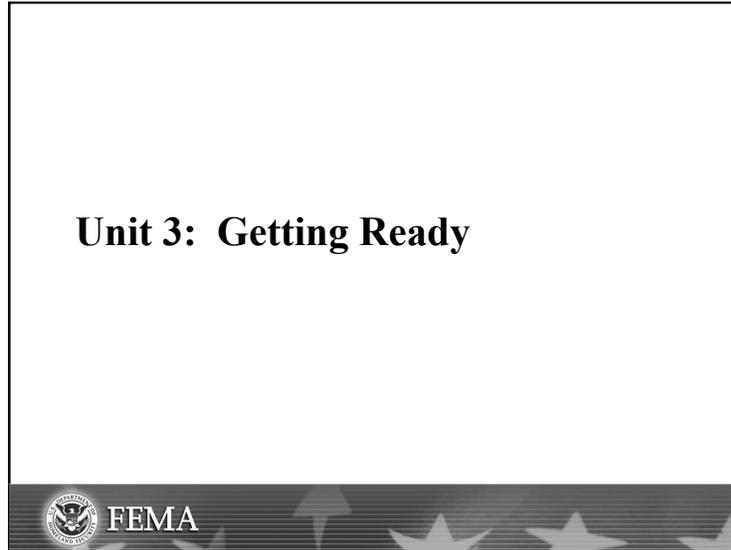

Unit 3: Getting Ready



Visual 3.1



Visual Description: Unit 3: Getting Ready

Key Points

Any jurisdiction's or agency's emergency management activities should be based on a thorough and realistic hazard analysis, which is documented in its Emergency Operations Plan (EOP). This unit will cover the relationship between the jurisdiction's hazard analysis and resource management planning, with a focus on using hazard analysis information to help plan resource needs.



Visual 3.2

Unit 3 Objectives

- Describe the relationship between the hazard analysis and resource management.
- Explain how using information from the hazard analysis can help resource managers prepare for incidents.

Unit 3:
Getting Ready

Visual Description: Unit 3 Objectives

Key Points

At the end of this unit, you should be able to:

- Describe the relationship between the hazard analysis and resource management.
- Explain how using information from the hazard analysis can help resource managers prepare for incidents.



Visual 3.3

Hazard Analysis (1 of 2)

- Identify what might happen.
- Quantify the likelihood of occurrence.
- Assess how bad things might get.
- Assess how many people might be injured or killed.
- Assess how much damage is likely.

Unit 3:
Getting Ready

Visual Description: Hazard Analysis (1 of 2)

Key Points

A number of methodologies can be used for hazard analysis, but that all methodologies should:

- Identify possible kinds of disasters and their related risks or consequences (what might happen?).
- Quantify the likelihood of an occurrence of any given disaster (how likely is it to happen?).
- Assess the most likely magnitude of any given disaster (how bad is it likely to be?).
- Assess the percentage of the population that is at risk from any given disaster (how many people might be injured or killed?).
- Assess the severity of impact or likely consequences of any given disaster (how much damage is there likely to be?).



Visual 3.4

Hazard Analysis (2 of 2)

- Provide a composite picture of:
 - The most likely types of disasters.
 - Their impact on the population.
 - Their likelihood of occurrence.
- Provide the foundation for decisionmaking.

Unit 3:
Getting Ready

Visual Description: Hazard Analysis (2 of 2)

Key Points

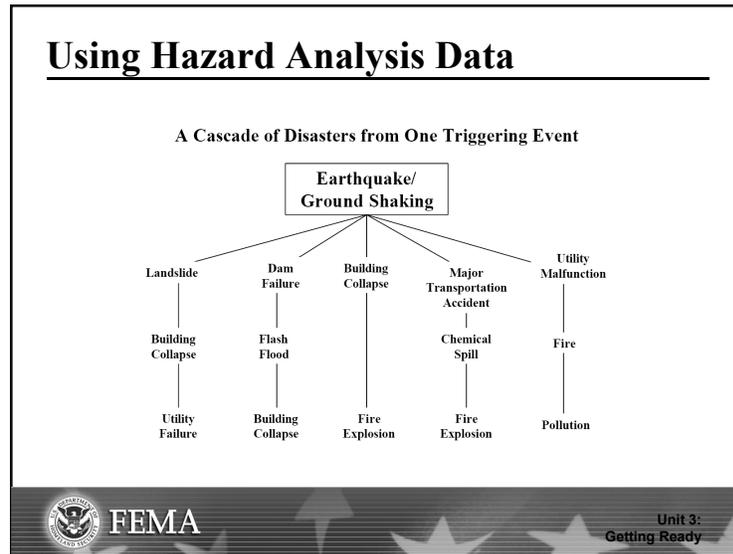
The hazard analysis will result in a picture of:

- The most likely disasters.
- Their potential impact on the population.
- Their likelihood of occurrence.

The jurisdiction's hazard analysis will provide the foundation for a range of decisionmaking—from policy decisions related to mitigation and preparedness measures, to practical measures, such as what kinds of supplies to warehouse and where to store them.



Visual 3.5



Visual Description: Using Hazard Analysis Data

Key Points

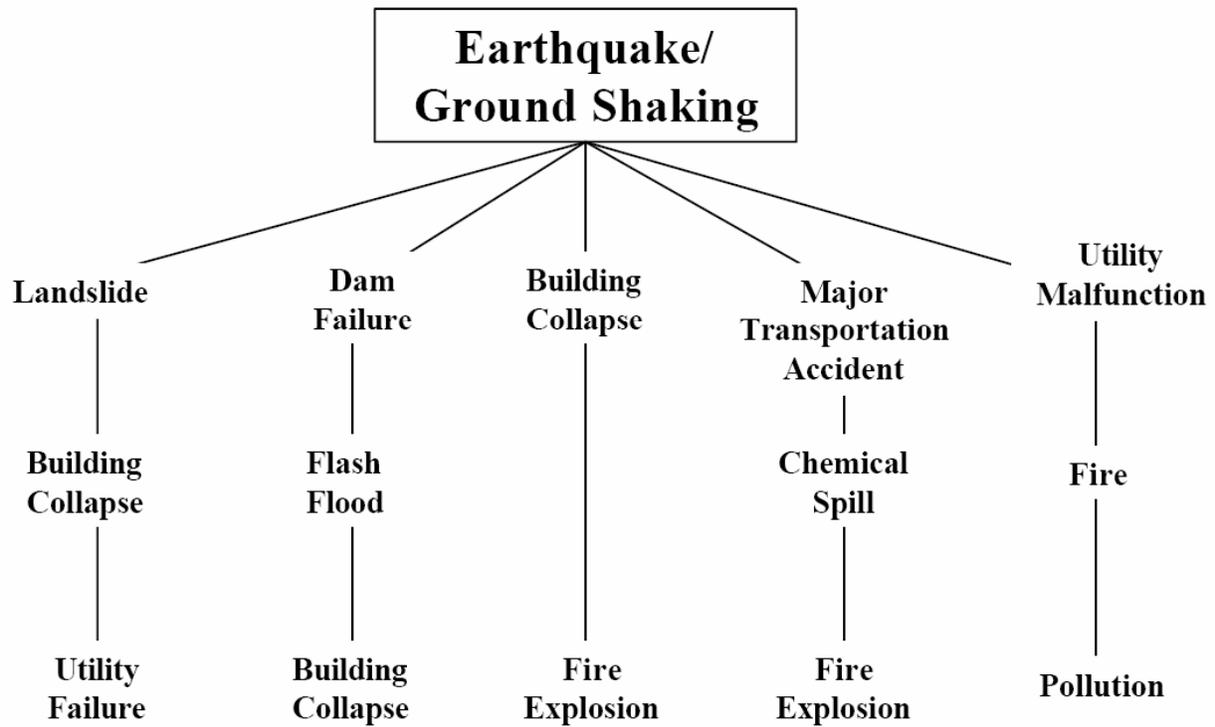
A critical factor in preparedness for resource mobilization and distribution is an understanding of how the hazards that are likely to occur in the community will affect response operations. The hazard/vulnerability analysis is essential for establishing the likelihood of occurrence of certain hazards in the community. It is usually included as part of the local EOP.

Hazards are defined as conditions or situations that have the potential for causing harm to people or property. Hazards do not occur alone; rather, each hazard causes a cascading effect in which other events emanating from the first hazard can also become hazards.

In the diagram on the slide, you can see the cascading effect of an earthquake. The events that result from the earthquake can escalate into a demand for resources. Each hazard will precipitate some predictable resource needs as well as other needs, which may be unique to the situation.

Because preparedness factors overlap for varying types of emergencies, being fully alert to one type of emergency increases a community's level of readiness for all types of emergencies (i.e., all-hazard preparedness). Applying all-hazard preparedness at the local level greatly expands the meaning and purpose of emergency management in the community; in fact, it enhances a community's preparedness to manage any type of emergency.

A Cascade of Disasters from One Triggering Event





Visual 3.6

Estimating Resource Demands

What resource demands can you envision occurring from the earthquake?

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Unit 3:
Getting Ready

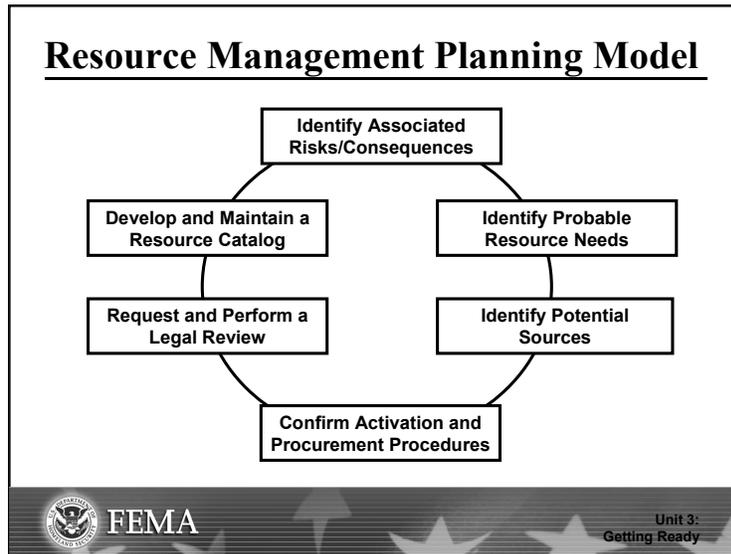
Visual Description: Estimating Resource Demands

Key Points

What resource demands can you envision occurring from the earthquake?



Visual 3.7



Visual Description: Resource Management Planning Model

Key Points

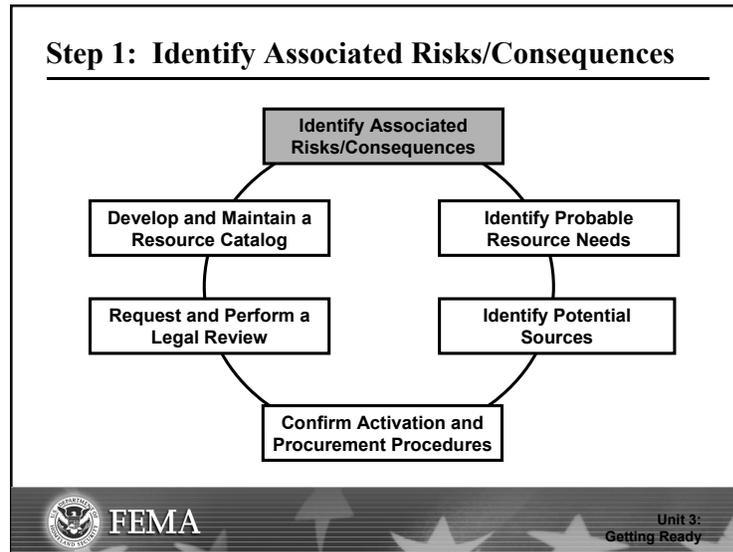
The recommended model for resource management planning divides the process into six steps:

1. Identify associated risks and consequences.
2. Identify probable resource needs.
3. Identify potential sources.
4. Confirm activation and procurement procedures.
5. Request and perform a legal review.
6. Develop and maintain a resource catalog.

Each step in the model will be covered in this unit.



Visual 3.8



Visual Description: Step 1: Identify Associated Risks and Consequences

Key Points

One of the first activities that should be accomplished when determining resource needs is to consider thoroughly the related risks and consequences of a specific disaster scenario. Most disasters spawn a variety of cascading events or related emergencies.

For example, an earthquake may cause:

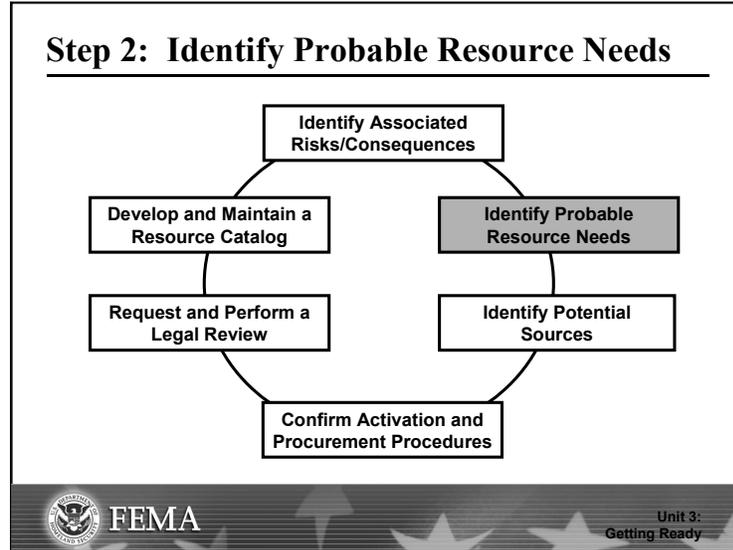
- Building and bridge collapses.
- Hazardous materials spills.
- Utility outages.

A thorough analysis of the risks and associated consequences will provide the baseline information needed for resource management planning.

Keep in mind that the hazard not only drives the kind/type of resources needed, but may present unique challenges to resource procurement. For example, earthquakes may damage roads, bridges, airports, and other infrastructure close to the disaster area, making resource delivery difficult. Hazmat incidents may present delivery issues because of limited approach routes, and decontamination issues as resources are demobilized and returned to service. Chemical and biological incidents may present shelf-life and refrigeration issues.



Visual 3.9



Visual Description: Step 2: Identify Probable Resource Needs

Key Points

The next step is to identify the probable resource requirements for managing each high-risk hazard, and its associated risks and consequences. Some resources will be specific to only one risk or consequence; others may be needed by all.

For example, following a hurricane, urban search and rescue resources would likely be needed only for building collapses, but resources associated with traffic control would be needed to assist with debris removal, security, and damage to bridges and roads.

You might review case histories or interview managers of similar disasters when researching infrequent or unfamiliar disasters. Sometimes, needed resources are not immediately apparent.

For example, incident managers in Oklahoma City had not considered the need to dispose of large quantities of biohazardous waste prior to the bombing of the Alfred P. Murrah Building. Another frequently overlooked or underestimated category is the needs associated with ethnic groupings, such as special dietary requirements or separate shelters.



Visual 3.10

General Resource Groupings

- Personnel
- Facilities
- Equipment
- Vehicles
- Teams
- Aircraft
- Supplies

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Getting Ready

Visual Description: General Resource Groupings

Key Points

The resources you will identify fall into seven general groupings:

- Personnel: Includes ICS “overhead” or management staff, technical specialists, EOC staff, etc.
- Facilities: Includes office space, shelters, warehouses, etc.
- Equipment (with or without the personnel needed to operate it): For example, dump trucks may be requested with or without operators. Fire engines are usually requested with firefighters.
- Vehicles: Includes automobiles, buses, etc.
- Teams: Groups of specially trained and equipped personnel, including needed equipment and supplies.
- Aircraft: Includes surveillance platforms, medevac, or cargo configuration.
- Supplies: Supplies are the largest and most difficult category to define. It is impossible to develop and maintain complete lists. A more efficient way to plan is to develop and maintain a current list of supplies with comprehensive inventories.

You may find it useful to use these groupings to focus your resource brainstorming activities, or you may wish to group resources after you have compiled a complete list.



Visual 3.11

Identifying Resource Needs

How can you be sure you get the exact resource you need when you request it?

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Getting Ready

Visual Description: Identifying Resource Needs

Key Points

How can you be sure you get the exact resource you need when you request it?



Visual 3.12

NIMS National Typing Effort

- **Category.** The function for which a resource would be most useful
- **Kind.** Broad classes that characterize like resources (teams, personnel, equipment, etc.)
- **Components.** Critical parts or pieces that are included within a resource

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Visual Description: NIMS National Typing Effort

Key Points

Thinking ahead about the appropriate configuration and capabilities of emergency resources can ensure that incidents receive the right resources for the job during an emergency. The NIMS Integration Center is directing a national resource typing effort to standardize resource characteristics.

In the national resource typing protocol, resources are organized by:

- **Category:** A category is the function for which a resource would be most useful (e.g., public works and engineering or firefighting).
- **Kind:** Kind refers to the broad classes that characterize like resources, such as teams, personnel, equipment, vehicles, aircraft, and supplies.
- **Components:** A resource may be comprised of several components. For example, the components of an urban search and rescue task force include:
 - Search team.
 - Medical team.
 - Heavy rescue team.
 - Logistics and management.



Visual 3.13

National Resource Typing Protocol

- **Metrics.** Measurable standards that help describe resource capabilities
- **Type.** A description of the level of resource capability
- **Additional Information.** Information that is useful in making a decision to request a resource (e.g., limitations, required authorizations, etc.)



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Visual Description: National Resource Typing Protocol

Key Points

The national resource typing protocol organizes resources in various ways:

- **Metrics:** Metrics are measurable standards that are useful in describing a resource's capability. Metrics vary depending on the kind of resource being measured. For example, a metric associated with a dump truck is how many tons the bed can hold.
- **Type:** Type refers to the level of resource capability. Assigning the Type 1 label to a resource implies that it has a level of capability greater than that of a Type 2 resource of the same kind.

Typing provides managers with additional information to aid in the selection and best use of resources.

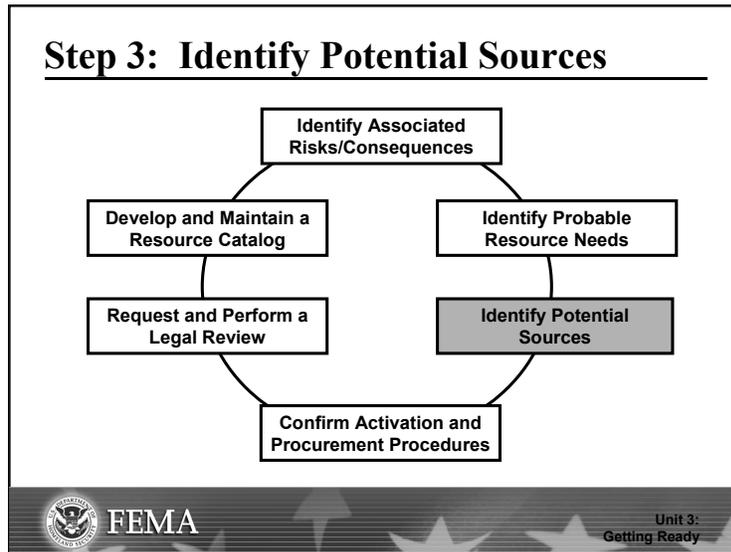
- **Additional information:** Additional information might include limitations, required authorizations, and applicable legislation or legal ramifications that affect activation or utilization of the resources.

Organizing resources according to the national resource typing protocol makes the resource ordering and dispatch processes within jurisdictions, across jurisdictions, and between governmental and nongovernmental entities more efficient.

The NIMS resources typing effort is ongoing. Explore the NIMS Integration Center (NIC) resource management page at: http://www.fema.gov/emergency/nims/mutual_aid.shtm



Visual 3.14



Visual Description: Step 3: Identify Potential Sources

Key Points

Resources can come from a variety of sources, including:

- Within your agency or jurisdiction.
- Mutual aid.
- Other levels of government.
- Volunteer organizations.
- Commercial sources.
- Donations.



Visual 3.15

In-House Sourcing

- What kinds and types of resources are already owned by your agency?
- Are they suitable for emergency use?
- What kinds of supplies does your agency usually warehouse?
- What training and experience do your agency's personnel have?

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Visual Description: In-House Sourcing

Key Points

You should always consider in-house resources before looking outside. In-house resources typically:

- Are less expensive to use.
- Can be dispatched easier and more quickly.

During a disaster, each level of government is expected to exhaust its own resources before approaching the next level of government for assistance. Consider the following questions when determining whether to go outside your agency or jurisdiction for a specific resource:

- What kinds and types of resources are already owned by my agency?
- Are they suitable for use in emergencies?
- What kinds of supplies does my agency usually warehouse?
- What training and experience does my agency's personnel have?

If you don't know the answers to these questions, conduct a resource survey of your agency as part of the planning process.



Visual 3.16

Mutual Aid

- Adjacent jurisdictions or agencies that share the same mission
- The next level of government
- NGOs with similar missions and resource needs

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Visual Description: Mutual Aid

Key Points

If your agency or jurisdiction does not have a specific resource, the next place to look is usually your mutual-aid partners.

- For governmental entities, mutual-aid resources can include adjacent jurisdictions or agencies that share the same mission, or the next level of government.
- For nongovernmental entities, mutual aid can also include organizations with similar missions and resource needs.
- In the private sector, sources of mutual aid can include businesses that use the same kinds of resources.

Remember that mutual-aid agreements or EMACs (at the State level) should be developed during the planning process.

Note: Mutual-aid agreements will be covered in more depth in Unit 4.



Visual 3.17

Other Levels of Government

- Availability is not guaranteed.
- May have co-pay or other requirements.
- May not be available for 72 hours or longer.
- Must follow established request procedures.

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Visual Description: Other Levels of Government

Key Points

Public-sector emergency managers should have a good idea of:

- Resources available at all levels of government.
- Their capabilities and support needs.
- The response times for specific resources or resources from specific sources.

Keep in mind that availability of a resource is not guaranteed. For example, members of the National Guard and military reserve units may not be available as disaster resources if they have been deployed elsewhere.

Also, there may be co-pay or other requirements associated with needed resources.

A good rule of thumb is to assume that resources outside the disaster area (e.g., State and Federal resources) will take up to 72 hours to arrive.

All resource requests to other levels of government must follow the established request procedures.



Visual 3.18

Volunteer Organizations

Determine during the planning process:

- What organizations are active in the area.
- The services they provide.
- How they can be accessed.

Whenever possible, include representatives of voluntary organizations on the planning team.



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Visual Description: Volunteer Organizations

Key Points

Many volunteer nongovernmental organizations (NGOs) play major roles in emergency response. Commonly referred to as Volunteer Organizations Active in Disaster, or VOAD, the number and degree of formal organizations vary from State to State. The American Red Cross is the most high profile of the VOAD organizations, with its national, congressionally mandated mission to provide care to disaster victims.

Knowing what volunteer agencies are active in your area, what resources they can provide, and how to activate and incorporate these resources into the response is critical to resource planning. You should consider including these organizations into your planning process.

Some jurisdictions have VOAD Councils designed to coordinate with each other and with public-sector jurisdictions. These Councils can be extremely valuable, both in the planning and the activation processes, especially if resource requests can be forwarded to the Council for resolution, rather than having to "shop around" to individual members.



Visual 3.19

Benefits of Including Volunteer Organizations

- Avoids “spontaneous volunteer” organizations.
- Helps organize spontaneous volunteers to avoid:
 - Loss of accountability.
 - Potential safety issues.
 - Public relations problems.
 - Loss of confidence in the response organization.
- Allows organizations to do what they do best!

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Visual Description: Benefits of Including Volunteer Organizations

Key Points

VOAD organizations offer many benefits to the responding jurisdiction. In fact, failure to include key VOAD organizations in your planning and exercises will result in duplication of effort and/or resource shortfalls. Some may show up as "spontaneous volunteer organizations" and will not check in with either the IC or EOC. This will result in:

- Failure to integrate VOAD resources into formal response, leading to loss of accountability.
- Potential safety issues.
- Public relations problems.
- Loss of confidence in the jurisdiction's ability to respond to a disaster.

Most importantly, VOAD members specialize in providing specific services during emergency situations. Involving VOAD organizations throughout the planning process and during a response allows them to do what they (as opposed to government agencies) do best.

Make sure agreements with volunteer organizations clearly spell out required training, experience, and equipment, as well as liability and employment relationship to the jurisdiction.



Visual 3.20

Commercial Sources

- Can provide resources that the jurisdiction does not have.
- Support the local economy.

Use standby contracts to guarantee resource availability and reduce cost.



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Visual Description: Commercial Sources

Key Points

Consider resources from commercial sources to fill some emergency needs. Many supplies are most easily and cost-effectively procured from local commercial sources—and the use of commercial sources can support the local economy, which is often critical in the wake of a disaster. Many jurisdictions depend heavily on local contractors for heavy equipment and operators, and it makes more sense to buy pens and pencils from a local supplier than to request them from FEMA.

Keep in mind the need to identify all costs associated with locally procured resources. Some costs, such as fuel, operators, or standby time, may not be readily apparent in a price quote. Many jurisdictions use standby contracts as a cost-effective way of getting the emergency resources they need from commercial sources.



Visual 3.21

Standby Contracts (1 of 2)

What is a standby contract?

The slide features the FEMA logo on the left and the text 'Unit 3: Getting Ready' on the right, set against a background of stars and arrows.

Visual Description: Standby Contracts (1 of 2)

Key Points

What is a standby contract?



Visual 3.22

Standby Contracts (2 of 2)

Standby contracts:

- Are negotiated before an emergency.
- Can be activated, if necessary, following an emergency.
- Guarantee delivery of a specified quantity and quality of resource.
- Guarantee delivery at the price in effect the day before the emergency occurred.

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Visual Description: Standby Contracts (2 of 2)

Key Points

Standby contracts offer several large benefits to jurisdictions using them because they:

- Are negotiated before an emergency occurs so that a contract does not have to be executed during a response.
- Can be activated, if necessary, by authorized personnel following an emergency.
- Guarantee delivery of a specified quantity and quality (e.g., kind and type) of resource and within a specified timeframe.
- Guarantee delivery at the price in effect on the day before the emergency occurred.

Many jurisdictions have found standby contracts to be extremely useful and a cost-effective way of accessing supplies, equipment, and personnel during emergency situations.



Visual 3.23

Donations

Specify:

- What goods and services will be accepted.
- How goods must be packed and shipped.
- How and where goods will be received and distributed.
- The conditions under which goods and services will be accepted.

Cash is best!



Unit 3:
Getting Ready

Visual Description: Donations

Key Points

During disasters, private-sector sources frequently wish to contribute goods and services free or at a reduced cost. However, it is also important to have a procedure in place that clearly defines and documents:

- What goods and services will be accepted. Specifying what goods and services are acceptable will reduce “closet cleaning” and the labor and other costs associated with disposing of unwanted goods.
- How goods must be packed and shipped and how and where they will be received and distributed. Emergency personnel do not have time to sort donated goods before warehousing or distributing them. And they cannot handle receipt of the often huge quantities of donated goods if they don’t know the goods are coming or when they will arrive. Specifying the conditions for packing, shipping, and receipt will help donations management personnel operate much more efficiently.
- The conditions under which goods and services are being offered. It is not unusual for jurisdictions to be billed at a later date for resources that were offered “free” in the initial response to an emergency. Making certain that the conditions for donation are clear helps ensure that donors are recognized for being good neighbors and that there are no misunderstandings later.

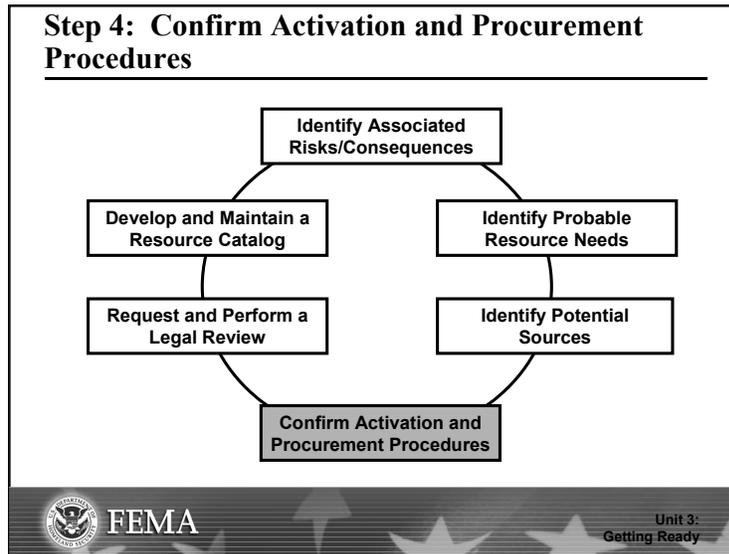
Jurisdictions should develop and implement an effective Donations Management Annex to the EOP that structures receipt, warehousing, inventorying, distribution, and accounting for large-scale disasters.

Remember that cash is always the best donation, so you should work with VOAD members and their Public Information Officers to get the word on donations to the public as soon as possible following a disaster.

Note: Unsolicited donations will be addressed later in this course.



Visual 3.24



Visual Description: Step 4: Confirm Activation and Procurement Procedures

Key Points

Just knowing who owns a resource is only half the battle. Additional questions need to be answered:

- How can that resource be obtained in the middle of the night, on a weekend, or when the owner/supervisor is out of town? Are 24-7 access phone numbers and addresses available? While many administrative rules work fine during routine circumstances, they may not serve the organization well during an emergency.
- Will the jurisdiction have to pay for this resource? If so, what is the rate? Are there additional costs associated with emergency use or after-hours activation? This is an area in which standby contracts can be extremely useful.
- Has purchasing authority been delegated to the appropriate personnel in sufficient amounts to meet emergency needs? Most jurisdictions limit purchasing authority to specific people and specific limits. Again, while administrative rules addressing financial issues may work fine during routine operations, they may not serve the organization well in an after-hours emergency. Stories abound of responders forced to purchase supplies with personal credit cards because official fiscal support was not available.
- What emergency declarations or legal frameworks must be activated or invoked? You should consult with your legal office to determine requirements in your State.

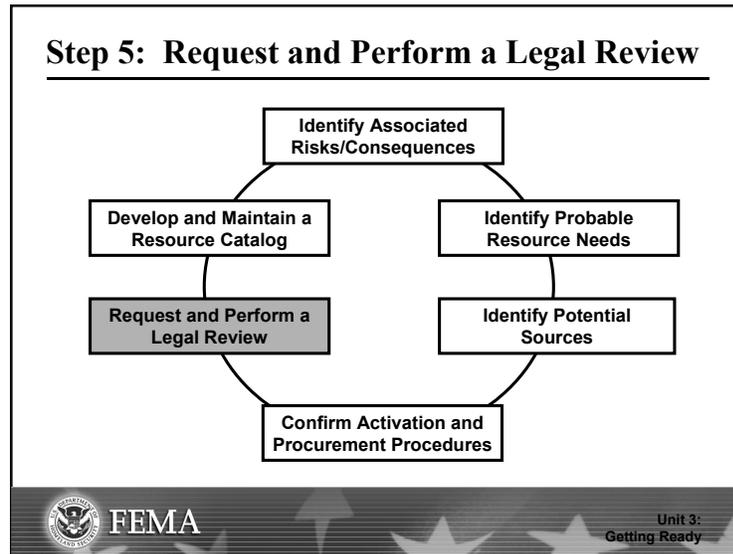
- How will the resource gain access to the incident scene? Planning efforts must consider the issues related to incident scene access. Convergence and self-dispatching represent a significant threat to scene safety and resource management. Planning should consider:
 - A method for identifying authorized personnel from other jurisdictions, volunteer organizations, or commercial vendors.
 - Procedures for clearing the incident scene of spectators, unauthorized volunteers, and victims.
 - Methods for securing the cleared scene and limiting access points.

To ensure that these issues are addressed adequately, ensure that the planning process includes:

- Determining who, at what level in each agency, has what purchasing authority.
- Ensuring that appropriate financial controls are in place and observed at all levels.
- Ensuring that appropriate training and refresher training on jurisdiction purchasing and documentation procedures is completed.



Visual 3.25



Visual Description: Step 5: Request and Perform a Legal Review

Key Points

It is time well spent to have legal counsel review your organization's legal foundations for resource management as well as the Resource Annex to the EOP. For example:

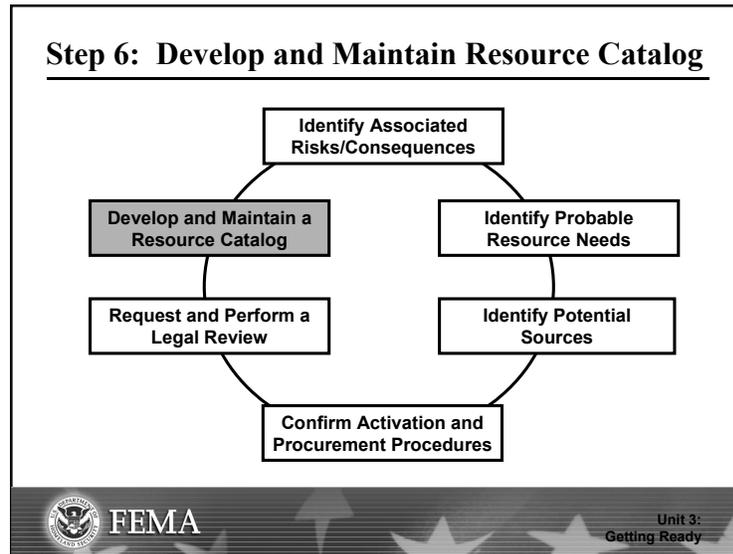
- It is an unfortunate fact of life that goods and services frequently make a major leap in price following a disaster. Many jurisdictions have put ordinances in place to prevent price gouging.
- In some jurisdictions, normal contracting procedures, such as the amount of time contracts must be advertised, can be suspended following a disaster.
- Some jurisdictions change the level of purchasing authority for specific individuals during an emergency. For example, what level of purchasing authority do Incident Commanders have? Department heads? Logistics Section Chiefs? Procurement Unit Leaders? Emergency Managers?
- Under what circumstances (if any) can personal property be commandeered?
- Are liability measures in place to protect both your jurisdiction and volunteers and their organizations? Liability laws vary widely from State to State.

- Has a disaster contingency fund been established? If so, who can access it, and under what conditions?
- Are sufficient intergovernmental agreements in place to perform and receive mutual aid?

Legal counsel can provide up-to-date guidance and advice on all of these issues.



Visual 3.26



Visual Description: Step 6: Develop and Maintain a Resource Catalog

Key Points

After you have determined what you need, where you can find it, and how to procure it, the information needs to be organized, made accessible to those who need it, and maintained. Most organizations develop their own versions of "the yellow pages," including:

- The type of resource.
- Its owner.
- Its location.
- Procedures for obtaining the resource.

Resource accessibility is also an issue. The most detailed inventory in the world is useless if staff can't access it. Inventories should be available in different formats and stored at different locations. If the primary inventory is electronic, it is advisable to have paper copies available for key Logistics and Finance/Administration personnel, dispatchers, and EOC staff.

Maintaining such catalogs is time-consuming work. It takes time and attention to detail to make sure all information is up to date, but there are few things more frustrating than discovering that a needed resource is not available when needed at 3 a.m. Most organizations update their resource lists on an annual or semiannual basis. There is software available that will e-mail contacts and ask for updates automatically.

The activity on the next page will summarize this topic, and give you practice in determining resource requirements for a multihazard event.



Visual 3.27

Activity: Determining the Resource Requirements To Manage a Hazard

1. Select a hazard.
2. Use the Cascading Effects diagram to identify events resulting from the hazard.
3. Use the Equipment, Supplies, and Personnel Worksheets to identify resource requirements.
4. Be prepared to discuss your worksheets with the class.



You have 20 minutes to complete this activity.



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Visual Description: Activity: Determining the Resource Requirements To Manage a Hazard

Key Points

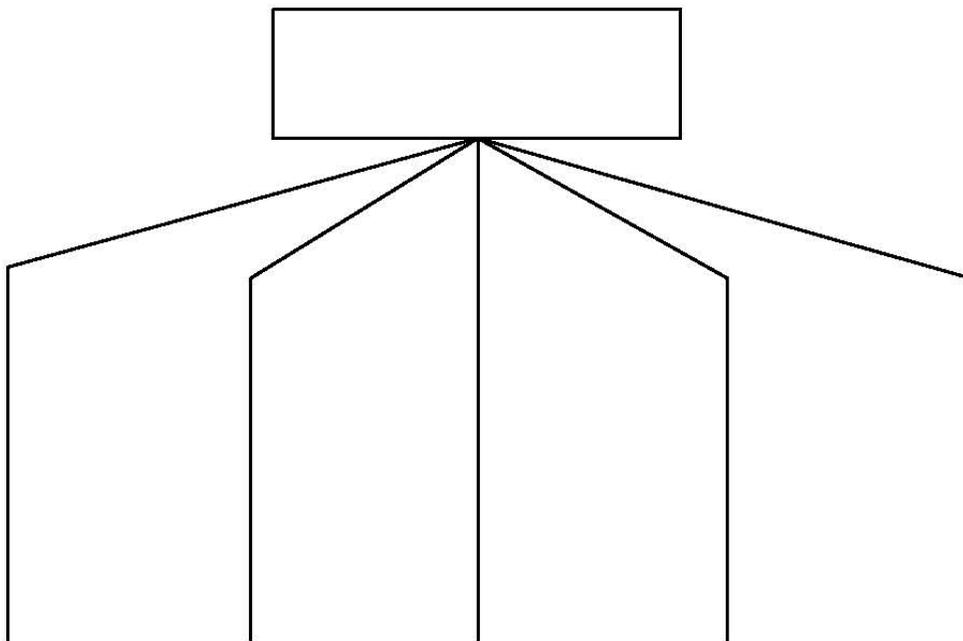
Refer to the next page for the activity instructions.

Instructions: Select a hazard, and define a specific population that will be affected by the hazard (i.e., how many people in a small, medium, or large jurisdiction).

In the diagram below, identify the cascading effects of that hazard. Then, on the worksheets that follow, determine the likely resource requirements for responding to the hazard.

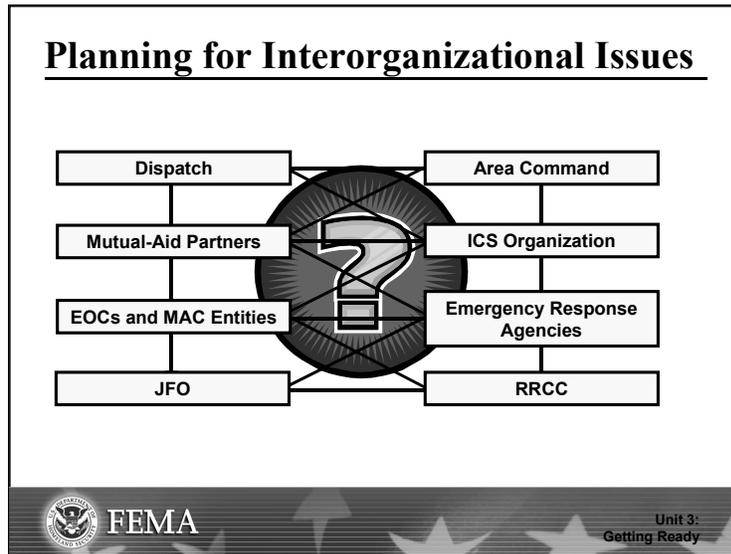
You will have 25 minutes to complete this activity.

A Cascade of Disasters from One Triggering Event





Visual 3.28



Visual Description: Planning for Interorganizational Issues

Key Points

It is critically important to think through the relationships between and among the various command and coordination entities that are likely to be activated during a disaster. Included in this analysis should be:

- ICS organization on incident.
- Dispatch organizations.
- Mutual-aid partners.
- Unified Command.
- Area Command.
- Emergency service districts or other special mission governmental entities.
- Local, county, regional and State EOCs.
- Multiagency Coordination (MAC) entities such as MAC Groups, VOAD Councils, State Emergency Boards, etc.
- FEMA Regional Response Coordination Centers (RRCCs).
- Joint Field Offices (JFOs).
- Joint Information Centers (JICs).

Keep in mind that a solution that works in one jurisdiction might be inappropriate (or illegal) in another.

Also, remember that most NIMS command and coordination structures are activated only during disasters. Dispatch centers or offices and agency ordering points manage resources on a day-to-day basis. It is not safe to assume that unfamiliar resource management procedures and entities will integrate smoothly with normal administrative structures during the stress and uncertainty inherent in a disaster. It is important that planners consider carefully the relationships among these structures as they relate to resource management.



Visual 3.29

Interoperability: Key Points

- No jurisdiction has all of the resources that could be needed during a disaster.
- Interoperability ensures that resources can be moved and assigned across jurisdictional boundaries.
- Interoperable resources expand the resource pool and ensure an effective response.

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Visual Description: Interoperability: Key Points

Key Points:

Following are some key points about the importance of interoperability:

- No jurisdiction has all of the resources that could conceivably be needed during a disaster.
- Interoperability ensures that resources can be moved and assigned across jurisdictional boundaries.
- Interoperable resources expand the resource pool and ensure an effective response.



Visual 3.30

Strategies To Ensure Interoperability

- Where national standards exist, adopt them.
- When possible:
 - Combine orders for standardized equipment.
 - Place bulk orders to ensure best price and interoperability.

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Getting Ready

Visual Description: Strategies To Ensure Interoperability

Key Points

There are many examples of incidents in which the lack of interoperability affected the outcome of the response. Nonstandard equipment severely hampers mutual-aid assistance. Strategies to ensure interoperability include:

- Where national standards exist for connections, fittings, and hardware, these should be adopted by all jurisdictions.
- When possible, combine orders for standardized equipment.
- When possible, make collective bulk orders to help ensure both best price and interoperability.

Interoperability is also a major issue with communications equipment. While matching hardware may not be necessary in all cases, those who use 800 or 900 MHz systems may discover that their hardware is proprietary, making communication with cooperators not on the system more difficult.

It is important to ensure that agencies share enough frequencies to provide communication during disasters. Many States have established Statewide emergency frequencies that can be used for major mobilizations.

Another major issue with communications equipment is backup power and redundancy, as well as alternative methods of communication and alert and warning systems for those emergencies which are likely to disrupt utilities.

Consideration should be given to interoperability in SOPs where they might affect how a resource can be deployed. For example, law enforcement agencies vary in restrictions on the use of devices such as stun grenades and nonlethal weapons. Where possible, mutual-aid partners should agree on such policies. When SOPs cannot be reconciled, it is important that mutual-aid partners know the differences up front.



Visual 3.31

Activity: Interoperability Issues

1. Select an interoperability issue you have encountered.
2. Brainstorm potential solutions.
3. Be prepared to discuss your lists with the class.



You have 15 minutes to complete this activity.



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Visual Description: Activity: Interoperability Issues

Key Points

Refer to the next page for the activity instructions.

Interoperability Issues Worksheet

Instructions: Work with your assigned small group to complete this activity. Select an Interoperability issue that you have faced during a disaster or emergency. Working with your group, brainstorm some potential solutions to the issue. You have 15 minutes to complete this activity. Be prepared to discuss your group's issue and potential solutions with the class.

Interoperability Issue:

Proposed Solutions:



Visual 3.32

Making Sure Everything Works

- Training
- Exercises



Unit 3:
Getting Ready

Visual Description: Making Sure Everything Works

Key Points

Short of actual disaster activation, the final test of all planning activities is to assess whether or not the system works under simulated conditions. This includes training and comprehensive exercises in all aspects of resource management to ensure interoperability.



Visual 3.33

Training

- Establishes base skill levels for both tactical and management tasks
- Training may be:
 - Paper-based self-study.
 - Web based.
 - Formal classroom sessions.

Unit 3:
Getting Ready

Visual Description: Training

Key Points

Training is necessary to establish the skills base for both tactical and management tasks. The format for training depends on the skill to be learned, but may include:

- Paper-based self-study.
- Web-based.
- Formal classroom sessions.



Visual 3.34

Discussion-Based Exercises

- Seminars
- Workshops
- Orientations
- Tabletop exercises

Unit 3:
Getting Ready

Visual Description: Discussion-Based Exercises

Key Points

Some good discussion-based exercises include:

- Seminars: Seminars are useful for introducing new programs, policies, or plans; reviewing roles and responsibilities; and laying a foundation for higher-level exercises.
- Workshops: Workshops combine aspects of training with problemsolving, and are useful for developing strategies for specific aspects of resource management.
- Orientations: Orientations are used to introduce new or revised plans, facilities, or policies.
- Tabletop exercises: Tabletop exercises test decisionmaking around plans, policies, and procedures in a low-stress environment. Tabletops are particularly useful to test MAC System coordination activities.



Visual 3.35

Operations-Based Exercises

- Drills
- Functional exercises
- Full-scale exercises

Unit 3:
Getting Ready

Visual Description: Operations-Based Exercises

Key Points

Operations-based exercises include:

- **Drills:** Drills are used to practice a single emergency response, concentrate the efforts of a single agency, or provide field experience. For example, a drill might be conducted to exercise call-up procedures for activating the EOC.
- **Functional exercises:** Functional exercises simulate a real emergency under high-stress conditions without incurring the cost of a full-scale exercise. Functional exercises can be used to test coordination and response activities of one or several functions or agencies and can provide a foundation for full-scale exercises.
- **Full-scale exercises:** Full-scale exercises test a jurisdiction's total response capabilities. Full-scale exercises are developed to be as close to an actual response as possible, making use of actual equipment and facilities.

A progressive exercise program incorporates both discussion-based and operations-based exercises. Regardless of the format, the results of these efforts must be captured and recycled through the planning process to ensure that any deficiencies are addressed.



Visual 3.36

Summary and Transition

- Resource management planning should be based on the results of a sound hazard analysis.
- Using the model presented in this unit, you can project many of your jurisdiction's needs.
- Be sure to work through interjurisdictional and interoperability issues during planning.
- Evaluate and exercise your Resource Annex to ensure that everything works as it should.

Unit 3:
Getting Ready

Visual Description: Summary and Transition

Key Points

Key points covered in this unit included the following:

- Resource management planning should be based on the results of a sound hazard analysis.
- Using the model presented in this unit, resource managers can project many of the jurisdiction's resource needs.

Projecting resource needs will not ensure a smooth operation during an emergency, however. You should:

- Identify and work through any interjurisdictional and interoperability issues during the planning process.
- Evaluate and exercise the Resource Annex to ensure that everything works as it should.

Notes: