MARYLAND CONTINUITY OF OPERATIONS PLANNING MANUAL
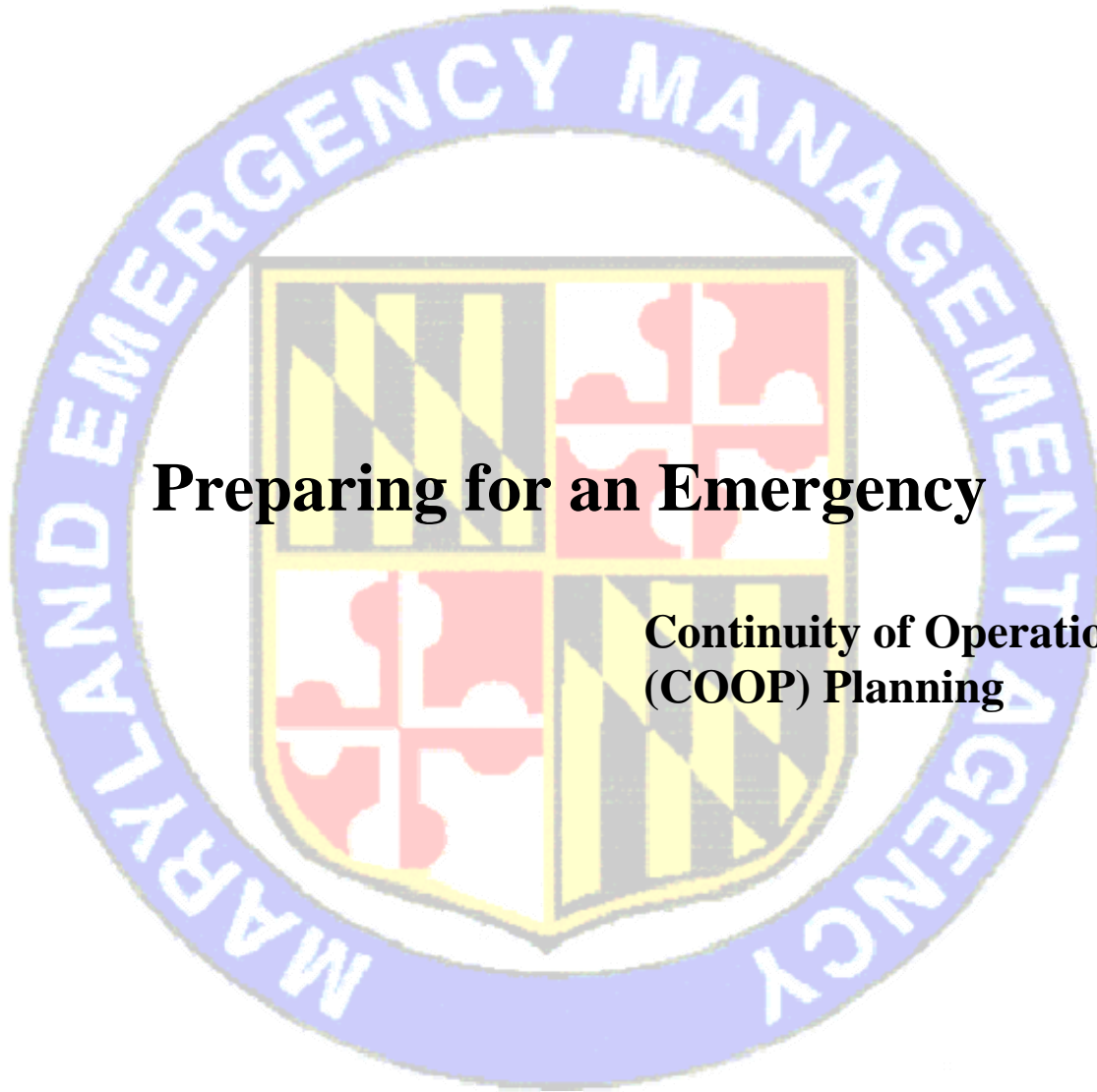
Preparing for an Emergency

Continuity of Operations (COOP) Planning

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Ver. 2.3

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This manual was prepared with the assistance of the Center for Health and Homeland Security at the University of Maryland, Baltimore.
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Foreword

The State of Maryland's goal is to implement a comprehensive and effective program to ensure continuity of operations of state and local government under all circumstances. As part of this effort, the Maryland Emergency Management Agency (MEMA) is encouraging all state and local organizations to have in place a viable plan that ensures continuity of operations through a full range of potential emergencies.

MEMA, in association with the University of Maryland, Center for Health and Homeland Security, has developed this "how-to" manual to assist state and local organizations in enhancing their continuity of operations planning.

This manual covers the following areas:

- Starting continuity of operations planning;

- Identifying critical and essential activities and functions;

- Determining vital records, systems, and equipment and a process to safeguard and update these items;

- Evaluating needs and selecting an alternate work site;

- Developing an effective communications plan;

- Creating a procedure for reconstitution;

- Preparing for the well-being of families;

- Testing and executing the continuity of operations plan and revising it periodically as necessary; and

- Creating and Implementing an Incident Command System

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Introduction to Continuity of Operations Planning

Consider the following scenario: a letter addressed to the director of your organization arrives at headquarters. Upon opening, the administrative assistant finds an anonymous note that has a powdery feel and strange scent. The administrative assistant throws the note away after concluding it is a hoax. The next day, he reports to work with a cough that gets increasingly worse, and ultimately, goes home sick. Two days later, custodial workers call in sick with similar symptoms. Testing of the administrative assistant's waste basket shows traces of anthrax. Upon receipt of the results, the individual in charge immediately orders closure of the building until it can be tested and decontaminated. In such a scenario, would you be able to continue operating and how would it do that?

The answer to this question is continuity of operations (COOP) planning. COOP planning is the effort to ensure the continued performance of essential government functions during a wide range of potential emergencies. Whether the hazard is the result of a natural or human-induced event, an "all hazards" approach assures that, regardless of the emergency, essential functions will continue.

COOP planning results in the development of a COOP plan. COOP plans should be designed to be applicable in a wide variety of emergencies. Threats can vary from naturally occurring events to man-made incidents and telecommunication or power failures. While bombs and fires capture the headlines, almost 90% of emergencies are "quiet catastrophes." These seemingly low profile disasters have as great a potential to disrupt the organization and cause problems as do the high visibility cataclysmic events. The following table lists the many potential threats.

Naturally Occurring	Human-Induced	
	Intentional	Unintentional
• Tornados • High Winds • Electrical Storms • Ice Storms • Snowstorms and Blizzards • Floods • Earthquakes • Epidemics • Major Landslides • Hurricanes and Typhoons • Tropical Storms • Wildfires • Droughts	• Misuse of Resources • Security Breaches • Theft • Fraud/Embezzlement • Fire/Arson • Vandalism • Sabotage: External and Internal Actors • Workplace Violence • Bomb Threats • Bioterrorism • Physical Terrorist Assaults • Labor Disputes/Strikes • Disruption of Supply Sources • Transportation System Disruption or Shutdown • Riot/Civil Disorder • War	• Voice & Data Telecommunications Failures or Malfunctions • Software/Hardware Failures or Malfunctions • Unavailability of Key Personnel • Human Errors • Power Outages: External or Internal • Water Outages • Gas Outages • HVAC System Failures or Malfunctions • Accidental Damage to or Destruction of Physical Plant and Assets

Continuity of Operations Plan: A document which outlines a plan assuring the capability to continue essential organization functions across a wide range of potential emergencies.

There are five main elements in a COOP Plan:

1) Essential Functions and Key Personnel;
2) Vital Records, Systems and Equipment;
3) Alternate Work Site(s) / Relocation;
4) Communications; and
5) Training, Testing, and Exercises.

These elements fit together much like a puzzle. They are intertwined and dependent upon one another and enable a plan to be smoothly and effectively implemented during an emergency. Additionally, the COOP components, when properly identified, will provide an easy transition back to normal operations at the primary facility when the time is appropriate.
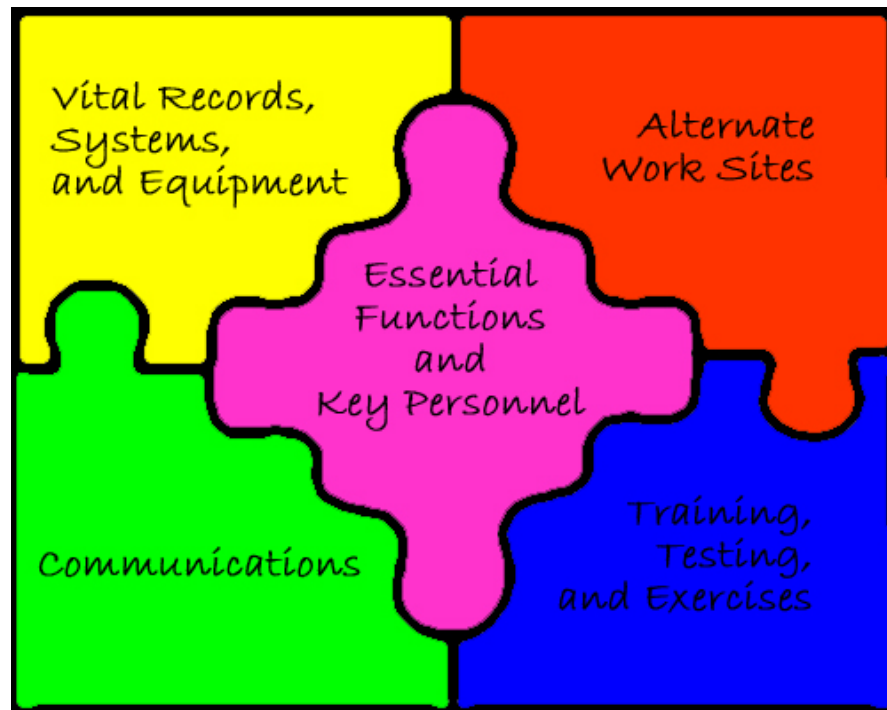
A. Why COOP Planning?

The image is hard to erase in even the most cynical of minds. Two planes evaporate into the two tallest buildings in New York City. Black smoke billows into a cloudless September sky. The towers collapse, and with them, fathers, mothers, husbands, wives, brothers, sisters, and children are lost in the burning dust. A city and a country are paralyzed with fear and grief. How could such a thing happen in the United States, if at all? This question may never be satisfactorily answered, but the sad fact remains: terrorism is part of the American landscape today. Indeed, soon after September 11, 2001, Senate and other federal government buildings were contaminated with anthrax. Traces of the biological agent shut down the Hart Senate Office building for over three months.

Today, government faces a challenge unlike any before. In addition to terrorism, disasters from many causes are on the rise, not only in frequency, but also in severity. Some of the most recent examples include the largest power outage in over 30 years that struck entire states from Ohio to Connecticut to Canada for several days in August 2003. In Maryland, flooding from Hurricane Isabel in September 2003 destroyed many towns along the Chesapeake Bay and submerged downtown Baltimore and Annapolis in eight feet of water. Additionally, wildfires, earthquakes, transportation accidents and strikes, tornadoes, blizzards, plant explosions, computer viruses and technology failures have wreaked havoc and caused major disruptions to both public and private operations throughout the nation in recent years.

The fundamental mission of every Maryland organization is reliability. Many organizations provide vital services to the people of Maryland and cessation of these services can have a devastating effect on individuals. In the absence of a COOP plan, an organization cannot fulfill its mission should a crisis on any scale disrupt essential operations.

Simply put, COOP planning is "good business practice." For years, such planning had been an individual responsibility that focused primarily on responding to emergencies within the confines of the organization. The content and structure of these plans, operational standards, and coordination, if any, were left to the discretion of the organization. However, recent natural catastrophes and acts of terrorism have given government a better understanding of organization inter-relatedness, and consequently shifted awareness to the need for ensuring continuity of essential government functions across the State.

B. What Are The Goals of COOP Planning?

COOP planning has eight main goals:

1) Ensuring continuous performance of essential functions and operations under all conditions;

2) Reducing loss of life and minimizing property damage and loss.

3) Executing a successful order of succession with accompanying authorities in the event a disruption renders that organization's leadership unable, unavailable, or incapable of assuming and performing their authorities and responsibilities of office.

4) Reducing or mitigating disruption to operations.

5) Ensuring that the organization has facilities where it can continue to perform essential functions during a continuity event.

6) Protecting essential facilities, equipment, records, and other assets;

7) Achieving a timely and orderly recovery and reconstitution from an emergency.

8) Ensuring and validating continuity readiness through a dynamic and integrated continuity training and exercise program.

The key purpose of COOP planning is to reduce the consequences of a disaster to acceptable levels. Although when and how a disaster will occur is not known, the fact that future disasters will happen is certain. How well (or poorly) a COOP plan is designed and implemented will determine *response, resumption, recovery, and restoration*.

RESPONSE ➡ RESUMPTION ➡ RECOVERY ➡ RESTORATION

A comprehensive COOP plan provides a framework that establishes operating procedures to sustain essential functions when normal procedures are not possible and provides a guide for the restoration of normal operations and building functions.

In accordance with MEMA's guidelines for COOP capability (see Appendix F: COOP Planning Guidance), COOP plans:

- Must be maintained at a high level of readiness;
- Must be capable of execution both with and without warning;
- Must be operational no later than twelve hours after activation;
- Must maintain sustained operations for at least fourteen days; and
- Should take maximum advantage of existing field infrastructures.

COOP Considerations
✓ Alternative modes of operation under conditions of uncertainty
✓ Vital systems and equipment
✓ Hardware/software requirements
✓ Communications requirements
✓ Advance preparations of the alternate facility so COOP can be activated
✓ Primary and alternate facility occupancy and resumption plans
✓ Internal reporting requirements
✓ Agreements with other state agencies
✓ Goal of providing essential functions for fourteen days

Defining organization resources corresponds to Phase I of the COOP Planning Model, explained below.

The first step in devising a COOP plan is defining resources, i.e. personnel and budget, among others. Based on this assessment, the organization can then determine its short and long term COOP planning goals and lay out a process for designing, developing and revising its COOP plan(s).

When devising a COOP plan, an organization must consider the assumptions underlying the plan. These assumptions include what threats will affect an organization's ability to carry out its mission; the expected impact for each potential threat; the probability that each potential threat will occur; whether personnel or resources from other organizations or municipalities not affected will be available; that the organization will implement a plan within twelve hours after the event; and that the plan will provide for the ability to continue operations for at least fourteen days after the emergency.

COOP Assumptions

✓ Emergencies or threatened emergencies can adversely impact the organization's ability to continue to support essential functions and provide support to the operations of clients and external agencies.

✓ Emergencies and threatened emergencies differ in priority and impact.

✓ The vulnerability of the organization depends on the probability of an event occurring and the impact that event could have on operations.

✓ Current organization and outside personnel and resources located beyond the area affected by the emergency or threat will be available as necessary to continue essential functions.

✓ When a COOP event is declared, the organization will implement a predetermined plan using trained and equipped personnel.

✓ The organization will provide operational capability within twelve hours of the event and be able to continue essential operations for fourteen days or until termination of the event, whichever is earlier.

C. Who Is Responsible For COOP Planning?

Responsibility for COOP planning belongs not to a single division, such as the information technology department, but to management itself. COOP planning must involve an entire agency at all levels. A COOP team should include the following:
- Senior Leadership
- COOP POC
- COOP Planning Team
  - Administration
  - Information Technology
  - Finance
  - Human Resources
  - Facilities or Maintenance

The head of each organization has several responsibilities:

1. Appointing a COOP coordinator or point of contact ("POC");

2. Developing a COOP Multi-Year Strategy and Program Management Plan;

3. Developing, approving and maintaining COOP plans for headquarters and all subordinate divisions;

4. Coordinating intra-organization COOP planning efforts and initiatives with policies, plans, and activities related to critical infrastructure protection;

5. Training of staff;

6. Participating in periodic inter-organization COOP exercises to ensure effective coordination and mutual support; and

> **Program Management Plan:**
> Organizations should develop and maintain their COOP capabilities using a multi-year strategy and program management plan. The plan should outline the process the agency will follow to designate essential functions and resources, define short and long-term COOP goals and objectives, forecast budgetary requirements, anticipate and address issues and potential obstacles, and establish planning milestones.

7. Notifying MEMA and other appropriate arms of State government upon execution of COOP plans. (See page ii for MEMA contact information.)

Although the director may delegate these tasks, the head of each organization should regularly monitor and be apprised of COOP team efforts. Moreover, there should be close coordination between management and the team responsible for COOP planning, regardless of its make-up.

MEMA is not responsible for developing individual COOP plans, but MEMA does play an important role as a coordinator of COOP activities across the State and as a provider of guidance to organizations and local governments. MEMA's duties include coordinating Executive Branch COOP activities; providing guidance in the development of COOP plans; chairing a COOP Working Group (CWG), which serves as the principal inter-organization forum for discussion of COOP matters and for dissemination of information; coordinating COOP exercises; and conducting periodic assessments of statewide COOP capabilities and reporting the results to the Governor.

D. How Does an Organization Start COOP Planning?

1. Business Continuity Planning

Business Continuity Planning (BCP) is the standard method by which businesses plan for COOP in an emergency. BCP involves several steps, which include performing a Business Impact Analysis (BIA) and a Risk Assessment (RA) (also referred to as Risk Analysis). It is impossible to properly plan for a disaster if the likely impacts of various disruptions on an organization are unknown.

A BIA is a means of systematically assessing the potential impacts of various events on operations. It allows an organization to understand the degree of loss that could occur from each potential disruption.

> **Business Impact Analysis:** An evaluation of the strengths and weaknesses of an organization's disaster preparedness and the qualitative and quantitative impact an interruption would have on a business's operations.

A BIA has four basic components:

1. Asset Identification;
2. Hazard Identification and Profiling;
3. Vulnerability Assessment; and
4. Impact Analysis.

The first step in conducting a BIA is identifying the assets that are required to perform the organization's core mission. The second step involves identifying the potential hazards or threats to these assets. The third step requires determining the susceptibility of the organization to the effects of each hazard or threat. The fourth and final step requires determining the potential impact of each threat. Assessing the impact of an event includes not only estimating the quantitative or economic losses but also the qualitative impact on the organization's ability to operate, i.e., psychological effects on employees and effect on the reputation of the organization.

Once the assets critical to an organization's operations and the potential threats to these assets have been identified in the BIA, the RA will establish the probability of an event causing disruption to operations. With this information, the RA then outlines a set of

> **Risk Assessment/Analysis:** An evaluation of the probability that certain disruptions will occur and the controls to reduce organizational exposure to such risk.

objectives and strategies for the prevention of, mitigation
of, and recovery from loss.

Although the BIA and RA are two separate inquiries, they are closely related and essential steps in BCP; thus, they are often performed together and the terms are used interchangeably. Often, the RA is performed together with the vulnerability assessment in a BIA.

2. COOP Program Model

Looking to BCP and project management models employed by business, COOP experts have developed a model for the COOP planning process. A COOP program consists of seven phases:

I.   COOP Program Initiation;
II. Identification of Functional Requirements;
III. COOP Plan Design and Development;
IV. COOP Program Implementation;
V.   COOP Training and COOP Plan Testing and Exercises;
VI. COOP Plan Revision and Updating; and
VII. COOP Plan Execution.

a. Phase I: Project Initiation

The project initiation phase consists of the appointment of a COOP coordinator; organization of a COOP team and definition of roles and responsibilities during COOP planning and COOP plan execution; identification of resources for the COOP program; establishment of objectives, milestones, deliverables, and timelines; and determination of procedures for information gathering and decision making.

The first step in the COOP planning process is selecting a COOP coordinator, known as a POC, for the COOP planning process. As mentioned above, the organization head is responsible for the development and maintenance of a COOP plan. Although the head may act as the POC, it is often best for the head to designate another high level official as the POC.

The POC, with the organization head's careful input, assembles a COOP team to complete the plan and execute it when necessary. The size and membership of the team will depend upon the size of the organization, but regardless, team members should be able to work effectively under pressure. It is helpful if team members have had some experience in contingency planning or crisis management, but it is not necessary.

POINT-OF-CONTACT JOB DESCRIPTION

The point-of-contact (POC) is one of the most important people involved in the COOP planning process. The POC is in constant communication with both the Maryland Emergency Management Agency (MEMA) and representatives from the University of Maryland School of Law Center for Health & Homeland Security (CHHS). Here are some things to keep in mind when choosing a POC:

● POC should be someone within the organization who is familiar with each division and knows, generally, what is required from each division.

● POC should be organized as COOP planning requires input from many individuals as well as several drafts of the plan itself.

● POC should be comfortable in a leadership position.

● POC is in charge of creating the COOP Planning team, getting each member to submit information for his or her division, and putting together the COOP plan.

● POC will have the best understanding of the COOP manual and should be available to assist other COOP team members.

An effective COOP team has a good mix of organization professionals and includes members from all levels of management and staff. It also consists of members from various divisions of the organization, including those not directly related to the mission, such as human resources, accounting, and information technology. The team members can then act as COOP coordinators for their respective functions, elements or divisions. By having representatives from all the divisions, the organization can better develop and implement a comprehensive COOP plan and train all employees on its execution.

The COOP team should meet regularly not only throughout the process of developing a COOP plan, but also after a COOP plan is completed to revise and update the plan accordingly.

b. Phase II: Identification of Functional Requirements

After project initiation, COOP planning begins with an assessment of the essential functions — those functions that are essential to achieving the organization's mission. (See Section I of this document.) The ultimate goal of the COOP plan is to provide for the continuance of such essential operations in a coordinated fashion. (See Appendix F: COOP Guidance Memo.) This necessitates understanding what the organization needs to get done, even in an emergency, and what resources, i.e., personnel, records, systems, equipment, etc., are required to continue essential functions.

The functional requirements phase also includes the equivalent of a business impact analysis and risk assessment. After assessing the essential functions of the organization, the COOP team should examine the potential threats to the critical processes and resources that support the essential functions. This exercise is crucial for the preparation of a thorough COOP plan.

c. Phase III: Plan Design and Development

In the COOP plan design and development phase, the COOP team should first decide on whether the plan should consist of one large plan with the four elements outlined above (Essential Functions and Key Personnel; Vital Records, Systems, and Equipment; Alternate Work Sites and Relocation; Communications) or of a series of smaller COOP plans, one for each major division of the organization. Whether the overall COOP plan consists of a single comprehensive plan covering all levels or components of an organization or of the individual COOP plans for each department or division depend on the structure of the organization, the complexity of its mission, and its available resources for planning. For example, an organization with few divisions and a narrow mission may opt for a single comprehensive COOP plan, while an organization with many divisions organized according to the essential functions may construct a plan that links individual COOP plans for each division.

> **Standard Operating Procedures:** Procedures for the conduct of normal operations.
>
> **Emergency Operations Plans:** Plans for the conduct of operations during an emergency.

An organization or division can use existing standard operating procedures (SOPs) and emergency operations plans (EOPs) as building blocks for development of a COOP plan. These plans typically include procedures for use in the event of an emergency, such as building evacuation plans; plans for notifying the public of new office or service center locations and phone numbers; plans for developing site-support procedures, including security for alternate facilities; and methods for acquiring resources necessary to sustain operations for up to fourteen days. Year 2000 (Y2K) plans are also good foundations for developing division COOP plans. Additionally, evacuation plans and Incident Command System (ICS) plans should be incorporated into final COOP plans (see Section VI of the Manual).

It is important to note, however, that SOPs and EOPs are not substitutes for COOP plans at any level. Each organization or division must thoroughly examine its operations in light of COOP concerns and use these procedures and plans only to assist in developing the COOP plan.

> **Maryland Department of Transportation (MDOT):** MDOT's mission is to ensure that Maryland's transportation network meets the needs of our citizens and supports economic development throughout the State. To achieve its mission, MDOT has several essential functions:
>
> 1) Operation of mass transit, i.e. buses and trains;
> 2) Construction, maintenance and improvement of highways;
> 3) Operation of toll roads and bridges;
> 4) Operation and maintenance of ports;
> 5) Regulation of motor vehicles; and
> 6) Regulation of air transportation.
>
> To carry out its essential functions, MDOT is organized into six modals:
>
> 1) Maryland Transit Administration;
> 2) State Highway Administration;
> 3) Maryland Transportation Authority;
> 4) Maryland Port Administration;
> 5) Motor Vehicle Administration, and
> 6) Maryland Aviation Administration.
>
> Because MDOT has numerous operations, completion of a COOP plan for each modal would be appropriate. The overall MDOT COOP plan would identify these essential functions and then incorporate by reference the individual modals' plans.

Organizing the COOP Plan

When an organization reaches the point of placing the collected data into a COOP plan draft, it should consider structuring the plan according to essential function. The plan should list each essential function, and then the key personnel, associated vital records, systems and equipment, the alternate worksite information, and the communications information related to each essential function. This way, if an emergency occurs and only one or a few operations are affected, the information can be quickly and easily accessed because it will be contained in one location within the manual.

Each organization should develop a format for their plan in order to ensure consistency and that all of the pertinent information from the worksheets is incorporated into the plan. The example provided is only an example. It is provided to show one way in which an organization can choose to format their plan; however, this is not the only way to structure a plan. Format your plan so that it fits your needs.

Remember to also include a glossary defining the acronyms the organization references throughout the COOP plan. This is important for people who may be implementing the plan who are not familiar with the acronyms related to each essential function.

> **Example of how to layout a COOP Plan:**
>
> **1.0 Essential Function A**
>   Priority: 1 (fill in corresponding number from worksheet 5)
>   Associated Critical Processes/Services Description:
>   Key Personnel:
>   Successor 1:
>   Successor 2:
>   Successor 3:
>   Successor 4:
>   Delegation of Authorities/Rules and Limitations:
>   Vital Records:
>   Backup:
>   Vital Systems:
>   Backup:
>   Vital Equipment:
>   Primary Facility:
>   Alternate Facility and Corresponding Information:
>   Communications:
>   Backup:

d. Phases IV – VI: COOP Program Implementation; Testing, Training and Exercises; and COOP Plan Revision and Updating

The COOP Program Implementation phase involves the publication of the COOP plan. This phase overlaps with the subsequent phase: Training, Testing and Exercises. (See Section V of this document.) Publication and distribution of the COOP plan(s) alone will not ensure the smooth execution of the plan when a disruption occurs. All staff must be educated on their role in COOP plan execution. Exercises that simulate various disruptions and practice COOP plan execution must be conducted, and backup systems and processes must be tested for effectiveness. Likewise, COOP Plan Revision and Updating overlaps with the previous two phases, because the organization will identify problems and gaps in the COOP plan as a result of the training, testing and exercises.

e. Phase VII: COOP Plan Execution

A final phase of a COOP program is the execution of a COOP plan during an actual disruption. This phase will be considered during plan development, because all COOP plans should contain strategies for resumption and recovery of operations that include procedures for emergency response; plan activation; communication; evacuation; and data preservation, salvage, and restoration.

E. USING THIS MANUAL

This manual provides guidance for the preparation and implementation of a COOP plan. The two main tools are the worksheets accompanying this manual and the sample COOP plan outline. (See Appendices B and C.) Completing the worksheets will assist in assembling the information necessary to develop the critical components of a COOP plan. However, should you have any questions, please call MEMA for assistance.

Because every organization has a different mission, each COOP plan will be unique. Therefore, merely filling in blanks on the worksheets is not a substitute for a plan that allows for the continuance of the organization in the event of a major disruption. The outline provides a bare-bones structure for the plan itself. This, along with the information gathered through use of the worksheets, will assist in completing a cohesive and comprehensive COOP plan specific to that organization's mission and needs.

This manual will help answer the following questions:

❖ What are the essential functions and key personnel?

❖ How can an organization's facilities, vital records, equipment, and other assets be protected?

- ❖ How can disruption to operations be reduced?

- ❖ How can damages and loss of life be minimized?

- ❖ Is it possible through planning to achieve timely and orderly recovery from an emergency, resuming full service to customers?

Tasks

This manual divides the data collection into tasks, and one or more worksheets are associated with each task. The completion of each worksheet leads to the completion of a task, and every task completed is another step toward completing the COOP plan.

Worksheets

The worksheets that correspond to each task provide the necessary directions and guidance for completion of the task. These worksheets should be photocopied as necessary and used to gather data for the COOP plan. They may also be used as templates for the organization's own spreadsheets and other applications. All of the worksheets can also be found in Appendix C.

Outline

The outline is essentially a table of contents for a COOP plan. By using the outline, an organization can develop a complete COOP plan with the basic COOP elements: essential functions and key personnel; vital records, systems, and equipment; alternate facilities; and communications. The outline is included as Appendix B.

Basics and Assumptions Boxes

These boxes provide information to clarify the main point of a section or task. The information given is merely a simplified version of the accompanying manual text.

Definition Boxes

The text boxes throughout the manual contain terms and concepts that warrant further explanation. These and other terms and phrases commonly used in COOP planning are defined in the Glossary found in Appendix A.

Example Boxes

The example boxes illustrate points that may need further clarification.

Appendices

The Appendices include state and federal resources useful in developing a COOP plan.

I. Essential Functions & Key Personnel

Section I: Essential Functions and Key Personnel

After organizing the COOP team and identifying resources for COOP planning, the first step in developing a COOP plan is identifying the organization's essential functions; their associated key personnel; and supporting critical systems/processes that must be sustained for at least fourteen days following a disruption. Essential functions encompass those critical areas of business that must continue even in the event of an emergency. In other words, they are those functions that must be performed to achieve the organization's mission. Emergency Support Functions (ESFs) should be included if you have them. Each essential function, in turn, is supported by critical processes or services that are provided to the public, other divisions within the organization, or other state and federal organizations.

> Section I corresponds to Phase II of the COOP Planning Model.

> **Essential Functions:** Those functions that enable organizations to provide vital services, exercise civil authority, maintain the safety and well being of the citizens, and sustain the industrial and economic base in an emergency.

Identifying essential functions requires an intimate understanding of all the organization's operations. Although many functions are important, not every activity the organization performs is an *essential* function that must be sustained in an emergency for fourteen days. Thus, the key to identifying essential functions is the organization's mission.

A. Procedures and Techniques for Identification

There is no one way to identify essential functions. However, the asset identification step of a BIA offers one approach, which focuses on the organization's functions and their criticality. This can be modified for the governmental context into a four-step approach.

1) Identify all functions;
2) Identify essential functions;
3) Prioritize those functions; and
4) Determine essential function resource requirements.

1. Task A: Identify All Organization Functions

Use Worksheet 1, Organization Functions, to complete this task.

The mission statement clearly outlines the basic purpose of the organization and is the first place to look to determine essential functions. Mission statements are often in the legislation that created the organization. However, other sources, such as regulations promulgated by the organization, may also contain information on functions. Existing SOPs, EOPs and reports on operations usually offer a good starting point for identifying various functions.

Additionally, current and former employees are excellent sources of information on an organization's functions. Keep in mind, however, that an organization's mission may have changed over the years and the functions it was originally designed to perform may now be obsolete.

Once all the functions are identified for COOP planning purposes, narrow the list to only the essential functions. This can be accomplished by referring back to the organization's mission and considering the beneficiaries of the function. For example, if other organizations are dependent on a particular function to continue their operations, then the function is probably an essential function. EOPs may also give clues as to what functions are essential.

2. Task B: Identify Critical Processes and Services

Use Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, in conjunction with Worksheet 1, Organization Functions, to complete this task.

After the essential functions are determined, examine the processes and services that support them. Essential functions and their supporting processes and services are intricately connected. Each essential function has unique characteristics and resource requirements, without which the function could not be sustained. Those processes and services described for each function that are necessary to assure continuance of an essential function are considered critical.

Often, critical processes and services vary depending upon the emergency or if they have a time or calendar component. For example, a blizzard would make snow removal a critical service, while a hurricane would not. Likewise, snow removal is a critical service in the winter, but not in the summer.

> **Maryland Institute for Emergency Medical Services Systems (MIEMSS)**: More than half of the emergency medical activity in Maryland is concentrated in the Baltimore metropolitan area. Accordingly, MIEMSS operates a critical communications center to assist with the heavy demand for emergency medical services. The Emergency Medical Resources Center (EMRC) coordinates medical consultation between medic units and hospital physicians. EMRC facilitates simultaneous communication between the emergency medical technician handling multiple victims and several receiving hospitals, which saves time when minutes can make the difference between life and death. This communication function is considered an essential function for MIEMMS that has little to no allowable downtime.

Worksheet 1

Organization Functions

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Task A. List All Organization Functions.
1. Examine organization legislative and regulatory mission.
2. Review existing SOPs and EOPs.
3. Talk to experts and former employees familiar with the organization.
4. In the first column of the table below, list all organization functions identified, including Essential Support Functions (ESFs).

</td>
<td>

Task B. Identify Essential Functions.
1. Reexamine organization mission.
2. Examine the services the organization provides to other agencies and the public.
3. Identify supporting critical processes and services in column 2.
4. Indicate in column 3 which functions are "essential" after considering their relationship to the organization mission.

</td>
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</table>

The first two rows provide examples of essential and non-essential functions.

All Functions	Description of Function	Essential Function?
Howard County: Procurement/Purchasing	*Emergency Procurement of Goods & Services for all County funded organizations*	*Yes*
Department of General Services; Administration Division	*Terminations, disciplinary actions, promotions, and reclassifications that can wait until after the emergency has passed – 310 actions*	*No*

Worksheet 2

Resource Requirements for Critical Processes and Services Supporting Essential Functions

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Complete a separate worksheet for each essential function. First, using the information from the description column on Worksheet 1, list the Critical Processes and Services for each function. Next, determine the personnel needed to perform that service and list the title of the position in the second column. In the last two columns list all records, equipment, and systems needed to make that essential function operable.

Example 1: Essential Function: *Issuance of birth, death, and marriage certificates and to provide divorce verification.*

Description of Function (Critical Process or Service)	RTO	Priority	Personnel	Records	Equipment and Systems
Serve customers at Division of Vital Records (DVR) Headquarters and process mailed requests	*24 days*	*1*	*DVR Staff*	*Birth, death, and marriage certificates and divorces verifications*	*Network, ADC, personal computers*

Example 2: Essential Function: *Emergency Procurement of Goods & Services*

Description of Function (Critical Process or Service)	RTO	Priority	Personnel	Records	Equipment and Systems
Howard County: Emergency Procurement of Goods & Services for all County funded organizations	*2 days*	*1*	*Procurement Staff*	*Inventory records; vendor agreements/contract; vendor lists*	*Computer; Network; Phone*

3. Task C: Identify Priority of Essential Functions

Use Worksheet 3, Priority of Essential Functions, to complete this task.

Once all essential functions and their supporting critical processes and services have been identified, prioritize the functions according to those activities that are pivotal to resuming operations when a catastrophic event occurs. Prioritization requires determination of the following:

- Time criticality of each essential function; and
- Sequence for recovery of essential functions and their critical processes.

An essential function's time criticality is related to the amount of time that function can be suspended before it adversely affects the organization's core mission. Time criticality can be measured by either recovery time or recovery point objectives. These are terms of art borrowed from Information Technology (IT) disaster recovery planning, but can be used in the broader context of COOP planning. A recovery time objective (RTO) is the period of time within which systems, processes, services, or functions must be recovered after an outage.   A recovery point objective (RPO) is more specific to information systems. It is the amount of data that can be lost measured by a time index. Thus, an RPO of one hour means that the last hour of data before the failure will not be recovered. Not all processes have RPOs, and some processes can have both a RPO and a RTO. During COOP planning, organizations will primarily be focusing on RTO, but it is important to understand RPO and incorporate RPO information into the COOP where necessary.

> **Recovery Time Objective:** The amount of time that is allowable before the system comes back on line.

> **Recovery Point Objective:** The amount of data that can be lost measured by a time index.

Deciding which essential function should be restored first in a crisis would be impossible without also considering its related critical processes and services. Critical processes or services are those that must be resumed soon after a disruption, generally within 24 hours. By contrast, secondary processes or services do not need to be resumed as quickly after a disruption.

Maryland State Police: The mission of the Maryland State Police (MSP) is "to fulfill its role as the State's lead coordinating law enforcement organization" and "to achieve public safety by improving the quality of life for the citizens of Maryland." An essential function of the MSP is to work with local law enforcement authorities in the investigation of crime and apprehension of offenders. A critical system that supports this function is its radio dispatch system. In the event of an emergency, this system would need to be operating within minutes. It would also need to be recovered first, if it were to be disrupted. Given this high time criticality, the MSP's essential function of crime investigation and apprehension would have a high priority in the MSP's COOP plan.

Critical Process or Service: A process or service that must be resumed quickly, e.g., less than 24 hours after a disruption.

To determine time criticality for each essential function, it is necessary to determine RTOs and RPOs, if applicable, for the critical processes or services that support it. On Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, list those processes and services for each essential function that were identified previously. Then list the RTO for each process or service. IT Disaster Recovery Plans (DRP) usually have RTOs for vital systems, and these can be used in estimating the RTO for an associated critical process or service. Also, think about the operational dependence of other processes or services upon those under consideration. If a critical process or service is necessary to keep another operating, then it deserves a short RTO. Once the RTOs have been determined for each critical process or service, list them according to the RTOs, putting those with the smaller figures first. The RTO for an essential function is the smallest RTO on the list for critical processes or services that support that function. Remember to take RPOs into consideration during this process.

After determining the time criticality of each essential function, prioritize them according to those that need to be recovered first. In addition, those functions upon which others depend should also receive a high priority in the sequence of recovery.

Maryland General Assembly: Both the Maryland Senate and the Maryland House of Delegates meet for 90 days each year between the months of January and April to act on bills. Time criticality for the essential functions of the Maryland General Assembly is dependent on whether or not they are in session. If in session, an emergency will have a much more substantial impact on the General Assembly's ability to continue making laws. Take all factors, such as the time of year, into consideration when prioritizing your essential functions.

Worksheet 3
Priority of Essential Functions

Using the information in the previous worksheets, prioritize *essential functions*. In column 1 list all essential functions. Next, assign a priority number in column 2, giving lower numbers to those functions that can be inoperable for longer periods of time. Additionally, more than one function may have comparable priority. Therefore, an organization can assign the same priority number to multiple functions. The goal here is to determine which functions would need to be operating first in case resources are not available to enable all functions to be operating immediately.

Essential Function	Priority
Howard County: Purchasing/Procurement	1
Howard County: Inspections, Licenses, Permits	2

B. Key Personnel and Continuity of Government

Every employee is important to the achievement of the organization's mission. However, like critical processes and services, each essential function has associated key personnel and positions that are necessary to the continuity of operations. They represent strategically vital points in management and authority and underscore the essential functions that must be carried out. If these positions are left unattended, the organization will not be able to meet customer needs or fulfill its essential functions. That is why a comprehensive COOP plan always includes a succession planning and management component in the event these key positions suddenly become vacant. Succession planning and management ensures the continued effective performance by making provisions for the replacement of people in key positions.

> **Continuity of Government:**
> The continued functioning of constitutional government under all circumstances.

Succession planning and management is part of Continuity of Government (COG) planning, which seeks to maintain leadership in the event of an emergency. It consists of two components: delegation of authority and orders of succession.

1. Delegation of Authority

Delegation of authority in COOP planning ensures rapid response to an emergency situation that requires COOP plan activation.

Delegation of authority planning involves the following tasks:

> **Delegation of Authority:**
> Pre-delegated authority for making policy determinations and decisions at headquarters, field levels, and other organizational locations, as appropriate.

- Identify which authorities can and should be delegated;
- Describe the circumstances under which the delegation would be exercised, including when it would become effective and terminate;
- Identify limitations of the delegation;
- Document to whom authority should be delegated; and
- Ensure officials are trained to perform their emergency duties.

a. Task D: Identify Authority to be Delegated

Use Worksheet 4, Authority to be Delegated, to complete this task.

There are two categories of authority that should be addressed in a delegation of authority plan: emergency authority and administrative authority. Emergency authority refers to the ability to make decisions related to an emergency, such as deciding whether to activate a COOP plan, deciding whether to evacuate a building, or determining which personnel should report for their duties. In an emergency requiring COOP plan activation, COOP team members are often the natural choice for assuming emergency authority. However, COOP team members are not the only candidates for such authority.

Administrative authority refers to the ability to make decisions that have effects beyond the duration of the emergency. Unlike emergency authority, administrative authority does not have a built-in expiration date. Such decisions involve policy determinations and include hiring and dismissal of employees and allocation of fiscal and non-monetary resources. Statutory or constitutional law may limit the delegation of this kind of authority, and counsel may need to be consulted when determining this type of delegation of authority.

b. Task E: Establish Rules and Procedures for Delegation of Authority

Use Worksheet 4, Authority to be Delegated, and Worksheet 5, Delegation of Authority: Rules, Procedures and Limitations, to complete this task.

Vacancies in key positions can occur for a variety of reasons, and many times vacancies are the result of non-emergencies, such as illnesses, leave of absences, and temporary assignments. Thus, the delegation of authority component to a COOP plan requires a list of conditions or events that will trigger the delegation of authority for that key position. Activation of any delegation of authority should be tied to the level of threat or category of emergency. (See Section VI, COOP Plan Execution for Level of Emergencies.) The plan should also detail how the designee will assume authority and how staff will be notified of the delegation.

Delegation of Authority Basics

- ✓ Identify which authorities should be delegated.
- ✓ Establish rules and procedures addressing:
  - Conditions for succession
  - Method of notification
- ✓ Identify limitations of delegations.
- ✓ Identify to whom authorities should be delegated.
- ✓ Train potential successors on their duties in an emergency.

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c. Task F: Identify Limitations on Authority to be Delegated

Use Worksheet 5, Delegation of Authority: Rules, Procedures and Limitations, to complete this task.

After identification of the authority to be delegated and establishment of rules and procedures, the next step is to identify limitations on the delegation. These limitations are often restrictions on the duration, extent or scope of the authority. The type of authority to be delegated will have inherent limitations. For example, emergency authority generally only lasts as long as the emergency exists. An individual with emergency authority may only make decisions regarding a single division or geographic area, or the designee may only make decisions necessitated by the emergency.

When delegating emergency authority, an organization ought to consider delegating authority among the key personnel in such a way to ensure that each has equitable shares of the duly established leadership. An organization should also provide training to officials on performance of their emergency duties. When delegating administrative authority, an organization also needs to examine laws and regulations governing the organization. Delegation of administrative authority is generally limited to upper management, but may be extended to middle management and non-management as necessary and allowed by law. Consult counsel for advice on delegation of administrative authority.

Worksheet 4

Authority to be Delegated

In this task, using the sample lines as a model, identify and describe the authority, and list those conditions that will trigger delegation of authority.

Authority (Function)	Type of Authority	Position Holding Authority	Triggering Conditions
Howard County: Purchasing/Procurement- Authorize emergency expenditures	*Emergency Authority*	*Comptroller; Organization Head*	*When the organization head or designated official has declared an official emergency.*
Close the office(s)	*Emergency Authority*	*Office Manager*	*When conditions make coming to or remaining in the office unsafe for staff and customers.*
Suspension of licensing and certification (DHMH - Board of Nursing)	*Administrative Authority*	*Executive Director*	*Nurse or certificate holder deemed a danger to public*

Worksheet 5

Delegation of Authority: Rules, Procedures and Limitations

Complete this worksheet for each authority identified in the first column of Worksheet 4, Authority to be Delegated. Indicate the authority on the line below and then list any rules for the delegation that may exist, outline procedures for the delegation including notification of relevant staff of the transfer of power, and limitations on the duration, extent and scope of the delegation.

Essential Function/Authority: Howard County: Authorize Emergency Expenditures

Rules	Procedures	Limitations
Applicable COMAR citation, County code regulation, or Agency regulation.	*County Official declares emergency and activates delegation plan; successor and then relevant staff are notified of delegation.*	*Successor remains in position until a new appointee is named and approved by the Maryland Senate.*

2.   Order of Succession

The purpose of identifying successors for each key position is to determine which personnel would have the authority to carry out the duties of his or her predecessor in case the predecessor is unavailable to fulfill his or her role. Developing orders of succession for key positions is intertwined with determining delegation of authority in an emergency. In fact, one of the steps in delegation of authority planning outlined previously, "document to whom authorities should be delegated," is essentially development of orders of succession.

> **Order of Succession:** A formula that specifies who will automatically fill a position if it is vacated.

A comprehensive COOP plan will include an order of succession for *each key position.* Although orders of succession for key leadership and management positions within the organization, both at headquarters and in satellite facilities, are necessary for a comprehensive COOP plan, orders of succession are not limited solely to management positions. All organizations have non-management personnel who, because of their function, are critical to the accomplishing the organization's goals.

It is preferable to identify key positions by the position title and not by the name of the person currently in the position, because different individuals may move through a single position, while positions tend to stay the same (however, it is also useful to include the name and contact information underneath each key position title). Consequently, the orders of succession by key positions will need fewer revisions over time. Nevertheless, there may be a few individuals who have very specific knowledge, skills, and/or experience that makes them key players; thus, they may have to be named specifically.

When identifying successors, COOP planners should consider the organizational and geographic proximity of the potential successor to the key position. A potential successor who is part of the same department or division (organizational proximity) is a good choice, because they already have an understanding of the key position. However, make sure that there is at least one successor in the order of succession, who is not located in the same office or facility in case the vacancy is due to a catastrophic event in a particular geographic location.

> **Order of Succession Considerations**
>
> ❖ Geographic Proximity
> ❖ Organizational Proximity
> ❖ Skills
> ❖ Experience
> ❖ Knowledge & Training
> ❖ Personality

While the focus should be upon the skills, experience, knowledge, and training necessary for holding a specific key position, personality, such as a particular individual's ability to work under pressure, may also be considered. An order of succession also requires sufficient depth. In other words, there may very well need to be more than one or two named successors in most circumstances.

To achieve the best results, all key positions should first be identified. The authority to be delegated, identified in the previous two worksheets, should already give some idea of which positions and personnel are key positions and personnel. However, there may be some key positions or personnel that have not been identified by looking solely at delegation of authority.

Each of the following tasks represents a different technique for identifying key positions and personnel. After performing these tasks and gathering data with their associated worksheets, you will link the key positions identified to their essential functions on Worksheet 7, Essential Functions and Key Positions, and then outline an order of succession for each key position in Worksheet 8, Order of Succession.

a. Task G: Prepare a Current Organization Chart

Use Worksheet 6, Current Organization Chart, to complete this task.

The first step in devising an order of succession is assessing the current organizational structure. This necessitates preparing a current organization chart by position and function, i.e., administrator, deputy administrator, consumer affairs division, etc. The chart may include the names of individuals in these positions, but should focus on the position, not the individual in the position at the current time. Under each function, the chart should list the key positions. When assessing the functions and key positions for each function, ask these questions:

1) What does this function uniquely contribute to the organization's mission?
2) Could this function operate effectively if this position were vacant?

The first question should be answered in terms of the inputs and outputs of that function relative to the organization's mission. The answer to the second question yields information on key positions. If the answer to this second question is "no", then ask, *"Why is that position so important?"* Is it because that person possesses specialized knowledge or carries out specialized duties? If so, then it is a key position. When assessing a leadership position for a function, ask, *"Does the staff working on that function lack the ability to perform without a leader?"* If the answer is "no", then ask, *"Why is the function able to operate without a leader?"* If other personnel are critical to this function, then the leader is not in a key position for this function. Tying key positions to essential functions in this manner makes evident any gaps between a function and a person performing part or all of that function.

b. Task H: Essential Functions and Key Positions

Use Worksheet 7, Essential Functions and Key Positions, to complete this task.

There are several methods that an organization should use to identify key positions. One method for determining key positions is to question management and staff. Managers generally have a strong grasp of their areas of responsibility. Ask them questions such as, *"What positions in your areas of responsibility are so important that if they suddenly became vacant, your part of the organization would face major problems in achieving your essential functions?"* Another approach would be to ask staff, *"In an emergency, would it be necessary for you to be present at the facility to perform your job?"* As with all delegations of authority questions, focus on position titles, as opposed to the names of persons in these positions.

A second method is to identify key positions by historical evidence. When the organization is missing a person who is in a key position, it is obvious and possibly devastating to performing essential functions. Decisions cannot be made, needs cannot be satisfied, orders cannot be shipped, etc. If there is an absence in a key position, essential functions are not being fully met. By examining organization in this manner, key positions are recognized by the consequences of a vacancy or anticipated vacancy.

Third, an organization that has experienced a crisis in the past that resulted in an unexpected departure by key position incumbents can use evidence of this past event as an indication of where key positions are located. Contact those supervisors who were present during the vacancy to find out which departures posted the greatest problem and why they posed such a problem.

Once key positions have been identified, an organization needs to maintain information about these positions. For example,

1. Who occupies those key positions now? What are their qualifications/backgrounds?
2. What are the work requirements for key positions?
3. Where are the key positions located in the organization?

c. Task I: Determine Orders of Succession for Each Key Position

Use Worksheets 7, Essential Functions and Key Positions, and 8, Order of Succession, to complete this task.

After determining the authority that should be delegated; studying the organization chart; examining the consequences resulting from a current or past vacancy; questioning current and former employees; and examining historical evidence; identify key positions for each essential function in Worksheet 7, Essential Functions and Key Positions.

Once key positions and personnel have been identified by essential function, determine the positions in Worksheet 8, Order of Succession, which would assume the authority of the key position if it became vacant unexpectedly. Consider the qualifications necessary to perform in the key position and the qualifications of the successor positions, as well as organizational and geographical proximity. The same successors may be named for different key positions, but avoid designating the same successor as the first successor to several key positions.

The Baltimore City Health Department (BCHD): BCHD's mission is to provide all Baltimoreans access to comprehensive, preventive quality health services and care, as well as to ensure a healthy environment. BCHD is comprised of many different divisions and involves a large number of employees. Although some divisions may need the majority of their employees to remain active during an emergency situation, other divisions may only need a few employees to carry out their tasks.

For example, Vaccine-Preventable Disease (VPD) is one division within BCHD. During an emergency involving an outbreak, VPD has identified two tasks that would need to be continued. The tasks are: (1) Vaccination; and (2) VPD Outbreak Investigation. For the Vaccination services to continue, the following employees would need to carry out the tasks: Bureau Head, Administrator; Nurse Manager; and Nurses/Educators. These employees are the key personnel needed for the emergency. All other employees would not need to be activated in this instance. For a VPD Outbreak Investigation to occur, BCHD would need to activate the following employees: Bureau Head; Administrator; Epidemiologist; Data Manager; and Data Entry/Educators. These are also key personnel.

These are not the only tasks that VPD handles, but are the only ones that need attention during an emergency involving an outbreak. Handling these vaccine issues take several nurses, data entry employees, and educators, and therefore, this department may use more employees during an emergency than other departments depending on the emergency.

Worksheet 6

Current Organizational Chart

Using the example organization chart below, complete an organizational chart for your organization. In the chart, remember to provide the title of the organization or division. Also, be sure to include the title, function, and name of the individual for each position.

```
                 Secretary Maryland Department of Health and Mental
                                    Hygiene
                                     Name
        ┌───────────────────────────┼───────────────────────────┐
 Deputy Secretary of Operations   Deputy Secretary for Health    Deputy Secretary for Public
            Name                    Care Financing                Health Services
          Function                      Name                          Name
                                      Function                      Function
        │                           │                           │
   Director of Community       Director Office of Health    Director of Community Health
        Relations                   Services                       Name
          Name                        Name                       Function
        Function                    Function

                            Director of Medical Care Operations & Eligibility
                                         Name
                                       Function

                            Director of Maryland Health Care Commission
                                         Name
                                       Function
```

Worksheet 7

Essential Functions and Key Positions

With the information gathered in the previous six worksheets, identify key positions for each essential function in the agency. The first row provides an example.

Essential Function	Key Position
Women, Infants, and Children Nutrition Program	*1. Director* *2. Database Manager* *3. Regional Coordinators* *4. WIC Center Managers*

Worksheet 8

Order of Succession

Complete a worksheet for each essential function. In the first column below, list the key positions identified in Worksheet 7, Essential Functions and Key Positions. Then in the remaining columns, list the positions that would assume the authority of the key position if it became vacant unexpectedly, i.e., illness, injury, special assignment, termination of employment, etc. Consider the qualifications necessary to perform in the key position and the qualifications of the successor positions, as well as organizational and geographical proximity. The same successors may be named for different key positions, but avoid designating the same position/person as the f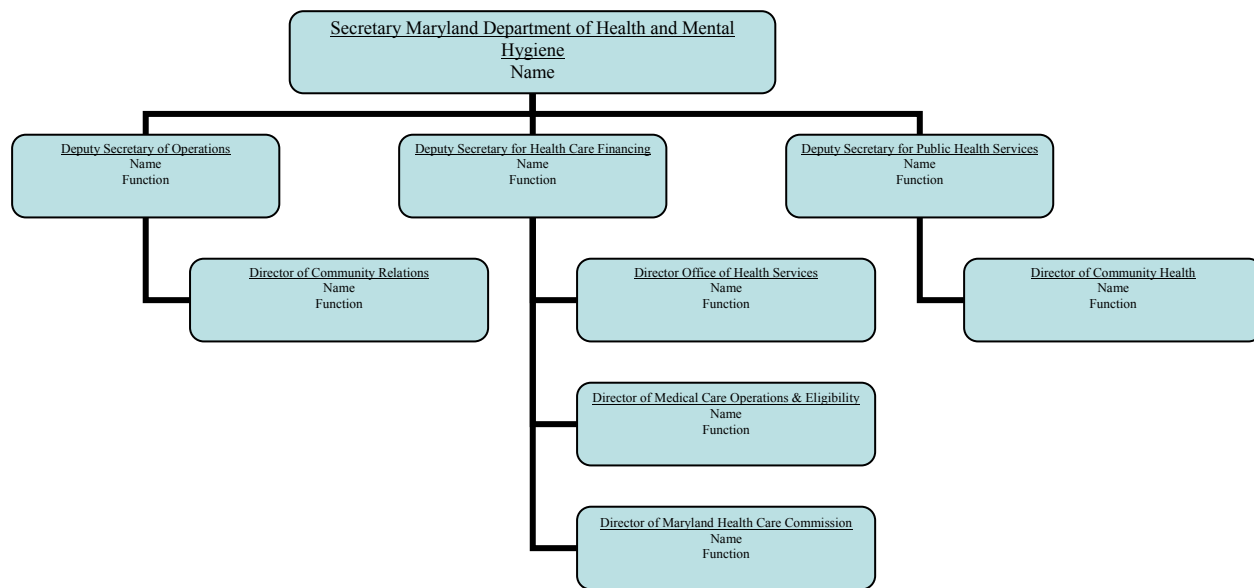irst successor to several key positions. Be sure to include both the title of the position and the individual who fills the position in each box.

Essential Function: Example - *In an emergency situation, procure temporary or permanent relocation space for state organizations which provide critical services and are located in leased or owned facilities. (DGS)*

Key Position	Successor 1	Successor 2	Successor 3	Successor 4
Assistant S mailto:ozeevi@mema.state.md.us ecretary	Joe Patterson, Chief – Lease Management & Procurement	George Fisher, Chief – Valuation & Appraisal	Abe Conners, Chief – Land Acquisition & Disposal	Jane Doe, Senior Acquisition Agent – Lease Management & Procurement
John Adams, Chief – Lease Management & Procurement	Jane Doe, Senior Acquisition Agent – Lease Management & Procurement	Emma Smith, Construction Manager – Lease Management & Procurement	Tom Smith, Acquisition Agent – Lease Management & Procurement	Gene Miller, Acquisition Agent – Lease Management & Procurement
Jane Doe, Senior Acquisition Agent – Lease Management & Procurement	Tom Smith, Acquisition Agent – Lease Management & Procurement	Emma Smith, Construction Manager – Lease Management & Procurement	Gene Miller, Acquisition Agent – Lease Management & Procurement	Cindy Stone, Acquisition Organization – Lease Management & Procurement
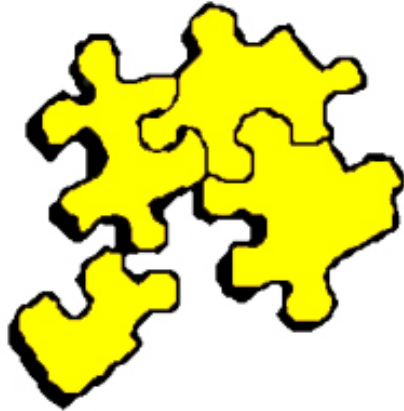
II. Vital Records, Systems, & Equipment

Section II: Vital Records, Systems, and Equipment

A successful COOP plan provides for the protection, accessibility, and recovery of the organization's vital records, systems, and equipment. These are the records, systems, and equipment that if irretrievable, lost, or damaged will materially impair the organization's ability to conduct business and carry out essential functions.

Every organization should have a maintenance program in place for the preservation and quality assurance of data and systems. Such a program should take into account the cost of protecting or reconstructing records weighed against the necessity of the information to achieving the organization's mission. COOP planning takes advantage of the maintenance programs already in place and may improve upon them to achieve optimal readiness for disruptions to essential functions.

A. Vital Records

In COOP planning, vital records are those records to which personnel must have access to in order to carry out essential functions. This should not be confused with the general meaning of the term "vital records" – birth, marriage, and death records. The term has a broader definition in the COOP context. They are typically in one of three forms: paper, electronic, or microfilm.

> **Vital Records:** Records or records, regardless of media, which, if damaged or destroyed, would disrupt organization operations and information flow, cause considerable inconvenience and require replacement or re-creation at considerable expense.

A COOP plan should address not only a system for protection and recovery of vital records in an emergency, but also a vital records program for normal operations. Every organization should have a vital records program. COOP planning for vital records includes assessment of any vital records programs in place and the improvement or development of a program to provide for the optimal protection, duplication, and preservation of records. This maintenance program, as well as procedures for the recovery and restoration of records, forms the basis of a vital records program.

There are five major tasks in COOP planning for vital records:

> **Assessment Sub-plan**: A plan that examines the current vital records program, if any, and identifies the strengths and weaknesses of the program in terms of record preservation and recovery.

1) Write an assessment sub-plan.

- If a vital records program is in place, the plan should lay out the steps for reviewing the current status of the program.
- If there is no program in place, the plan should outline how the program will be developed and administered.

2) Develop forms for gathering information.

- Create a questionnaire to assist offices in identifying vital records.
- Use Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, or create a form listing essential functions and all records supporting those functions.

> **Disaster Recovery**: The methodical restoration and reconstitution of operations after a disruptive event that destroys or damages an organization's facilities, equipment, systems, data, records, and other assets.

Tip: Disaster recovery companies may have forms that can be adapted for this purpose. Consider consulting them before designing forms on your own. The Maryland State Archives (MSA) can provide lists of disaster recovery companies.

3) Identify vital records.

- Vital records may include part or all of a series or group of records.
- These records usually include personnel records and system documentation.

4) Review protection needs for each vital record and compare with current program.

5) Develop a restoration and recovery sub-plan.

Vital Records Program Basics

✓ Assign responsibility for program implementation and execution.

✓ Ensure vital records are evaluated on the basis of their necessity in carrying out essential functions.

✓ Ensure that emergency operating records vital to the continuity of essential functions during an emergency will be available at alternate work sites in the event that these sites are activated.

✓ Safeguard legal and financial records essential to the preservation of legal rights and interests of individual citizens and the government.

✓ Ensure vital records are easily retrievable and maintainable.

✓ Ensure that current inventory of vital records is readily accessible.

✓ Outline procedures for, and prioritize the recovery of, vital records during an emergency.

✓ Ensure damage to vital records during an emergency is minimized.

✓ Provide procedures for recovery of damaged records.

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1. **Task J: Identify Vital Records**

Use Worksheet 9, Vital Records, to complete this task.

The key to identification of vital records is looking to the essential functions and their supporting critical processes and services. In Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, you have already identified the records needed to perform essential functions. With that worksheet, determine those records that are necessary for emergency operations and/or the recovery or the continuation of the essential functions for at

least fourteen days and list them in Worksheet 9, Vital Records. Also indicate whether these records are time-critical, that is they are needed within 72 hours of the disruption.

Identifying vital records is somewhat like identifying essential functions.

Maryland State Archives (MSA): The MSA is the very model of records management. The MSA is responsible for the "management of public records and for the collection, custody, and preservation of the official records, documents, and publications of the State." This includes maintenance of databases for other State agencies. Thus, many MSA records would qualify as vital records in the COOP sense.

The organization may perform many functions, but not all are essential. The same can be said about records, all may be important, but not all are vital. For this task remember the following maxims:

- Only a small percentage of the records are vital, that is, essential to emergency operations and to the organization's continuance, or that are difficult or impossible to replace.

- Although records designated as permanent are often vital, the length of time a record is retained does not necessarily mean the record is vital, nor does a record once designated as such remain so forever.

- Vital records may be in any format or medium. Original records are not necessary. It is the information, not the medium that is most important.

- If the information is contained in a medium other than paper, consideration must be given to the technology required to access the information and the availability of that technology in the event of an emergency. For example, if the record is on microfilm only, the COOP plan should include provision of film readers in an emergency.

Maryland Family Health Administration (MFHA): An example that reflects the situation of most agencies is the MFHA under the Department of Health and Mental Hygiene. The MFHA administers the Women, Infants and Children Program, a federally funded program that provides healthy supplemental foods and nutrition counseling for pregnant women, new mothers, infants and children under age five. The records of beneficiaries, such as eligibility and benefits received, would be vital to continued operation of the supplemental food program during a disruption. However, the nutritional counseling may not be a critical service during an emergency, and thus, their associated records may not be vital.

2. Task K: Identify, Select and Arrange for Protection Methods

Use Worksheet 10, Vital Records Protection Methods, to complete this task.

The next step after identification of vital records is determination and selection of protection methods. This necessitates first looking at the current methods of protection and preservation. The routine maintenance program for the records in question may be sufficient for the protection of information in the event of a disruption to critical processes and services. However, the effectiveness of the protection method should always be evaluated in light of COOP concerns.

The COOP team should look at the current backup and retention schedules for each vital record and ask if the files should be backed up more often or retained for greater periods. Another measure to consider is the replication of an organization's server in an alternate facility or scanning paper records. The team should also consider storing duplicate files off-site, if they are not currently so stored, or upgrading the current storage facilities to provide greater protection from fire, water, thermal damage, theft, or sabotage. Another form of protection is limiting access to records through various security systems and procedures.

Providing an off-site storage facility where duplicated vital records and documentation may be stored for use during disaster recovery is an important tool. Records that need to be duplicated and stored off-site should be identified along with the type of duplication. Further, those records that need to be stored in fire resistant equipment *on-site* along with those records requiring special consideration need to be identified. Facilities immediately able to accommodate electronic records, including programs for running the systems and system documentation must also be identified, as well as sites that could be readied to accommodate these functions if an emergency arose. (See Section III: Alternate Work Sites and Relocation Planning.)

Regular back up and transfer of files to an alternate location is a very effective form of protection for vital records. It eliminates the need for extensive recovery; however, it becomes more expensive the more often it is performed. Maryland State Archives (MSA) has the statutory responsibility for government records management and is a repository of permanent electronic and paper records for State organizations. Consider consulting MSA for assistance in assessing your records management program. The Records Management Division of the Department of General Services also offers off-site storage of disposable records. (See the information box for contact information for these two resources.)

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**Records Management Division
Department of General Services**

(410) 799-1930

3. Task L: Identify Restoration and Recovery Resources

For this task, use Worksheet 11, Restoration and Recovery Resources.

It is said that prevention is the best cure; however, there may be situations where the protection methods employed fail. In such a circumstance, an organization must turn to its vital records recovery sub-plan. Because vital records are often part of vital systems and equipment, a single disaster recovery plan often addresses both records and systems/equipment. The information technology (IT) department should have a disaster recovery plan in place for IT systems and equipment. Accordingly, COOP teams should consult with their respective IT staff for assistance in COOP planning for recovery of vital electronic records. However, the inquiry does not stop at the IT department door. COOP teams should also identify restoration and recovery resources for non-electronic records.

MSA has a Conservation Department that specializes in the assessment and mitigation of damaged paper records and can advise other organizations on restoration and recovery planning.

MSA also maintains a list of recovery companies that organizations can contact for assistance. It is a good idea to contact potential contractors and assess their capabilities before an emergency resulting in loss of or damage to vital records. In that way, organizations will not waste time during an emergency figuring out who to call and vital records can be restored more quickly when the need arises.

Worksheet 9

Vital Records

Using the information gathered in Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, list those records that are necessary for the continued operation of critical processes or services for fourteen days. Records can be in electronic or paper form. Do not include records that may be useful but are not essential to performing the service. Also indicate whether these records are time-critical – needed within 72 hours of an emergency.

Essential Function: _____

Critical Service or Process	Vital Record	Description	Form of Record	Type of Record	Time Critical?
Toll Bridge and Tunnel Operations	Emergency Operation Plan	Plans that outline procedures for the division during an emergency.	Paper and Electronic	Emergency	Yes
Paying employees	Payroll	Information on salaries and earnings of employees	Electronic	Financial	No

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Worksheet 10

Vital Records Protection Methods

For each vital record identified in Worksheet 9, Vital Records, list where the records are kept; how often they are backed up or revised; and any particular methods of protection, including security measures. Those vital records that have no protection other than backup or duplicate copies may be candidates for additional protection measures. In those cases, consider and recommend additional protection methods in the last column.

Vital Record	Storage Location	Maintenance Frequency	Current Protection Method(s)	Recommendations for Additional Protection Method(s) (if necessary)
Emergency Operation Plan	Microfilm copies at headquarters; hard copies in offices of management personnel.	Review and revise annually	Kept in locked file cabinets in managers' offices	Save in electronic format
Payroll Records	Off-site storage facility in Annapolis area	Backed up weekly on Mondays	Second database maintained in separate system at a secure site.	

Worksheet 11

Restoration and Recovery Resources

List all record recovery and restoration resources, contact information and services available below. Include evening, holiday, and emergency/alternate contact information, as well as contact information for regular business hours.

Company Name	Contact Name	Address / Phone/Hours	Services
Maryland State Archives	*Conservation Dept.* *Contact: Jane Doe*	*350 Rowe Boulevard* *Annapolis, MD 21401* *(800) 235-4045* *(410) 260-6400* *Mondays-Fridays: 8AM – 5PM* *Closed on weekends and holidays*	*Consulting; limited damage assessment and restoration of paper records.*

B. Vital Systems and Equipment

A system or piece of equipment is critical if it is essential to emergency operations and/or to the continuance of critical processes and services during a crisis for a minimum of fourteen days. COOP planning for critical systems and equipment should proceed in the same way as planning for vital records. The first step is to identify critical systems and equipment and the second step is to select and arrange protection methods for them.

Many of the critical processes supporting essential functions include or consist entirely of IT systems and applications. For this reason, the IT component of any organization plays a vital role in COOP planning. However, the IT component is not ultimately responsible for developing COOP plans. COOP planning is the responsibility of the organization head and the designated POC and COOP team, not of the IT department. Many IT departments already have recovery plans in place, such as disaster recovery plans (DRPs) or EOPs, which can be incorporated into an organization's COOP plan. However, these plans are not the same as, and cannot be substitutes for, COOP plans because they are usually only limited to the IT systems' recovery in the event of an emergency.

> **Information Technology (IT):** Systems and applications, generally computer-based, which assist in the collection, storage, analysis, and communication or transfer of data and information to other systems and/or individuals.

As discussed above, many systems and equipment are computer based and are handled by the IT department. However, there are other procedures or equipment that may not be electronic, i.e., transportation and phone systems, and a COOP team should not rely solely on the IT staff to provide for backup, protection, and recovery of all vital systems and equipment.

For vital systems to remain operational in the event of an emergency, an organization should aim to generate a COOP plan sufficiently detailed so that even a non-technical employee could recover the basic systems in an emergency. This entails establishing clear priorities for the resumption of each essential function and its supporting vital systems and equipment (see Section I, A. 3. Task C. Priority of Essential Functions).

1. **Task M: Identify Vital Systems and Equipment**

Use Worksheet 12, Vital Systems and Equipment and Priority, to complete this task.

As with vital records, identify those systems and equipment that are essential to the functioning of the organization and the continuance of the organization's mission. Bear in mind that not every system or piece of equipment is vital, even if it is important. The timing of a system's or piece of equipment's use may also bear on whether it is vital or not. For example, MDOT's snow plows are vital during and immediately after a blizzard, but are not vital during the summer.

> **Maryland Office of the Comptroller (MOC):** The MOC provides IT services critical to the daily operation of most state agencies. Acting as Maryland's chief accountant, the comptroller pays the state's bills, maintains its books, prepares financial reports, and pays state employees. The MOC's financial systems are vital to not only the achievement of MOC's mission, but also to the continued operation of every organization in the State of Maryland.

After identification of critical systems and equipment, prioritize how systems and equipment should be recovered in the event of a disruption. When prioritizing, consider the critical processes and services that these systems support. Also, review the IT disaster recovery plan or any EOPs in place, which generally include such information.

> **Maryland Institute for Emergency Medical Services Systems (MIEMSS):** MIEMSS is the lead organization responsible for coordinating Maryland's statewide emergency medical services (EMS) system. A vital system is its dispatch system that coordinates provision of emergency medical transport services. Vital equipment includes emergency vehicles such as ambulances and helicopters.

It is also important to consider if a system or piece of equipment is dependant upon another particular system or piece of equipment to be operable. For example, computer systems are dependant upon an electrical supply to be operable. Therefore, resumption of power would have to occur before the computer system could be up and running. As with critical processes and services, there might also be a calendar component, such as a disruption to the electronic tax return filing system would be a greater problem in April than in August.

> **St. Mary's County Circuit Court** uses a vital system called UCS. This is a State case-history system and it contains complete docket entries for cases heard in the Circuit Court. The record is complete back to 1997. Backup and recovery is covered for this system if an event were to occur in St. Mary's County because the UCS servers are located off-site. In the event of an emergency, the court will still be able to access case history and carry on essential functions as necessary.

2. Task N: Select and Arrange Protection Methods for Critical Systems and Equipment

Use Worksheet 13, Vital Systems and Equipment Protection Methods, to complete this task.

Review the list of vital systems and equipment and assess the best method of protection. The assessment will depend on the nature of the system or equipment, but a protection plan for systems and equipment should include maintenance programs that regularly test these systems and equipment and the associated protective measures for optimal performance. For instance, backup power generators should be checked regularly.

Worksheet 12
Vital Systems and Equipment and Priority

Using the information gathered in Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, list those systems and equipment that are absolutely necessary for the continued operation of critical processes or services for fourteen days (i.e., computer, software, etc.). Do not include systems or equipment that may be useful but are not essential to performing the service.

Critical Process or Service	Critical System or Equipment	Networks or Servers that Must be Operational in Order to Support the Critical System or Equipment	Priority	Description	Type of System
Instantaneous registration verification system for law enforcement.	MVA Vehicle Registration and License Database	Internet and Program Database	1	Contains information on all automobiles registered in the State of Maryland	Computer system linked to a national database.

Worksheet 13
Vital Systems and Equipment Protection Methods

For each vital system or equipment identified in Worksheet 12, Vital Systems and Equipment, list the location(s) of the system/equipment, maintenance frequency, and any particular methods of protection. If there are no protection methods in place or those in place do not seem sufficient, suggest additional methods in the last column.

Critical System or Equipment	Location	Maintenance Frequency	Current Protection Method(s)	Recommendations for Additional Protection Method(s) (if necessary)
FMIS	Annapolis Data System (Annapolis)	Daily	A separate database is maintained in a separate system at a secure site	None

III.   Alternate Work Sites & Relocation Planning

Section III: Alternate Work Sites and Relocation Planning

Another important element of a COOP plan is the designation of alternate work sites and a relocation sub-plan. In some emergency scenarios, activation and execution of a COOP plan may not necessitate relocation to an alternate facility, i.e., the organization will not be forced to abandon the primary work site. However, should leaving the primary work site be necessary, there is a three-step process to relocation: (1) Activation and Relocation; (2) Alternate Facility Operations; and (3) Reconstitution.

The first step occurs in the first twelve hours after a disruption to operations requiring abandonment of the primary facility. This step relies heavily upon communication, not only between the POC/COOP team and affected personnel, but also between the organization and vendors, who will be providing services for the move to temporary quarters, and the public. The second step involves the conduct of operations at an alternate work site and lasts until the director declares an end to the emergency. Generally, operations in the alternate facility should be limited to only the essential functions. All alternate facilities must have the capability to sustain essential functions for fourteen days. The third step involves the return to the regular organization quarters and resumption of normal operations.

Step	Time Frame	Activity
Step I- Activation and Relocation	0-12 Hours	• Notify alternate facility manager of impending activation and relocation requirements. • Notify MEMA. • Activate plans to transfer to alternate facility. • Notify key personnel to relocate. • Instruct all personnel on duties. • Assemble records/equipment required for essential functions at alternate facility. • Order needed equipment/supplies. • Transport records and designated communications. • Secure original facility. • Continue essential functions at regular facility, if available, until alternate facility is ready. • Advise alternate facility on status.
Step II- Alternate Facility/Work Site Operations	12 Hours to Termination of Emergency	• Provide guidance to non-essential employees and information to the public. • Identify replacements for missing personnel (delegation of authority and orders of succession). • Commence full execution of operations supporting essential functions at the alternate facility.
Step III- Reconstitution	Termination and Return to Normal Operations	• Inform all personnel that the threat no longer exists. • Supervise return to normal operating facility. • Conduct a review of COOP plan execution and effectiveness.

A. Alternate Work Sites

In the event that an emergency forces a work area, such as a mailroom, or an entire building to be evacuated, key personnel should relocate to an alternate work site, which allows the organization to carry out its essential functions and meet the needs of emergency personnel.

> **Alternate Work Site:** A location where the organization can carry out essential functions when the critical facilities are inaccessible.

Because the need to relocate may occur without warning, organizations should make every effort to pre-position, maintain, or provide for minimum essential equipment for continued operations of essential functions at the alternate operating facilities for a minimum of fourteen days.

There are several types of alternate work sites and all have different capacity levels. The type of work sites chosen may depend on needs, budgetary concerns, or the level of the emergency (see Section V, COOP Training, Testing, and Exercises; COOP Plan Execution and Certification, below). An organization should not limit itself to one alternate work site. Several can be chosen. For instance, an organization can have one type of alternate site available for lower level and short term emergency operations and a larger and more equipped site set up for use in higher level emergencies.

Hot Site	A hot site is an alternate facility that already has in place the computer, telecommunications, and environmental infrastructure necessary to recover the organization's essential functions.
Warm Site	A warm site is an alternate work site equipped with some hardware and communications interfaces, as well as electrical and environmental conditioning that are capable of providing backup after additional software or customization is performed and/or additional equipment is temporarily obtained.
Cold Site	A cold site is an alternate facility that has in place the environmental infrastructure necessary to recover essential functions or information systems, but does not have preinstalled computer hardware, telecommunications equipment, etc. Arrangements for computer and telecommunications support must be made at the time of the move to the cold site.

An organization can opt to set up an independent facility for emergency use only. In selecting an alternate work site, the criteria for selection should include the following factors:

- Size of potential alternate facility and space requirements for essential functions;
- Design of the potential alternate facility and its adaptability for operations;
- Security requirements;

- Communication requirements for essential functions;
- Location of potential alternate facility relative to the primary facility;
- Ability to obtain outside services at the potential alternate work site;
- Availability of mass transit to the alternate facility;
- Contractual obligations presently in place;
- Budget constraints; and
- Level of emergency.

Another option for an alternate work site is a pre-existing facility already in use by the organization. A tornado may destroy one of the spaces, but leave another building or work area untouched. Those organizations with multiple facilities may find it easier to move into buildings or work areas not damaged. In determining alternate facility locations, consider the geographic impact of the disruption and use the following guidelines:

- <u>Localized Event</u>:   0-60 mile radius from current location
- <u>Widespread Event</u>: 60-150 mile radius from current location

Often, due to fiscal constraint, operating and maintaining a separate alternate work site is not within the means of an organization. If this is the case, consider entering into cooperative or mutual aid agreements, and using virtual office technologies. With a cooperative agreement, an organization can contract for use of another organization's facility in an emergency. The arrangement can also be less formal as in a mutual aid agreement. A mutual aid agreement involves two organizations agreeing to help each other in the event of an emergency. Several organizations may also opt to contract together with an outside vendor for use of an emergency facility. A word of caution: in making these agreements, be sure to assess whether the potential cooperative/mutual aid partner has similar agreements with other organizations in place and if these might conflict with the agreement at hand. A large-scale disaster could affect many organizations that have contracted with each other or for use of the same space in an emergency.

> **Cooperative Agreement:** Any formal, legally-binding contract between two or more parties where the parties agree to share an alternate facility.
>
> **Mutual Aid Agreement**: As between two or more entities, public and/or private, the pre-arranged rendering of services in terms of human and material resources when essential resources of one party are not adequate to meet the needs of a disaster or other emergency.

1. **Task O: Identify Requirements for Alternate Work Sites**

Use Worksheet 14, Requirements for Alternate Work Sites, to complete this task.

Begin by identifying the work site needs by essential function. In the event that the organization has to move to an alternate facility, there are additional needs of staff operating at the facility that must be met. This includes provision for logistical support and lodging through arrangement with vendors for transportation, hotels, catering, etc. Be sure to address the needs of employees with disabilities as required by the federal Americans with Disabilities Act.

In addition to the physical needs of personnel, the COOP plan should also address their emotional needs. Regardless of their origin, disasters affect the motivation and morale of employees, which affects their productivity. Furthermore, employees will experience greater stress levels, even if the COOP plan is implemented flawlessly. A COOP plan may include provisions for counseling and plan for readjustments of work assignments for those who are incapacitated by the emotional impact of a disaster such as a terrorist attack (*e.g.*, death of a family member). These concerns should be tailored to the type and duration of the disruption.

2. Task P: Identify Various Options for Alternate Work Sites

Use Worksheet 15, Alternate Work Site Options, to complete this task.

Current facilities owned or used by the organization should be considered first as options for alternate work sites. These are good candidates for hot, warm, or at least cold sites. If an organization does not have suitable additional facilities or none of those are deemed appropriate as potential sites, the COOP team should consider entering into a mutual aid agreement with another organization to use their facilities or an agreement to share an alternate work site. Mutual aid agreements can be made for hot, warm or cold sites.

When identifying possible alternate facilities, bear in mind that an alternate facility, at a minimum, should be capable of accommodating the following features:

1) Immediate capability to perform essential functions under various threat conditions;

2) Sufficient space and equipment to sustain the relocating organization;

3) Ability to communicate with all identified essential internal and external organizations, customers, and the public (see Section IV, Communications);

4) Reliable logistical support, services, and infrastructure systems, including water, electrical power, heating and air conditioning, etc.;

5) Ability to sustain essential functions for fourteen days;

6) Appropriate physical security and access controls; and

7) Consideration for the health, safety, and emotional well-being of relocated employees and customers, i.e., number of wash rooms, parking, accessibility for the disabled, etc.

Assess whether the potential alternate work site may be susceptible to some risk, such as flooding. If the potential alternate site is located in a flood zone or faces some elevated risk of physical damage, it may not be an ideal alternate work site.

Remember, the security and access to both the primary and the alternate facilities during emergency and non-emergency situations need to be arranged. The security procedures should be able to accommodate all hazards and include provisions for identifying access restrictions.

B. Relocation Planning

Identification of alternate work sites is of little use if there is no plan for relocating personnel and resources suddenly because of an emergency. Relocation planning focuses on several issues:

- Communications between management, personnel, emergency personnel, other organizations, customers, and the general public (see Section IV, Communications, below);
- Logistics; and

C. Other Considerations

When determining your alternate facility locations and transportation needs, make sure to take into account any employees who may have special needs and would need additional help or services at an alternate facility or with transportation to an alternate facility.

Worksheet 14

Requirements for Alternate Work Sites

For this task, identify the requirements for the alternate work site by essential function. Requirements include personnel, special needs, power, communication, and space. The example given in line one of the table is a general guide for the type of information that should be provided.

Essential Function	Number of Personnel	Power	Communication	Space Requirements	Food	Transportation	Lodging
Administration	*4 employees*	*Standard*	*4 telephones, long distance, one satellite dish*	*400 sq. feet*	*Food Service for 4*	*From primary to alternate work site or from personnel home/center location to work site.*	*4 single beds*

Worksheet 15

Alternate Work Site Options

This task serves several purposes. Not only will it help identify a variety of alternate work sites, the worksheet may also be used to track memoranda of understanding (MOU), leases, occupancy and cooperative agreements, and contracts with other entities for facility use. *It is important to identify multiple alternate sites, including sites located in counties where an organization does not carry on its daily operations. This way, if an organization's building is inaccessible, the organization will be able to relocate to another area without problems.*

Facility	Address	Agreement	Date Executed	Annual Cost	Security	Secure Storage Available?	Special Notes
Calvert Street	*100 S. Calvert St Baltimore, MD 21201*	*MOU with Finance Office for 400 sq. feet*	*8/20/03*	*40*	*Normal*	*Yes*	*Desks will be provided*

Section IV: Communications

Communications planning, the final part of phase
three of the COOP planning model, is central to
the COOP plan. Without effective and reliable
methods for communication in an emergency, all
the planning would be meaningless and the
situation would quickly erode to chaos. The
communications component of a COOP plan
requires well-defined chains of communication
with alternative means of communicating should
the primary telecommunications systems, i.e.,
telephones, faxes, internet, not be functioning.

Section IV corresponds
to Phase III of the COOP
Planning Model.

Communications Planning Goals

✓ Capability commensurate with
organization's essential functions
and activities.

✓ Ability to communicate with the
COOP team, management and other
organization components.

✓ Ability to communicate with
agencies, to which services are
provided, as well as emergency
personnel.

Organizations should strive to maintain
communications capabilities commensurate with
essential functions at all times. The COOP plan
should facilitate communication between the
POC/COOP team, management and staff and
should provide for communication with other
organizations, as well as emergency personnel. The
plan should also provide a means for notifying
customers of organization relocation and procedures
for contacting the organization and conduction
business in an emergency.

The first step in communications planning is to assess those communications systems supporting
each essential function. The second step is to identify controls that could prevent interruption of
primary communication channels and alternative modes of communication in case the primary
modes of communication are not available. The final step is to create a chain of communication
for emergency situations.

A. Communication Systems Supporting Essential Functions

Task Q: Identify Communication Systems Supporting Essential Functions

*Use Worksheet 16, Communication Systems Supporting Essential Functions, to complete this
task.*

As with previous tasks, the key to identifying communications systems is reviewing the critical
processes and services that support the essential functions.

In most organizations today, business is conducted primarily through telecommunications, i.e., telephone or email. These telecommunications systems generally support the entire organization and are not specific to a particular function. Nevertheless, some functions have communication methods that are peculiar to that function. For example, the Maryland Department of Natural Resources police have a radio communication system.

> **Telecommunications:** Digital, electronic or automated systems used in transmitting messages between remote locations. Examples include telephone, cable, radio, television, email and internet service.

When identifying communication systems, do not forget intra-organization communication systems that link various divisions and functions within an organization. There may also be inter-organization systems — integrated systems tying the communication systems of two or more organizations together. For example, the Department of Budget and Management monitors the financing and expenditures of other State organizations.

> **Maryland Department of Budget and Management, Division of Telecommunications:** The Division of Telecommunications coordinates the development, procurement, management and operation of telecommunications equipment, systems, and services by State government; provides radio frequency coordination for state and local agencies in accordance with Federal Communications Commission regulations; and administers the Telecommunications Access of Maryland (TAM) program to provide dual party telephone relay service to Maryland's hearing and speech disabled citizens. These communications services are vital to state's operations, because other agencies and local governments depend upon the Division of Telecommunications.

B. Preventative Controls and Alternative Modes of Communication

1. Task R: Identify and Implement Preventative Controls

Use Worksheet 17, Preventative Controls for Communication Systems, to complete this task.

As with vital records, preventative controls are necessary in mitigating risks to those communication systems that support essential functions, both at the primary and alternate work sites. Examples of preventative controls include the following:

> **Preventative Controls:** Preventive controls attempt to avoid the occurrence of unwanted disruptions such as data loss through power outages, equipment malfunction and destruction.

- Uninterruptible power supplies to provide short-term backup power to system components;

- Air-conditioning systems with adequate excess capacity that, despite failure of certain components, allow continued functioning of the entire system;

- Fire and smoke detectors;

- Water sensors in the ceiling and floor for computer and telecommunications rooms;

- Gasoline or diesel powered generators to provide long-term backup power;

- Fire suppression systems;

- Emergency master system shutdown switch; and

- Technical security controls.

An organization should assess those preventative controls that are best for each particular mode of communication and then compare those controls to the protective measures now in place at both the primary work site(s) and at any alternate work sites.

2. Task S: Identify Alternative Modes of Communication

Use Worksheet 18, Alternative Modes of Communication, to complete this task.

When preventative controls fail, an organization should have alternative providers and/or modes of communication in place to fill the gap. This can be handled by having a separate emergency communication system set up or by using communication systems already in place. For example, cellular phones could be an alternative mode of communication for voice lines.

Service providers offer special services for emergencies, such as telecommunications services priority (TSP). This service gives an organization's telecommunications circuits priority allowing communications to get through when all circuits are busy. Check with your organization's service providers for information on any emergency communications services. Worksheet 24, Communication Systems Supporting Essential Functions, provides space to list any available emergency services. Consider also providing radios, satellite phones or other special communication devices to COOP team members for use in an emergency.

3. Interoperability

Because of the need to coordinate efforts with the federal, state, and local governments, i.e. fire and police, organizations with first responder roles, such as MEMA, have special communications considerations. Interoperable communications systems (i.e., systems that can be used to communicate between departments of a single jurisdiction or different jurisdictions) are critical in allowing emergency personnel to communicate with each other.

> **Interoperability:** The ability of a system or a product to work with other systems or products without special effort on the part of the user.

Unfortunately, one organization's radios often cannot be used to communicate with another organization. Also, encryption/privacy protocols can be different and thereby interfere with incident management. They must be "turned off" to allow communication across departments and jurisdictions. If your organization plays a "first responder" role as one of its critical functions, you should give serious consideration to interoperability issues.

> **First Responder:** Persons that arrive first on the scene in an emergency; typically ambulance, fire department, and police.

Another consideration is communication between systems at the alternate work site(s) and the primary facility. There may be situations where the data systems at the primary facility are still functional, but the primary work site is inaccessible to humans, *e.g.*, contamination of building with a biological or chemical agent. The plan should try to ensure that systems at alternate facilities can communicate with systems at the primary facility.

Worksheet 16

Communication Systems Supporting Essential Functions

Complete a separate worksheet for each essential function. Review information already gathered on vital systems and equipment for clues on communication systems that support critical processes and services and, in turn, their associated essential functions. In this chart, list the current vendor and its contact information; the services the vendor is currently providing the organization; and any special emergency services the vendor has to offer.

Essential Function: Procurement and Purchasing

Communication Mode	Current Provider	Services Provided	Special Services Available
Voice Lines	*Verizon*	*Local and long distance telephone service; caller ID; call waiting; voicemail*	
Fax Lines			
Data Lines			
Cellular Phones			
Pagers			
E-mail			
Internet Access			
Instant Messenger Services			
Blackberry and Other Personal Digital Assistants (PDAs)			
Radio Communication Systems			
Other			

Worksheet 17

Preventative Controls for Communication Systems

Complete a worksheet for each facility and indicate whether the facility is a primary or alternate work site. Identify all the optimal preventative controls for each communication system and then list the preventative controls currently in place for that mode of communication.

Work Site: _100 Main Street_____ **Primary or Alternate?** ___Primary_____

Communication System	Optimal Preventative Controls	Preventative Controls Currently In Place
Voice Lines		
Fax Lines		
Data Lines		
Cellular Phones		
Pagers		
E-mail		
Internet Access		
Instant Messenger Services		
Blackberry and Other Personal Digital Assistants (PDA)		
Radio Communication Systems		
Other		

Worksheet 18

Alternative Modes of Communication

Copy the information gathered in Worksheet 16, Communication Systems Supporting Essential Functions, into this table and identify alternative providers and/or modes of communication. Communication systems already in place can be named as alternative modes for other modes of communication. For example, radios could be an alternative mode of communication for voice lines.

Communication System	Current Provider	Alternative Provider	Alternative Mode #1	Alternative Mode #2
Voice Lines	*Verizon*	*AT&T; Cingular*	*Cellular*	*Nextel*
Fax Lines				
Data Lines				
Cellular Phones				
Pagers				
E-mail				
Internet Access				
Instant Messenger Services				
Blackberry and Other Personal Digital Assistants (PDAs)				
Radio Communication Systems				
Other				

C. Media Relations

Another critical consideration in COOP planning is the media. The media play an important role in disseminating information to the public; however, great care must be taken in managing contacts with the media to avoid the spread of misinformation and unfounded rumors. Organizations should consider having a representative from media relations on the COOP team. If that is not possible, at a minimum an organization should designate a contact person for the media in its COOP plan. This person will be responsible for preparing press releases and regularly speaking with the media regarding the organization's response to the crisis.

D. Chain of Communication

1. Task T: Create a Personnel Contact List (Rapid Recall List)

Use Worksheet 19, Personnel Contact List (Rapid Recall List), to complete this task.

An emergency or disaster could strike at any time, not just during work hours or off hours during the work week. A clear and organized plan for communication between key personnel, general staff and the public is necessary to ensure efficient implementation of a COOP plan.

The centerpiece of a communications plan is a rapid recall list (RRL). An RRL is a cascading list of first responders, i.e., police, fire department, EMS, and key personnel, such as the POC, COOP team members, emergency personnel within the organization, and management, in order of notification. In other words, the first person on the list, generally the director, is the first to be contacted by the POC in the event of an emergency. That person in turn is responsible for contacting next person below his or her name

> **Rapid Recall List:**
> Cascading list in order of notification of key organization personnel and outside emergency personnel.

on the list. If the next person on the list is not available, the person should contact the person below that person on the list and so on until he or she is able to speak with someone.

The list should contain the business, home, pager, and cellular numbers for each individual, and any alternate means of communication, i.e., email or two way radios, should the phone lines be incapacitated. Management members on the list will also be responsible for communicating to the staff in their department.

Worksheet 19
Personnel Contact List
(Rapid Recall List)

The Personnel Contact List is a short document with a cascade call list and other critical phone numbers. The cascade list should include COOP team members, key personnel, management and emergency personnel, both inside and outside the organization. The POC will activate the list and initiate the first contact with the organization head and COOP Team.

Employee Cascade List	Email Address	Work #	Home #	Cellular or Pager #
Jack Wells (Organization Head)	jwells@organization.com	(410)772-8841	(410)962-8374	(443)224-9876
COOP Team				
• Jamie Parker	jparker@organization.com	(410)772-8842	(410)334-9825	(443)673-6392
• Patricia Turner	pturner@organization.com	(410)772-8843	(410)967-4123	(443)873-5042
Key Personnel & Management				
• Rebecca Miller	rmiller@organization.com	(410)772-8852	(410)643-8756	(443)254-8777
• Luke Hyatt	lhyatt@organization.com	(410)772-8854	(410)743-8888	(443)817-0905
Emergency Personnel	**Phone Number(s)**			
Fire Department	911			
Police Department	911			
Ambulance/Emergency Medical Services	911			
MEMA Emergency Operating Center	(410)517-3600			
Employee Emergency Hotline	1-800-772-8800			
Alternate Facility Contacts	**Pete Burns; 1616 North Avenue, Salisbury, MD 21240 (301) 455-0098**			
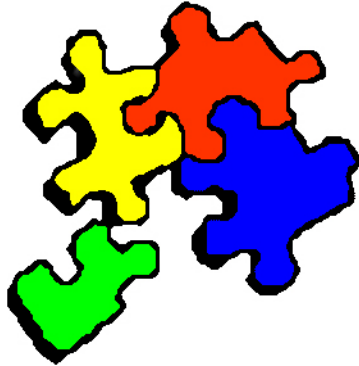
Section V: Reconstitution

A. Purpose

Reconstitution is conducted after the emergency or disruption ceases and is unlikely to resume. Organizations must identify and outline a plan to return to normal operations once organization heads or their successors determine reconstitution operations can begin. The organization should also appoint a Reconstitution Manager.

> **Reconstitution:** The process by which surviving and or replacement personnel resume normal operations from the original or replacement primary operating facility.

B. Reconstitution Process

1. Extensive coordination is necessary to refurbish the original facility or to procure a new facility once an Organization suffers the loss of its originating facility due to an event directly affecting the facility or collateral damage from a disaster rendering the structure unsafe for reoccupation. Within 24 hours of an emergency relocation, the organization should initiate and coordinate operations to salvage, restore, and recover the building after receiving approval from the appropriate local and Federal law enforcement and emergency services.
2. Coordinate and pre-plan options for reconstitution of an organization regardless of the level of disruption causing implementation of its COOP Plan. These options shall include movement from the COOP or devolution location to the originating facility or a new site when the originating facility is rendered unstable or uninhabitable. The orderly transition of all functions, personnel, equipment, and records from the relocation site to a new or restored facility must be planned.
3. Outline procedure necessary to effect a smooth transition from a relocation site to a new or restored facility. If you are returning to the original facility, you will need to ensure the safety of the building.

C. Implementation of Reconstitution Plan

Once you have a plan for reconstitution, you will need to inform all employees of the plan and the schedule for implementing it and the actions they should take.

The implementation of the plan will mean the actual transfer of materials, personnel, supplies, and equipment to the original facility, a new permanent facility, or a temporary facility. The plan should ensure that this transfer is an orderly one.

Once you begin the transfer back to normal operations, you will need to notify your organization's operations center. You will also need to notify customers and other contacts and ensure they know how to reach you.

No test, training, or exercise event will offer you the insight into the strengths and weaknesses of your COOP program that actual operations will provide. You should capitalize on the lessons

learned about the COOP capability. Conducting an after-action review is an effective means of identifying those areas that require corrective action and those that do not.

D. Reconstitution Manager

Reconstitution is a huge undertaking. So, who is responsible for making sure that it goes well? The reconstitution manager is the individual who will coordinate and oversee the reconstitution process and who will develop the reconstitution plan. The responsibilities of the reconstitution manager are outlined here.

This individual will not work in isolation. Coordination with a host of other individuals and groups, including senior leadership, will be required. The reconstitution manager should create a reconstitution team consisting of individuals whose expertise will be required for the reconstitution effort. This team will assist in carrying out many of the responsibilities identified below:

- Develop space allocation and facility requirements
- Coordinate with appropriate organization to obtain office space for reconstitution if the building is not habitable
- Form a reconstitution team
- Develop a time-phased plan, listing functions and projects in order of priority for resuming normal operations
- Develop procedures, as necessary, for restructuring the staff
- Ensure the building is structurally safe and that it meets all local occupancy regulations

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Steps Leading Up to the Reconstitution Process:

✓ The primary facility is no longer available;
✓ An organization's COOP Plan has been activated;
✓ The Reconstitution Team is formed;
✓ The Reconstitution Team determines when the original facility will be able to be accessed or they will locate a new primary or temporary facility in the event that serious damage has occurred to the primary facility;
✓ Employees relocate to original or new facility.

E. Planning Beyond 14 Days

Task U, Forming a Reconstitution Team

Use Worksheet 20, Forming a Reconstitution Team, to complete this task.

COOP is designed to handle emergencies for a 14-day time period. When an incident occurs, it is likely that an organization will immediately know whether an emergency will extend beyond a 14-day period or whether reconstitution of normal operations will be able to occur within the

COOP time frame. It is important for organizations to look into considerations that may need to be taken into account in the event that an emergency does extend beyond 14 days. Although the plan your organization is currently developing does not go into detail about extending an emergency situation beyond 14 days, your organization should know which aspects would be most affected and have a strong idea of how to handle an extended emergency.

Worksheet 20

Forming a Reconstitution Team

The Reconstitution Team is a group of identified employees who help implement the reconstitution plan developed by an organization. Fill in the following worksheet to determine which employees will help carry out the reconstitution plan and decide when an organization is able to reoccupy its primary worksite. This team will be lead by the reconstitution manager.

Title	Name	Role	Responsibilities
Manager	*Jack Johnson*	*Oversee reconstitution*	*Determine when to implement reconstitution plan; ensure that building is structurally safe and meets local occupancy regulations; inform appropriate people that main facility is habitable and normal operations are able to be resumed at main office*
Team Member 1	*Sara Turner*	*Help facilitate reconstitution plan*	*Look into obtaining office space if building is not habitable; develop time-phased plans for resuming normal operations; restructure staff, if necessary*
Team Member 2			
Team Member 3			

VI. COOP Plan Execution

Vital Records,
Systems,
and Equipment

Alternate
Work Sites

Essential
Functions
and
Key Personnel

Communications

Training,
Testing,
and Exercises
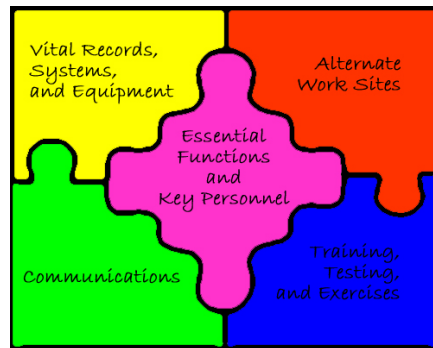
A.   COOP Plan Execution

As discussed in the introduction to this manual, there are many threats that can disrupt operations. Moreover, these threats vary in magnitude and extent. A single tornado, for instance, could destroy one building while leaving the neighboring buildings untouched. A biological terrorist strike could render entire sections of a city uninhabitable. A bomb or fire could destroy only a portion of a facility, leaving the rest of the facility usable. The damage from an event could be reparable in a short time, e.g., matter of days or weeks, or it could be so extensive, it will take months to years to return to normal operations at the facility.

A COOP plan can be activated in part or in whole depending upon the disruption or threat. An event may demand that employees evacuate a single facility for a day or two, in which case execution of only communications component of the COOP plan and IT recovery of data and systems may be necessary. On the other hand, an organization's headquarters could be destroyed at the height of the business day, which necessitates full execution of a COOP plan, including the deliberate and pre-planned movement of key personnel to an alternate work site that is capable of sustaining essential functions for fourteen days.

An effective COOP plan will outline an executive decision process for the quick and accurate assessment of the situation and determination of the best course of action for response and recovery in that case. It is helpful to develop a decision matrix or flow chart that ties the organization's reaction to the class or level of emergency. There are no standardized classification systems for emergencies, but the following model may be useful. Bear in mind, however, that for essential functions and critical processes and services with a time criticality of zero, no disruption is acceptable, and therefore, this classification system may not fit.

Class/Level of Emergency	Impact on Organization
I	▪ Disruption of up to 12 hours, with little effect on services or impact to essential functions or critical systems. ▪ No COOP activation required, depending on individual organization requirements.
II	▪ Disruption of 12 to 72 hours, with minor impact on essential functions. ▪ Limited COOP activation, depending on individual organization requirements.
III	▪ Disruption to one or two essential functions or to a vital system for no more than three days ▪ May require movement of some personnel to an alternate work site or location in the primary facility for less than a week
IV	▪ Disruption to one or two essential functions or to the entire organization with potential of lasting for more than three days

	but less than fourteen days
	▪ May require activation of orders of succession for some key personnel
	▪ May require movement of some personnel to an alternate work site or location in the primary facility for more than a week
V	▪ Disruption to the entire organization with a potential for lasting at least fourteen days
	▪ Requires activation of orders of succession for some key personnel
	▪ Requires movement of many, if not all personnel, to an alternate work site for more than fourteen days.

The plan should also lay out emergency roles of the COOP team. This may have already been discussed in the early phases of COOP planning. However they should be reiterated here to avoid confusion when an actual emergency arises.

B. Building Evacuation Plan

Another important part of COOP planning is the development of a building evacuation plan. The goals of a building evacuation plan are to protect lives and property in the event of an emergency. Organizations should develop a building evacuation plan for each building that their employees work in. A building evacuation should include the following elements.

1. Building Alert System

a. Task V, Establishing a Building Alert System

Use Worksheet 21, Building Alert System, to complete this task.

All buildings should have a system in place to alert employees that there is an emergency that requires them to leave the building. Examples of alert systems include fire alarms and building PA systems.

2. Evacuation Routes and Exits

All buildings should have designated emergency routes and exits placed on each floor of the building. Training should be provided to inform employees of the emergency routes and exits for their building.

3. Emergency Evacuation Personnel

a. Task W, Identifying Emergency Call-In Number, Emergency Evacuation Personnel, and Employee Contact List

Use Worksheet 22, Emergency Call-In Number, Emergency Evacuation Personnel Roster, and Employee Contact List to complete this task.

There are three parts to Worksheet 22. First, every organization should have an Emergency Call-In Number. In the event of COOP activation, the first order of business is to get information to employees about the status of the emergency. Provide all employees with an emergency call-in phone number and advise them that the recorded message will be updated periodically. For Worksheet 22, provide the phone number that employees may call to determine the status of the emergency and how it affects the organization.

Second, the Emergency Evacuation Personnel, and their alternates are regular employees who have been selected to ensure that building evacuation is carried out as planned, evacuated building occupants are directed to assigned assembly points where they will be accounted for, and persons needing assistance to evacuate are attended to. Each organization should designate a team of employees to perform the following functions in the event of a building evacuation:

- Maintain a current list of all occupants, including part time and student employees that work in the building.
- Ensure area occupants leave the building in cases where there is word of an emergency but building alarm didn't sound.
- Assist and/or direct occupants with limited mobility either to safe rooms, or down stairs if able to negotiate stairway.
- Inform occupants to leave the building as soon as possible and go to assembly area.
- Check off co-workers who safely reported to assembly point from occupant list.
- Collect information on missing personnel known, or suspected to still be in the building, and report to emergency personnel.
- Monitor corridors on floors and ensure personnel are moving toward exits.
- Check restrooms on floors to ensure they have been evacuated.
- Make sure fire doors on enclosed stairways and exits are closed and not blocked.

A building may have one or many emergency evacuation teams, depending on the size and number of employees in the building. In the case of a large building that has

many floors and employees, it may be necessary to have an emergency evacuation team for each floor.

Third, the plan must include an Employee Contact List. A person(s) from your Emergency Evacuation Team should be designated to develop and maintain an up-to-date employee contact list for all employees that work in the building. The list should be readily available in a paper format so the designated person can easily obtain the list in the event of an emergency. The document should include the following information:

- The names of all employees that work in the building
- The floor locations of all employees
- Personal contact information for all employees, such as home addresses, cell phone numbers, and home phone numbers
- Emergency contact numbers for all employees, such as cell phone numbers and home phone numbers of individuals that would need to be called in case an employee is injured, missing, etc.

4. Designated Assembly Area(s)

a. Task X, Establishing Designated Assembly Area(s)

Use Worksheet 23, Designated Assembly Areas, to complete this task.

Building occupants should meet at a designated assembly area after evacuation so they can be accounted for. The assembly area(s) should be an open area away from the building and out of the way of responding emergency personnel. There may be more than one assembly area(s) depending on the size of the building and the location of the exits. In addition, alternative assembly areas should be identified in the event the main assembly area(s) cannot be used.

5. Shelter-In-Place

Under some emergency circumstances, evacuating the building may not be the right choice. Deciding to not evacuate the building is referred to as "shelter-in-place." It is important to develop a shelter-in-place plan in the event that evacuating the building would be detrimental to health and safety of your employees. You should have a system of alerting your employees to shelter-in-place and not evacuate the building.

6. Training

A building population and emergency evacuation team that are well informed about the building evacuation plan, through training, will be less likely to panic than one which is unaware of the correct action to take. Your organization should periodically schedule evacuation drills to familiarize building occupants and your emergency evacuation team with the duties they are expected to perform in an emergency.

Worksheet 21

Building Alert Systems

List the systems that are in place to alert building occupants to evacuate and to shelter-in-place. Also, describe the systems, note their maintenance frequency, and identify any back-up systems.

Building:_____

Evacuation Systems	Description	Maintenance Frequency	Back-Up Systems
Shelter-In-Place Systems	**Description**	**Maintenance Frequency**	**Back-Up Systems**

Worksheet 22

Emergency Call-In Number, Emergency Evacuation Personnel Roster, and Employee Contact List

The Emergency Call-In Number, Emergency Evacuation Personnel Roster, and Employee Contact List is a short document that includes the contact information for all employees to find updated information regarding the status of an incident. It also includes all members of your building Emergency Evacuation Personnel Plan, and all contact information for the employee's of each floor. Begin this worksheet by providing an emergency number that employees can call to find out about the emergency and check on the status of the organization. Make sure to periodically update the message as the status of the emergency changes. Next, fill in the designated Emergency Evacuation Personnel. Finally, for each floor, fill in the contact information for each employee who's office resides on that particular floor. *Note: This worksheet should be filled out by an emergency evacuation team member for each floor, as the information contained in this worksheet is particular to each floor.*

Emergency Number:____1-800-New-Info_____

Building:___Main Street Building_____
Floor Number:___4___

Employee	Email Address	Work #	Home # and Address	Cellular or Pager #	Emergency Contact Info
Emergency Evacuation Team					
1.					
2.					
Employee Contact List					
1.					
2.					

Worksheet 23

Designated Assemby Areas

Identify the designated assembly area for employees evacuating the building in the event of an emergency. Also, identify two alternate assembly areas to be used in the event that designated area cannot be used.

Building:_____
Floor:_____

Designated Assembly Area	Alternate Assembly Area 1	Alternate Assembly Area 2

C. Family Support Planning

During an emergency, many questions will arise as to the health and safety of employees and family members, how pay and benefits may be affected, and general questions as to the status of the organization. The organization will want to create a Family Support Plan which includes procedures for:

- Activating an emergency information call-in number for employees;
- Tracking employees during an emergency; and
- Providing guidance and assistance to employees and their families.

Internet Resources for Family Support Planning

✓ **Maryland Emergency Management Agency**
   www.familyfirst.md
   - Get a go-kit
   - How to plan for your family

✓ **Department of Homeland Security**
   http://www.ready.gov
   - Ready America: Get a Kit/Make a Plan/Be Informed
   - Ready Kids

   http://www.citizencorps.gov/
   - Citizen Corps Councils
   - Volunteerism
   - Citizen and Community Training

   http://www.dhs.gov/dhspublic/display?theme=29
   - Current DHS Threat Level

✓ **OPM**
   http://www.opm.gov/emergency/
   - Employee's Guide
   - Family Guide

   http://www.opm.gov/oca/compmemo/2005/2005-18.asp
   - Information on Emergency Pay and Leave
   - Katrina-specific supplements

✓ **National Credit Union Administration**
   http://www.ncua.gov/Publications/brochures/EmergencyFinancialFirstAidKit.pdf
   - Emergency Financial First Aid Kit

✓ **The Red Cross**
   http://www.redcross.org/
- Creating family plans
- Building emergency kits
- Buy emergency kits and tubes
- Shelter-in-place information
- Evacuation information

SPECIAL CONSIDERATIONS

For People with Disabilities:
- Create a support network to help in an emergency.
- Tell these people where you keep your emergency supplies.
- Give one member of your support network a key to your house or apartment.
- Contact your city or county government's emergency information management office. Many local offices keep lists of people with disabilities so they can be located quickly in a sudden emergency.
- Wear medical alert tags or bracelets to help identify your disability.
- If you are dependent on dialysis or other life sustaining treatment, know the location and availability of more than one facility.
- Show others how to operate your wheelchair.
- Know the size and weight of your wheelchair, in addition to whether or not it is collapsible, in case it has to be transported.
- *Additional Supplies for People with Disabilities:*
  - Prescription medicines, list of medications including dosage, list of any allergies.
  - Extra eyeglasses and hearing-aid batteries.
  - Extra wheelchair batteries, oxygen.
  - Keep a list of the style and serial number of medical devices.
  - Medical insurance and Medicare cards.
  - List of doctors, relatives or friends who should be notified if you are hurt.

For Baby:
- Formula http://www.ready.gov/america/getakit/index.html
- Diapers
- Bottles
- Powdered milk
- Medications
- Moist towelettes
- Diaper rash ointment

For the Elderly:
- Ask your doctor about storing prescription medications such as heart and high blood pressure medication, insulin and other prescription drugs.
- Denture needs
- Contact lenses and supplies
- Extra eye glasses
- Identify agencies in your area that may assist with transportation and evacuation in the event it is needed.

Biological Threats

Unlike an explosion, a biological attack may or may not be immediately obvious. While it is possible that you will see signs of a biological attack, as was sometimes the case with the anthrax mailings, it is perhaps more likely that local health care workers will report a pattern of unusual illness or there will be a wave of sick people seeking emergency medical attention. You will probably learn of the danger through an emergency radio or TV broadcast, or some other signal used in your community. You might get a telephone call or emergency response workers may come to your door.

In the event of a biological attack, public health officials may not immediately be able to provide information on what you should do. It will take time to determine exactly what the illness is, how it should be treated, and who is in danger. However, you should watch TV, listen to the radio, or check the Internet for official news including the following:

- Are you in the group or area authorities consider in danger?
- What are the signs and symptoms of the disease?
- Are medications or vaccines being distributed?
- Where? Who should get them?
- Where should you seek emergency medical care if you become sick?

During a declared biological emergency:
- If a family member becomes sick, it is important to be suspicious.
- Do not assume, however, that you should go to a hospital emergency room or that any illness is the result of the biological attack. Symptoms of many common illnesses may overlap.
- Use common sense, practice good hygiene and cleanliness to avoid spreading germs, and seek medical advice.
- Consider if you are in the group or area authorities believe to be in danger.
- If your symptoms match those described and you are in the group considered at risk, immediately seek emergency medical attention.
- Be prepared to improvise to protect your nose, mouth, eyes and cuts in your skin.
- Cover your mouth and nose with layers of fabric that can filter the air but still allow breathing. For example, two to three layers of cotton such as a t-shirt, handkerchief or towel. Otherwise, several layers of tissue or paper towels may help.
- Wash with soap and water.
- Listen closely to the radio for official public service announcements.

ALL HAZARD EMERGENCY SUPPLY KITS FOR HOME

Recommended Items to Include in a Basic Emergency Supply Kit:
- Water, one gallon of water per person per day for at least three days, for drinking and sanitation
- Food, at least a three-day supply of non-perishable food
- Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both
- Flashlight and extra batteries
- First aid kit
- Whistle to signal for help
- Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place
- Moist towelettes, garbage bags and plastic ties for personal sanitation
- Wrench or pliers to turn off utilities
- Can opener for food (if kit contains canned food)
- Local maps

Additional Items to Consider Adding to an Emergency Supply Kit:
- Prescription medications and glasses
- Infant formula and diapers
- Pet food and extra water for your pet
- Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container
- Cash or traveler's checks and change
- Emergency reference material such as a first aid book or information from www.ready.gov
- Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.
- Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.
- Household chlorine bleach and medicine dropper – When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- Fire Extinguisher
- Matches in a waterproof container
- Feminine supplies and personal hygiene items
- Mess kits, paper cups, plates and plastic utensils, paper towels
- Paper and pencil
- Books, games, puzzles or other activities for children
- One gallon of water per person per day, for drinking and sanitation.
- Children, nursing mothers, and sick people may need more water.
- If you live in a warm weather climate more water may be necessary.
- Store water tightly in clean plastic containers such as soft drink bottles.
- Keep *at least* a three-day supply of water per person.

First Aid Considerations:
- Two pairs of Latex, or other **sterile gloves** (if you are allergic to Latex).
- **Sterile dressings** to stop bleeding.
- **Cleansing agent**/soap and antibiotic towelettes to disinfect.
- **Antibiotic ointment** to prevent infection.
- **Burn ointment** to prevent infection.
- **Adhesive bandages** in a variety of sizes.
- **Eye wash solution** to flush the eyes or as general decontaminant.
- **Thermometer** (particularly important during a biological threat)
- **Prescription medications** you take every day such as insulin, heart medicine and asthma inhalers. You should periodically rotate medicines to account for expiration dates.
- **Prescribed medical supplies** such as glucose and blood pressure monitoring equipment and supplies.

Things it may be good to have:
- Cell Phone
- Scissors
- Tweezers
- Tube of petroleum jelly or other lubricant

Non-prescription drugs:
- Aspirin or nonaspirin pain reliever
- Anti-diarrhea medication
- Antacid (for upset stomach)
- Laxative

POST EVENT CONCERNS

Contamination is of great concern post event. Biological agents and other hazardous materials, as well as debris and water may contaminate your buildings and equipment. Often the "cure" is worse than the disease. Be prepared to decontaminate equipment and understand the impact of contamination. Plans should include salvage and drying of important documents and equipment. In addition, mold and mildew may be a problem after the event.

1. Daycare

a. Task Y, Determining Daycare for Employee's Children

Use Worksheet 24, Daycare, to complete this task.

Relocating to an alternate facility could have a drastic impact on those employees who have children. For single parents, childcare is of particular importance. The organization should consider whether the alternate facility will provide daycare for children who are not in school or whether employees should provide daycare for their children. In addition, employees may have to work overnight to reinstate essential functions. How will those employees provide supervision for their children? Will those employees receive reimbursement for childcare costs associated with relocating to an alternate facility or working at night? In Worksheet 29, employees should provide information on their children, including their ages, whether they are in school, and whether daycare will need to be provided for the children. Worksheet 29 should be completed by management and address issues such as whether childcare will be provided at an alternate facility or at a location nearby and whether employees will be reimbursed for childcare costs associated with relocating to an alternate facility.

2. Counseling Services

a. Task Z, Accessing Counseling Services

Use Worksheet 25, Counseling Services, to complete this task.

Following an emergency, many employees may be unable to focus at work or suffer from post-traumatic stress syndrome. The organization should address in its COOP plan whether it will provide counseling services for its employees. In addition, should employees be seriously injured or not survive a disaster, the organization may want to provide counseling services for the surviving family members. Worksheet 30 sets forth different issues for management to consider should counseling services be provided for employees and their family members.

Worksheet 24
Daycare

In this task, identify the number of children each employee has, whether the children will require supervision or whether they are old enough to attend school, whether the parent prefers to utilize daycare near the alternate facility or have his/her children supervised at home, and the average cost of daycare to the parent.

Employee	Number of Children	In School or Daycare Required?	Would the Parent Prefer Supervision of Children at Daycare, Near the Worksite, or at Home?	Daycare Costs	Daycare Facilities Provided at or Near Alternate Worksite?	Employees Reimbursed for Childcare Costs Associated with Relocating to the Alternate Site or for Working Overtime or at Night?
John Doe	2	1 – School 1- Daycare	In-home	$500/week	No	Yes. Rate = $10/hour Each employee will need to provide evidence of daycare costs for reimbursement
Jane Doe	2	1 – School 1- Daycare	Supervision at a daycare center near the relocation site.	$500/week	Yes, daycare provided for children 6 months – 6 yrs in near alternate location.	No

Worksheet 25
Counseling Service

In this task, organization management should identify whether counseling services will be provided to employees and/or their families after a disaster has occurred. Also, provide the contact information for the counseling service and whether that person or group will provide any special services for organization employees and/or their families.

Will Counseling Be Provided?	Who Will Provide the Services?	Contact Information for Person/Group Providing Services	Who Will Counseling Provided For?	Special Counseling Services Provided by the Person/Group
Yes	Feel Better Counseling Services	Jane Doe 1234 Main St. Baltimore, MD 21201 w: 410-555-1234 janedoe@work.com	Employees only	Will provide both individual and group therapy sessions
Yes	Feel Better Counseling Services	Jane Doe 1234 Main St. Baltimore, MD 21201 w: 410-555-1234 janedoe@work.com	Employees and their immediate family members	None

D. Incident Command System (ICS)

1. What is ICS?

Each organization needs to create an Incident Command System (ICS). The ICS component is more narrow than a COOP plan because it focuses solely on the period immediately following an emergency. The traditional ICS has been altered slightly to fit the needs of COOP Planning. It is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure (the organization) which is designed to help immediate management responses to an emergency. In other words, it is the group of people who are necessary in evacuating a building, relocating employees to an alternate location, and making sure that personnel are accounted for immediately following a disaster.

> **NIMS/ICS**
> Check out the FEMA Website for more information on the National Incident Management System (NIMS) at:
> www.fema.gov/**nims**

2. ICS Functional Structure

Several layers of employees are needed in order to create a strong ICS plan. Each organization will need to designate an Incident Commander, a Public Information Officer, an Operations head, a Planning head, a Logistics head, and a Finance & Administration head. In addition, the COOP Point of Contact should also be part of the ICS team.

a. Task AA: Create an ICS Chart

Use Worksheet 26, Incident Command System, to complete this task.

The key to this task is identifying the personnel who will be the Incident Commander, the Public Information Officer, the Operations head, the Planning head, the Logistics head, and the Finance & Administration head.

The Incident Commander (IC) is generally the director or a deputy director of the organization. The IC:

- Declares the activation of the COOP plan;
- Maintains responsibility for the overall management of the organization's response to the COOP-activating event; and
- Declares the end of COOP plan activation and return to normal operations.

News organizations are generally at the scene of a disaster immediately after the arrival of first responders. As such, the Public Information Officer (PIO) is an extremely important person at the outset of an emergency. The PIO:

- Maintains responsibility for interfacing with the public, media, and with other organizations;
- Develops accurate and complete information on the incident's cause, size, and current situation; and
- Monitors the release of information to the public and controls rumors.

The head of the Operations section maintains control of the emergency site. This person is responsible for:

- Managing tactical operations at the incident site directed toward reducing the immediate hazard;
- Saving lives and property;
- Establishing situation controls; and
- Restoring normal conditions at the incident site.

The head of the Planning section collects all information from the emergency site to anticipate resource needs and prepare a plan for operations should employees have to remain in the office. This person is responsible for:

- Collecting, evaluating, and disseminating tactical information pertaining to the incident;
- Forecasting resource needs; and
- Developing shelter-in procedures.

The head of the Logistics section is responsible for:

- Meeting all support needs for the incident; and
- Ordering resources, as forecasted by the head of the Planning section, through appropriate procurement authorities from off-incident locations.

The head of the Finance & Administration section is critical during a complex incident, but not always necessary for more minor incidents. For minor incidents, the head of the Planning section could take on this role. This person is responsible for:

- Identifying and accessing multiple sources of funds; and
- Monitoring expenditures.

The COOP Point of Contact (POC):

- Supports and advises the COOP IC and the section heads;
- Monitors the situation and keeps the COOP IC informed on all developments; and
- Contacts COOP team members for support as is necessary.

Worksheet 26

Complete the graph below to create an Incident Command System (ICS). The employees who comprise the ICS team are largely responsible for overseeing employees and coordinating events immediately following an incident
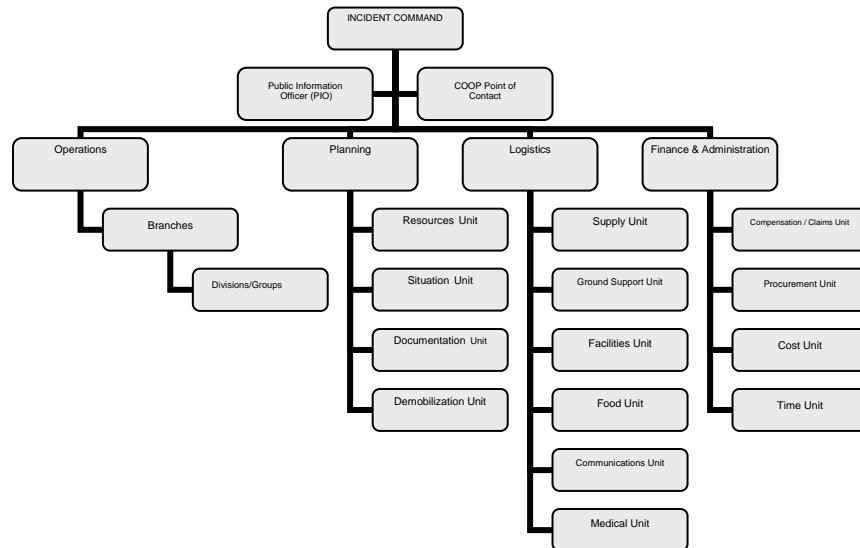
E. Creating a Go Kit

When preparing for emergency situations, it's best to think first about the basics of survival: **fresh water, food, clean air and warmth**. Encourage everyone to have a **Portable Kit** or a **Go Kit** customized to meet personal needs, such as essential medications.

1. **NOAA weather radio**
   - With tone-alert feature, if possible, that automatically alerts you when a **watch or warning** is issued in your area. Tone-alert is not available in some areas.
   - Include extra batteries.
   - It is recommended that you have both a battery-powered commercial radio and a NOAA weather radio with an alert function. The NOAA weather radio can alert you to weather emergencies or announcements from the Department of Homeland Security. The commercial radio is a good source for news and information from local authorities.
2. Keep copies of **important records** such as site maps, building plans, insurance policies, employee contact and identification information, bank account records, supplier and shipping contact lists, computer backups, emergency or law enforcement contact information and other priority documents in a waterproof, fireproof portable container. Store a second set of records at an off-site location.

3. Talk to your co-workers about what **emergency supplies** the company can feasibly provide, if any, and which ones individuals should consider keeping on hand.
4. Recommended emergency supplies include the following:
   - **Water**, amounts for portable kits will vary. Individuals should determine what amount they are able to both store comfortably and to transport to other locations. If it is feasible, store one gallon of water per person per day, for drinking and sanitation
   - **Food**, at least a three-day supply of non-perishable food
   - **Battery-powered radio and extra batteries**
   - **Flashlight** and **extra batteries**
   - **First Aid kit**
   - **Whistle** to signal for help
   - **Dust or filter masks**, readily available in hardware stores, which are rated based on how small a particle they filter
   - **Moist towelettes** for sanitation
   - **Wrench** or **pliers** to turn off utilities
   - **Can opener** for food (if kit contains canned food)
   - **Plastic sheeting** and **duct tape** to **"seal the room"**
   - **Garbage bags** and **plastic ties** for personal sanitation

> **Creating a Go Kit:**
>
> 1) http://www.ready.gov
>
> 2) http://www.redcross.org/services/disaster/0,1082,0_217_,00.html

VII. COOP Training, Testing, & Exercises
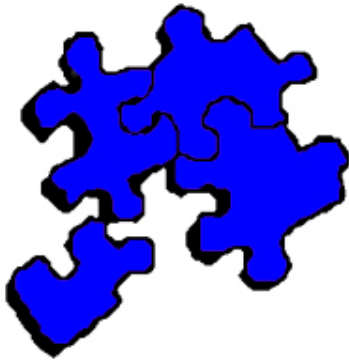
Section VII: COOP Training, Testing, and Exercises

A. Training, Testing, and Exercises

If an organization is to have an effective COOP plan, its employees need to have more than a general awareness of COOP requirements. Each employee plays an important part in the organization's COOP readiness, and each division must know how to execute its portion of the COOP plan and how it relates to the other divisions of the COOP plan. In short, every employee needs to "own" the process.

To achieve this, an organization needs to train all personnel on COOP planning and conduct COOP exercises, where personnel will use a COOP plan in response to a mock disaster. COOP plans should be adaptable to various scenarios that range from partial or short term to complete disruptions. The COOP team also needs to test its plans, backup and recovery systems regularly. It is through such testing that gaps can be identified and revisions can be made to the plan.
Finally, an organization should review and update its plans regularly. The work of the POC and COOP team does not end with the development and implementation of a COOP program. Indeed, development and implementation are just the beginning. An effective COOP plan will not remain viable without regular review and revision.

EXERCISES AND DRILLS TO TEST YOUR ORGANIZATION'S COOP PLAN

FULL-SCALE EXERCISES: These exercises resemble real emergency scenarios and test how employees will react and implement your entire COOP plan. Full-scale exercises are generally unannounced, similar to a real-life situation. These exercises are highly useful in making employees feel comfortable with a COOP plan and determining weaknesses within a plan. Full-scale exercises should be conducted periodically.

TABLE-TOP EXERCISES: These exercises can be effective in testing all or part of a plan. They are generally, scheduled exercises that involve the entire organization and are intended to get employees thinking about how they would implement the COOP Plan and where the Plan needs to be strengthened. A table-top exercise is based around a hypothetical scenario that, or a scenario that has occurred in the past. Employees will go through the incident step-by-step and determine how they will handle each aspect of an emergency.

BLUE-ENVELOPE DRILLS: Blue-envelope drills focus on specific aspects of a COOP plan. They are intended to help a COOP Team member become comfortable and familiar with the COOP Plan. To conduct a blue-envelope drill, an employee will unexpectedly be handed a blue-envelope with a scenario inside the envelope. The scenario will require the employee to carry out a particular part of the COOP Plan depending on what aspect is being tested. For example, if the organization is attempting to test how the employee handles back-up and recovery methods of Vital Systems, then the emergency might involve a power outage.

HOT-WASH: It is often useful to conduct a "hot-wash" after completing exercises and drills. This is basically a discussion of what went well or didn't work during the exercise and drill. The information gathered during the hot-wash should be used to revise and strengthen your plan so that it can be more effective.
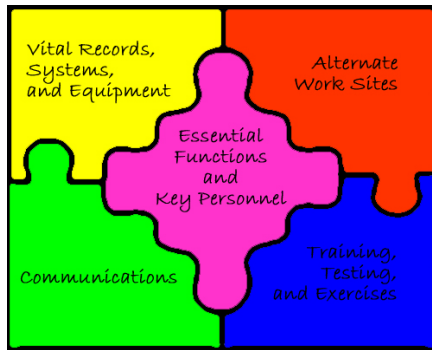
A. COOP Plan Certification

Because an organization's top executive is ultimately responsible for the COOP plan, he or she should review that plan and certify that it is complete. An organization director should determine the viability of the COOP capability as set forth in the COOP plan before certifying it. The director can use Worksheet 27, Certification Checklist, which comprises all the best practice elements of a COOP plan, in making this determination. A director can also certify the plan in stages, such as certifying the essential functions before proceeding with development of the plan. After the organization head signs off on the COOP Plan, the organization should submit it to MEMA for review and MEMA will archive the plan.

1. Task BB: Certification of the COOP Plan

Use Worksheet 27, Certification Checklist, to complete this task.

Worksheet 27
Certification Checklist

☐ Is there a COOP program point of contact (POC) and COOP team designated?

☐ Have you included your emergency evacuation plans?

☐ Have all key elements of the organization (program managers, facilities, information resource management, security, telecommunications, records management, public affairs, emergency response organizations, and senior management) been involved in the planning process?

☐ Have the organization's essential functions been clearly identified?

☐ Is the delegation of authority outlined sufficient to ensure continuance of organization operations?

☐ Is there a clear and documented order of succession for key management positions and appropriate authority for key officials, so that there is adequate command and control in an emergency?

☐ Have all the personnel named as successors or as holders of emergency responsibilities been briefed or trained on their responsibilities? Is contingency staffing available to perform essential functions?

☐ Is there sufficient capability to conduct procurement actions, keep financial records, record time and attendance, and perform other essential administrative support functions?

☐ Is there a vital records program?

☐ Is there a plan for protection and recovery of vital systems and equipment?

☐ Have alternate worksites been identified?

☐ Are there sufficient resources at alternate worksites to ensure that essential functions can be performed? If not, have arrangements made to obtain the necessary resources?

☐ Does the relocation plan provide for security, transportation, food and lodging of all personnel who may need to operate out of that facility?

☐ Does the plan ensure support for employees and their families in the event of an emergency?

☐ Is there a detailed communication plan that identifies preventative controls for communications equipment and alternative modes of communication, addresses interoperability issues as necessary, and lays out a chain of communication?

☐ Is there sufficient detailed information in the plan to ensure that the plan can be implemented (e.g., phone numbers, addresses, names, locations, equipment)?

☐ Does the plan provide information on the formation and activation of a reconstitution team?

☐ Is there a program for training organization personnel on COOP plan implementation?

☐ Is there a program to test the plan with exercises or drills?

☐ Is there a schedule of regular review and revision of the COOP plan?

☐ Has an Incident Command System (ICS) been included?

APPENDICES

APPENDIX A: Executive Summary

APPENDIX B: Glossary

APPENDIX C: COOP Outline

APPENDIX D: Worksheets

APPENDIX E: Reference Materials

APPENDIX F: COOP Quick Plan Guidance

APPENDIX G: COOP Guidance Memo

APPENDIX A: EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Today, government faces a challenge unlike any before. In addition to terrorism, disasters from many causes are on the rise, not only in frequency, but also in severity. In Maryland, flooding from Hurricane Isabel in September 2003 destroyed many towns along the Chesapeake Bay and submerged downtown Baltimore and Annapolis in eight feet of water. Additionally, wildfires, earthquakes, transportation accidents and strikes, tornadoes, blizzards, plant explosions, computer viruses and technology failures have wreaked havoc and caused major disruptions to both public and private operations throughout the nation in recent years.

Many governmental organizations provide vital services to the people of Maryland and cessation of these services can have a devastating effect on individuals. In the absence of a Continuity of Operations Plan (COOP), an organization cannot fulfill its mission should a crisis on any scale disrupt essential organization operations.

The State of Maryland currently leads the country in the development of COOP plans. Maryland began its COOP planning process on January 12, 2003 when Governor Robert Ehrlich wrote a letter directing his twenty cabinet agencies to develop a COOP Plan by January 31, 2004. The purpose of the plans is to prepare for any kind of emergency, man-made or natural, large or small and to ensure the continuation of each agency's essential functions during an emergency.

Each agency was encouraged to work with the Maryland Emergency Management Agency (MEMA) to complete its plan. Additionally, MEMA provided the agencies with a COOP manual to help guide them through the planning process. The COOP manual breaks COOP Planning down into four components: essential functions and key personnel; vital records, systems, and equipment; communications; and alternate facilities.   Each component is described in detail and accompanied by a series of worksheets to ensure a thorough collection of data and information relating to the internal workings of an organization.

Essential Functions. The identification of essential functions that must be maintained during an emergency situation is an important first step. These functions include providing for the safety and well being of employees, visitors, and the public; maintaining essential communications; and retaining the capability to provide important public services.

Vital Records, Systems, and Equipment. The protection of vital records, systems, and equipment, including the ability to access and use such records are a central part of COOP planning. Examples of vital records include emergency plans and documents, orders of succession, delegations of authority, staffing assignments, and selected program records needed to continue critical agency operations. In addition, legal and financial records, as well as contractual obligations are vital records which may be maintained. Vital records and systems include any IT applications or systems that are necessary for the agency to perform its minimum essential functions.

Relocation/Alternate Work Sites. One or more alternate work sites must be identified and prepared so that in the even of an emergency the agency can conduct its essential functions. These alternate work sites must be capable of supporting staff and systems necessary to conduct essential activities and functions. Such capabilities should include, but are not limited to, communications, security, transportation, local area network (LAN) capability, if required, and space for the emergency organization. At least one site should be physically and geographically separate from the primary location.

Communications Plan. A system, with redundancy, for communicating with employees, local, state, and federal agencies, and the public subsequent to an emergency must be available. This would include specific duties expected of public affairs officers. Contact lists of management and essential staff are vital.

Many of the state agencies successfully completed their COOP plan and were certified by MEMA. MEMA and the state agencies continue to work closely on maintaining and updating the COOP plans. Additionally, the agencies frequently participate in large and small scale exercises, training, and drills to familiarize and prepare themselves with the execution of their COOP plan.

As MEMA nears the completion of the first phase of planning with the state agencies, Maryland is looking ahead to the next wave of government organizations to begin planning. I strongly encourage the local jurisdictions to begin their planning process. The local jurisdictions are equally vulnerable to emergency situations. Planning for a disaster of any kind is the most effective means of preventing the disruption of an organization's most critical functions. This process can be very time consuming and requires an in-depth analysis into the fundamental workings of an organization. Additionally, COOP planning necessitates cooperation among the many people who enable the local jurisdictions to function. Local emergency management teams should initiate the COOP planning process within each jurisdiction. We highly recommend that the local jurisdictions look to MEMA for guidance and begin their planning now.

Glossary of COOP-Related Terms

Action Officer	Designated individual with the responsibility to ensure that all actions prescribed to his/her respective department/office are executed according to the policies and procedures of the COOP.
After-Action Report (AAR)	A narrative report that presents issues found during an incident and recommendations on how those issues can be resolved.
Alternate Database/Records Access	The safekeeping of vital resources, facilities, and records, and the ability to access such resources in the even that the COOP plan is put into effect.
Alternate Facilities/Work Site	A location, other than the normal facility, used to conduct critical functions/and or process data in the event that access to the primary facility is denied or the primary facility is damaged. The alternate site provides the capability to perform minimum essential department or office functions until normal operations can be resumed.
Alternative Communications	Communication methods that provide the capability to perform minimum essential department or office functions until normal operations can be resumed**.**
Application Recovery	The component of IT Disaster Recovery which deals specifically with the restoration of business system software and data, after the processing platform has been restored or replaced.
Assessment	The act of assessing; appraisal.
Backup	The practice of copying information, regardless of the media (paper, microfilm, audio or video tape, computer disks, etc.) to provide a duplicate copy.
Business Continuity Plan	Provides procedures to resume or restore critical business processes following a disruption. This

plan must be coordinated with IT Disaster Recovery Plan to ensure the recovery time objective (RTO) is addressed and is consistent in each document, and that recovery strategies and supporting resources neither negate each other nor duplicate efforts. The program or business owners typically develop this plan as they are most familiar with their business processes.

Business Impact Analysis (BIA)   An evaluation of the strengths and weaknesses of an agency's disaster preparedness and the impact an interruption would have on agency business. This is a management level analysis by which an organization assesses the quantitative (financial) and qualitative (non-financial) impact and loss.

Business IT Recovery Process   The common critical path that all companies follow during a recovery effort. There are major nodes along the path which are followed regardless of the organization. The process has seven stages: 1) Immediate response, 2) Environmental restoration, 3) Functional restoration, 4) Data synchronization, 5) Restore business functions, 6) Interim site, and 7) Return home.

Chain of Communication   A list of names of agency personnel in the order that they will be notified in the event of an emergency; persons on the list may be responsible for communicating information to their subordinates in the agency and to those lower on the list.

Cold Site   A relocation site that is reserved for emergency use, but which requires the installation of equipment, etc., before it can support operation.

Continuity of Government   The effort to ensure continued leadership, authorities, direction and control, and preservation of records, thereby maintaining a viable system of government.

Continuity of Operations   An internal effort within individual components of the government to assure that capability exists to continue essential component functions

across a wide range of potential emergencies through a planning document.

COOP Plan Maintenance	Steps taken to ensure the COOP plan is reviewed annually and updated whenever major changes occur.
Cooperative Agreement	Any formal, legally-binding contract between two or more parties whereby the parties to that agreement agree to either share an alternate facility.
Critical Processes & Services	Activities, which could not be interrupted or unavailable without significantly jeopardizing operations of the organization.
Delegation of Authority	Pre-delegated authorities for making policy determinations and decisions at headquarters, field levels, and other organizational locations, as appropriate.
Disaster Recovery	The methodical restoration and reconstitution of facilities, data, records, systems and equipment after a disruption to operations that has caused damage and/or destruction of these resources.
Emergency	A sudden, usually unexpected event that does or could do harm to people, resources, property, or the environment. Emergencies can range from localized events that affect a single office in a building, to human, natural, or technological events that damage, or threaten to damage, local operations. An emergency could cause the temporary evacuation of personnel or the permanent displacement of personnel and equipment from the site to a new operating location environment.
Emergency Operating Records	Records (plans, and directives, orders of succession, and delegation of authority) essential to the continued functioning of an agency during and after and emergency to ensure continuity of operations.
Emergency Operations Plan	A plan that provides facility-wide procedures for emergency situations that generally includes personnel safety and evacuation procedures.

Essential Functions	Those functions that enable State agencies to provide vital services, exercise civil authority, maintain the safety and well being of the citizens, sustain the industrial/economic base in an emergency.
Hot Site	A fully equipped facility, which includes stand-by computer equipment, environmental systems, communications capabilities, and other equipment necessary to fully support an organization's immediate work and data processing requirements in the event of an emergency or a disaster.
Interoperability	The ability of a system or a product to work with other systems or products without special effort on the part of the user.
IT Disaster Recovery Plan	Plan that provides recovery and restoration procedures for mission-critical information technology (IT) components/systems that are necessary to perform mission-critical business functions. This plan does not provide contingency planning guidance for business processes. Business processes should be addressed in a business resumption or business continuity plan that is typically developed by non-IT staff.
Key Positions or Personnel	Those positions required to be filled by the local government or deemed essential by the State or individuals whose absence would jeopardize the continuation of an organization's essential functions.
Legal and Financial Records	Records (personnel records, social security records, payroll records, insurance records, contracts etc.) essential to the protection of the legal and financial rights of an agency and of the individuals directly affected by the agency's activities.
Logistics Team	A working group responsible for coordinating the activities associated with relocation planning and deployment of essential operations and positions during a COOP event.

Mutual Aid Agreement	As between two or more entities, public and/or private, the pre-arranged rendering of services in terms of human and material resources when essential resources of one party are not adequate to meet the needs of a disaster or other emergency. Financial aspects for post-disaster or post-emergency reimbursements may be incorporated into the agreement.
Non-critical Processes	Business processes or supporting information which could be interrupted or unavailable for a significant period of time (generally several weeks) without significantly jeopardizing the critical functions of an organization.
Non-vital Records	Records or documents, which are important, but if irretrievably lost or damaged, will not materially impair the organization's ability to conduct business.
Occupant Evacuation Plan (OEP)	provides facility-level procedures for occupants of a facility in the event of a situation posing a potential threat to the health and safety of personnel, the environment, or property. This plan includes planning for personnel safety and evacuation. This plan is not an IT system functionality based plan and can therefore be implemented separately. A copy of the OEP should be appended to the IT Disaster Recovery Plan for reference purposes.[1]
Order of Succession	A formula that specifies by position who will automatically fill a position once it is vacated.
Plan	A systematic arrangement of elements or important parts.
Point of Contact	The coordinator of the COOP program and leader of the COOP team, who will implement COOP plan during an emergency.
Preventative Controls	Measures in place to prevent loss of function of systems and of data critical to an agency's essential functions.

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[1] Source State of Maryland IT Disaster Recovery Guidelines, 1 November 2002, Department of Budget and Management, Office of Information Technology. p. 4.

Primary Facility   The site of normal, day-to-day operations.

Rapid Recall List   Cascading list of key agency personnel and outside emergency personnel in order of notification.

Recovery Point Objective (RPO)   The point in time to which data must be restored in order to resume processing transactions. In an IT context, the amount of data that can be lost measured by a time index**.**

Recovery Time Objective (RTO)   The period of time within which systems, applications, or functions must be recovered after an outage.

Reconstitution   The process by which surviving and/or replacement personnel resume normal operations from the original or replacement primary operation facility.

Relocation Site (Alternate Facility)   The site where all or designated employees will report for work if required to move from the primary facility.

Risk Assessment/Analysis   An evaluation of the probability that certain disruptions will occur and the controls to reduce organizational exposure to such risk.

Standard Operating Procedures   Protocol for the conduct of regular operations.

Vital Records and Systems   Records or documents, regardless of media (paper, microfilm, audio or video tape, computer disks, etc.) which, if damaged or destroyed, would disrupt business operations and information flows and cause considerable inconvenience and require placement or re-creation at considerable expense.

Warm Site   An alternate processing site which is only partially equipped (as compared to a Hot Site which is fully equipped).

APPENDIX C: COOP OUTLINE

SAMPLE COOP OUTLINE

I.   COOP RESPONSIBILITY

   A. Point of Contact (a.k.a. COOP Coordinator or Team Leader)

      [COOP Manual, Introduction, C. Who is Responsible for COOP Planning? Page 6; COOP Manual, Introduction, D. How does an agency start COOP planning?, 2. COOP Program Model, a. Phase I, page 8; Appendix B: Glossary, page B-5]

   B. COOP Team

      [COOP Manual, Introduction, D. How does an agency start COOP planning?, 2. COOP Program Model, a. Phase I, page 8]

   C. Agency Management

      [COOP Manual, Introduction, D. How does an organization start COOP planning?, 2. COOP Program Model, a. Phase I, page 8]

II. COOP PROGRAM SCHEDULE & TIMELINE

   [COOP Manual, Introduction, D. How does an agency start COOP planning?, 2. COOP Program Model, a. Phase I, page 8]

III. IMPACT ANALYSIS

   [COOP Manual, Introduction, D. How does an agency Start COOP Planning?, 1. Business Continuity Planning, page 6; Appendix B: Glossary, page B-2]

   A. Assets

      1. Buildings/Facilities

      2. Records and Data

      3. Computer Systems

      4. Equipment

   B. Hazards

      1. Natural

      2. Human-Induced

   C. Agency Vulnerability and Risk Assessment [Appendix B: Glossary, page B-5]

      1. Buildings/Facilities

      2. Records and Data

      3. Computer Systems

      4. Equipment

   D. Impact Analysis [Appendix B: Glossary, page B-2]

IV. ORGANIZATION ESSENTIAL FUNCTIONS AND KEY PERSONNEL

A. Organization Functions

[COOP Manual, Section I: Essential Functions, A. Procedures and Techniques for Identification, Task A, page 15; Worksheet 1, Agency Functions, page 17]

B. Organization Essential Functions
[COOP Manual, Section I: Essential Functions, A. Procedures and Techniques for Identification, Task B, page 16; Worksheets 1 & 2, Agency Functions, page 17-18]

1. Associated Personnel

[COOP Manual, Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, page 17-18]

2. Associated Records

[COOP Manual, Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, page 17-18]

3. Associated Systems and Equipment

[COOP Manual, Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, page 17-18]

C. Priority of Essential Agency Functions

[COOP Manual, Section I: Essential Functions, A. Procedures and Techniques for Identification, 3. Task C, Prioritize Essential Functions, page 18; Worksheet 3, Priority of Essential Functions, page 19]

1. Time Criticality of Each Essential Agency Function
[COOP Manual, Section I: Essential Functions, A. Procedures and Techniques for Identification, 3. Task C, Priority of Essential Functions, page 18; Appendix B: Glossary, page B-5]

a. RTOs for Critical Processes or Services Supporting Essential Functions

b. Dependant Processes, Services, & Functions

c. RTOs for Essential Functions

2. Priority for Resumption of Essential Functions

D. Delegation of Authority

[COOP Manual, Section I: Essential Functions, B. Key Personnel and Continuity of Government, 1. Delegation of Authority, page 20; Worksheet 4, Authority to be Delegated, page 22; Worksheet 5, Delegation of Authority: Rules, Procedures and Limitations, page 22]

1. Authority to be Delegated

a. Key Management Positions

b. Key Non-management Positions

2. Rules and Procedures for Delegation of Authority

3. Limitations on Delegation of Authority

    a. Time

    b. Geographical

    c. Organization

    d. Scope

E. Order of Succession

[COOP Manual, Section I: Essential Functions, B. Key Personnel and Continuity of Government, 2. Order of Succession, page 23; Worksheets 6-8, pages 27-28; Appendix B: Glossary, page B-5]

1. Conditions for Succession

2. Notification of Succession

3. Positions/Persons to assume authority.

V. VITAL RECORDS, SYSTEMS, AND EQUIPMENT PROTECTION

A. Identification of Vital Records, Systems and Equipment

[COOP Manual, Section II: Vital Records, Systems, and Equipment, A. Vital Records, page 30; Task J. Identify Vital Records, page 31; Worksheet 9, page 34; B. Vital Systems and Equipment, 1. Task M: Identify Vital Systems and Equipment, page 36; Worksheet 12, Vital Systems and Equipment and Priority, page 37]

1. Records, Systems, and Equipment Required to Perform Agency's Essential Functions

[Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, page 17-18; Worksheet 9, Vital Records, page 34]

2. Time-critical Records, Systems and Equipment (Needed within 72 hours)

[Worksheet 2, Resource Requirements for Critical Processes and Services Supporting Essential Functions, page 17-18; Worksheet 9, Vital Records, page 34]

B. Assessment of Current Vital Records Program

[COOP Manual, Section II: Vital Records, Systems, and Equipment, pages 30-35; Worksheets 10, Vital Records Protection Methods, and 11, Restoration and Recovery Resources, pages 34-35]

1. Current Vital Records Program

    a. Security and Access

        i. Custody of Records

        ii. Authorized Personnel

    b. Records Life Cycle

       c. Physical Preservation

           i. Fire

           ii. Flooding/Water Infiltration

           iii. Structural Damage

           iv. Biological, Chemical and Radiological Contamination

           v. Tampering

           vi. Mechanical Malfunctions and Power Outages

       d. Electronic Record Preservation

       e. Post-Disaster Damage Assessment, Recovery and Reconstitution

    2. Strengths and weaknesses of current program

    3. Recommendations for improvement of current program

       a. Security and Access

       b. Preservation

       c. Post-Disaster Damage Assessment, Recovery and Reconstitution

C. Vital Systems and Equipment Protection and Recovery

[COOP Manual, Section II: Vital Records, Systems, and Equipment, B. Vital Systems and Equipment, Worksheet 12, Vital Systems and Equipment Priority, page 37; Worksheet 13, Vital Systems and Equipment Protection Methods, page 37]

    1. Security and Access

       a. Information Technology Personnel

       b. Other Authorized Personnel

    2. Maintenance

    3. Protection

       a. Fire

       b. Flooding/Water Infiltration

       c. Structural Damage

       d. Biological, Chemical, and Radiological Contamination

       e. Tampering

           i. Computer Viruses

           ii. Mechanical Tampering and Sabotage

       f. Malfunctions and Power Outages

    4. Post-Disaster Damage Assessment and Recovery Sub-Plan

VI. ALTERNATE WORK SITE ASSESSMENT AND RELOCATION

    A. Requirements for Alternate Work Sites

    [COOP Manual, Section III: Alternate Work Sites and Relocation Planning, A. Alternate Work Sites, pages 40-42; Worksheet 14, Requirements for Alternate Work Sites, page 43]

        1. Key Personnel

           a. Spatial Requirements

           b. Equipment and Furniture

        2. Vital Records, Systems & Equipment

           a. Spatial Requirements

           b. Electrical Requirements

           c. Heating Ventilation, and Air Conditioning

           d. Protective Measures

        3. Security and Access Requirements

    B. Options for Alternate Work Sites

    [COOP Manual, Section III: Alternate Work Sites and Relocation Planning, A. Alternate Work Sites, 2. Task P: Identify Various Options for Alternate Work Sites, page 42; Worksheet 15, Alternate Work Site Options, page 43]

        1. Current Agency Facility Assessment

           a. Assets

               i. Physical

              ii. Security and Access

           b. Deficits

               i. Physical

              ii. Security and Access

           c. Contractual Obligations

        2. Other Available Facilities Assessment

           a. Other Agency and Public facilities

               i. Assets

                   (a) Physical

                   (b) Security and Access

                   (c) Vital Records, Systems and Equipment Requirements

              ii. Deficits

                   (a) Physical

         (b) Security and Access

         (c) Vital Records, Systems and Equipment Requirements

     iii. Contractual Considerations

     iv. Costs

  b. Private facilities

     i. Assets

         (a) Physical

         (b) Security and Access

         (c) Vital Records, Systems and Equipment Requirements

     ii. Deficits

         (a) Physical

         (b) Security and Access

         (c) Vital Records, Systems and Equipment Requirements

     iii. Contractual Considerations

     iv. Costs

  c. Cooperative and Mutual Aid Agreements

    [COOP Manual, Section III: Alternate Work Sites and Relocation Planning, page 41; Appendix B: Glossary, pages B-3, B-4]

C. Relocation Sub-Plan

[COOP Manual, Section III: Alternate Work Sites and Relocation, B. Relocation Planning, pages 42-43; Worksheets 14 and 15, page 43]

1. Activation of Relocation Sub-Plan

  a. Emergency Triggers for Hot Site Activation

  [COOP Manual, Section III: Alternate Work Sites and Relocation, A. Alternate Work Sites, page 40; Section V: Reconstitution, pages 52-55; Section VI: COOP Plan Execution, A. COOP Plan Execution, pages 57-58; Section VII: COOP Training, Testing, and Drills, pages 69; Section VIII: Certification, 71; Appendix B: Glossary, page B-4]

     i. Complete destruction or incapacitation of agency headquarters

     ii. Complete destruction or incapacitation of key agency satellite facilities and/or facilities containing vital records, systems and equipment

  b. Emergency Triggers for Warm Site Activation

  [COOP Manual, Section III: Alternate Work Sites and Relocation, A. Alternate Work Sites, page 40; Section V: Reconstitution, page 52; Section VI: COOP Plan Execution, page 57; Section VII: Training, Testing, and Drills, page 69; Section VIII: Certification, page 71; Appendix B: Glossary, page B-6]

<blockquote>

i. Partial destruction or incapacitation of agency headquarters

ii. Partial destruction or incapacitation of key agency satellite facilities and/or facilities containing vital records, systems and equipment

</blockquote>

c. Emergency Triggers for Cold Site Activation

[COOP Manual, Section III: Alternate Work Sites and Relocation, A.Alternate Work Sites, page 40; Section V: Reconstitution, page 52; Section VI: COOP Plan Execution, page 57; Section VII: Training, Testing, and Drills, page 69; Section VIII: Certification, page 71; Appendix B: Glossary, page B-2]

<blockquote>

i. Partial destruction or incapacitation of agency satellite facilities

ii. Short term incapacitation of agency satellite facilities

</blockquote>

3. Transportation, Lodging, and Food

[COOP Manual, Section III: Alternate Work Sites and Relocation, B. Relocation Planning, page 42-43; Worksheet 14-15, page 43]

a. Hot Site Facilities

b. Warm Site Facilities

c. Cold Site Facilities

4. Security and Access

[COOP Manual, Section III: Alternate Work Sites and Relocation, A. Alternate Work Sites, B. Relocation Planning, page 42-43; Worksheet 15, Security and Access, page 43]

a. Hot Site Facilities

b. Warm Site Facilities

c. Cold Site Facilities

2. Communications

[COOP Manual, Section IV: Communications, D. Chain of Communication, page 50; Worksheet 19, Personnel Contact List, page 51]

a. Notification of Emergency and Non-Agency Personnel

b. Notification of Key Personnel

c. Notification of Non-essential Personnel

VII. COMMUNICATIONS

A. Communication Systems Supporting Essential Functions

[COOP Manual, Section IV: Communications, A. Communication Systems Supporting Essential Functions, Task Q: Identify Communication Systems, pages 45-46; Worksheet 16, Communication Systems Supporting Essential Functions, page 48]

B. Preventative Controls

[COOP Manual, Section IV: Communications, B. Preventative Controls and Alternative Modes of Communication, pages 46-47; Worksheet 17, Preventative Controls for Communication Systems, page 48; Appendix B: Glossary, page B-5]

    1. Primary Facility

    2. Alternate Facilities

C. Alternative Communication Methods and Interoperability

[COOP Manual, Section IV: Communications, B. Preventative Controls and Alternative Modes of Communication, pages 46-47; Worksheet 18, Alternative Modes of Communication, page 49 Appendix B: Glossary, pages B-1, B-4]

D. Media Relations

[COOP Manual, Section IV: Communications, C. Media Relations, page 49]

E. Chain of Communication

[COOP Manual, Section IV: Communications, D. Chain of Communication, page 50; Worksheet 19, Personnel Contact List, page 51]

    1. Personnel

        a. Point of Contact/COOP Team Leader

        b. COOP Team

        c. Intra- and Extra-agency Emergency Responders

        d. Agency Management

        e. Key Agency Personnel

    2. Order of Notification (Rapid Recall List)

[COOP Manual, Section IV: Communications, D. Chain of Communication, page 50; Worksheet 19 Personnel Contact List, page 51]

VIII. RECONSTITUTION

[COOP Manual, Section V: Reconstitution, E. Planning Beyond 14 Days, Task U, Forming a Reconstitution Team; page 54]

1. Identify Manager and Team Members

IX. COOP PLAN EXECUTION

A. COOP Plan Execution

[COOP Manual, Section VI: COOP Plan Execution, pages 57-67]

1. Roles and Duties

[COOP Manual, Section VI: COOP Plan Execution, A. COOP Plan Execution, page 57; Introduction, D. How Does an Agency Start COOP Planning?, 2. COOP Planning Model, page 8]

    a. COOP POC

    b. COOP Team Members

    c. Agency Management

    d. Agency Division Management

    e. Key Agency Personnel

    f. Information Technology Personnel

    g. Named Successors in Order of Succession Plan

2. Triggers for COOP Implementation

[COOP Manual, Section VII: COOP Training, Testing, and Drills, page 69]

    a. Incapacitation of Key Agency Personnel

    b. Incapacitation of Key Agency Facilities

    c. Incapacitation of Agency Vital Systems and Equipment

    d. Loss, Damage, or Destruction of Vital Records

3. Phases of Relocation

[COOP Manual, Section III: Alternate Work Sites and Relocation Planning, page 43]

    a. Phase I: Activation and Relocation

    b. Phase II: Alternate Facility/Work Site Operations

    c. Phase III: Reconstitution and Return to Normal Operations

B. Emergency Evacuation Plan

[COOP Manual, Section VI: COOP Plan Execution, pages 57-67]

1. Building Evacuation Plan

[COOP Manual, Section VII: COOP Plan Execution, B. Building Evacuation Plan, page 58]

    a. Building Alert System

    b. Evacuation Routes and Exits

    c. Emergency Evacuation Personnel

    d. Designated Assembly Area(s)

    e. Employee Contact List

    f. Shelter-In-Place

    g. Training

TRAINING, TESTING AND DRILLS

[COOP Manual, Section VII: COOP Training, Testing, and Drills, page 69]

A. Training, Testing and Drills

[COOP Manual, Section VII: COOP Training, Testing, and Drills, page 69]

1. COOP Training and Drills

   a. COOP POC

   b. COOP Team Members

   c. Agency Management

   d. Agency Division Management

   e. Key Agency Personnel

   f. Information Technology Personnel

   g. Named Successors in Order of Succession Plan

   h. Remaining Agency Personnel

2. CPR/First Aid and Other Training

   a. COOP POC

   b. COOP Team Members

3. Testing of Backup Systems and Equipment

Appendix D: Reference Materials

REFERENCES

Federal Preparedness Circulars:

FPC 65, Federal Executive Branch Continuity of Operations (COOP), dated July 26, 1999.
 http://www.fas.org/irp/offdocs/pdd/fpc-65.htm

FPC 66, Federal Executive Branch Continuity of Operations (COOP), dated April 30, 2001.
 http://www.fema.gov/pdf/library/fpc66.pdf

FPC 67, Federal Executive Branch Continuity of Operations (COOP), dated April 30, 2001.
 http://www.fema.gov/pdf/library/fpc67.pdf

Presidential Decision Directives:
Clinton, W. J. (1998, May 22). *Combating Terrorism*. PDD 62.

 http://www.fas.org/irp/offdocs/pdd-62.htm

Clinton, W.J. (1998, May 22). *Critical Infrastructure Protection (CIP).* PDD 63.

 http://www.fas.org/irp/offdocs/pdd/pdd-63.htm

Clinton, W. J. (1999, Oct. 21). *Enduring Constitutional Government and Continuity of Government Operations*. PDD 67.

 http://www.fas.org/irp/offdocs/pdd/pdd-67.htm

Bush, G. W. (2003, Dec. 17). *Critical Infrastructure Identification, Prioritization, and Protection*. Homeland Security Presidential Directive 7.

 http://www.fas.org/irp/offdocs/nspd/hspd-7.html

Additional Resources:
FEMA Independent Study Program: IS-547 Introduction to Continuity of Operations (COOP), Http://training.fema.gov/EMIWeb/IS/is547.asp.

NIMS Information: www.fema.gov/**nims**

Appendix E: COOP Quick Plan Guidance

1.0 Essential Function A:
Priority number of function:
Associated Critical Processes/Services Description:
Key Personnel:
   Work Phone:
   Home Phone:
   Cell Phone:
   Additional #s:
   Emergency Contact #:
  Successor 1:
   Work Phone:
   Home Phone:
   Cell Phone:
   Additional #s:
   Emergency Contact #:
  Successor 2:
   Work Phone:
   Home Phone:
   Cell Phone:
   Additional #s:
   Emergency Contact #:
  Successor 3:
   Work Phone:
   Home Phone:
   Cell Phone:
   Additional #s:
   Emergency Contact #:
  Successor 4:
   Work Phone:
   Home Phone:
   Cell Phone:
   Additional #s:
   Emergency Contact #:
Delegation of Authorities:
Rules and Limitations on Authority Delegations:
Vital Records:
Backup:
Vital Systems:
Backup:
Vital Equipment:
Primary Facility:
Alternate Facility and Corresponding Information (transportation/lodging/food,
   spatial requirements, number of personnel needed at alternate facility):
Is this a Hot/Warm/ or Cold Site:
Communications:
Backup:

START ⟶

NOTE: Before you begin with the following 12 steps, start by reviewing the attached template.

STEP 1: Look to your mission statement. Determine the functions of your organization that MUST be addressed within the first 14 days of an emergency. These are your essential functions. Prioritize them by determining which functions would need to be handled first.

STEP 2: After determining your essential functions, list the critical processes and services associated with that function.

⟶

STEP 3: For each essential function, list the key personnel needed to carry out that function.

STEP 4a: For each key personnel determine 4 successors who could take over each position in an emergency.

STEP 4b: When gathering data for the order of succession, include the employee's name, title, work/home/cell phone numbers, home address, and emergency contact number

NEXT PAGE

STEP 5a: For this step, you will need to determine the authority to be delegated and the procedures associated with the delegation of authorities. Authorities to be delegated include, closing the office, or making budgetary decisions. List all authorities to be delegated for each key position, including whether it is emergency or administrative authority, the position holding authority, and the triggering condition providing authority.

STEP 5b: Once the delegation of authorities is determined, you need to review the order of succession to ensure that each successor is capable of carrying out all the duties of his/her predecessor. If the successor needs permission or cannot carry out all duties of the predecessor, then the rules and limitations for that position must be listed.

STEP 6a: Every organization needs a vital records program. Examine each essential function and determine the vital records that are needed to carry out that function. Specify whether the record is in electronic or hard copy, or both, and where the records are physically located.

STEP 6b: The next step is to identify backup and recovery methods for the organization's vital records. List the storage location, maintenance frequency, current protection methods, and any additional protection methods.

STEP 6c: The final step to the vital records program is restoration and recovery. Identify the company name, contact name, address/phone number/hours, and services provided by the organization's restoration resources.

STEP 7a: An essential function cannot operate without the necessary systems and equipment. In step 7, you will need to identify the systems and equipment associated with each essential function. Begin by looking at the associated critical processes and services for each function. Then, list the *critical* systems and equipment, including, computers or databases, along with networks or servers that must be operational. Finally, offer a description of the system or equipment.
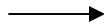
STEP 7b: Protection methods must be addressed for vital systems and equipment. For each vital system and equipment, list the location, maintenance frequency, current protection methods, and any other additional protection methods.

STEP 8: Provide the address of your organization's primary facility.
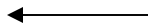
STEP 9a: Every organization needs an alternate facility, and two are better than one. Provide an address for each of your organization's alternate facilities. Label the facility as a hot, cold, or warm site. A hot site can be accessed immediately and all systems and equipment would be fully operational. A warm site contains at least some equipment and/or systems, but may not be fully operational to carry out all essential functions. A cold site is basically a space to operate. Remember, if it is feasible, an employee can work out of his/her home.
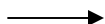
STEP 9b: Now, for each alternate facility listed, provide information on how many employees will be needed, how they will be transported to the facility, what the organization will do about lodging and food, and what spatial requirements will be required to accommodate those employees.

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STEP 10a: One of the most critical components of a COOP plan is the Communications. This allows an organization to remain in contact and provide continuous updates on a situation. Keeping in mind your essential functions, provide detailed information regarding your organization's voice lines, fax lines, data lines, cellular phones, pagers, email, internet access, radio communications systems, and Blackberry's. This means listing the current provider, and the services provided.

STEP 10b: Next, identify the optimal preventative controls and the preventative controls already in place for each of your communications systems.

STEP 10c: Finally, identify alternative providers for each of your communications systems.

STEP 11: The second to last step in this modified COOP Planning process is to put together an employee contact list. This includes providing names, addresses, work/home/cell phone numbers, and emergency contact names and numbers for your essential employees.

STEP 12: Lastly, go back to the template and fill in the components with the data that you have compiled throughout these steps.

FINISHED: Once you complete all of these steps and fill out the corresponding template, your organization will have a head start on beginning its COOP plan.

Appendix F: COOP Guidance Memo

State of Maryland

Continuity of Operations
Planning Guidance

PURPOSE

This memorandum provides guidance to Maryland organizations for use in developing viable and executable contingency plans for the continuity of operations (COOP). COOP planning facilitates the performance of department/agency essential functions during any emergency or situation that may disrupt normal operations.

APPLICABILITY AND SCOPE

The provisions of this memorandum are applicable to all departments, agencies, independent organizations, and local governments hereinafter referred to as "organizations." While some of the language contained in this guidance focuses on planning for threats related to terrorism, the COOP elements outlined herein are for use in all hazards.

POLICY

It is the policy of the State of Maryland to have in place a comprehensive and effective program to ensure continuity of essential functions under all circumstances. As a baseline of preparedness for the full range of potential emergencies, all organizations shall have in place a viable COOP capability which ensures the performance of their essential functions during any emergency or situation that may disrupt normal operations.

BACKGROUND

COOP planning is simply a "good business practice"—part of the fundamental mission of organizations as responsible and reliable public institutions. For years, COOP planning had been an individual organization responsibility primarily in response to emergencies within the confines of the organization. The content and structure of COOP plans, operational standards, and interagency coordination, if any, were left to the discretion of the agency. The changing threat environment and recent emergencies, including localized acts of nature and terrorism, have shifted awareness to the need for COOP capabilities that enable organizations to continue their essential functions across a broad spectrum of emergencies. Also, the recent use of weapons of mass destruction has emphasized the need to provide the Governor a capability which ensures continuity of essential government functions across the State. To provide a focal point to orchestrate this expanded effort, MEMA will be coordinating COOP efforts. Inherent in that role is the responsibility to formulate guidance for organizations to use in developing viable, executable COOP plans; facilitate interagency coordination as appropriate; and oversee and assess the status of COOP capability across State government. Additionally, each agency is responsible for appointing a senior government executive as an Emergency Coordinator to serve as program manager and agency point of contact for coordinating agency COOP activities.

OBJECTIVES

COOP planning is an effort to assure that the capability exists to continue essential agency functions across a wide range of potential emergencies. The objectives of a COOP plan include:

   a. Ensuring the continuous performance of an organizations' essential functions/operations during an emergency;

   b. Protecting essential facilities, equipment, records, and other assets;

   c. Reducing or mitigating disruptions to operations;

   d. Reducing loss of life, minimizing damage and losses; and,

   e. Achieving a timely and orderly recovery from an emergency and resumption of full service to customers.

PLANNING CONSIDERATIONS

In accordance with current guidance, a viable COOP capability:

   a. Must be maintained at a high level of readiness;

   b. Must be capable of implementation both with and without warning;

   c. Must be operational no later than 12 hours after activation;

   d. Must maintain sustained operations for up to two weeks; and,

   e. Should take maximum advantage of existing organization field infrastructures.

Organizations should develop and maintain their COOP capabilities using a multi-year strategy and program management plan. The plan should outline the process the agency will follow to designate essential functions and resources, define short and long-term COOP goals and objectives, forecast budgetary requirements, anticipate and address issues and potential obstacles, and establish planning milestones.

ELEMENTS OF A VIABLE COOP CAPABILITY

At a minimum, all organizations should develop and maintain their COOP capabilities using a multi-year strategy and program management plan. The plan should outline the process the agency will follow to designate essential functions and resources, define short and long-term COOP goals and objectives, forecast budgetary requirements, anticipate and address issues and potential obstacles, and establish planning milestones.

COOP capabilities shall encompass the following elements:

a. PLANS AND PROCEDURES. A COOP plan shall be developed and documented that when implemented will provide for continued performance of essential functions under all circumstances. At a minimum, the plan should:

1. Delineate essential functions and activities;

2. Outline a decision process for determining appropriate actions in implementing COOP plans and procedures;

3. Establish a roster of fully equipped and trained emergency personnel with the authority to perform essential functions and activities;

4. Include procedures for employee advisories, alerts, and COOP plan activation, with instructions for relocation to pre-designated facilities, with and without warning, during duty and non-duty hours;

5. Provide for personnel accountability throughout the duration of the emergency;

6. Provide for attaining operational capability within 12 hours; and,

7. Establish reliable processes and procedures to acquire resources necessary to continue essential functions and sustain operations for up to two weeks.

b. IDENTIFICATION OF ESSENTIAL FUNCTIONS. All organizations should identify their essential functions as the basis for COOP planning. Essential functions are those functions that enable organizations to provide vital services, exercise civil authority, maintain the safety and well being of the general populace, and sustain the industrial/economic base in an emergency. In identifying essential functions, organizations should:

1. Identify all functions performed by the organization, then determine which must be continued under all circumstances;

2. Prioritize these essential functions;

3. Establish staffing and resources requirements needed to perform essential functions;

4. Identify mission critical data and systems necessary to conduct essential functions;

5. Defer functions not deemed essential to immediate agency needs until additional personnel and resources become available; and,

6. Integrate supporting activities to ensure that essential functions can be performed as efficiently as possible during emergency relocation.

c. DELEGATIONS OF AUTHORITY. To ensure rapid response to any emergency situation requiring COOP plan implementation, organizations should pre-delegate authorities for making policy determinations and decisions at headquarters, field levels, and other organizational locations, as appropriate. These delegations of authority should:

1. Identify the programs and administrative authorities needed for effective operations at all organizational levels having emergency responsibilities;

2. Identify the circumstances under which the authorities would be exercised;

3. Document the necessary authorities at all points where emergency actions may be required, delineating the limits of authority and accountability;

4. State explicitly the authority of designated successors to exercise agency direction, including any exceptions, and the successor's authority to re-delegate functions and activities as appropriate;

5. Indicate the circumstances under which delegated authorities would become effective and when they would terminate. Generally, pre-determined delegations of authority would take effect when normal channels of direction are disrupted and would terminate when these channels have resumed;

6. Ensure that officials who may be expected to assume authorities in an emergency are trained to carry out their emergency duties; and,

7. Specify responsibilities and authorities of individual agency representatives designated to participate as members of interagency emergency response teams.

d. ORDERS OF SUCCESSION. Organizations are responsible for establishing, promulgating, and maintaining orders of succession to key positions. Such orders of succession are an essential part of an agency's COOP plan. Orders should be of sufficient depth to ensure the agency's ability to perform essential functions while remaining a viable part of the Government through any emergency. Geographical dispersion is encouraged, consistent with the principle of providing succession to office in emergencies of all types. Each agency should:

1. Establish an order of succession to the position of Organization Head. A designated official serves as acting head of the organization until appointed by the Governor or relieved;

2. Establish orders of succession to other key headquarters leadership, district office, and regional positions;

3. Identify any limitation of authority based on delegations of authority to others;

4. Describe orders of succession by positions or titles, rather than names of individuals;

5. Include the orders of succession in the vital records of the agency;

6. Revise orders of succession as necessary, and distribute revised versions promptly as changes occur;

7. Establish the rules and procedures designated officials are to follow when facing the issues of succession to office in emergency situations;

8. Include in succession procedures the conditions under which succession will take place; method of notification; and any temporal, geographical, or organizational limitations of authorities;

9. Assign successors, to the extent possible, among the emergency teams established to perform essential functions, to ensure that each team has an equitable share of duly constituted leadership; and,

10. Conduct orientation programs to prepare successors for their emergency duties.

e. ALTERNATE FACILITIES. All organizations shall designate alternate operating facilities as part of their COOP plans, and prepare their personnel for the possibility of unannounced relocation of essential functions and/or COOP contingency staffs to these facilities. Facilities may be identified from existing organization infrastructures, or external sources. Facilities shall be capable of supporting operations in a threat-free environment, as determined by the geographical location of the facility, a favorable assessment of the local threat, and/or the collective protection characteristics of the facility. In acquiring and equipping such facilities, organizations are encouraged to consider cooperative interagency agreements and promote sharing of identified alternate facilities. Alternate facilities should provide:

1. Immediate capability to perform essential functions under various threat conditions, including threats involving weapons of mass destruction;

2. Sufficient space and equipment to sustain the relocating organization. Since the need to relocate may occur without warning, or access to normal operating facilities may be denied, organizations are encouraged to pre-position and maintain minimum essential equipment for continued operations at the alternate operating facilities;

3. Interoperable communications with all identified essential internal and external organizations, critical customers, and the public;

4. Reliable logistical support, services, and infrastructure systems, including water, electrical power, heating and air conditioning, etc.

5. Ability to sustain operations for a period of up to two weeks;

6. Consideration for the health, safety, and emotional well-being of relocated employees; and,

7. Appropriate physical security and access controls.

f. INTEROPERABLE COMMUNICATIONS. The success of organization operations at an alternate facility is absolutely dependent upon the availability and redundancy of critical communications systems to support connectivity to

internal organizations, other organizations, critical customers, and the public. When identifying communications requirements, organizations should take maximum advantage of the entire spectrum of communications media likely to be available in any emergency situation. These services may include, but are not limited to: secure and/or non-secure voice, fax, and data connectivity; Internet access; and e-mail. Interoperable communications should provide:

1. Capability commensurate with an organizations' essential functions and activities;

2. Ability to communicate with COOP contingency staffs, management, and other organizational components;

3. Ability to communicate with other organizations and emergency personnel; and,

4. Access to other data and systems necessary to conduct essential activities and functions.

g. VITAL RECORDS AND DATABASES. The protection and ready availability of electronic and hardcopy documents, references, records, and information systems needed to support essential functions under the full spectrum of emergencies is another critical element of a successful COOP plan. Personnel must have access to and be able to use these records and systems in conducting their essential functions. Categories of these types of records may include:

1. Emergency Operating Records. Vital records, regardless of media, essential to the continued functioning or reconstitution of an organization during and after an emergency. Included are emergency plans and directives; orders of succession; delegations of authority; staffing assignments; and related records of a policy or procedural nature that provide agency staff with guidance and information resources necessary for conducting operations during an emergency, and for resuming formal operations at its conclusion.

2. Legal and Financial Records. Vital records, regardless of media, critical to carrying out an organization's essential legal and financial functions and activities, and protecting the legal and financial rights of individuals directly affected by its activities. Included are records having such value that their loss would significantly impair the conduct of essential agency functions, to the detriment of the legal or financial rights or entitlements of the organization or of the affected individuals. Examples of this category of vital records are accounts receivable; contracting and acquisition files; official personnel files; Social Security, payroll, retirement, and insurance records; and property management and inventory records.

Plans should account for identification and protection of the vital records, systems, and data management software and equipment, to include classified or sensitive data as applicable, necessary to perform essential functions and activities, and to reconstitute normal agency operations after the emergency. To the extent possible, organizations should pre-position and update on a regular basis duplicate records or back-up electronic files.

h. TESTS, TRAINING AND EXERCISES. Testing, training, and exercising of COOP capabilities is essential to demonstrating and improving the ability of organizations to execute their COOP plans. Training familiarizes contingency staff members with the essential functions they may have to perform in an emergency. Tests and exercises serve to validate, or identify for subsequent correction, specific aspects of COOP plans, policies, procedures, systems, and facilities used in response to an emergency situation. Periodic testing also ensures that equipment and procedures are maintained in a constant state of readiness. All organizations shall plan and conduct tests and training to demonstrate viability and interoperability of COOP plans. COOP test, training, and exercise plans should provide for:

1. Individual and team training of organization COOP contingency staffs and emergency personnel to ensure currency of knowledge and integration of skills necessary to implement COOP plans and carry out essential functions. Team training should be conducted at least annually for COOP contingency staffs on their respective COOP responsibilities;

2. Internal agency testing and exercising of COOP plans and procedures to ensure the ability to perform essential functions and operate from designated alternate facility / facilities. This testing and exercising should occur at least annually;

3. Testing of alert and notification procedures and systems for any type of emergency at least quarterly;

4. Refresher orientation for COOP contingency staffs arriving at an alternate operating facility. The orientation should cover the support and services available at the facility, including communications and information systems for exchanging information if the normal operating facility is still functioning; and administrative matters, including supervision, security, and personnel policies; and,

5. Joint agency exercising of COOP plans, where applicable and feasible.

COOP IMPLEMENTATION

Relocation may be required to accommodate a variety of emergency scenarios. Examples include scenarios in which:

- An organizations' headquarters is unavailable and operations can shift to a regional or field location;

- A single organization facility is temporarily unavailable and the agency can share one of its own facilities or that of another organization; and,

- Many, if not all, organizations must evacuate a metropolitan area.

While any of these scenarios involves unavailability of a facility, the distinction must be made between a situation requiring evacuation only and one dictating the need to implement COOP plans. A COOP plan includes the deliberate and pre-planned movement of selected key principals and supporting staff to a relocation facility. As an example, a sudden emergency, such as a fire or hazardous materials incident, may require the evacuation of an organization building with little or no advanced notice, but for only a short duration. Alternatively, an emergency so severe that an organization facility is rendered unusable and likely will be for a period long enough to significantly impact normal operations, may require COOP plan implementation. Organizations should develop an executive decision process that would allow for a review of the emergency and determination of the best course of action for response and recovery. This will preclude premature or inappropriate activation of an agency COOP plan.

One approach to ensuring a logical sequence of events in implementing a COOP plan is time phasing. A suggested time-phased approach for COOP activation and relocation, alternate facility operations, and reconstitution follows:

a. <u>PHASE I—ACTIVATION AND RELOCATION (0-12 HOURS)</u>

- o Notify alternate facility manager(s) of impending activation and actual relocation requirements;

- o Notify the MEMA Joint Operations Center (MJOC), (410) 517-3600, and other appropriate organizations of the decision to relocate and the time of execution or activation of call-down procedures;

- o Activate plans, procedures, and schedules to transfer activities, personnel, records, and equipment to alternate operating facility/facilities;

- o Notify initial COOP contingency staff to relocate;

- o Instruct all other emergency and non-emergency personnel on what they are to do;

- o Assemble necessary documents and equipment required to continue performance of essential operations at alternate operating facility/facilities;

- o Order equipment/supplies, if not already in place;

- o Transport documents and designated communications, automated data processing, and other equipment to the alternate operating facility/facilities, if applicable;

- Secure the normal operating facility physical plant and non-moveable equipment and records, to the extent possible;

- Continue essential operations at the normal operating facility if available, until alternate facility/facilities is operational; and,

- Advise alternate operating facility manager(s) on the status of follow-on personnel.

b. PHASE II—ALTERNATE FACILITY OPERATIONS (12 HOURS – TERMINATION)

- Provide amplifying guidance to other key staff and non-emergency employees;

- Identify replacements for missing personnel and request augmentation as necessary;

- Commence full execution of essential operations at alternate operating facility/facilities;

- Notify the MJOC and all other appropriate organizations immediately of the organizations' alternate location, operational and communications status, and anticipated duration of relocation, if known; and,

- Develop plans and schedules to phase down alternate facility/facilities operations and return activities, personnel, records, and equipment to the primary facility when appropriate.

c. PHASE III—RECONSTITUTION (TERMINATION AND RETURN TO NORMAL OPERATIONS)

- Inform all personnel, including non-emergency personnel, that the threat of or actual emergency no longer exists, and provide instructions for resumption of normal operations;

- Supervise an orderly return to the normal operating facility, or movement to other temporary or permanent facility/facilities using a phased approach if conditions necessitate;

- Report status of relocation to the MJOC and other organization's points of contact (POC), if applicable; and,

- Conduct an after-action review of COOP operations and effectiveness of plans and procedures as soon as possible, identify areas for correction, and develop a remedial action plan.

RESPONSIBILITIES

The following responsibilities should be clearly outlined in agency COOP planning guidance and internal documents:

a. Each organization head is responsible for:

1. Appointing an organization COOP program POC;
2. Developing a COOP Multi-Year Strategy and Program Management Plan;
3. Developing, approving, and maintaining organization COOP plans and procedures for headquarters and all subordinate elements, which provide for:

   - Identification of organization essential functions;
   - Pre-determined delegations of authority and orders of succession;
   - Contingency staffing to perform essential functions;
   - Alternate operating facilities;
   - Interoperable communications, information processing systems and equipment; and,
   - Protection of vital records and systems.

4. Conducting tests and training of organization COOP plans, to include COOP contingency staffs, and essential systems and equipment, to ensure timely and reliable implementation of COOP plans and procedures;
5. Participating in periodic interagency COOP exercises to ensure effective interagency coordination and mutual support;
6. Notifying the MJOC and other appropriate organizations upon implementation of COOP plans; and,
7. Coordinating intra-organization COOP efforts and initiatives with policies, plans, and activities related to terrorism and critical infrastructure protection.

b. In addition, MEMA is responsible for:

1. Serving as the Executive Agent for Executive Branch COOP;
2. Coordinating COOP activities of State organizations;
3. Issuing COOP guidance to promote understanding of, and compliance with, the requirements and objectives of governing directives;
4. Chairing a COOP Working Group (CWG), which serves as the principal interagency forum for discussion of COOP matters such as policy guidance, plans, and procedures, and for dissemination of information to organizations for developing and improving their individual COOP plans;
5. Coordinating interorganization COOP exercises; and,
6. Conducting periodic assessments of COOP capabilities and reporting the results to the Governor.