

# Evacuation Transportation Management

## Task Five: Operational Concept



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16. Abstract Much of what is known about evacuations is based on preparations for incidents, such as hurricanes, for which there is advance warning. With advance warning, evacuations can be planned and managed using procedures and systems that have been developed as a result of extensive and methodical pre-planning. This approach, however, does not adequately support management of incidents when there is no advance warning or when conditions are changing rapidly. Evacuations in response to these types of incidents tend to be monitored, but not well managed. The Federal Highway Administration (FHWA) recognized the importance of and need for new tools and processes to help agencies plan for and manage evacuations where there is little or no advanced warning. Consequently, the FHWA initiated a project to assess the state of the practice and state of the art in evacuation transportation management.  The purpose of this document is to outline a concept of operations for transportation management during a no-notice emergency evacuation. This report will illustrate how agencies interact with each other, what information is shared, and how transportation systems are effectively managed during disasters. The concept of operations is intended to address who, what, when, where, why, and how the transportation management system needs to operate during a major no-notice event or disaster requiring evacuation. A high level description of activities that occur during each phase of the evacuation process is provided.			
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## CHAPTER 1. INTRODUCTION

This document is part of a study on the State of the Practice and State of the Art in Evacuation Transportation Management being conducted for the Federal Highway Administration (FHWA).

### 1.1 Purpose of Document

The purpose of this document is to outline a concept of operations for transportation management during a no-notice emergency evacuation. This report illustrates how agencies interact with each other, what information is shared, and how transportation systems are effectively managed during disasters. The concept of operations addresses the who, what, when, where, why, and how of the operation of the transportation management system during a major no-notice event or disaster requiring evacuation. A high-level description of activities that occur during each phase of the evacuation process is provided. Thus, this document provides an overview of the various agencies involved, their roles and responsibilities, the type of information exchanged between them, and the methods by which this occurs.

### 1.2 Definition of Event

Based on the knowledge gained from various sources and documentation, a common definition for a disaster has been defined for this study, which entails the following:

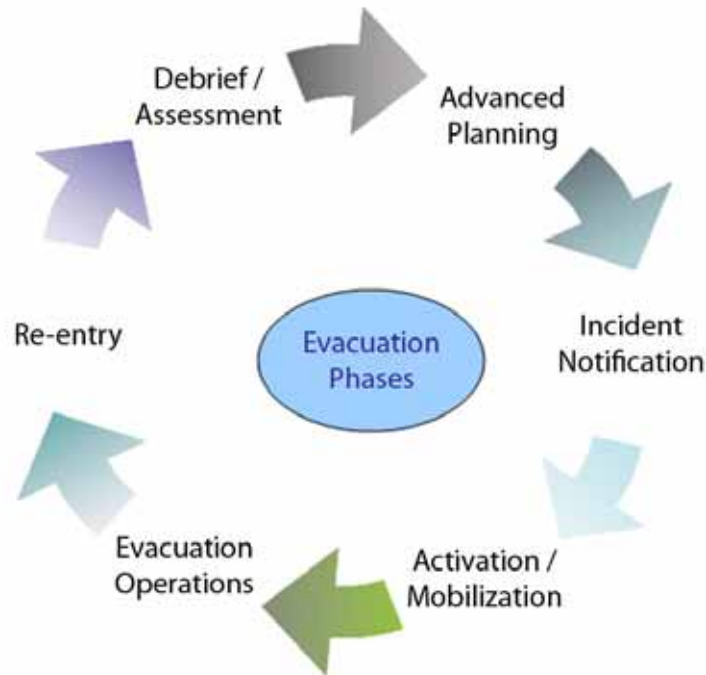
- *Suddenness* – Unforeseen, unpredictable
- *Scale* – Has large impact and involves a large part of the public
- *Institutional Response* – Beyond the normal capacity for coping and involving many institutions
- *Prolonged Duration of Effect* – Impact does not quickly dissipate
- *Uncertainty in Behavioral Response* – Outside of normal range of experience.

### 1.3 General Timeline of Events

For the purpose of this study, a no-notice disaster that results in an emergency evacuation can be divided into phases, based on a timeline of events, as shown in Figure 1. The six phases of activities that form a general progression of events are:

- Phase 1 – Advanced Planning
- Phase 2 – Incident Notification
- Phase 3 – Activation and Mobilization
- Phase 4 – Evacuation Operations
- Phase 5 – Re-Entry
- Phase 6 – Debrief and Assessment.

**Figure 1: Phases of a No-Notice Emergency Evacuation**



Given the spontaneous and chaotic nature of no-notice emergency incidents, these phases are likely to overlap in time. Therefore, the progression of these phases is not meant to indicate a firm timeline.

**Advanced Planning** – Ideally, some level of planning and organization will have been established prior to an event actually taking place. The planning phase would assume that agencies have worked together to establish a cooperative system for just such an emergency including roles and responsibilities, resource management and infrastructure operations, and key points of contact for agencies that would be involved. Education of the public would also be covered as advanced planning.

**Incident Notification** – This phase assumes an incident has occurred and been detected, and notification must be established. This is when the incident command system (ICS) is initialized.

**Activation and Mobilization** – This phase involves the dissemination of information to the public and all preparation for the actual evacuation. The ICS will be established and operational.

**Evacuation Operations** – This phase covers the actual exit movement and transfer of people and goods from the affected area to another. State, county, and local agency support will be directed through the ICS.

**Re-Entry** – This phase involves the ingress of evacuees. It will require coordination among local, county, and state agencies, through the ICS, to ensure a safe and orderly re-entry process.

***Debrief and Assessment*** – The final phase in the evacuation process occurs after a majority of the evacuees has returned, the ICS is disassembled, and day-to-day operations are more or less “back to normal.” This phase addresses the need for all agencies involved in the evacuation process to sit down together and evaluate the overall evacuation operation from beginning to end.

## **1.4 Agencies Involved in Evacuation Implementation**

For this report, several agency types were identified for easier categorization of the numerous agencies that may take part in an evacuation event. According to locale, agencies may take on similar titles, but have entirely different functions. The purpose of categorizing the agencies was to help in distinguishing the various levels of jurisdiction that agencies may take on in an “ideal” setting. In actuality, there may be agencies that operate in dual roles, such as local and county roles. These are likely to be more common in rural settings. For the purpose of this report, a more hierarchical structure is assumed.

### **Local**

The local agency would be the jurisdiction or municipality in which the incident has occurred. The local agency would determine the severity of the incident and identify the need for evacuation.

Examples of local agencies include:

- City Emergency Management Department
- City Street Transportation Department
- City Police Department
- City Public Transit Department.

### **County and State**

Typically, evacuation orders will come from the county or state level. In many instances, the county emergency operations center will assume a lead partner role with local agencies, and state agencies would play more of a support role, involving additional resources and personnel as needed, to assist local and county agencies in conducting an emergency evacuation.

Examples of county agencies include:

- County Office of Emergency Management
- County Office of Homeland Security
- County Department of Transportation
- Sheriff’s Office (County Law Enforcement/Public Safety).

Examples of state agencies include:

- State Division of Emergency Management
- State Office of Homeland Security
- State Department of Transportation.



## **Federal**

Federal agencies, such as the Department of Homeland Security (DHS) or the Department of Justice, tend to play a coordinating or investigative role after the incident has taken place. The Federal Emergency Management Agency (FEMA) may also conduct an evacuation operations assessment after local and state agencies have implemented the evacuation.

Examples of federal agencies include:

- FEMA
- FHWA.

## **Other**

All other non-governmental agencies are categorized as other agencies. These would include the media and private sector agencies that also play an important role in the evacuation such as the American Red Cross and Salvation Army. They serve and assist the evacuees throughout the process, often having the most direct contact with the affected population.

## **1.5 Organization of Report**

The following chapters of this report follow the general timeline by phase for the evacuation implementation strategy. Chapter 2 focuses on Phase 1, the Advanced Planning stage of implementation. Chapter 3 summarizes the needs of Phase 2, Incident Notification. Chapter 4 covers Phase 3, Activation/Mobilization. Chapter 5 addresses Phase 4, which involves the actual Evacuation Operations. Chapter 6 details Phase 5, the Re-Entry process. Chapter 7 summarizes Phase 6, the Debrief/Assessment phase.

Each chapter is structured in the same manner to allow the reader to easily maneuver from one point of reference to another through the phased timeline of an evacuation. Each chapter provides a brief introduction, followed by sections describing the agencies' roles and responsibilities, resources and equipment, and coordination process.

Most of the information presented in the following chapters is provided in tabular form, listed by agency type for ease of reference.

## **1.6 Audience**

The principal target audience for this document is transportation agencies and emergency planning and response agencies in the public sector, as they are responsible for developing evacuation strategy plans and following through with implementing an evacuation.

## CHAPTER 2. PHASE 1: ADVANCED PLANNING

### 2.1 Introduction

A critical step in being prepared for an emergency evacuation would involve the advanced planning and preparation for just such a disaster. As mentioned previously, in an ideal situation, some level of planning and organization will have been established prior to the occurrence of an event. The planning phase assumes that agencies have worked together prior to an actual emergency evacuation to establish a cooperative system that all agree to follow in an emergency situation. Advanced planning would also include educating the general public on what to do during an emergency evacuation event.

This chapter briefly outlines the agencies involved in the advanced planning phase, their roles and responsibilities, resources and equipment used during this phase, and sharing and coordination of information.

### 2.2 Roles and Responsibilities

The roles and responsibilities of the various agencies involved in planning for an emergency evacuation are similar. Depending on the demographics of a particular region, emergency evacuation plans may be developed at the local level, the county level, the state level, or any combination of the three. One of the most critical components of the advanced planning phase is coordination and cooperation among all agencies involved.

Ideally, each plan, regardless of the agency that developed the plan, should fit into the overall general emergency plan for the city, region, county, and state. Each agency should be familiar with the roles and responsibilities allocated to them in the various plans. **Table 1** describes the typical roles and responsibilities during the advanced planning phase of the various agencies involved in developing emergency evacuation plans.

**Table 1: Phase 1 Advanced Planning Roles and Responsibilities**

Agency Type	Agency	Roles and Responsibilities
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law agencies management enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan, if not already done by the emergency management agency (EMA) stating that each agency will participate in regularly scheduled exercises/drills, testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Conduct high-level analysis of the evacuation area to determine projected number of evacuees within jurisdiction</li> <li>• Inventory resources of agencies within the local jurisdiction, and coordinate with other EMAs (local, county, and state) to plan for sharing of resources in an emergency situation</li> <li>• Establish redundancy of emergency operations centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Develop evacuation plans, in coordination with other local, county, state, and transit agencies, with consideration for all types of evacuation scenarios (e.g., naturally occurring, accidental, and/or terrorist events)</li> <li>• Develop and participate in intergovernmental and mutual-aid agreements</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct after-action reports</li> <li>• Educate the public about emergency evacuation routes and procedures</li> <li>• Practice cooperation with other agencies during normal times</li> <li>• Store copies of emergency plans and vital records in multiple locations to protect them in the event the main emergency operations center becomes compromised during an incident</li> </ul>

Agency Type	Agency	Roles and Responsibilities
	Transportation	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law enforcement/public safety, transit, etc.) to develop emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA) stating that each agency will participate in regularly scheduled exercises/drills, testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Evaluate evacuation route alternatives and determine feasibility of using each evacuation route, including capacity needs and restrictions, and clearance times under various hypothetical scenarios</li> <li>• Evaluate the need for evacuation phasing</li> <li>• Establish evacuation transportation control guidelines (e.g., utilization of transit resources to transport evacuees, contraflow, optimization of signal patterns and lane use, mitigation of work zone impacts, and suspension of tolls and fares)</li> <li>• Establish redundancy of Traffic Management Centers, systems, equipment, and personnel</li> <li>• Evaluate how Intelligent Transportation System (ITS) components can aid in an evacuation</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media about evacuation procedures and resources</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Coordinate with other local, county, state, and transit agencies to develop evacuation plans</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct after-action reports</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>

Agency Type	Agency	Roles and Responsibilities
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Establish redundancy of operations/management centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media</li> <li>• Establish Reverse 911® protocols</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Coordinate with other local, county, state, and transit agencies to develop evacuation plans</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct after-action reports</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Establish redundancy of operations/management centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct after-action reports</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>

Agency Type	Agency	Roles and Responsibilities
	Transit	<ul style="list-style-type: none"> <li>• Coordinate with local, county, and state agencies to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Establish guidelines for transit agency response, including rerouting of vehicles, call back of drivers and dispatchers, etc. in the event of an evacuation</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct after-action reports (AARs)</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law state management enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills, testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Conduct high-level analysis of evacuation area to determine projected number of evacuees within the jurisdiction</li> <li>• Inventory resources of agencies within the local jurisdiction, and coordinate with other EMAs (local, county, and state) to plan for sharing of resources in an emergency situation</li> <li>• Establish redundancy of emergency operations centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media about evacuation procedures and resources</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Develop evacuation plans, in coordination with other local, county, state, and transit agencies, with consideration towards all types of evacuation scenarios (e.g., naturally occurring, accidental, and/or terrorist events)</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> </ul>

Agency Type	Agency	Roles and Responsibilities
		<ul style="list-style-type: none"> <li>• Provide personnel training and practice regarding evacuation procedures and conduct AARs</li> <li>• Educate the public about emergency evacuation routes and procedures</li> <li>• Practice cooperation with other agencies during normal times</li> <li>• Store copies of emergency plans and vital records in multiple locations to protect them in the event the main emergency operations center becomes compromised during an incident</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Establish redundancy of emergency operations centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Coordinate with local and county EMAs to plan for sharing of resources in an emergency situation</li> <li>• Coordinate with other local, county, state, and transit agencies to develop evacuation plans</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct AARs</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills, testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Evaluate evacuation route alternatives and determine feasibility of using each evacuation route, including capacity needs and restrictions, and clearance times under various hypothetical scenarios</li> <li>• Evaluate the need for evacuation phasing</li> <li>• Establish evacuation transportation control guidelines (e.g., utilization of transit resources to transport evacuees,</li> </ul>

Agency Type	Agency	Roles and Responsibilities
		<p>contraflow, optimization of signal patterns and lane use, mitigation of work zone impacts, suspension of tolls and fares)</p> <ul style="list-style-type: none"> <li>• Establish redundancy of operations/management centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media about evacuation procedures and resources</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Coordinate with other local, county, state, and transit agencies to develop evacuation plans</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct AARs</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills, testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Establish redundancy of operations/management centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Coordinate with other local, county, state, and transit agencies to develop evacuation plans</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct AARs</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>



Agency Type	Agency	Roles and Responsibilities
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills, testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Establish Reverse 911® protocols</li> <li>• Establish redundancy of operations/management centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media about evacuation procedures and resources</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Coordinate with other local, county, state, and transit agencies to develop evacuation plans</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> <li>• Provide personnel training and practice regarding evacuation procedures and conduct AARs</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Coordinate with other critical agencies (transportation, law enforcement/public safety, transit, etc.) to develop an emergency evacuation strategy plan</li> <li>• Execute an agreement with all agencies identified in the emergency evacuation strategy plan (if not already done by EMA), stating that each agency will participate in regularly scheduled exercises/drills, testing the evacuation plan against various scenarios (e.g., natural disaster, terrorist attack, and disease outbreak)</li> <li>• Establish redundancy of operations/management centers, systems, equipment, and personnel</li> <li>• Establish uniform communications protocols both within the agency and with other agencies</li> <li>• Establish uniform communications protocols for notifying the public and the media about evacuation procedures and resources</li> <li>• Develop a contact list consisting of phone numbers (office, home, cell), fax, pager, and email addresses of key personnel at other local, county, and state agencies</li> <li>• Coordinate with other local, county, state, and transit agencies to develop evacuation plans</li> <li>• Participate in intergovernmental and mutual-aid agreements</li> </ul>

Agency Type	Agency	Roles and Responsibilities
		<ul style="list-style-type: none"> <li>• Provide personnel training and practice regarding evacuation procedures and conduct AARs</li> <li>• Practice cooperation with other agencies during normal times</li> </ul>
Federal Agencies	Federal Emergency Management Agency (FEMA)	<ul style="list-style-type: none"> <li>• Provide guidance to local, county, and state EMAs for developing emergency evacuation plans</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>• Be familiar with established uniform communications protocols for notifying the public</li> <li>• Work with emergency management to establish dedicated TV and/or radio stations for use during emergency procedures, if applicable</li> </ul>
	Private Support Agencies (e.g., American Red Cross, Salvation Army)	<ul style="list-style-type: none"> <li>• Provide personnel training and practice regarding evacuation procedures and conduct AARs</li> <li>• Prepare personnel and resources for immediate deployment at any time</li> <li>• Maintain database of possible shelter locations including available resources, special needs, pet shelters, etc.</li> </ul>

## 2.3 Resources and Equipment

Identifying resources and equipment needed in the event of an emergency evacuation prior to the incident occurring can help those agencies involved in implementing the evacuation to focus on conducting actual evacuation procedures, rather than worrying about where, and from whom, to obtain equipment and additional resources.

**Table 2** describes some of the resources and equipment that various agencies involved in emergency evacuation planning should identify during the advanced planning phase.

**Table 2: Phase 1 Advance Planning Resources and Equipment**

Agency Type	Agency	Resources and Equipment
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Planning guidance materials (e.g., evacuation plan examples and county guidelines)</li> <li>• Inventory of agency resources (e.g., emergency operations center and communications capabilities)</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Contracts/agreements to provide additional resources if needed</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Planning guidance materials (e.g., evacuation plan examples and county guidelines)</li> <li>• Transportation network data (e.g., lane and intersection configurations, signal timing, and roadway capacities)</li> <li>• Transportation network models</li> <li>• Inventory of agency resources (e.g., traffic management center, ITS devices, traffic signals including locations, communications infrastructure, and traffic control devices)</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Contracts/agreements to provide additional resources if needed</li> </ul>
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Inventory of agency resources</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Coordination with Emergency Management and Transportation to identify needed resources based on evacuation plan (e.g., traffic barricades and cones)</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• Inventory of agency resources</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Coordination with Emergency Management and Transportation to identify needed resources based on evacuation plan (e.g., ambulances, and medi-flight helicopters)</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• Transit network data (e.g., routes, schedules, vehicle availability, vehicle capacities, and ITS equipment)</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Planning guidance materials (e.g., evacuation plan examples and county guidelines)</li> <li>• Inventory of agency resources (e.g., emergency operations center and communications capabilities)</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Contracts/agreements to provide additional resources if needed</li> </ul>

Agency Type	Agency	Resources and Equipment
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Planning guidance materials (e.g., evacuation plan examples and county guidelines)</li> <li>• Inventory of agency resources (e.g., emergency operations center and communications capabilities)</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Contracts/agreements to provide additional resources if needed</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>• Planning guidance materials (e.g., evacuation plan examples and county guidelines)</li> <li>• Transportation network data (e.g., lane and intersection configurations, signal timing, and roadway capacities)</li> <li>• Transportation network models</li> <li>• Inventory of agency resources (e.g., traffic management center, ITS devices, traffic signals including locations, communications infrastructure, and traffic control devices)</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Contracts/agreements to provide additional resources if needed</li> </ul>
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Planning guidance materials (e.g., evacuation plan examples and county guidelines)</li> <li>• Transportation network data (e.g., lane and intersection configurations, signal timing, and roadway capacities)</li> <li>• Transportation network models</li> <li>• Inventory of agency resources (e.g., traffic management center, ITS devices, traffic signals including locations, communications infrastructure, and traffic control devices)</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Contracts/agreements to provide additional resources if needed</li> </ul>
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Inventory of agency resources</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Coordination with Emergency Management and Transportation to identify needed resources based on evacuation plan (e.g., traffic barricades and cones)</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Inventory of agency resources</li> <li>• Documentation of other agencies' resources and capabilities</li> <li>• Coordination with Emergency Management and Transportation to identify needed resources based on evacuation plan (e.g., traffic barricades and cones)</li> </ul>

e	Agency	Resources and Equipment
Federal Agencies	Federal Emergency Management Agency (FEMA)	<ul style="list-style-type: none"> <li>• Planning guidance materials (e.g., local, county, and state evacuation plan examples, and federal guidelines)</li> <li>• Contracts for resources</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>• Communications protocols for notifying the public</li> </ul>
	Private Support Agencies (e.g., American Red Cross and Salvation Army)	<ul style="list-style-type: none"> <li>• Contracts/agreements to assist in providing food, shelter and medical care along evacuation routes</li> </ul>

## 2.4 Coordination

The federal government, through FEMA, requires all states to have a comprehensive emergency operations plan to serve as a guide for all types of hazards that may occur in their area, including emergency evacuation events. This comprehensive plan would be built upon the emergency plans developed by the counties and cities within that state. Thus, the information should be fully coordinated among all agencies.

Typically, this has involved a hierarchical structure to the development of emergency management plans at all levels. The local level, usually individual cities or counties, will lead the development of plans for emergency planning, response, and recovery operations within their immediate jurisdictions. Emergency management agencies at the next higher level, county and/or state, typically serve to coordinate all local-level emergency management activities, as well as assist with additional law enforcement and transportation system management.

Public education programs would be undertaken by either local or county agencies to prepare the general public for an emergency. Information on what to do during an emergency evacuation, such as which travel routes to use (maps), a list of emergency provisions (disaster preparedness kits), and testing of the communications systems allows agencies to train the general public on what to expect during an emergency situation.

Advanced planning activities are then coordinated through a series of emergency operation plans, developed at the local, county, and state levels to fulfill federal requirements. Advanced planning for emergency evacuation scenarios should be included at all levels of the emergency planning documentation.

After the plan has been developed, all agencies involved should agree to test the plan on a regular basis. Ideally, the plan would be tested under a number of scenarios. The test would typically begin with the occurrence of an incident triggering a mass evacuation. The test would conclude with all of the agencies that were involved sitting down, evaluating, and documenting each aspect of the plan that did and did not go well.

## CHAPTER 3. PHASE 2: INCIDENT NOTIFICATION

### 3.1 Introduction

An emergency evacuation would only be issued when an incident occurs that is deemed detrimental to the welfare of the general public within the impact area. It is assumed that a no-notice evacuation would occur for an incident with little or no warning. During this phase, the incident has already occurred and been detected, and an evacuation order is being evaluated. Thus, notification of the need to evacuate the public must be established and quickly communicated to all affected agencies. It is assumed that this phase involves notification only to those affected agencies first. Once those agencies have been informed, and first responders have been dispatched, the decision as to when to inform the public of an emergency evacuation should be made. This is when the Incident Command System (ICS) is initialized to coordinate all agencies involved in the evacuation process.

This chapter briefly outlines the agencies involved in the incident notification phase, their roles and responsibilities, resources and equipment used during this phase, and the sharing and coordination of information.

### 3.2 Roles and Responsibilities

The incident notification phase is the first phase in which the ICS is initialized. During this phase, affected agencies should review their emergency evacuation plans and begin to coordinate who, how, and where to evaluate the immediate post-incident situation. The incident notification phase may require substantial information gathering with regards to identifying the extent of any damage to infrastructure and determining which areas may need to be evacuated.

Perhaps the most crucial task of the entire evacuation plan is notifying the public of an emergency evacuation. Using the ICS to coordinate information gathered by all agencies involved and to identify one specific person to consistently disseminate that information will help ensure that the public will not receive conflicting information from different agencies. The incident notification phase is time sensitive. Immediately following the incident, those in the affected areas may quickly go into a panicked state. Therefore, being prepared to assess the situation in a timely manner should aid in providing the public with detailed and accurate information to go along with the evacuation order.

**Table 3** describes some of the roles and responsibilities of various agencies involved in the incident notification phase.



**Table 3: Phase 2 Incident Notification Roles and Responsibilities**

Agency Type	Agency	Roles and Responsibilities
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Coordinate dissemination of all information regarding the incident to the media via the agency's Public Information Officer (PIO). It is important that information is centralized from all agencies before it is disseminated to the media</li> <li>• Notify other agencies of what actions they need to initiate</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Coordinate transportation infrastructure restoration and recovery activities including notification of staff</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• If responding to the incident first, notify other lead jurisdiction agencies (emergency management, transportation, and fire department) of the incident and report its status</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• If responding to the incident first, notify other lead jurisdiction agencies (emergency management, transportation, and law enforcement/public safety) of the incident and report its status</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• If incident occurs within the transit system or in view of transit personnel, notify the local emergency response agency. If it occurs elsewhere, notify the staff of the need to implement the emergency plan</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Coordinate dissemination of all information regarding the incident to the media via the agency's PIO. It is important that information is centralized from all agencies before it is disseminated to the media</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Coordinate dissemination of all information regarding the incident to the media via the agency's PIO. It is important that information is centralized from all agencies before it is disseminated to the media</li> <li>• Coordinate with local agencies</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>• Coordinate transportation infrastructure restoration and recovery activities. Support local agencies if necessary</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>

e	Agency	Roles and Responsibilities
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Coordinate transportation infrastructure restoration and recovery activities. Support local and county agencies if necessary</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• If responding to the incident first, notify other lead jurisdiction agencies (emergency management, transportation, and fire department) of the incident and report its status</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• If responding to the incident first, notify other lead jurisdiction agencies (emergency management, transportation, and fire department) of the incident and report its status.</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>• If present at the scene at the time of the incident, notify the local emergency response agency</li> <li>• Provide incident information to the public as received from the lead jurisdiction EMA's PIO</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>
	Private Support Agencies (e.g., Red Cross and Salvation Army)	<ul style="list-style-type: none"> <li>• Be aware of the incident and alert the staff of potential need to mobilize resources</li> <li>• Review agency checklist to take and prepare for regional actions</li> </ul>

### 3.3 Resources and Equipment

The resources and equipment needed to carry out the incident notification phase of an emergency evacuation include individuals, systems, and devices that are used to broadcast information to a large number of people. The ability to use multiple modes of communication both to communicate within and among agencies, as well as to communicate with the media and the public, is essential to the incident notification phase.

**Table 4** describes the resources and equipment needed to carry out the incident notification phase of an emergency evacuation.

**Table 4: Phase 2 Incident Notification Resources and Equipment**

Agency Type	Agency	Resources and Equipment
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• PIO</li> <li>• Emergency alert system</li> <li>• Dedicated TV and/or radio stations</li> <li>• Emergency Operations Center</li> <li>• Web site</li> <li>• Incident Command System (ICS)</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• 511 system</li> <li>• Dynamic Message Signs (DMS)</li> <li>• Highway Advisory Radio (HAR) system</li> <li>• Web site</li> <li>• ICS</li> <li>• Traffic Management Center (TMC)</li> </ul>
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• 911 dispatch (Including Reverse 911® if available)</li> <li>• Communications system</li> <li>• ICS</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• 911 dispatch (Including Reverse 911® if available)</li> <li>• Communications system</li> <li>• ICS</li> <li>• TMC</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• Communications system</li> <li>• Dispatch/Operations Center</li> <li>• Web site</li> <li>• ICS</li> </ul>

Agency Type	Agency	Resources and Equipment
	Transit	<ul style="list-style-type: none"> <li>• Communications system</li> <li>• Dispatch/Operations Center</li> <li>• Web site</li> <li>• ICS</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• PIO</li> <li>• Emergency alert system</li> <li>• Dedicated TV and/or radio stations</li> <li>• Emergency Operations Center</li> <li>• Web site</li> <li>• ICS</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• PIO</li> <li>• Emergency alert system</li> <li>• Dedicated TV and/or radio stations</li> <li>• Emergency Operations Center</li> <li>• ICS</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>• 511 system</li> <li>• DMS</li> <li>• HAR system</li> <li>• Web site</li> <li>• ICS</li> <li>• TMC</li> </ul>
	State Department of Transportation	<ul style="list-style-type: none"> <li>• 511 system</li> <li>• DMS</li> <li>• HAR system</li> <li>• Web site</li> <li>• ICS</li> <li>• TMC</li> </ul>

Agency Type	Agency	Resources and Equipment
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• 911 dispatch</li> <li>• Communications system</li> <li>• ICS</li> <li>• Reverse 911® system</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• 911 dispatch</li> <li>• Communications system</li> <li>• ICS</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>• Communications system to facilitate notification of first-responders in the event the media is the first on the scene</li> </ul>

### **3.4 Coordination**

This phase is critical in that it is when the command structure is determined. Depending on evacuation area radius and location, multiple agencies at various tiers of the public sector may be involved. The ICS, as defined in the National Incident Management System (NIMS), should be defined in the plan and followed.

The tasks that will be conducted during this phase will likely involve gathering information that will be disseminated to the media and the public. Those agencies responsible for maintaining the information-gathering equipment during normal times will likely be asked to report the critical information gathered from their equipment and devices during the incident notification phase. Ideally, the information will be transferred through the proper channels using the ICS before being disseminated to the media and the public.

This phase will also require coordination between transportation officials and law enforcement officials. Ideally, preparation for an actual evacuation from a transportation standpoint will begin during the incident notification phase. After identifying preferred evacuation routes, transportation officials should work closely with law enforcement officials to provide traffic control equipment and resources.

## CHAPTER 4. PHASE 3: ACTIVATION AND MOBILIZATION

### 4.1 Introduction

Once the decision to evacuate the public has been made, the order would be issued and the general public would be notified. At this time, all agencies and the public would need to be preparing to actually conduct the evacuation of the affected area. The activation and mobilization phase would involve the dissemination of information to the public and all preparation for the actual evacuation. The ICS will be operational; thus, all agencies would be operating in concert under the system. Specific understandings of how to proceed with the evacuation are planned and agreed to by all agencies under the ICS.

This chapter briefly outlines the agencies involved in the activation and mobilization phase, their roles and responsibilities, resources and equipment used during this phase, and the sharing and coordination of information during this phase.

### 4.2 Roles and Responsibilities

The activation and mobilization phase is when the evacuation procedures are executed. Ideally, by the beginning of this phase, first responders are being dispatched and positioned to aid and guide the general public through the actual evacuation. All affected agencies should be operating under the ICS to gather and disseminate information relating to specific evacuation routes and procedures that can be relayed to the media and to the public.

**Table 5** describes some of the roles and responsibilities of various agencies involved in the activation and mobilization phase.



**Table 5: Phase 3 Activation and Mobilization Roles and Responsibilities**

Agency Type	Agency	Roles and Responsibilities
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Coordinate the evacuation decision with the decision-maker (e.g., mayor and governor)</li> <li>• Determine the evacuation area perimeter</li> <li>• Activate the emergency alert system</li> <li>• Activate the Emergency Operations Center (EOC) and/or back-up facilities if necessary (e.g., alternate EOC and mobile command center)</li> <li>• Coordinate dissemination of information regarding the evacuation order to the media via the agency's PIO</li> <li>• Identify and contact other response agencies that will support evacuation</li> <li>• Recall and deploy agency personnel as needed</li> <li>• Coordinate resources of agencies to support evacuation needs, and move resources to where they are needed including shelters</li> <li>• Estimate number of evacuees within the jurisdiction, including those with special mobility needs, at the time of incident and evacuation clearance times</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Activate Traffic Management Center if incident occurs outside of normal operating hours</li> <li>• Prepare to activate back-up facilities if necessary (e.g., alternate TMC and mobile command center)</li> <li>• Recall and deploy agency personnel as needed</li> <li>• Provide road condition information gathered from traffic signal systems, vehicle detection systems, and closed-circuit television (CCTV) surveillance system to lead and affected agency emergency management personnel</li> <li>• Evaluate evacuation route alternatives for this scenario, determine feasibility of using each evacuation route, and implement appropriate evacuation traffic control measures (including provisions for enabling the movement of emergency vehicles and personnel into the affected area)</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Establish Incident Command/Unified Command/Area Command, as appropriate</li> <li>• Recall and deploy agency personnel as needed</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>

Agency Type	Agency	Roles and Responsibilities
	Fire Department	<ul style="list-style-type: none"> <li>Establish Incident Command/Unified Command/Area Command, as appropriate</li> <li>Recall and deploy agency personnel as needed</li> <li>Maintain expenditure records to facilitate reimbursement</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>Recall and deploy agency personnel as needed</li> <li>Make all vehicles available to support mobilization of evacuees necessary, including special needs evacuees</li> <li>Provide and coordinate/manage transit resources</li> <li>Coordinate with lead emergency management agency through dispatch/operations center</li> <li>Establish park-and-ride assembly points</li> <li>Maintain expenditure records to facilitate reimbursement</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>Recall and deploy agency personnel as needed</li> <li>Activate the EOC and/or back-up facilities if necessary (e.g., alternate EOC and mobile command center)</li> <li>Coordinate resources of agencies to support evacuation needs of lead and affected agencies</li> <li>Maintain expenditure records to facilitate reimbursement</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>Recall and deploy agency personnel as needed</li> <li>Activate the EOC and/or back-up facilities if necessary (e.g., alternate EOC and mobile command center)</li> <li>Coordinate resources of agencies to support evacuation needs of lead and affected agencies</li> <li>Maintain expenditure records to facilitate reimbursement</li> <li>Coordinate intra-state, out of state, and federal resources</li> <li>Provide lead role in the event of a multi-state evacuation or if evacuees are evacuated to other states</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>Assume roles and responsibilities for evacuations originating within unincorporated areas, otherwise assume roles and responsibilities of a neighboring agency</li> <li>Activate traffic operations/management center if incident occurs outside of normal operating hours</li> <li>Prepare to activate back-up facilities if necessary (e.g., alternate Traffic Management Center and mobile command center)</li> <li>Recall and deploy agency personnel as needed</li> <li>Maintain expenditure records to facilitate reimbursement</li> </ul>

Agency Type	Agency	Roles and Responsibilities
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Activate Traffic Management Center if incident occurs outside of normal operating hours</li> <li>• Prepare to activate back-up facilities if necessary (e.g., alternate Traffic Management Center and mobile command center)</li> <li>• Recall and deploy agency personnel as needed</li> <li>• Provide road condition information gathered from traffic signal systems, vehicle detection systems, and CCTV surveillance system to lead and affected agency emergency management personnel</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Assume roles and responsibilities for evacuations originating within unincorporated areas, otherwise assume roles and responsibilities of a neighboring agency</li> <li>• Recall and deploy agency personnel as needed</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Recall and deploy agency personnel as needed</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>• Recall and deploy agency personnel as needed</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	Private Support Agencies (e.g., Red Cross and Salvation Army)	<ul style="list-style-type: none"> <li>• Recall and deploy agency personnel as needed</li> <li>• Coordinate with lead emergency management agency</li> <li>• Anticipate shelter needs, and provide reception and shelter locations to lead agency emergency management personnel</li> <li>• Establish evacuee and responder support (rest stations, food, water, etc.)</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>

### 4.3 Resources and Equipment

The resources and equipment used in the activation and mobilization phase are similar to the resources and equipment identified in the incident notification phase in that they are both used to broadcast information to a large population. They differ in that the resources and equipment used in the activation and mobilization phase depend heavily on the ability to mass broadcast to a population on the move via DMS, HAR, and the 511 system, among other methods.

**Table 6** describes some of the resources and equipment needed to conduct the activation and mobilization phase of an emergency evacuation.

**Table 6: Phase 3 Activation and Mobilization Resources and Equipment**

Agency Type	Agency	Resources and Equipment
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> <li>• Personnel (on- and off-duty)</li> <li>• Emergency Operations Center</li> <li>• PIO</li> <li>• Web site</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Traffic Management Center</li> <li>• Current road condition information</li> <li>• Transportation network models</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, high-occupancy vehicle (HOV) lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Cones, barricades, signs, etc.</li> <li>• Vehicle fleet</li> <li>• PIO</li> <li>• Web site</li> </ul>

Agency Type	Agency	Resources and Equipment
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> <li>• Mobile Command Post</li> <li>• PIO</li> <li>• Web site</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Fire trucks</li> <li>• Ambulances (may be a contracted service)</li> <li>• Fire suppression equipment</li> <li>• Fire protection equipment</li> <li>• Hazmat teams</li> <li>• Decontamination unit/supplies</li> <li>• Hazardous Plume Detection Model</li> <li>• Fire Modeling</li> <li>• Mobile Command Post</li> <li>• PIO</li> <li>• Web site</li> </ul>

Agency Type	Agency	Resources and Equipment
	Transit	<ul style="list-style-type: none"> <li>• Intra-agency dispatch and communications system</li> <li>• Personnel (on- and off-duty)</li> <li>• Transit vehicles (e.g., buses, trains, trolleys, ferries, and wheelchair lift vehicles)</li> <li>• ITS equipment</li> <li>• Park-and-ride lots</li> <li>• PIO</li> <li>• Web site</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> <li>• Personnel (on- and off-duty)</li> <li>• Emergency Operations Center</li> <li>• Cones, barricades, signs, etc.</li> <li>• PIO</li> <li>• Web site</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> <li>• Personnel (on- and off-duty)</li> <li>• Emergency Operations Center</li> <li>• Cones, barricades, signs, etc.</li> <li>• PIO</li> <li>• Web site</li> </ul>

Agency Type	Agency	Resources and Equipment
	County Department of Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Traffic Management/Operations Center</li> <li>• Current road condition information</li> <li>• Transportation network models</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, HOV lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Cones, barricades, signs, etc.</li> <li>• Vehicle fleet</li> <li>• PIO</li> <li>• Web site</li> </ul>
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Traffic Management Center</li> <li>• Current road condition information</li> <li>• Transportation network models</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, HOV lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Cones, barricades, signs, etc.</li> <li>• Vehicle fleet</li> <li>• PIO</li> <li>• Web site</li> </ul>



Agency Type	Agency	Resources and Equipment
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Cones, barricades, signs, etc.</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> <li>• Mobile Command Post</li> <li>• PIO</li> <li>• Web site</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Cones, barricades, signs, etc.</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> <li>• Mobile Command Post</li> <li>• PIO</li> <li>• Web site</li> </ul>

Agency Type	Agency	Resources and Equipment
Other Agencies	Media	<ul style="list-style-type: none"> <li>• Mobile units with satellite communications</li> <li>• Video cameras</li> <li>• Reporters</li> <li>• Technical crews</li> <li>• PIO</li> <li>• Web site</li> </ul>
	Private Support Agencies (e.g., Red Cross and Salvation Army)	<ul style="list-style-type: none"> <li>• Personnel</li> <li>• Mobile and permanent shelters</li> <li>• Rest stations</li> <li>• Food</li> <li>• Water</li> <li>• Pet shelters</li> <li>• Shelters for people with special needs</li> <li>• Medical</li> <li>• PIO</li> <li>• Web site</li> </ul>

## 4.4 Coordination

Using the ICS, the lead agency will be responsible for coordinating the resources of other affected agencies to help identify appropriate evacuation routes. Utilization of ITS devices both to monitor roadway conditions as well as to communicate with the evacuating public is a crucial task during this phase. The information-gathering portion of this phase will rely heavily on the efforts of both transportation agencies and law enforcement agencies. Information regarding the status of the immediate post-incident transportation infrastructure will aid in identifying evacuation routes as well as providing law enforcement agencies with an idea of what types of traffic control procedures to implement at various locations along these routes. Depending upon the size of the evacuated area, evacuation routes will likely pass through multiple jurisdictions. To ensure through flow on preferred evacuation routes, agencies will need to coordinate signal timing information, lane capacity information, ITS capabilities, and other related data across jurisdictional boundaries.

Each agency will be responsible for gathering various types of information and relaying that information, through the proper channels according to the ICS, to the PIO and posting it on the agency Web site. The PIO will be responsible for notifying the public of appropriate evacuation routes.

## CHAPTER 5. PHASE 4: EVACUATION OPERATIONS

### 5.1 Introduction

In a no-notice evacuation scenario, once the evacuation is in progress, there is likely a large movement of people, vehicles, and goods from the impacted area. The evacuation operations phase covers the actual exit movement and transfer of people and goods from an affected area to a safe location. In addition, it may require the entry of first responders, equipment, and supplies. State, county, and local agency support will be directed from the ICS.

This chapter briefly outlines the agencies involved in the evacuation operations phase, their roles and responsibilities, resources and equipment used during this phase, and the sharing and coordination of information during this phase.

### 5.2 Roles and Responsibilities

This phase assumes that the necessary preparations for an emergency evacuation have already been made, all responders have been dispatched, equipment is in place, and the general public is in the process of evacuating. At this point, the information dissemination procedures mentioned in the previous two phases are still being conducted.

During this phase, law enforcement agencies assume the critical task of directing traffic control procedures while trying to create a safe, manageable environment for the evacuating public. It will be important to continuously monitor and manage the flow of traffic throughout the course of the evacuation operations phase. Issues such as disabled vehicles blocking through traffic and restless evacuees and uncontrollable factors such as the weather may create a stressful environment for affected agencies as well as the evacuating public.

**Table 7** describes some of the roles and responsibilities of the various agencies involved in the evacuation operations phase.

**Table 7: Phase 4 Evacuation Operations Roles and Responsibilities**

Agency Type	Agency	Roles and Responsibilities
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Continue to coordinate dissemination of information regarding the evacuation to the public via the agency's PIO and Web site by providing timely and accurate updates</li> <li>• Coordinate resources of agencies to support evacuation needs</li> <li>• Monitor the progress of the evacuation by means of data provided by other responding agencies, and direct the process as needed</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Support traveler information dissemination using information obtained from vehicle detection systems and CCTV surveillance system, and provide information to lead and affected jurisdictions' emergency management personnel</li> <li>• Support law enforcement/public safety traffic management and control efforts, and implement modifications to signal system or ITS devices as requested</li> <li>• Provide timely updates of road condition information gathered from traffic signal systems, vehicle detection systems, and CCTV surveillance system to lead and affected agency emergency management personnel</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Direct, conduct, and monitor evacuation process</li> <li>• Provide protection and security of evacuation area</li> <li>• Direct traffic control, with support from Public Works/Transportation</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• Perform rescue and life safety operations when required</li> <li>• Support law enforcement/public safety in executing evacuation</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• Provide and coordinate/manage transit resources</li> <li>• Coordinate with lead emergency management agency through Dispatch/Operations Center</li> <li>• Mobilize transit vehicles and drivers to transport evacuees</li> <li>• Use transit vehicles as mobile shelters for emergency personnel</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>

Agency Type	Agency	Roles and Responsibilities
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Provide operational support and resources to lead and affected jurisdictions</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Provide lead role in the event of a multi-state evacuation or if evacuees are evacuated to other states</li> <li>• Provide operational support and resources to lead and affected jurisdictions</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>• Assume roles and responsibilities of a lead or affected agency for evacuations originating within unincorporated areas, otherwise assume roles and responsibilities of a neighboring agency</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Support traveler information dissemination, in coordination with lead agency</li> <li>• Support law enforcement/public safety traffic management and control efforts, and implement modifications to signal system on highways and at interchanges as requested</li> <li>• Provide timely updates of road condition information gathered from traffic signal systems, vehicle detection systems, and CCTV surveillance system to lead and affected agency emergency management personnel</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Assume roles and responsibilities of a lead or affected agency for evacuations originating within unincorporated areas, otherwise assume roles and responsibilities of a neighboring agency</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Assume primary responsibility for evacuation on state highways and freeways</li> <li>• Provide support to local and affected agencies in implementing evacuation plans</li> <li>• Maintain expenditure records to facilitate reimbursement</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>• Provide evacuation information to the evacuees as received from the lead jurisdiction emergency management agency's PIO</li> </ul>
	Private Support Agencies (e.g., Red Cross and Salvation Army)	<ul style="list-style-type: none"> <li>• Manage shelters</li> <li>• Manage responder support (rest stations, food, water, etc.)</li> <li>• Facilitate contact centers for information</li> <li>• Coordinate social services</li> </ul>

Agency Type	Agency	Roles and Responsibilities
		<ul style="list-style-type: none"><li>• Coordinate with Salvation Army</li><li>• Coordinate with Humane Society</li><li>• Collect and manage donations</li><li>• Activate Community Emergency Response Team (CERT)</li></ul>

### 5.3 Resources and Equipment

This phase focuses heavily upon the ability for personnel in the field to communicate with personnel in the emergency operations center and Traffic Management Center. Supplying needed resources and equipment to the field may present a challenge depending upon the condition of the roadway network. Identifying resources and equipment that would be needed in the field and strategically placing those items in locations that would be easily accessible in the event of an evacuation may facilitate the task of providing resources and equipment to field personnel.

**Table 8** describes some of the resources and equipment needed for various agencies to conduct the evacuation operations phase.



**Table 8: Phase 4 Evacuation Operations Resources and Equipment**

Agency Type	Agency	Resources and Equipment
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> <li>• Personnel (on- and off-duty)</li> <li>• Service patrol vehicles with towing and refueling capabilities used to provide evacuees with assistance with minor automobile issues</li> <li>• Emergency Operations Center</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Traffic Management/Operations Center</li> <li>• Current road condition information</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, HOV lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Vehicle fleet</li> <li>• Service patrol vehicles with towing and refueling capabilities used to provide evacuees with assistance with minor automobile issues</li> <li>• Barricades, cones, sandbags, gravel, light towers, arrow boards</li> </ul>

Agency Type	Agency	Resources and Equipment
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> <li>• Mobile Command Post</li> <li>• Helicopters</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Fire trucks</li> <li>• Ambulances</li> <li>• Mobile Command Post</li> <li>• Decontamination equipment</li> <li>• Fire suppression equipment</li> <li>• Fire protection equipment</li> <li>• Hazmat teams</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Personnel (on- and off-duty)</li> <li>• Transit vehicles (e.g., buses, trains, trolleys, ferries, and wheelchair lift-equipped vehicles)</li> <li>• Park-and-ride lots</li> </ul>

Agency Type	Agency	Resources and Equipment
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> <li>• Personnel (on- and off-duty)</li> <li>• Mobile Command Center</li> <li>• Emergency Operations Center</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> <li>• Personnel (on- and off-duty)</li> <li>• Mobile Command Center</li> <li>• Emergency Operations Center</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Traffic Management/Operations Center</li> <li>• Current road condition information</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, HOV lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Mobile Command Center</li> <li>• Barricades, cones, sandbags, gravel, trucks, light towers, arrow boards</li> </ul>

Agency Type	Agency	Resources and Equipment
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Traffic Management Center</li> <li>• Current road condition information</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, HOV lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Mobile Command Center</li> <li>• Barricades, cones, sandbags, gravel, trucks, light towers, arrow boards</li> </ul>
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> <li>• Helicopters</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> <li>• Mobile Command Post</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> </ul>

Agency Type	Agency	Resources and Equipment
		<ul style="list-style-type: none"> <li>• Helicopters</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> <li>• Mobile Command Post</li> <li>• Web site</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>• Mobile units with satellite communications</li> <li>• Video cameras</li> <li>• Reporters</li> <li>• Technical crews</li> <li>• Helicopters</li> </ul>
	Private Support Agencies (e.g., Red Cross and Salvation Army)	<ul style="list-style-type: none"> <li>• Personnel</li> <li>• Mobile and permanent shelters</li> <li>• Rest stations</li> <li>• Food</li> <li>• Water</li> <li>• Medical care</li> <li>• Pet resources</li> </ul>

## 5.4 Coordination

Communication with the public is likely to occur primarily through available media resources as well as ITS elements such as DMS, HAR, and the 511 system. All of the information the public receives should be disseminated from one point. Information should be transferred through the proper ICS channels to the PIO who will be responsible for determining what information eventually will be delivered to the public.

This phase of the evacuation relies heavily on gathering and relaying information between field and operations personnel. Field personnel will be responsible for managing evacuation procedures such as traffic control, traffic signal operations, and law enforcement, as well as evacuee-related tasks such as providing gasoline and service patrol vehicles to help remove disabled vehicles from the travel way; alternate modes of transportation for those who may be without vehicles; or possibly even food, water, gasoline, medical care, and portable lavatories along the evacuation routes.

Communications from field personnel will probably come in the form of requests for additional resources. Maintaining open lines of communication between field personnel and operations personnel will ensure that everyone remains informed and up to date on evacuation conditions.

## CHAPTER 6. PHASE 5: RE-ENTRY

### 6.1 Introduction

During this phase, an assessment will be made of the safety of the area for evacuee return, the evacuation order will be lifted, and evacuees will be allowed to return, indicating the start of the re-entry phase. This phase is unpredictable in many ways. It will be difficult to estimate the number of evacuees that will be returning at any given time. There is also a possibility that the transportation infrastructure sustained major damage in the incident and may not be fully capable of handling re-entry traffic. At this point, all agencies should be aware that re-entry operations could very well be just as extensive and/or complex as the evacuation operations were. Agencies should continue to operate under the ICS to coordinate re-entry efforts across jurisdictions.

This chapter briefly outlines the agencies involved in the re-entry phase, their roles and responsibilities, resources and equipment used during this phase, and the sharing and coordination of information during this phase.

### 6.2 Roles and Responsibilities

The re-entry phase is somewhat unpredictable. Once the evacuation order has been lifted, an unknown percentage of the population may return immediately, another unknown percentage may return gradually, and still another unknown percentage of the population may not return at all. Ideally, agencies should be prepared for a worst-case scenario in which a majority of the evacuated public returns at once. Establishing a timetable for re-entry procedures and coordinating with other agencies on re-entry activities may expedite this phase. The plan for re-entry must be communicated to the public, many of whom may have evacuated a long distance from the area.

**Table 9** describes the roles and responsibilities of various agencies involved in the re-entry phase.

**Table 9: Phase 5 Re-Entry Roles and Responsibilities**

Agency Type	Agency	Roles and Responsibilities
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Coordinate dissemination of evacuation area status and evacuee return information to the public via the agency's PIO by providing timely and accurate updates</li> <li>• Decide when evacuees will be allowed to return to the evacuated area</li> <li>• Establish re-entry procedures, including possible phasing</li> <li>• Coordinate re-entry with other agencies</li> <li>• Maintain expenditure records to facilitate reimbursement</li> <li>• Maintain records of agency's evacuation return activities</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Support law enforcement/public safety traffic management and control efforts</li> <li>• Maintain records of agency's evacuation return activities</li> </ul>
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Direct, conduct, and monitor re-entry process</li> <li>• Provide protection and security of evacuation area</li> <li>• Direct traffic control, with support from transportation</li> <li>• Maintain records of agency's evacuation return activities</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• Support law enforcement/public safety in executing re-entry</li> <li>• Maintain records of agency's evacuation return activities</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• Coordinate/manage transit resources</li> <li>• Coordinate with lead emergency management agency through Dispatch/Operations Center</li> <li>• Maintain records of agency's evacuation return activities</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Provide operational support and resources to lead and affected jurisdictions</li> <li>• Maintain records of agency's evacuation return activities</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Provide lead role in the event of a multi-state re-entry or if evacuees were evacuated to other states</li> <li>• Provide operational support and resources to lead and affected jurisdictions</li> <li>• Maintain records of agency's evacuation return activities</li> </ul>



Agency Type	Agency	Roles and Responsibilities
	County Department of Transportation	<ul style="list-style-type: none"> <li>Assume roles and responsibilities for re-entry originating within unincorporated areas, otherwise assume roles and responsibilities of a neighboring agency</li> <li>Support law enforcement/public safety traffic management and control efforts</li> <li>Maintain records of agency's evacuation return activities</li> </ul>
	State Department of Transportation	<ul style="list-style-type: none"> <li>Support traveler information dissemination, in coordination with lead agency</li> <li>Support law enforcement/public safety traffic management and control efforts, and implement modifications to signal system on highways and at interchanges as requested</li> <li>Provide timely updates of road condition information gathered from traffic signal systems, vehicle detection systems, and CCTV surveillance system to lead and affected agency emergency management personnel</li> <li>Maintain records of agency's evacuation return activities</li> </ul>
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>Assume roles and responsibilities for re-entry originating within unincorporated areas, otherwise assume roles and responsibilities of a neighboring agency</li> <li>Maintain records of agency's evacuation return activities</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>Assume primary responsibility for re-entry routed on state highways and freeways</li> <li>Provide support to local and affected agencies in implementing re-entry plans</li> <li>Maintain records of agency's evacuation return activities</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>Provide re-entry information to the evacuees as received from the lead jurisdiction emergency management agency's PIO</li> </ul>
	Private Support Agencies (e.g., Red Cross and Salvation Army)	<ul style="list-style-type: none"> <li>Facilitate contact centers for information</li> <li>Coordinate with Humane Society to assist in reuniting pets and owners</li> <li>Collect and manage donations</li> </ul>

### 6.3 Resources and Equipment

As mentioned previously, the re-entry phase is unpredictable in that it is difficult to determine when, or if, a large influx of evacuees will be returning to their points of origin. From a resources and equipment standpoint, agencies must plan for the worst-case scenario, monitor the post-evacuation influx closely, and provide resources and equipment as needed.

**Table 10** describes some of the resources and equipment that would likely be needed by various agencies involved in the re-entry phase.

**Table 10: Phase 5 Re-Entry Resources and Equipment**

Agency Type	Agency	Resources and Equipment
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> <li>• Personnel (on- and off-duty)</li> <li>• Emergency Operations Center</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Traffic Management Center</li> <li>• Current road condition information</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, HOV lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Vehicle fleet</li> <li>• Barricades, cones, sandbags, gravel, light towers, arrow boards</li> </ul>
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> <li>• Helicopters</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> </ul>

Agency Type	Agency	Resources and Equipment
		<ul style="list-style-type: none"> <li>• Mobile Command Post</li> </ul>
	Fire Department	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Fire trucks</li> <li>• Ambulances</li> <li>• Fire suppression equipment</li> <li>• Fire protection equipment</li> <li>• Hazmat teams</li> <li>• Mobile Command Post</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Personnel (on- and off-duty)</li> <li>• Transit vehicles (e.g., buses, trains, trolleys, and ferries)</li> <li>• Park-and-ride lots</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> <li>• Personnel (on- and off-duty)</li> <li>• Emergency Operations Center</li> </ul>
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Inter-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Emergency alert system</li> </ul>

Agency Type	Agency	Resources and Equipment
		<ul style="list-style-type: none"> <li>• Personnel (on- and off-duty)</li> <li>• Emergency Operations Center</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Traffic Management/Operations Center</li> <li>• Current road condition information</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, HOV lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Vehicle fleet</li> <li>• Barricades, cones, sandbags, gravel, light towers, arrow boards</li> </ul>
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Emergency evacuation plans</li> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Personnel (on- and off-duty)</li> <li>• Service patrols</li> <li>• Traffic Management Center</li> <li>• Current road condition information</li> <li>• ITS devices (e.g., surveillance cameras, DMS, HAR, 511 or other traveler information systems (phone and/or Web), interconnected traffic signal systems, HOV lanes, ramp metering, traffic signal priority for buses, and vehicle detection systems)</li> <li>• Vehicle fleet</li> <li>• Barricades, cones, sandbags, gravel, light towers, arrow boards</li> </ul>

Agency Type	Agency	Resources and Equipment
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• Incident Command System</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> <li>• Helicopters</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> <li>• Mobile Command Post</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Intra-agency communications system</li> <li>• Back-up communications (e.g., cell phones, satellite phones, bull horns, cable television, AM/FM radio, email, Internet, fax, handouts, maps, and ham radio operators)</li> <li>• ICS</li> <li>• Personnel (on- and off-duty)</li> <li>• Police cruisers</li> <li>• Helicopters</li> <li>• Flares</li> <li>• Fire arms, tasers, etc.</li> </ul>
Other Agencies	Media	<ul style="list-style-type: none"> <li>• Mobile units with satellite communications</li> <li>• Video cameras</li> <li>• Reporters</li> <li>• Technical crews</li> <li>• Web site</li> <li>• Helicopters</li> </ul>

Agency Type	Agency	Resources and Equipment
	Private Support Agencies (e.g., Red Cross and Salvation Army)	<ul style="list-style-type: none"><li>• Personnel</li><li>• Mobile shelters</li><li>• Rest stations</li><li>• Food</li><li>• Water</li></ul>

## 6.4 Coordination

During this phase, the ICS may or may not govern the ingress of evacuees depending upon the size of the ingress population. The same traffic control procedures and setups that were used during the evacuation may not apply in the ingress scenario. Nonetheless, affected agencies should be familiar with the re-entry procedures specified in the plan. Re-entry procedures may differ from jurisdiction to jurisdiction, so coordination among neighboring jurisdictions is critical to a successful re-entry process.



## CHAPTER 7. PHASE 6: DEBRIEF AND ASSESSMENT

### 7.1 Introduction

As soon as all of the agencies that were involved in the evacuation process have resumed normal operations and the ICS has been disassembled, the debrief and assessment phase should begin. The purpose of this phase is to get all of the agencies involved in the evacuation process together to discuss and document what went well, what went wrong, what should be changed in the overall emergency evacuation plan and process, and what additional training and exercises are needed for evacuation personnel. This phase may also involve an independent assessment from federal agencies such as FEMA.

This chapter briefly outlines the agencies involved in the debrief and assessment phase, their roles and responsibilities, resources and equipment used during this phase, and the sharing and coordination of information during this phase.

### 7.2 Roles and Responsibilities

This phase will help determine the inefficiencies and shortcomings of the emergency evacuation plan and procedure. Thoroughly executing the tasks identified in this phase may allow agencies to perform more efficiently and effectively, as well as possibly save lives if a similar event were ever to occur again.

**Table 11** describes the roles and responsibilities of various agencies involved in the debrief and assessment phase.

**Table 11: Phase 6 Debrief and Assessment**

Agency Type	Agency	Roles and Responsibilities
Local Agencies	Emergency Management	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>
	Transportation	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>
	Law Enforcement/ Public Safety	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>

Agency Type	Agency	Roles and Responsibilities
	Fire Department	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>
County and State Agencies	County Emergency Management	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>

Agency Type	Agency	Roles and Responsibilities
	State Emergency Management/Office of Homeland Security	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>
	County Department of Transportation	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>
	State Department of Transportation	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>

Agency Type	Agency	Roles and Responsibilities
	County Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>
	State Law Enforcement/Public Safety	<ul style="list-style-type: none"> <li>• Discuss/evaluate overall performance in relation to the agency's execution of the tasks described in the emergency evacuation plan</li> <li>• Discuss/evaluate overall performance in relation to the emergency evacuation plan's ability to address the issues that were apparent during the actual emergency evacuation</li> <li>• Prepare a post-evacuation document detailing the agency's evacuation operations and experiences as well as lessons learned and modify plans as necessary</li> <li>• Present expenditure records to facilitate reimbursement</li> <li>• Present records of agency's evacuation activities</li> </ul>
Federal Agencies	Federal Emergency Management Agency (FEMA)	<ul style="list-style-type: none"> <li>• Provide independent analysis of overall incident response and evacuation operations</li> </ul>

### **7.3 Resources and Equipment**

The resources and equipment required for this phase should be minimal, most likely nothing more than the documentation of evacuation processes and procedures taken throughout the course of the actual event. Each agency should be prepared to evaluate and critique the overall execution of the evacuation plan as well as the content of the evacuation plan document. In addition, agencies should complete an inventory of equipment and supplies used for the evacuation and restock as necessary.

### **7.4 Coordination**

This phase requires that all of the agencies involved in the evacuation process be able to meet at the same time and be prepared to provide information/documentation relating to the evacuation process and operations. This could be accomplished via teleconference, video conference, face-to-face meeting, etc.

After the post-evacuation talks have ended, all lessons learned should be documented. The lessons learned document could then be used to update the existing evacuation plan in the advanced planning phase, hence returning all agencies to the initial phase of evacuation transportation management.

## Contact Information

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