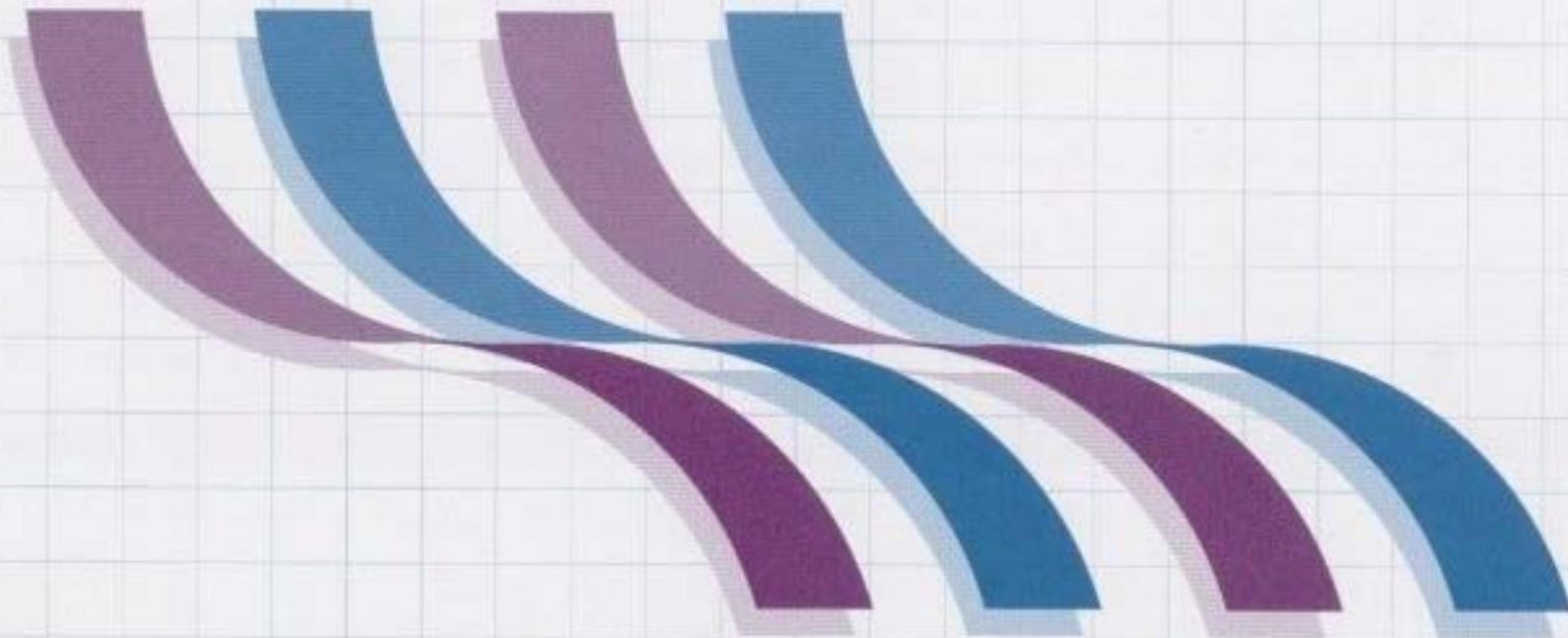

Survivable Crisis Management Plan Development Guide





*Survivable Crisis Management
Plan Development Guide*

Federal Emergency Management Agency



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Introduction

Survivable Crisis Management (SCM) is an operational capability the Federal Emergency Management Agency (FEMA) seeks to achieve in the States and Territories. The SCM capability FEMA seeks to achieve is the ability of each of the States and Territories to survive a catastrophic emergency and be able to direct, control, and coordinate emergency operations within the State and in coordination and cooperation with other States and the Federal Government. The objective of the SCM initiative is to develop a network of survivable capabilities within each State, nationwide among the States, and between the States and the Federal Government to ensure that States can continue to govern.

The purpose of this document is to guide the States and Territories through the step-by-step process necessary to develop an SCM capability. Designed as a practical tool to aid in the development of SCM plans and proposals, this development guide is a companion document to *An Introduction to Survivable Crisis Management*, published in September 1992. Although this development guide focuses on the development of

statewide SCM capabilities, the same procedures are applicable to comprehensive local government planning.

SCM is an initiative through which FEMA civil defense funding—from a variety of program elements and activities such as Emergency Operating Centers (EOC's), the Emergency Broadcast System (EBS), population protection planning (PPP), radiological defense (RADEF), and others—will be used in an integrated way to build a comprehensive and survivable emergency management capability. To accomplish this, FEMA is promoting the SCM initiative with interested States and Territories to encourage and assist them in developing comprehensive SCM plans in which emergency managers:

- Assess the hazards and risks to and vulnerabilities in their State or Territory
- Define requirements
- Assess existing capabilities against requirements
- Identify deficiencies
- Develop a comprehensive plan to correct deficiencies and meet requirements

- Develop contingency plans to work around deficiencies until they are corrected
- Develop and conduct exercises to evaluate the operational capabilities of people, facilities, and equipment

The SCM initiative to establish statewide SCM capabilities in each of the 50 States and six Territories is a top FEMA program priority. Each State and Territory must be able to manage the consequences of emergencies regardless of their cause. Therefore, each State and Territory should identify and develop a basic SCM infrastructure that will meet the needs of and threats to that State or Territory. Through the SCM initiative, FEMA will prioritize the application of Federal civil defense funds to assist States to build an SCM capability.



The Need for SCM Plan Development

All State, Territorial, and local emergency managers should recognize that SCM is a vital nationwide necessity. The potential costs and consequences of the inability to ensure timely and effective disaster responses are huge. Achievement of an SCM capability for every State and Territory is a priority goal.

States and Territories are not expected to incur the total cost of upgrading their capabilities to achieve SCM. Federal matching funds are available for such projects as EOC development, warning and communications systems, personnel, planning, training, radiological instrumentation, EBS station protection, and other capabilities needed to achieve SCM, in addition to facility and equipment maintenance.

The regulations covering the allocation of Federal funds for State SCM projects are well defined. But, because each State's situation is somewhat different, there is built-in flexibility. FEMA is prepared to consider each SCM funding request on its own merits. The SCM initiative is designed to be flexible and to focus and integrate civil defense resources to achieve SCM capabilities in all the States and Territories.

The human, political, and economic benefits realized from an SCM capability are substantial. Being able to coordinate effectively with other response organizations and to apply resources effectively is likely to mitigate consequences and speed recovery. Having a better understanding of what your SCM capabilities are, how they work, and what is needed to survive and continue to direct, control, manage, and coordinate emergency operations can help you make optimal use of existing emergency preparedness resources.

It is important to get started developing an SCM Plan. Today, the ensured ability to deal with emergency situations, whenever they arise, whatever their cause, has become a hallmark of effective leadership. The lessons of recent incidents emphasize the importance of an SCM capability: The worst damage to human life, property, and reputation is usually set in motion within the first few hours of a disaster striking. If the leaders responsible for managing emergencies—and the capabilities needed for them to do so—are not ready and survivable when the situations occur, the consequences can be catastrophic. That is why SCM should be a high priority

for the Federal Government and for every State and Territory in the United States.

Developing a comprehensive SCM Plan is a straightforward process. FEMA, at the Federal and Regional levels, is ready to assist in SCM Plan development and implementation. This guide and its Appendix A, SCM Plan Review Format, and *An Introduction to Survivable Crisis Management* will assist you in planning and setting forth strategies for SCM Plan development. With experience gained in other pilot SCM projects, FEMA is able to share the "lessons learned" in SCM planning and in developing required SCM capabilities.

In addition to generic design criteria, FEMA has prepared a number of publications that State planners are invited to study and that FEMA will supply upon request. These publications are listed in Appendix C. Requests for, or discussions of, such materials are welcomed by the FEMA Regional Directors. For further information, please contact your FEMA Regional Director. A list of FEMA Regional Offices is provided in Appendix B.



How to Develop an SCM Plan and Proposals

The achievement of an SCM capability requires a comprehensive approach to the individual emergency management situations and requirements faced by each State or Territory. A plan to achieve an SCM capability must begin with an assessment of the hazards and risks facing that State or Territory. The next steps in the SCM process are to define what is required to meet these hazards and risks and to assess the State's existing capabilities against the requirements. With the requirements and existing capabilities clearly understood, the State can identify its deficiencies and develop a comprehensive plan to remedy them.

The SCM Development Process Flowchart shown in Figure 1 illustrates the activities necessary to develop SCM capability. Accomplishing Steps 1 through 7 requires a limited expenditure of funds because these steps are mainly analysis and evaluation. Implementing the plan may require capital expenditures, operational funds, or legislative action.

The SCM Development Process Flowchart provides the framework within which States and Territories can develop individualized plans that identify, evaluate, and prioritize their own emergency requirements. This approach helps managers to focus resources on only necessary activities. In turn, this approach greatly helps decision makers during the budgeting process.

The strategy for developing an SCM Plan requires a systematic approach to assessing hazards and risks, requirements, and State or local capabilities. The resulting analysis yields a profile of the State's deficiencies. At this point, a comprehensive plan for both short- and long-term remediation can be developed. Training and exercise will evaluate the operational capabilities of people, facilities, and equipment.

Each step in the SCM development process is discussed in this section. Supporting documents, references, and checklists are included.

■ **Step 1. Assess Hazards, Risks, and Vulnerabilities**

All geographical areas of the United States are vulnerable to a variety of natural, technological, and national security hazards. They range from the more commonplace tornadoes in the Midwest to the extremely destructive events, such as volcanic eruptions in the Northwest or hurricanes in the Southeast, and to attack on the Nation. The first step in the SCM planning and proposal development process is to identify the hazards that threaten your specific area, determine the risk the hazards pose, and assess the vulnerability of your jurisdiction to these hazards. Combining these three elements—hazards, risks, and vulnerabilities—will produce a profile of your jurisdiction that is basic to defining your requirements.

Different hazards have different effects on our ability to survive the event and continue to direct, control, manage, and coordinate emergency operations within a jurisdiction and in cooperation with other

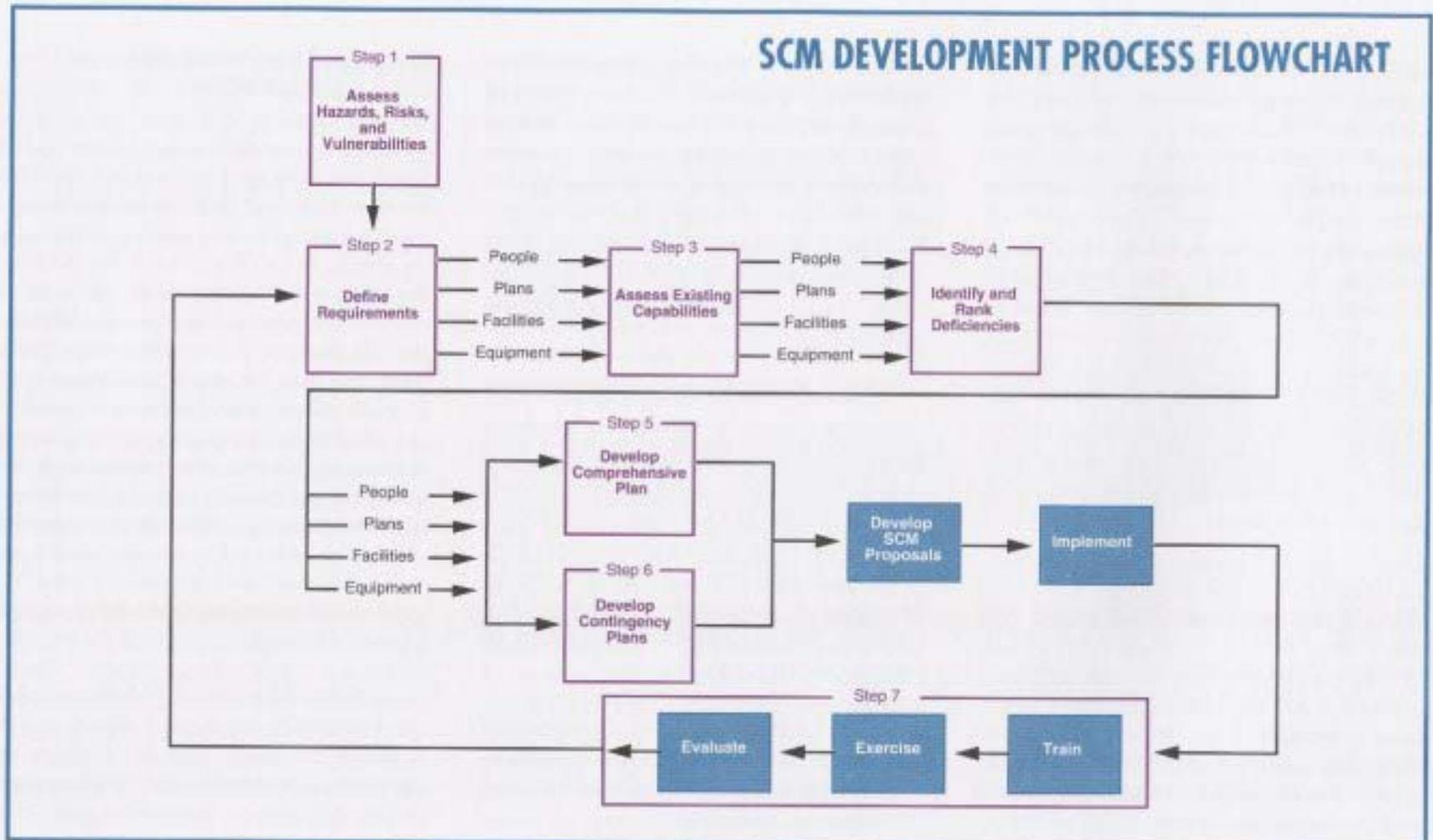


Figure 1.
SCM Development Process Flowchart



State and local governments and the Federal Government. Identifying hazards must be accompanied by a determination of the risk each hazard poses. Risk assessment includes identifying the frequency and severity of occurrences in particular locations to allow for a ranking of the risk. The final element in this step is matching your vulnerabilities with specific hazards, given their assessed risk levels. The vulnerability of your SCM capability will vary with the intensity, duration, geographic coverage, and demographic impact of a hazard as well as with the nature of your capabilities and their survivability. This assessment of vulnerability must also include an analysis of the effect of simultaneous hazards. The occurrence of one hazard of a certain intensity, duration, or extent may well increase drastically the risk level of other hazards. An earthquake may significantly increase the probability of urban fire or dam failure. In a similar fashion, the ability to survive and continue to direct, control, manage, and coordinate emergency operations—the SCM capability—may not be affected by just one hazard but may be vulnerable to multiple

hazards whether they occur coincidentally or causally.

Beginning the assessment might seem daunting, but the experience already gained by emergency management professionals in other States or Territories can be called on to provide documentation for much of this task. In addition, FEMA may have already accomplished a large part of the analysis required for your area of the country.

FEMA publishes several documents that can assist in the identification of specific regional hazards and risks. (These reference documents are listed in Appendix C.) These publications, and the general methodology that should be used to conduct a risk assessment, are discussed in this guide. A useful starting place is *Risks and Hazards—A State by State Guide*. This document, published in September 1990, provides specific State-by-State information on the various natural and technological and national security hazards to be found in each area. More recently, FEMA published *Principal Threats Facing Communities and Local Emergency Management Coordinators*

This 1992 report to the Senate Committee on Appropriations provides both information on frequent disasters and maps, statistical data, and a bibliography of important related publications.

The two publications previously referenced are comprehensive and will be helpful. However, the level of detail necessary in planning for emergencies facing each jurisdiction must be determined by State and local emergency planners. The publications will, nevertheless, provide a convenient starting point for the assessment of the particular hazards and risks affecting each State or Territory. For example, the location of industries with the potential for causing hazardous materials incidents or releases should be carefully evaluated. Similarly, the major transportation arteries and infrastructure (such as highways, railways, and airports) should be evaluated as to the frequency, type, and quantity of potentially hazardous materials that are transported in each jurisdiction. The location of emergency response infrastructure components (such as EOC's or communications systems) should



Hazards, Risks, and Vulnerabilities Checklist

- Based on history and other sources that define threats, list the hazards and risks that have affected your State or local community or that may affect your jurisdiction.
- Estimate the probability of future occurrences of each incident.
- Evaluate the possibility of new types of incidents resulting from population changes, new transportation routes and types, new construction, and the like.
- Evaluate combinations of events and the possibility of one event causing another.
- Develop a jurisdiction-wide map of probable and possible occurrences, including "spillover" events from neighboring jurisdictions. Also, evaluate vulnerability caused by interdependencies between systems such as power, transportation, water treatment, and communications. Specifically assess the vulnerability of key emergency management systems needed to direct, control, and coordinate emergency operations and continue to govern.
- Assess the potential regional size, shape, and evolution of specific incidents.
- Assess the potential consequences for your jurisdiction and others resulting from any of the potential incidents.
- Review the incident analysis at the city and county level to be sure that any local factors affecting probability, severity, ability to respond, or potential consequences are considered.
- Review the experiences and "lessons learned" from previous incidents.
- Based on both probabilities of occurrence and potential severity of consequences, draw up a prioritized list of incidents your jurisdiction must be prepared to handle and the risks they pose.

Table 1.
Hazards, Risks, and Vulnerabilities Checklist

be surveyed carefully during this phase. Key steps in building this assessment are provided in the Hazards, Risks, and Vulnerabilities Checklist, shown in Table 1.

To carry out the area-specific examination of risks and hazards at the city and county level, a set of detailed maps at the 1:50,000 scale will be useful. Each jurisdiction should be examined for relevant hazard and risk factors, as well as the potential for impact from adjacent jurisdictions.

An adjunct for local government planning, *Capability and Hazard Identification Program for Local Governments—Workbook*, *Civil Preparedness Guide (CPG) 1-35*, and *Capability and Hazard Identification Program Plan for State Governments*, CPG 1-36, are handy references for conducting an individualized hazard and risk assessment. The hazard and risk identification process will aid greatly in the understanding of the magnitude of the threat faced by each jurisdiction.

■ Step 2. Define SCM Requirements

Based on the assessment of hazards, risks, and vulnerabilities identified in Step 1, Step 2 determines the requirements for



directing, controlling, coordinating, and managing emergency operations. Integral to this step is the SCM concept of *all-hazard* emergency management capability. The needs of any given region will relate to the identified risks and hazards for that particular area and should also be the result of an analysis of existing response capabilities in terms of actual requirements for that area. Components should also be integrated and coordinated. States that have prepared SCM plans indicate that this is the most difficult task in SCM preparation. A general list of requirements for all States and Territories is shown in the SCM Requirements Checklist (Table 2). A brief discussion of each of the 10 requirements in the checklist follows.

1. *Comprehensive concept of operations.*

An established, well-understood concept of operations is the integrating element of any Emergency Operations Plan (EOP). A concept of operations is the overall approach you plan to take when dealing with emergencies. Within this conceptual framework, systems are developed, operating plans and procedures are created, training

is conducted, responses are made, performance is evaluated, and future needs are identified. Thus, it is essential to review your concept of operations to be sure that it covers the range of identified hazards, risks, and vulnerabilities; encompasses the other SCM requirements; and will work well in your specific situation (organizational, political, geographical, etc.).

In principle, any situation may be approached in several different ways. In practice, it is better to have everyone involved totally familiar with and working within the same concept of operations. It is essential to have all the organizational qualities, operating systems, and other capabilities to meet SCM requirements, and it is vital to integrate them. A complex management structure, such as any State and its local government system, must have comprehensive emergency plans and procedures that are well understood and universally applied.

2. *A well-defined emergency management organization.*

The structure of an emergency management organization can be the

SCM Requirements Checklist

- ✓ Comprehensive concept of operations
- ✓ A well-defined emergency management organization
- ✓ A current, complete, and tested Emergency Operations Plan (EOP)
- ✓ Designated, qualified, and trained personnel
- ✓ Survivable primary and alternate Emergency Operating Centers (EOC's)
- ✓ Survivable warning and communications systems
- ✓ Survivable records and data bases needed to conduct emergency operations
- ✓ Survivable vital records needed to reconstitute the government and for recovery
- ✓ Comprehensive training and exercise programs
- ✓ A continuity-of-government (COG) plan, including established lines of succession, predelegation of authority, and emergency action steps

Table 2.
SCM Requirements Checklist



deciding factor in whether the response to a crisis or emergency will be successful. Key attributes of a well-developed and potentially successful emergency management organization are its inherent flexibility, the quality and coverage of its legal and operational policy guidance, and clearly designated leadership that is prepared through study, training, exercise, and experience to oversee the management of each type of incident. SCM is all-hazard emergency management. Thus, the management structure designed to direct, control, manage, and coordinate all-hazard response must be able to efficiently identify, acquire, and apply the human and physical resources necessary to meet the specialized demands of a wide range of specific types of emergencies.

3. A current, complete, and tested Emergency Operations Plan.

An effective EOP is needed to turn a concept of operations, people, sets of equipment, and specific EOP's and procedures into an effective emergency response. Built to meet the specific needs of the individual State or Territory, the EOP

usually contains the eight main elements shown in Table 3.

Detailed guides for the development and review of EOP's are provided in CPG 1-8, *Guide for the Development of State and Local Emergency Operations Plans*, and CPG 1-8A, *Guide for the Review of State and Local Emergency Operations Plans*. It would be worthwhile to review both guides in the process of developing a plan and proposal to achieve SCM capability.

4. Designated, qualified, and trained personnel.

A critical component of any emergency response capability is the people involved. The best plans, equipment, and procedures could be completely useless if designated, qualified, and trained personnel are not available to take the appropriate action at the right time. One important planning consideration for emergency managers is the effect of the activation of National Guard or military Reserves on personnel availability. A catastrophic emergency may well require such activation that may, in turn, reduce the availability of emergency personnel.

Designated means that the people assigned to each function know their assignments and know that their crisis management functions are part of their jobs. *Qualified* means that people assigned specific, especially technical, functions have the skills and experience necessary to perform those functions. *Trained* means that managers and nonmanagement staff have full knowledge of the organization, personnel, procedures, concepts of operations, equipment, and their roles within the system, and that they know the territory in which they will be expected to direct or perform their functions. Under these three definitions, training for emergency preparedness never truly ends because personnel and skill requirements change. Training must be continuous, realistic, task-specific, and mandatory if State, Territorial, or local leadership is to be confident of its SCM capability.

5. Survivable primary and alternate emergency operating centers.

Survivable means having the ability to continue to function under any condition



Main Emergency Operations Plan Elements

1. **Purpose:** The plan discusses how emergency operations planning fits into the applicable government overall emergency planning structure.
2. **Situation and Assumptions:** The plan describes, in general terms, situations pertinent to the jurisdiction and their potential scope and impact. Assumptions about the emergency organization in relation to emergency preparedness capabilities should be stated.
3. **Concept of Operations:** The plan describes the various levels of government roles in the four phases (preparedness, mitigation, response, and recovery) of emergency management including capabilities, interjurisdictional and interorganizational relationships, authorities, and responsibilities for continuity of government (COG) as addressed in the seven COG measures in CPG 1-10.
4. **Organization and Assignment of Responsibilities:** This element of the plan expands item 3 in detail. It should include procedures for monitoring/evaluating assignment accomplishments.
5. **Administration and Logistics:** The plan describes implementation alternatives to regular procedures for transition to emergency operations. The plan further includes administrative details for State Government transport and establishment of emergency operations from an alternate EOC.
6. **Plan Development and Maintenance:** The plan describes the process of determining hazard identification, required capabilities, available resources, organizational structure, agreements, and vulnerabilities. It provides processes for implementation, evaluation, review, and revision/updates. It contains annexes as needed.
7. **Authorities and References:** The plan cites applicable laws, ordinances, and agreements and the plan's implementation.
8. **Definition of Terms:** The plan defines unique specialized terms and vocabulary to aid effective communication.

CPG 1-8 Annexes

- Annex A - Direction and Control
- Annex B - Communications
- Annex C - Warning
- Annex D - Emergency Public Information
- Annex E - Evacuation
- Annex F - Reception and Care
- Annex G - In-Place Protective Shelter
- Annex H - Health and Medical
- Annex I - Law Enforcement
- Annex J - Public Works
- Annex K - Fire and Rescue
- Annex L - Radiological Defense
- Annex M - Human Services
- Annex N - Resource Management

Table 3.
Main Emergency Operations Plan Elements



that would destroy or disable normal systems or structures. It is essential that the actual physical facilities from which a crisis or emergency is to be managed survive the event that precipitated their need. If they cannot, then an SCM capability does not exist, and the ability to direct, control, manage, and coordinate emergency operations is in jeopardy. Thus, the ability to govern is threatened. Given this, the development of survivable EOC's is the foundation of an SCM capability.

There are several ways to achieve survivability, such as hardening facilities, locating facilities outside known risk areas, developing redundant capability at an alternate location, or developing a mobile capability which can be moved away from the threat. The decision as to which option(s) to pursue depends on operating needs for day-to-day and emergency functions and their cost impact. The most cost-effective solution may be a combination of one or more of the survivability options. It follows that achieving this capability, along with personnel funding, will be the greatest financial burden of all SCM capability development activities. Table 4 lists 13 features of a survivable EOC.

Features of a Survivable Emergency Operating Center (Self-contained and capable of sustained operation)

- | | |
|--|---|
| 1. Fixed-facility primary and alternate emergency operating centers (EOC's), possibly with a transportable communication capability. | heating, ventilation, and air-conditioning; CBR filtration; and medical supplies) capabilities for sustained operations over an extended period. |
| 2. Designed and equipped for management of the range of anticipated emergencies, both natural and technological. | 8. Equipped with survivable communications for warning, emergency broadcast, and connectivity with other EOC's, other jurisdictions, State and Federal Government agencies, and key response and recovery organizations. |
| 3. Constructed with sufficient space to house people and equipment for day-to-day and sustained continuous operations and capable of full staffing for the most extensive emergency anticipated. | 9. Equipped with environmental monitoring and protection (e.g., radiological instrumentation) and other capabilities and resources needed to ensure effective sheltering from chemical, biological, and radiological hazards. |
| 4. Sited to avoid or minimize threats to the EOC from natural and technological hazards. | 10. Equipped with approved fire and safety systems and alarms. |
| 5. Designed and built to survive the range of anticipated hazards and to function effectively. | 11. Staffed to handle day-to-day activities and all emergencies. |
| 6. Protected against electromagnetic effects; lightning; pulse; power surge; and chemical, biological, and radiological (CBR) threats. | 12. Has adequate operational procedures. |
| 7. Equipped with electric power, fuel, and life support (e.g., shelter; food; water; sewer; | 13. Tested and exercised regularly. |

Table 4.

Features of a Survivable Emergency Operating Center



FEMA assists States in the development of fully operational EOC's by providing matching funds and technical assistance. FEMA publication CPG 1-20, *Emergency Operating Centers Handbook*, provides an overview of the EOC development and operations process. Appendix I, added to this *Handbook* in 1989, addresses specific issues of survivability and design needed to meet SCM capability criteria. FEMA's technical staff is ready to assist you with your EOC development needs, from assessment of existing facilities to the design of an "ideal" EOC for your State. The survivability of all EOC's must be assessed by comparing risks and hazards affecting the EOC site against the specific vulnerabilities of the EOC facility.

6. *Survivable warning and communications systems.*

Every day, society becomes more dependent on nearly instantaneous telecommunications. When disaster strikes and these systems fail, the results can be catastrophic. Government operates through communications; without them, even the most comprehensive plans, procedures, and

directions are useless. Thus, there exists a strong requirement for each State and Territory to possess a comprehensive and survivable telecommunications network.

SCM warning and communications requirements must be identified, specifically those necessary to direct, control, manage, and coordinate emergency operations. The EBS is a critical component of a State's direction and control capability. The EBS provides State and local government officials with the ability to provide emergency information to the public. All State primary and State alternate EOC's must have reliable access to EBS stations serving them. The National Warning System (NAWAS) is a dedicated, national telephone network, consisting of more than 2,200 stations, including primary State EOC's. NAWAS provides Federal, State, and local government officials the ability to send and receive emergency alerts, warnings, and information.

SCM warning and communications systems for emergency management may also be used for other purposes; however, they must meet minimum criteria, as highlighted in Table 5. These systems must be reliable and available for primary use in response to

emergencies. This means that all systems must provide effective and consistent service for emergency management. They must be able to survive the "worst-case" conditions imposed by the risks and hazards specific to any jurisdiction, and they must be protected against electromagnetic effects. They must be effective statewide. They must include connectivity between the EOC's, as well as the ability to communicate with key State agencies, State field organizations, local jurisdictions, adjoining States, Federal authorities, and key volunteer and private organizations. This connectivity is a technical and organizational concern as it includes identification and execution of all necessary agreements and Memorandums of Understanding (MOU's) to support the use of day-to-day operations for warning and communications systems during emergencies.

FEMA developed the computerized Portable Emergency Data System (PEDS), which was distributed to States and Territories through FEMA Regional Offices. PEDS contains useful license information from the Federal Communications Commission licenses, which can be used to assist States in planning and establishing connectivity between jurisdictions and agencies. Additionally, it can aid emergency



managers in identifying organizations with which an MOU or letter of agreement needs to be negotiated for mutual aid and radio networking. Private and voluntary organizations can also offer excellent backup communications capabilities in the event of an emergency.

Recently, FEMA updated its 4 1/2-day course, "Telecommunications and Warning Systems," offered by the Emergency Management Institute at the National Emergency Training Center in Emmitsburg, MD. Presented in three sections—Telecommunications and Warning Systems Analysis; Planning, Operations, and Management of Systems; and System Procurement and Installation—the course is designed for State and local communication officers and specialists responsible for managing, evaluating, testing, exercising, and employing telecommunications and warning systems.

7. Survivable records and data bases needed to conduct emergency operations.

It is essential that the information requirements for disaster response in your State or Territory be identified and cataloged.

SCM Warning and Communications Requirements

- | | |
|--|---|
| 1. Survivable, hardened, redundant, transportable, reliable, available, maintainable, compatible, etc. | management, including key field elements |
| 2. Primary use for emergency management during emergencies | 6. Survivable links between primary and alternate emergency operating centers |
| 3. Able to survive all hazards including the "worst-case" incident in the State or Territory | 7. Survivable communications with local jurisdictions |
| 4. Protected against electromagnetic effects | 8. Survivable communications with adjoining States |
| 5. Survivable communications with State departments and agencies and other organizations involved in emergency | 9. Survivable communications with Federal authorities |
| | 10. Survivable communications with key volunteer and private organizations |

Table 5.

SCM Warning and Communications Requirements

Primary and alternate EOC's should contain the information data bases and records necessary to sustain emergency operations, with provisions made for backup and update of this data.

Although information needs will vary from jurisdiction to jurisdiction, there are general categories of information, as Table 6 indicates, that each EOC should maintain. For each category, the relevant information



on contact persons, procedures for contact and alternatives, location, purpose, or other appropriate information should be organized so that it is readily accessible during an emergency. Each category could be organized to identify emergency personnel, State and local agencies, Federal agencies, voluntary organizations, private organizations, media, and neighboring jurisdictions. Discussion of these items with your neighboring States will solidify this list from your State. Federal Response Plan (FRP) needs should be coordinated with the checklist in Table 6.

8. Survivable vital records needed to reconstitute the government and for recovery.

The State, in collaboration with local jurisdictions, must have a system for the secure storage of vital records necessary to reconstitute the government and to conduct recovery efforts. Safeguards for various vital records are exhibited in Table 7. Records related to the legislative, judicial, and executive functions of the State and local jurisdictions must be preserved. Likewise,

secure data storage should exist for vital records necessary to protect individual interests such as birth and death, marriage and divorce, property and land title or ownership, and taxes and licenses. CPG 1-10 provides criteria for ensuring that both the records needed to respond to a crisis and those needed to reconstitute government after a crisis are safely maintained.

9. Comprehensive training and exercise programs.

The purpose of a comprehensive training and exercise program is to ensure that if plans go awry they do so within the controlled and simulated crisis atmosphere of an exercise, rather than when lives and property are at risk. Training familiarizes officials with the roles, responsibilities, and procedures they would be expected to execute during an emergency; exercises allow them to practice their roles, responsibilities, and procedures and to evaluate their performance and capabilities under conditions that simulate emergency events.

Records for Emergency Operations



Table 6.
Records for Emergency Operations



Training is a continuous process. There is always something more that can be learned about responding to a disaster. FEMA has a long history of planning, conducting, and evaluating training and exercises and is fully prepared to assist each State and Territory in this area. Additionally, FEMA operates the National Emergency Training Center in Emmitsburg, MD, where officials can be trained in a variety of subject areas relating to emergency management. The States also operate a variety of emergency management training programs. FEMA's *Hazardous Materials Exercise Evaluation Methodology*, released in February 1992, is designed specifically to help State and local emergency managers and others to develop, implement, and evaluate their own exercises. It can be adapted generically for use in a variety of exercises.

10. A continuity-of-government plan, including an approved line of succession.

Lines of succession, predelegations of authority, and other preparedness and planning measures are integral to an emergency management program, but they are often neglected. Even though most

emergencies do not threaten the institutional integrity of State, Territorial,

Vital Records Safeguards

1. Identify records necessary to reconstitute each branch of government.
2. Identify records necessary to protect individual interests.
3. Protect vital records by duplicate copies, dispersal, and safe or secure storage.
4. Regularly and systematically update duplicates of vital records.
5. As an added safeguard, arrange reciprocal storage between State and local governments.

Table 7.
Vital Records Safeguards

or local governments, the consequences of some major emergencies, such as a catastrophic earthquake, hurricane, or attack, could disrupt the ability of government to function. In order to ensure that the government can preserve, maintain, or reconstitute its executive, legislative, and judicial functions, it is vital that each State and Territory identify specific requirements for continuity-of-government. FEMA can provide assistance on the development of lines of succession for critical positions within your State or Territory. In addition, CPG 1-10, the *FEMA Guide for the Development of a State and Local Continuity of Government Capability*, provides recommended actions and discusses the essential emergency requirements common to all States and Territories, regardless of the nature of the hazards or risks they face.

■ Step 3. Assess Existing Capabilities

The next phase of SCM plan development is a "self assessment" of current State and local capabilities to meet the SCM requirements defined in Step 2. Within the context of your State's concept of operations



and the hazards and risks that threaten your State, you should assess the adequacy of staff, plans, facilities, and equipment to meet the defined SCM requirements. FEMA documents, such as CPG 1-36, *Capability and Hazard Identification Program Plan for State Governments*, and CPG 1-35, *Capability and Hazard Identification Program for Local Governments—Workbook*, will be useful in this phase of the analysis.

By conducting the assessment, you should be able to identify current capabilities and compare them with requirements. Table 8 lists questions you can ask yourself as you conduct the assessment. The product of this assessment should be a list of capabilities, with each rated as “adequate” or “inadequate” in terms of its meeting SCM requirements. A third rating, “insufficient information,” indicates a need for further review of that individual capability category. Each rating should contain a brief narrative stating reasons a capability was rated adequate or inadequate. An “insufficient information” rating should be clarified.

Assessment of existing SCM capabilities depends on identification of the specific requirements in a given area. An inventory of available capabilities may be a starting point for the assessment. It must then be related to the listed requirements. Staff can be listed and compared with projected staff needs.

Every State and Territory has a varied mix of public, private sector, and volunteer resources involved in emergency management. Few, if any, systems would be complete or effective without these resources. Good preparedness planning requires that all personnel resources be identified, located, and allocated for emergency use. The review of these resources is essential for capability planning and as a resource management tool. Appropriate action is required at the State and local level to ensure that the information needs of private groups are met.

Private resources are often available in the form of equipment and services. Large businesses with sizable investments in staff and property are often willing to support

SCM Capabilities Assessment Checklist

- ✓ Are all hazards and risks from Step 1 clearly identified?
- ✓ Are the threat consequences considered?
- ✓ Are requirements to respond to each hazard and risk clearly defined?
- ✓ Are people capabilities assessed against requirements?
- ✓ Are plan capabilities assessed against requirements?
- ✓ Are facilities capabilities assessed against requirements?
- ✓ Are equipment capabilities assessed against requirements?

Table 8.
SCM Capabilities Assessment Checklist



development and maintenance of emergency management capabilities by contributing hardware and funds to State and local governments. Organizations, such as construction companies, have heavy equipment that can be valuable in many emergencies. Agreements on conditions under which such equipment may be committed in an emergency are essential. In many instances, large State or local government expenditures for expensive, seldom-used equipment can be avoided by agreements with private owners.

In the SCM development process, it is essential to identify all possible resources. FEMA encourages this appraisal and the recruitment of resources from the private sector and can consider private sector contributions of items eligible for funding as a basis for matching funds or in-kind matches.

■ Step 4. Identify and Rank Deficiencies

A careful comparison of existing capabilities with the defined SCM capability

requirements should identify gaps that must be filled or problems that must be remedied to achieve a comprehensive SCM capability. Some of the identified deficiencies obviously pose more serious risks than others. Thus, it is important to rank the deficiencies in descending order of seriousness, with the deficiency having the greatest potential impact on preparedness leading the list. This list will then provide a chronology of what needs to be done to achieve a full SCM capability.

Potential deficiencies should be examined in the same manner as the SCM requirements were identified, using the same SCM Requirements Checklist in Table 2. These requirements should be compared with and contrasted to the specific capabilities identified in the capabilities assessment. Each requirement identified in Step 2 should have a matching capability identified in the assessment phase. Where a match does not occur, a deficiency exists. Determination of the magnitude will be inexact. The FEMA Regional Office staff is able to provide assistance in this area. The

completed prioritized list should be used to develop a remedial action plan for correcting these deficiencies.

■ Step 5. Develop a Comprehensive Plan with Proposals

Developing a comprehensive plan and contingency plans (Step 6) are interrelated and require a determination of what actions need to be taken to correct the deficiencies identified in Step 4. This determination should rank the deficiencies in order of importance, outline proposed remedies, prioritize levels of effort and funding needed to make the indicated additions or improvements, and establish a schedule for completing remedial actions. Although each deficiency can be examined discretely, one remedial action could address multiple deficiencies.

Developing a prioritized list of remedial actions does *not* represent an automatic commitment to expend funds. The list of remedial actions should serve as the foundation for the development of a



comprehensive plan and a guide for directing available or future funds and resources to areas that yield the greatest improvement per dollar spent. The list and the SCM Plan can also be used as a basis for presentations when requesting funds from the legislature or the Federal Government. It will demonstrate that you have conducted a careful analysis of the situation and that resources are being requested in a logical manner and with well-defined objectives.

An overall plan to achieve SCM capabilities requires a mixture of approaches. Only some of them involve funding. As suggested in the Priorities, Costs, and Resources Checklist (Table 9), the task now is to bring all remedial actions together into a single plan, listing the required actions, each option, the estimated costs, anticipated sources of funding or other resources, and the desired timetable for completion. The key is to undertake SCM planning and the achievement of SCM capabilities as an integral part of the State's or Territory's existing emergency management programs. SCM ultimately is

a process of strengthening the State's or Territory's all-hazard emergency management capabilities to ensure survivability and effectiveness.

First, priorities should be established for those deficiencies most critical to an SCM capability. Second, develop cost estimates for each deficiency, together with an assessment of the possibility for remediation without resorting to outside spending. Third, estimate completion times. Fourth, investigate the use of private and volunteer resources. Fifth, combine remedial actions into a single plan, with other options, costs, sources of funding, and optimal timeframes for completion. The list can be reordered based on available resources and funding. These priorities may include funds for facilities and equipment, staff, changes to laws, interagency agreements, MOU's, planning, training, or exercises.

■ Step 6. Develop Contingency Plans with Proposals

Nature and probability are unlikely to cooperate by waiting until all deficiencies

Priorities, Costs, and Resources Checklist

- ✓ Develop priorities for remedial actions most critical to achieving a near-term SCM capability.
- ✓ Develop cost estimates and appropriate action associated with each of the identified deficiencies.
- ✓ Assess the ability to accomplish "in-house" correction.
- ✓ Estimate the time required to complete each task.
- ✓ Estimate the need for outside assistance.
- ✓ Review the availability of local resources, including private sector and volunteer.
- ✓ Bring all remedial actions together into a single plan: the required actions, each option, the estimated costs, anticipated sources of funding, and the desired timetable for completion.
- ✓ Reprioritize the list of remedial actions by available resources, funding, and by requirements and determine who has the responsibility for what action.

Table 9.
Priorities, Costs, and Resources Checklist



are corrected before an emergency situation occurs. An emergency may occur before the comprehensive plan, complete with all of the defined SCM requirements and corrected deficiencies, has been implemented. However, contingency plans for working around the deficiencies, such as borrowing or obtaining advance commitment of equipment from a private firm or by negotiating and signing a mutual-aid agreement with a neighboring jurisdiction, can be put in place. Such arrangements may serve until new capabilities are in place. Exploring such opportunities may actually conserve critical funds and result in long-term enhancements of the total capability that could be available to your jurisdiction in an emergency. In any case, it is important to know the deficiencies and to plan how you will operate without a given capability.

Development of your jurisdiction's SCM capabilities need not occur in a vacuum. FEMA has a vital interest in the development of a compatible, nationwide SCM capability serving all 50 States and six Territories. Each State and Territory has a

similar interest in the welfare of its citizens. Therefore, FEMA is prepared to offer technical and financial assistance for a State's or Territory's SCM capability development. State and Territory planning staffs should work closely with FEMA staff to ensure that the State or Territory benefits from the experience of FEMA and other States.

In addition to providing technical assistance across the spectrum of SCM requirements, FEMA administers several programs designed to provide financial assistance to State and local emergency preparedness efforts. These programs vary, each having its own regulations, but they can be applied flexibly and packaged creatively to assist States in implementing well-defined SCM development plans. More information can be obtained about these programs by consulting the FEMA publication *CCA General Program Guidelines* (CPG 1-3). Additionally, the FEMA Regional Office serving your State or Territory can provide detailed information regarding these and other sources of funding.

There is no single way to develop an SCM capability. There is, however, a format in which an SCM proposal should be structured for submission to FEMA. Appendix A provides a structured guide to the review and evaluation of an SCM Plan. This SCM Panel Review Format is used by staff at FEMA to review SCM plans and proposals for adequacy. Each of the points in the format should focus on the minimum requirements for an SCM capability. Each State should approach the task according to its own requirements. However, a standard treatment and a uniform approach will make it easier for State planners to work with city and county planners, with the private sector, with volunteer groups, and with FEMA. This structured approach will greatly aid FEMA staff in assisting you in your SCM development activities. Although individualized requirements will differ from one State to another, they should all share a set of common characteristics, as indicated in the sample SCM Plan Outline shown in Table 10.



■ Step 7. Train, Exercise, and Evaluate

Once SCM capabilities are achieved, sustaining these capabilities is a continuing, iterative process. With the initial steps accomplished and the SCM capability in place, an ongoing sequence of training, exercising, and evaluating should be established. This sequence will provide the information needed to constantly ensure current SCM capability. In addition to the feedback from training, exercising, and evaluating, a periodic review should involve a systematic revisiting of each of the steps in the SCM Plan Development Process. This review should be carried out by the State's experienced planners and responders. In that way, as hazards or risks change, as new requirements develop, or as new emergency management experiences are gained, the SCM capability can be modified to meet new demands or new knowledge. And, finally, a systematic procedure for recording the lessons learned from any emergency is essential to ensuring an effective response to the next emergency.

SCM Plan Outline—Foreword, Purpose, Goals, and Objectives	
<ol style="list-style-type: none"> 1. Assessment of Hazards and Risks <ul style="list-style-type: none"> • Checklist of hazards • Potential consequences/risks 2. Identified Requirements for SCM Capability <ul style="list-style-type: none"> • State emergency staff <ul style="list-style-type: none"> - Staff size by responsibilities/organization - Unique staff training needs • EOP and procedures • Laws • Lines of succession • Predelegations of authority • Emergency action steps • Protection of government resources • Data bases and records needed for operations • Primary and alternate EOC's • Facilities • Communications systems • Vital records for continuity of government <ul style="list-style-type: none"> - Relevant laws • Checklists for each element 3. Assessment of Capabilities <ul style="list-style-type: none"> • Cover all requirements listed in step 2 above • List results on checklist as in step 2 above • Determine survivability of each element 4. Determination of Deficiencies <ul style="list-style-type: none"> • Comparison of requirements and capabilities checklists • Specific deficiencies uncovered <ul style="list-style-type: none"> - People - Plans - Equipment 	<ul style="list-style-type: none"> - Facilities - Communications - Laws - Mutual-aid agreements - Interagency/State agreements - Memorandums of Understanding - Training and exercise programs <ol style="list-style-type: none"> 5. Plan for Capability Development <ul style="list-style-type: none"> • Main topics of proposal <ul style="list-style-type: none"> - People - Plans and procedures - Facilities - Equipment - Training and exercises • Prioritized needs • Developed cost estimates • Identified resources • Developed master plan including timelines 6. Develop Contingency Plan <ul style="list-style-type: none"> • People • Plans • Facilities • Equipment 7. Train, Exercise, and Evaluate <ul style="list-style-type: none"> • People • Plans • Facilities • Equipment <p>Annexes</p> <ul style="list-style-type: none"> • Legal documents and citations • List of Civil Preparedness Guides • Addresses of FEMA Regional Offices • State Government emergency staff • Maps of hazards • Maps of facilities and resources • Maps of areas at risk

Table 10.
SCM Plan Outline—Foreword, Purpose, Goals, and Objectives



Conclusions

The benefits of a comprehensive statewide SCM capability are quite substantial and well worth the effort and investment required. The political, economic, and human benefits of the ability of government to survive a disaster and to deal with its consequences are enormous. It is the legal and moral obligation of elected and appointed officials to provide for the continuity of essential government services under the most severe conditions. Only with solid planning and foresight can such a capability be achieved, and the vehicle for assessing needs and planning how to accomplish this vital task is SCM. This publication has provided a general guide to the steps required to lay the foundation for your State, Territory, or local SCM capability

development effort. Remember that this document is only a guide and that nothing in the SCM capability development process should be considered rigid. The variety of hazards faced by the different regions of the United States and the diversity of approaches jurisdictions take to emergency management mandate a flexible planning approach. The professionals at FEMA are ready to assist you through each step in the development of your SCM capability. If you have not already done so, please contact the FEMA Regional Office to arrange an initial meeting to discuss assistance in this important effort. For your convenience, a list of the FEMA Regional Offices, their addresses, and phone numbers is included as Appendix B.



SCM Plan Review Format - Appendix A

Each SCM plan and its associated funding requests submitted by a State or Territory are reviewed by staff at FEMA Headquarters in Washington, DC. Comments and suggestions for improvement in the plan are sent by FEMA Headquarters to the appropriate FEMA Regional Office to assist the Region in working with the State to improve its SCM plan. The format presented here is that used by FEMA Headquarters to organize comments and suggestions for transmittal to the Region. The subpoints listed in this format are intended to focus FEMA staff on critical aspects of any State SCM plan. The FEMA review analyzes the process used by the State in preparing the plan and the specific content of the plan.

I. DEVELOPING A PLAN/PLANNING PROCESS

Analysis and evaluation in the planning process should be comprehensive, detailed, realistic, logical, and prioritized.

- Assessment of Risks/Hazards (Threat Analysis)
- Definition of the Required SCM Capabilities

- Assessment of Existing Capabilities
- Identification of Deficiencies (Needs Analysis)
- Development of Long-Range Correction Plan
- Development of Short-Term Contingency Plan
- Testing, Exercising, Evaluating, Reassessing

IIA. ELEMENTS OF PLAN/PLAN CONTENT - Emergency Operations Capabilities

Elements of plan content should be survivable, reliable, available, maintainable, realistic, compatible, tested and exercised, and comprehensive. In addition, people should be designated, qualified, and trained, and plans should be flexible.

- People
 - Emergency management organization
 - Training
- Plans and Procedures
 - Succession
 - Predelegation of authority
 - Emergency Operating Procedures (EOP's)/ Standard Operating Procedures (SOP's), Memorandums

- of Understanding (MOU's), laws and agreements
- Emergency actions
- Protection of government resources
- Emergency records and data base (vital records needed to manage the emergency)—maps, locators, rosters
- Vital records (nonemergency to reconstitute the government)
 - Individual interest—birth, death, tax, title, etc.
 - Public interest—constitutions, charters, etc.
 - Essential government records for each branch
- Concept of emergency operations
- Facilities
 - Devolution of control and concept of operations
 - Primary Emergency Operating Center (PEOC)
 - Survivability specifications—Civil Preparedness Guide (CPG) 1-20
 - Location: Nonhazard location attack (< 2 pounds per square inch (psi) over pressure location), flood plain, earthquake fault zone, transportation access



- Structure: Protection factor (PF) of 100; hardening suitable to risk; heating, ventilation, and air conditioning (HVAC); emergency power/fuel supply; fire/safety systems; adequate space, bunking, feeding; toilet and sanitary systems
- Life support: water, food, medical, sanitary supplies, housekeeping
 - Alternate Emergency Operating Centers (AEOC's)—same criteria as applied to primary
- Support Equipment
 - Operational—status displays, automated data processing (ADP) hardware and software, other equipment, paper, administrative supplies, manuals
 - Protective
 - Radiological Defense (RADEF)
 - Electromagnetic Pulse (EMP)
 - Hazardous Materials (HAZMAT)
- Communications
 - Survivable and redundant communications—connectivity required for State PEOC's and AEOC's:
 - State to Federal
 - State to adjacent States
 - State to local jurisdictions

- State to State departments/agencies
- State to private sector and volunteer agencies
- State departments/agencies to Federal counterparts
- State to Emergency Broadcast System (EBS) primary and alternates
- RADEF organization
 - Warning
 - EBS
 - Sirens
 - National Warning System (NAWAS)

IIB. ELEMENTS OF PLAN/PLAN CONTENT - Capability Development Program

- Proposed Corrections
 - People
 - Plans and Procedures
 - Facilities
 - Equipment
 - Communication
- Long-Range Plan
 - Action
 - Timing
 - Cost
 - Prioritization
 - Resource Source

- Short-Term Contingency Plan
 - How to operate without a capability pending corrective action

III. PREPARATION OF FUNDING REQUESTS

- One or more project proposals

IV. POSTIMPLEMENTATION EVALUATION

- Tests and Exercises, Actual Emergency Events
 - People
 - Plans and Procedures
 - Facilities
 - Equipment
 - Communication

V. REPEAT PLANNING CYCLE BASED ON LESSONS LEARNED



FEMA Regional Offices - Appendix B

FEMA Region I

CT, MA, ME, NH, RI, VT
JW McCormack Post Office and
Courthouse Building
Room 442
Boston, MA 02109-4595
(617) 223-9540

FEMA Region II

NJ, NY, PR, VI
26 Federal Plaza, Room 1337
New York, NY 10278-0002
(212) 225-7208

FEMA Region III

DC, DE, MD, PA, VA, WV
Liberty Square Building, 2nd Floor
105 South Seventh St.
Philadelphia, PA 19106-3316
(215) 931-5500

FEMA Region IV

AL, FL, GA, KY, MS, NC, SC, TN
1371 Peachtree St., NE, Suite 700
Atlanta, GA 30309-3108
(404) 853-4200

FEMA Region V

IL, IN, MI, MN, OH, WI
175 West Jackson Blvd., 4th Floor
Chicago, IL 60604-2698
(312) 408-5500

FEMA Region VI

AR, LA, NM, OK, TX
Federal Regional Center
800 North Loop 288, Room 206
Denton, TX 76201-3698
(817) 898-5104

FEMA Region VII

IA, KS, MO, NE
911 Walnut St., Room 200
Kansas City, MO 64106-2085
(816) 283-7060

FEMA Region VIII

CO, MT, ND, SD, UT, WY
Denver Regional Center
Building 710, Box 25267
Denver, CO 80225-0267
(303) 235-4812

FEMA Region IX

AZ, CA, HI, NV, Pacific Commonwealths
and Territories
Building 105
Presidio of San Francisco, CA 94129-1250
(415) 923-7100

FEMA Region X

AK, ID, OR, WA
Federal Regional Center
130 228th St., SW
Bothell, WA 98021-9796
(206) 487-4600

FEMA Caribbean Area Office

PR, VI
Calle Majagua Building #61
Antigua Naval Base, Miramar
San Juan, Puerto Rico 00907
(809) 729-7637

FEMA Pacific Area Office

AS, GU, MP
Building T-112
Port Shafter, HI 96819
(808) 541-3947



References - Appendix C

Title	Number	Date	Title	Number	Date
An Introduction to Survivable Crisis Management		Sep 1992	Guide for the Development of State and Local Emergency Operations Plans	CPG 1-8	Jun 1990
SCM Plan Development		Apr 1993	Guide for the Review of State and Local Emergency Operations Plans	CPG 1-8a	Sep 1988
SCM Telecommunications and Warning Systems Planning Process		(in press)	Guide for the Development of a State and Local Continuity of Government Capability	CPG 1-10	Jul 1987
Risks and Hazards—A State by State Guide	FEMA 196	Sep 1990	Guide for Design and Development of a Local Radiological Defense Support System	CPG 1-30	Jun 1981
Principal Threats Facing Communities and Local Emergency Management Coordinators	FEMA 191	Apr 1993	Guide to Hurricane Preparedness Planning for State and Local Officials	CPG 2-16	Dec 1984
Capability and Hazard Identification Program for Local Governments—Workbook	CPG 1-35	Apr 1992	Life Support Operations in Shelters	CPG 2-20	Jan 1988
Capability and Hazard Identification Program Plan for State Governments	CPG 1-36	Oct 1988	Emergency Operating Centers Handbook (with Change 1)	CPG 1-20	May 1984 May 1989
CCA General Program Guidelines	CPG 1-3	Dec 1989	Electromagnetic Pulse Protection Guidance	CPG 2-17	Feb 1991
Comprehensive Cooperative Agreement Policies and Procedures Guide	CPG 1-38	May 1991	Principles of Warning and Criteria Governing Eligibility of National Warning System (NAWAS) Terminals	CPG 1-14	May 1991
Objectives for Local Emergency Management	CPG 1-5	Jul 1984			



Title	Number	Date
National Warning System (NAWAS) Operations Manual	CPG 1-16	Nov 1980
Outdoor Warning Systems Guide	CPG 1-17	Mar 1980
Broadcast Station Protection Program: Emergency Equipment Fallout Protection	CPG 1-33	May 1984
State and Local Communications and Warning Systems Engineering Guidance	CPG 1-37	Sep 1984
Radiological Defense Preparedness	CPG 2-1	Sep 1989

Title	Number	Date
Radiological Safety in Shelters	CPG 2-6.4	Sep 1983
Transportation Planning Guidelines for the Evacuation of Large Populations	CPG 2-15	Sep 1984
State and Local Earthquake Hazards Reduction; Implementation of FEMA Funding and Support	CPG 2-18	Aug 1985
Hazardous Materials Exercise Evaluation Methodology		Feb 1992