

Developing and Maintaining Emergency Operations Plans

Comprehensive Preparedness Guide (CPG) 101

Version 2.0

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EXCERPT - Chapter 4

4. The Planning Process

Overview

This chapter merges information from the first three chapters and describes an approach for operational planning that is consistent with processes already familiar to most planners. When the planning process is used consistently during the preparedness phase, its use during operations becomes second nature. The goal is to make the planning process routine across all phases of emergency management and for all homeland security mission areas.

The process described in this chapter blends concepts from a variety of sources. It applies at all levels of government and allows private and nongovernmental organizations to integrate with government planning efforts. Although individual planners can use this process, it is most effective when used by a planning team.

Steps in the Planning Process

There are many ways to produce an EOP. The planning process that follows is flexible and allows communities to adapt it to varying characteristics and situations. While not ideal, if time is a constraint, steps can be minimized or skipped in order to accelerate the process. Small communities can follow just the steps that are appropriate to their size, known risks, and available planning resources. Figure 4.1 depicts steps in the planning process. At each step in the planning process, jurisdictions should consider the impact of the decisions made on training, exercises, equipment, and other requirements.

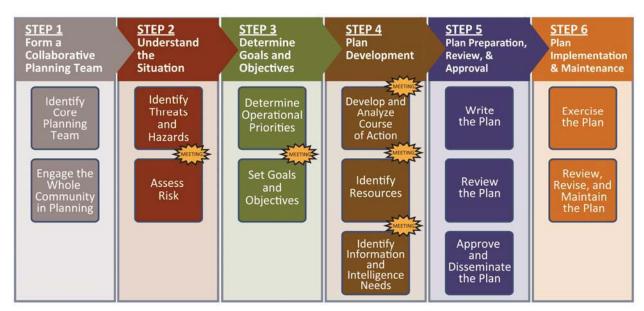


Figure 4.1: Steps in the Planning Process

Step 1: Form a Collaborative Planning Team

Experience and lessons learned indicate that operational planning is best performed by a team. Using a team or group approach helps organizations define the role they will play during an operation. Case studies and research reinforce this concept by pointing out that the common thread found in successful operations is that participating organizations have understood and accepted their roles. In addition, members of the planning team should be able to understand and accept the roles of other departments and agencies. One goal of using a planning team is to build and expand relationships that help bring creativity and innovation to planning during an incident. This approach helps establish a planning routine, so that processes followed before an incident occurs are the same as those used during and following an incident.

A community benefits from the active participation of all stakeholders. Some tips for gathering the team together include the following:

- *Plan ahead*. The planning team should receive plenty of notice about where and when the planning meeting will be held. If time permits, ask the team members to identify the time(s) and place(s) that will work for the group.
- **Provide information about team expectations.** Planners should explain why participating on the planning team is important to the participants' agencies and to the community itself, showing the participants how their contributions will lead to more effective operations. In addition, budget and other project management concerns should be outlined early in the process.
- Ask the senior elected or appointed official or designee
 to sign the meeting announcement. A directive from the
 executive office carries the authority of the senior official
 and sends a clear signal that the participants are expected
 to attend and that operational planning is important to the
 community.
- Allow flexibility in scheduling after the first meeting.

 Not all team members will need to attend all meetings. In some cases, task forces or subcommittees can complete the work. When the planning team chooses to use this option, it should provide project guidance (e.g., time frames, milestones) but let the subcommittee members determine when it is most convenient to meet.
- Consider using external facilitators. Third-party facilitators can perform a vital function by keeping the process focused and mediating disagreements.

Case Study: A Small Community Planning Team

A small community took the following approach to forming its planning team:

Who was involved in the core planning team?

The core planning team was composed of any department or office that was likely to be involved in most, if not all, responses. The five to seven most central people in this community were: the Fire and Police Chiefs, the Emergency Manager and the Planner, and the Head of Public Works.

What did they do?

- Studied the composition of the population within the community
- Provided information to create a complete draft plan
- Answered questions about the community for the draft plan
- Provided additional commentary on roles and responsibilities
- Gave information about the community's standard operations
- Clarified command structures
- Provided information about resources, capabilities, threats, and risks
- Gave writers information for integration

Who participated in the expanded planning team?

The expanded planning team included responders and stakeholders who might become involved in a major incident. In this case, the community used a 10- to 20-member group that included emergency managers from surrounding communities, business leaders, secondary responders, representatives from industry, community leaders (including leaders from the disability community), and community contractors.

What did they do?

- Reviewed the full plan
- Provided insights and recommendations for improvement
- Integrated additional perspectives
- Agreed to provide additional support

The key to planning in a group setting is to allow open and frank discussion during the process. Interaction among planners can help elicit a common operational understanding. Individual group members must be encouraged to express objections or doubts. If a planner disagrees with a proposed solution, that planner must also identify what needs to be fixed.

Identify Core Planning Team

In most jurisdictions, the emergency manager or homeland security manager is the senior official's policy advisor for prevention, protection, response, recovery, and mitigation strategies, as well as overall preparedness. The emergency manager or homeland security manager may also be the prevention and protection advisor, if that role is not given to a law enforcement official or other designated advisor. In these roles, emergency managers or homeland security managers are often responsible for coordinating and developing an EOP, filling the role of lead planner. This means that the emergency manager provides oversight to a jurisdiction's planning team. However, other government agencies or departments may have statutory authority and responsibility that overlaps or complements this responsibility. For example, law enforcement often has the lead in addressing prevention and protection, while public health addresses unique epidemiological issues.

It is important to include a hazard mitigation expert on the planning team. Mitigation planners are a valuable resource for information concerning hazard analysis, functional vulnerabilities, critical facilities, and funding availability. Including mitigation promotes continuity throughout emergency planning and helps reduce the number of physical constraints by leveraging resources to address anticipated operational requirements.

Increasingly, emergency management agencies are hiring permanent staff and/or contracting subject matter experts to provide expertise on disability, access and functional needs, children, and household pets and service animals for the emergency planning process. These experts provide critical perspectives and information to ensure individuals with disabilities, others with access and functional needs, and individuals with limited English proficiency are fully integrated into EOPs. These experts can also help ensure compliance with anti-discrimination laws.

The planner must ensure that operational planning involves the jurisdiction's entire emergency management and homeland security team. Initially, the team should be small, consisting of planners from the organizations that usually participate in emergency or homeland security operations. They form the core for all planning efforts. As an EOP matures, the core team expands to include other planners.

Jurisdictions that use an agency and department operational structure might use a core team consisting of planners from the following:

- Emergency management
- Law enforcement
- Fire services
- EMS
- Public health

Even at this early stage, planners should begin thinking about the impact of who is involved in the planning process, as it will have a major impact on preparedness and operational requirements.

For example, if there is no hazardous materials response capability in a jurisdiction, planners will need to consider how to obtain that capability (through agreements) or develop that capability (through equipment, training, licensing, etc.).

Conversely, failure to include groups in planning (such as advocates for those with access or functional needs) will lead to mistakes and/or shortfalls in capability and resource requirements.

- Hospitals and health care facilities
- Public works
- Utility operators
- Education
- Agriculture
- Animal control
- Social services
- Childcare, child welfare, and juvenile justice facilities (including courts)
- National Guard
- Private sector
- Civic, social, faith-based, educational, professional, and advocacy organizations (e.g., those that address disability and access and functional needs issues, children's issues, immigrant and racial/ethnic community concerns, animal welfare, and service animals).

A jurisdiction might want to base the core planning team's membership on the EOP structure it uses. For example, jurisdictions using an ESF structure might form a core team composed of planners from the lead agencies or departments for ESF #4 (Fire), ESF #5 (Emergency Management), ESF #6 (Mass Care), ESF #8 (Public Health and Medical Services), and ESF #13 (Public Safety). Note that these ESF titles are examples. While the Federal naming convention is preferred for consistency, a jurisdiction should use its local ESF naming convention in its plans.

Regardless of the core planning team structure, the involvement of executives from the member agencies, departments, or CIKR organizations (where appropriate) is critical. They are able to speak with authority on policy, provide subject matter expertise, and provide accountability as it relates to their agency or department.

Engaging the Whole Community in Planning

Engaging in community-based planning—planning that is *for* the whole community and *involves* the whole community—is crucial to the success of any plan. Determining how to effectively engage the community in this planning process is one of the biggest challenges faced by planners. This challenge may be built on misperceptions about a community's interest in participating in the process, security concerns about involving those outside government, or a failure to jointly and adequately define the role of the community in the planning process. Community leaders have a keen understanding about their community's needs and capabilities and are a valuable stakeholder that can support the planning process in many ways. Community-based planning should also include notifying affected, protected groups of opportunities to participate in planning activities and making such activities accessible to the entire community (e.g., use of interpreters and translated announcements).

Communities may or may not be geographically constrained. Geographic communities are generally the basis for emergency management agencies and are constructed around political boundaries. The geographic community includes a number of communities of interest. These communities of interest are not necessarily confined to the borders of a jurisdiction and may center on physical, social, cultural, or philosophical structures. Examples include:

• Civic, social, faith-based, educational, professional, and advocacy organizations

- Immigrant and limited English proficiency constituencies
- Voluntary organizations
- Private service providers
- Critical infrastructure operators
- Local and regional corporations.

The private sector is a critical component in community engagement. Not only are they often the primary providers of critical services to the public, they also possess knowledge and resources to supplement and enhance preparedness, response, and recovery efforts. Often, private sector and government missions overlap—early coordination ensures effective sharing of information and resources and facilitates the establishment of common goals and objectives.

Private sector engagement presents unique challenges. The private sector plays a critical role in any disaster, and it is important to ensure they are active participants in the process, including involvement in jurisdictional training and exercise programs. An effective outreach program is critical in developing these partnerships.

Disasters begin and end locally. After the response is over, it is the local community that lives with the decisions made during the incident. Therefore, communities should have a say in how a disaster response occurs. They should also shoulder responsibility for building their community's resilience and enhancing its recovery before, during, and after a disaster. The community may have capabilities and resources that do not exist in the volume needed or at all within the traditional government response structure.

Case Studies: Private Sector Partnerships

Arlington County, Virginia has developed the "Safer Arlington Partnership," a program engaging non-profit, private sector, and public sector organizations in which members work together to enhance the level of preparedness in the County. The program's mission is achieved through four task forces: Training and Exercises, Information and Tools, Resource Inventory and Management, and Education and Outreach. More information regarding this initiative can be found at http://www.fema.gov/pdf/privatesector/ safer arlington partnership.pdf.

Several large metropolitan areas have also integrated the private sector into their catastrophic planning activities, including Honolulu (pandemic planning), Los Angeles/ Long Beach (disaster housing), National Capital Region (evacuation and contra-flow), New York/New Jersey (infrastructure protection, disaster housing), Norfolk (commodities and resource management), and Seattle (evacuation and sheltering).

There are many ways to leverage the community's capabilities and knowledge in the preparedness process. Although often viewed as a challenge, engaging the community can be successfully accomplished when approached correctly.

The foundation for community-based planning is knowing the community (see Figure 4.2). A keen understanding of the actual population and its needs will have a profound effect on the success or failure of any plan. Understanding the requirements of those with access and functional needs affects mass care courses of action and the resulting plans. Additionally, the number of children in the community will affect the ways in which schools are used as a resource, in turn defining some of the requirements for reunification planning. Engaging the community will increase the likelihood that people follow protective action measures during a crisis because they understand how plans address household pets or service animals. Likewise, taking into account the perceptions and fears of some populations, such as undocumented immigrants, may increase the plan's effectiveness.

Know the Community

As you progress in producing a community map, there are three major areas where members of various communities can assist your effort.

Hazards

Members of the community know the natural, technological, and man-made hazards that exist in their community.

Population

As a geographic community can include many social communities, it is important to engage the members of the community to get a picture of what populations are represented. Planners need to know where these populations are located and what needs they may have.

Capabililties

Social communities bring a host of capabilities that can be used to respond to a disaster (e.g., volunteers to run/staff shelters, licensed healthcare practitioners), while corporations can provide material support and are a community in and of themselves.

Identify the Communities to Engage

Working with existing groups is the most efficient way to link into a community as they have established relationships, networks and communication channels.

- Existing community-based programs are worth connecting with because trusted relationships have already been established between these offices and the community and further initiatives can capitalize on this goodwill.
- The community assessment process will identify existing programs and contacts.
- Being familiar with current events and programs in the community will help identify barriers and opportunities for engagement.

Partner with Community Leaders to Develop an Engagement Program

Engagement is about building trusted relationships.

- Community leaders need to trust that planners will support the work of the community and not dictate solutions for their issues. If communities don't trust that this will happen, they may choose to disengage.
- Working with leaders in the community to establish the type and level of engagement is critical.
- Leaders may be people who have an official position within the community or simply the "doers" in the community that have the ability to create the momentum needed for engagement activities. The best person to establish a partnership with will only be identified after getting to know the community well.

Figure 4.2: Community Engagement in Planning

Finally, it is critical to include civic leaders, members of the public, and representatives of community-based organizations in the planning process. They may serve as an important resource for validating assumptions about public needs, capabilities, and reactions. Because many planning assumptions and response activities will directly impact the public at large, involving the whole community during the planning phase is essential. This involvement should continue during validation and implementation. Potential roles include support to planning teams, public outreach, and establishing Community Emergency Response Teams (CERT). Planners can obtain assistance for including the whole community in the planning process from state or local Citizen Corps Councils, as well as the Local Emergency Planning Committee (LEPC). Pre-established partnerships and relationships are important for leveraging subject matter expertise and resources during a disaster.



Step 2: Understand the Situation

Effective risk management depends on a consistent comparison of the hazards a particular jurisdiction faces. This is typically performed through a threat/hazard identification and risk assessment process that collects information about threats and hazards and assigns values to risk for the purposes of determining priorities, developing or comparing courses of action, and informing decision making. Depending on the resources available and leadership, a jurisdiction could conduct an in-depth process—cataloging everything from specific asset vulnerabilities to emergency personnel staffing levels. Often, however, this level of analysis is not possible or practical; in such cases, jurisdictions should conduct a risk assessment of achievable and appropriate scale and scope.

Identify Threats and Hazards

Planners should start the problem-solving process by conducting research and analysis on the jurisdiction's threats and hazards. Considering the potential risks a jurisdiction may face brings specificity to the planning process. If risks are problems and operational plans are the solution, then hazard and threat identification and analysis are key steps in the planning process.

The first step of research focuses on gathering information about the jurisdiction's planning framework, potential risks, resource base, demographics, household pet and service animal population, and geographic characteristics that could affect emergency operations. There are many existing resources available to support planners in this step.

Threat assessments prepared for or by agencies may provide information on potential "soft targets" and threats within the jurisdiction. In addition, jurisdictions' hazard mitigation plans are an excellent resource for this step, as they are required to identify, catalog, and analyze all natural hazards that have the ability to impact the specified community. Jurisdictions should take additional steps to include human-caused and technological hazards.

Federal and state analyses that include data about historical incidents faced by the community also provide valuable information for this step. In addition, local organizations (e.g., the local chapter of the American Red Cross), utilities, other businesses, and members of the planning team can provide records about their experiences.

As an additional source, planning teams can use state and local fusion centers to provide analytical products, such as risk and trend analyses, that are derived from the systematic collection and evaluation of threat information. Fusion centers also provide access to national-level intelligence and can serve as a mechanism to "deconflict" information.

Sources for expertise on hazard or threat potential include jurisdictional agencies; academic, industrial, and public interest group researchers; private consultants specializing in hazard or threat analysis; and professional associations concerned with the hazards or threats on a planner's list. Sources of information on the community and possible consequences from risks vary. To determine the potential consequences of certain facility-based hazards, planners might check with the facility owner/operator or the agency (Federal, state, territorial, tribal, local, or regional) that regulates that kind of facility. The LEPC may be able to assist with this information. For demographics, census data are available, as are off-the-shelf computer products that organize such data by zip code. Knowing the number and type of household pets and service animals the jurisdiction may need to accommodate during an emergency situation will also guide preparedness activities. Sources of such data include market statistics, household pet licensing databases, and rabies vaccination records.

The planning team should also make extensive use of the existing information about the jurisdiction. For example, the local planning and zoning commission or department may have extensive demographic, land use, building stock, and similar data. Building inspection offices maintain data on the structural integrity of buildings, codes in effect at time of construction, and the hazard effects that a code addresses. Local public works (or civil engineering) departments and utilities are sources for information on potential damage to and restoration time for the critical infrastructures threatened by hazard effects. The chamber of commerce may offer a perspective on damage to businesses and general economic loss. Other sources of information mentioned previously—emergency service logs and reports, universities, professional associations, etc.—also apply.

Understanding the consequences of a potential incident requires gathering information about the potential access and functional needs of residents within the community. To begin planning, jurisdictions must have an accurate assessment—an informed estimate of the number and types of individuals with disabilities and others with access and functional needs residing in the community. Emergency planners should base their assessments on lists and information collected from multiple relevant sources, such as:

- U.S. Census data
- Social services listings (e.g., dialysis centers, Meals on Wheels)
- Paratransit providers
- Bureau of motor vehicles (accessible parking permit holders)
- Centers for Independent Living
- Home health agencies
- Vocational rehabilitation and job access services
- Disability services providers
- Health or behavioral health agencies

- Utility providers
- Congregate settings (e.g., nursing homes, summer camps)
- Schools and universities
- Medicaid
- Hospitals
- Daycare centers (for children or senior citizens)
- Places of worship
- Homeless shelters
- · Housing programs.

If planners compile the numbers from various lists, often referred to as the "list of lists" concept, they will have an estimate of the number of individuals residing in their communities, which will benefit planning for sufficient transportation and sheltering. Together, these lists can provide raw numbers vital to understanding the magnitude of the community's requirements. Emergency managers should also gather as much information as possible regarding the types of services these individuals require so emergency staff can be adequately trained and resource needs can be met.

These different types of assessments are sometimes mistakenly considered the same as registries when, in fact, they are different. A registry is a database of individuals who voluntarily sign up and meet the eligibility requirements for receiving emergency response services based on a need (the criteria for which should be established by the jurisdiction).

The next step of the threat and hazard identification process is to organize the information into a format that is usable by the planning team. One effective method for organizing hazard or threat information is to use a matrix based on dimensions used during the risk analysis process:

- Probability or frequency of occurrence
- Magnitude (the physical force associated with the hazard or threat)



- Intensity/severity (the impact or damage expected)
- Time available to warn
- Location of the incident (an area of interest or a specific or indeterminate site or facility)
- Potential size of the affected area
- Speed of onset (how fast the hazard or threat can impact the public)
- Duration (how long the hazard or threat will be active)
- Cascading effects.

Depending on the kinds of decisions and analyses the information is meant to support, planners might use other categories for data organization. For example, the decision that one hazard poses a greater threat than another may require only a qualitative estimate (e.g., high versus medium), whereas planning how to deal with health and medical needs caused by a particular hazard may require estimates of likely fatalities and injuries.

Assess Risk

The risk assessment⁷ is the basis for EOP development. The assessment helps a planning team decide what hazards or threats merit special attention, what actions must be planned for, and what resources are likely to be needed. The analysis method inventories, evaluates, and provides loss estimates for assets deemed critical during the response and recovery phases of an incident. Planners can also obtain the Hazards U.S. Multi-Hazard (HAZUS-MH) model from FEMA. HAZUS-MH is a nationally applicable and standardized methodology and software program that estimates potential losses from earthquakes, floods, and hurricane winds. This type of hazard assessment is similar to that which is required for hazard mitigation plans. In fact, if the

Remember that as the situation is analyzed and hazards or threats are prioritized, each carries with it training, equipment, and exercise requirements. It is not too early—even if only at a high level—to consider what is within the scope of capability of the jurisdiction and how those capabilities can be enhanced through preparedness activities and by the adding or sharing of resources.

community possesses a FEMA-approved multi-hazard mitigation plan, an assessment may be readily available. Mitigation plans can be used as reference documents to simplify the development of most hazards-based analyses.

The information gathered during the jurisdictional assessment of individuals with disabilities and others with access and functional needs requires a detailed analysis. Emergency planners need to review the assessment findings and analyze the quantity and types of resources (including personnel) needed during different types of incidents. For example, a jurisdiction with a large number of limited English proficiency residents might need to identify methods by which language assistance will be provided (e.g., bilingual personnel, interpreters, translated documents) to support operations, such as evacuation, sheltering, and recovery. Additionally, planners need to work with social services agencies to plan for unaccompanied minors and to assess for types of resources needed for the community's children during and following a disaster.

Hazard and threat analysis requires that the planning team knows risks that have occurred or could occur in the jurisdiction. The process should begin with a list of the risks that concern planners, developed from research conducted earlier in the planning process. A list of concerns might include those listed in Table 4.1.

⁷ FEMA Publication 386-2, Understanding Your Risks: Identifying Hazards and Estimating Losses, provides a detailed method for conducting hazard and risk assessments for many hazards.

Table 4.1: Sample Hazards List

| Natural Hazards | Technological Hazards | Human-Caused Hazards |
|-------------------|-----------------------|----------------------|
| Avalanche | Airplane crash | Civil disturbance |
| Disease outbreak | Dam/levee failure | Cyber events |
| Drought | HAZMAT release | Terrorist acts |
| Earthquake | Power failure | Sabotage |
| Epidemic | Radiological release | School violence |
| • Flood | Train derailment | |
| Hurricane | Urban conflagration | |
| Landslide | | |
| Tornado | | |
| Tsunami | | |
| Volcanic eruption | | |
| Wildfire | | |
| Winter storm | | |

Planners must keep in mind that hazard or threat lists pose two problems. The first is exclusion or omission. There is always a potential for new and unexpected risks (part of the reason why maintaining an all-hazards, all-threats capability is important). The second is that such lists involve groupings, which can affect subsequent analysis. A list may give the impression that hazards or threats are independent of one another, when in fact they are often related (e.g., an earthquake might cause dam failure). Lists may group very different causes or sequences of events that require different types of responses under one category. For example, "Flood" might include dam failure, cloudbursts, or heavy rain upstream. Lists also may group a whole range of consequences under the category of a single hazard. "Terrorism," for example, could include use of conventional explosives against people or critical infrastructure; nuclear detonation; or release of lethal chemical, biological, or radiological material.

Using a risk analysis, the planning team must compare and prioritize risks to determine which hazards or threats merit special attention in planning (and other emergency and homeland security management efforts). The team must consider the frequency of the hazard or threat and the likelihood or severity potential of its consequences in order to develop a single indicator of the risk to the jurisdiction. This effort allows for comparisons and the setting of priorities. While a mathematical approach is possible, it may be easier to manipulate qualitative ratings (e.g., high, medium, low) or index numbers (e.g., reducing quantitative information to a 1-to-3, 1-to-5, or 1-to-10 scale based on defined thresholds) for different categories of information used in the ranking scheme. Some approaches involve the consideration of only two categories—frequency and consequences—and treat them as equally important. In other approaches, potential consequences receive more weight than frequency. While it is important to have a sense of the magnitude involved (whether in regard to the single indicator used to rank hazards or to estimate the numbers of people affected), these indicators are static. Some hazards or threats may pose a risk to the community that is so limited that additional analysis is not necessary. Others might be dynamic, such as HAZMAT toxicity and transportation routes.

The analysis process produces facts and assumptions, which can be distinguished as follows:

• Facts are verified pieces of information, such as laws, regulations, terrain maps, population statistics, resource inventories, and prior occurrences.



Assumptions consist of information accepted by planners as being true in the absence of facts in order
to provide a framework or establish expected conditions of an operational environment so that
planning can proceed. Assumptions are used as facts only if they are considered valid (or likely to be
true) and are necessary for solving the problem.

Incident managers replace assumptions with facts when they implement a plan. For example, when producing a flood annex, planners may assume the location of the water overflow, size of the flood hazard area, and speed of the rise in water. When the plan is put into effect as the incident unfolds, operations personnel replace assumptions with the facts of the situation and modify the plan accordingly. Planners should use assumptions sparingly and put great effort into performing research and acquiring facts, including the use of historical precedent.

The outcomes of the analysis process help planners determine goals and objectives (Step 3) and select the supporting planning concept they will use when developing the plan (Step 4).

Step 3: Determine Goals and Objectives

Determine Operational Priorities

Operational priorities specify what the responding organizations are to accomplish to achieve a desired end-state for the operation. The senior official may communicate desired end-states for the operations addressed in the plans. By using information from the risk profile developed as part of the analysis process, the planning team engages the senior official to establish how the hazard or threat would evolve in the jurisdiction and what defines a successful outcome for responders, disaster survivors, and the community.

Starting with a given intensity for the hazard or threat, the team imagines an incident's development from prevention and protection efforts, through initial warning (if available) to its impact on the jurisdiction (as identified through analysis) and its generation of specific consequences (e.g., collapsed buildings, loss of critical services or infrastructure, death, injury, displacement). These scenarios should be realistic and created on the basis of the jurisdiction's hazard/threat and risk data. Planners may use the incidents that have the greatest impact on the jurisdiction (worst-case), those that are most likely to occur, or an incident constructed from the impacts of a variety of risks. During this process of building an incident scenario, the planning team identifies the requirements that determine actions and resources. Planners are looking for requirements generated by the hazard or threat, the response, and by constraints/restraints.

- Requirements can be caused by the nature of the hazard or threat. They lead to functions, such as law enforcement intervention, public protection, population warning, and search and rescue. Response requirements are caused by actions taken in response to an agent-generated problem. These tend to be common to all operations. An example is the potential need for emergency refueling during a large-scale evacuation. Subsets could include the needs to find a site for refueling, identify a fuel supplier, identify a fuel pumping method, control traffic, and collect stalled vehicles.
- A constraint is something that must be done ("must do"), while a restraint is something that prohibits action ("must not do"). They may be caused by a law, regulation, or management directive; some physical characteristic (e.g., terrain and road networks that make east-west evacuations impossible); or resource limitations.

Once the requirements are identified, the planning team restates them as priorities and affirms those priorities with the senior official.



Set Goals and Objectives

Goals and objectives must be carefully crafted to ensure they support accomplishing the plan mission and operational priorities. They must also clearly indicate the desired result or end-state they are designed to yield. This approach enables unity of effort and consistency of purpose among the multiple groups and activities involved in executing the plan.

Goals are broad, general statements that indicate the intended solution to problems identified by planners during the previous step. They are what personnel and equipment resources are supposed to achieve. They help identify when major elements of the response are complete and when the operation is successful.

Objectives are more specific and identifiable actions carried out during the operation. They lead to achieving response goals and determining the actions that participants in the operation must accomplish. Translating these objectives into activities, implementing procedures, or operating procedures by responsible organizations is part of planning. As goals and objectives are set, planners may identify more requirements that will feed into the development of courses of action as well as the capability estimate (see Step 4).

Example: Relationships among the Mission, Operational Priorities, Goals, and Objectives

Plan Mission: Effectively coordinate and direct available resources to protect the public and property from hazards or threats.

Operational Priority: Protect the public from hurricane weather and storm surge.

Goal: Complete evacuation before arrival of tropical storm winds.

Desired result: All self- and assisted evacuees are safely outside of the expected impact area prior to impact.

Objective: Complete tourist evacuation 72 hours before arrival of tropical storm winds.

Desired result: tourist segment of public protected prior to hazard onset, allowing resources to be redirected to accomplishing other objectives in support of this goal or other goals.

Step 4: Plan Development

Develop and Analyze Courses of Action

This step is a process of generating, comparing, and selecting possible solutions for achieving the goals and objectives identified in Step 3. Planners consider the requirements, goals, and objectives to develop several response alternatives. The art and science of planning helps determine how many solutions or alternatives to consider; however, at least two options should always be considered. Developing only one solution may speed the planning process, but it will probably provide for an inadequate response, leading to more damaging effects on the affected population or environment.

Developing courses of action uses the hybrid planning approach previously discussed. When developing courses of actions, planners depict how an operation unfolds by building a portrait of the incident's actions, decision points, and participant activities. This process helps planners identify tasks that occur immediately at incident initiation, tasks that are more mid-incident focused, and tasks that affect long-term operations. The planning team should work through this process by using tools that help members visualize operational flow, such as a white board, "sticky note" chart (see Figure 4.3), or some type of project management or special planning software.

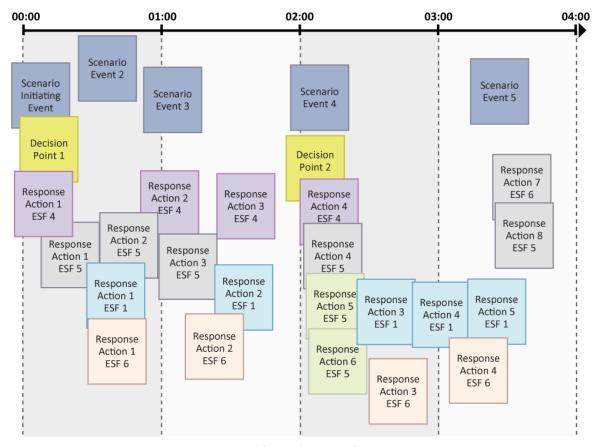


Figure 4.3: "Sticky Note" Chart

Course of action development follows these steps:

- Establish the timeline. Planners should cover all mission areas in the timeline and typically use the speed of incident onset to establish the timeline. The timeline may also change by phases. For example, a hurricane's speed of onset is typically days, while a major HAZMAT incident's speed of onset is minutes. The timeline for a hurricane might be in hours and days, particularly during the pre- and post-impact phases. The timeline for the HAZMAT incident would most likely be in minutes and hours. For a multijurisdictional or layered plan, the timeline for a particular scenario is the same at all participating levels of government. Placement of decision points and response actions on the timeline depicts how soon the different entities enter the plan.
- *Depict the scenario*. Planners use the scenario information developed in Step 3 and place the incident information on the timeline.
- *Identify and depict decision points*. Decision points indicate the place in time, as incidents unfold, when leaders anticipate making decisions about a course of action. They indicate where and when decisions are required to provide the best chance of achieving an intermediate objective or response

Courses of Action in a Nutshell

Courses of action address the what/ who/when/where/why/how for each solution.

As each potential course of action is identified, the planner should consider where it supports the priorities, goals, and objectives established by the senior official. Additionally, the course of action should be examined to determine whether it is feasible and whether the stakeholders that are needed to implement it find it acceptable.

goal (the desired end-state). They also help planners determine how much time is available or needed to complete a sequence of actions.

- *Identify and depict operational tasks*. For each operational task depicted, some basic information is needed. Developing this information helps planners incorporate the task into the plan when they are writing it. Planners correctly identify an operational task when they can answer the following questions about it:
 - What is the action?
 - Who is responsible for the action?
 - When should the action take place?
 - How long should the action take and how much time is actually available?
 - What has to happen before?
 - What happens after?
 - What resources does the person/entity need to perform the action?
- Select courses of action. Once the above analysis is complete, planners must compare the costs and benefits of each proposed course of action against the mission, goals, and objectives. Based on this comparison, planners then select the preferred courses of action to move forward in the planning process. While not necessary for every course of action identified, planners should use their best judgment and identify when the selection of a course or courses of action will need to be elevated to the senior elected or appointed official for approval. Where practical, the appropriate official should approve these actions prior to the review and completion of the plan.

"Red-Teaming" as a Method for Analyzing Courses of Action

A "peer review" process for plans is a useful tool for examining whether plans contain all of the necessary elements. Leveraging expertise from outside the jurisdiction will aid in challenging assumptions and identifying gaps in the jurisdiction's courses of action.

For plans dealing with adaptive threats (e.g., terrorism), examining plans "through the eyes of the adversary" can lead to significant improvements and a higher probability of success. This process is known as "red-teaming." Essential elements of a red-team review include:

- Engaging the law enforcement community and fusion centers to act as the adversary
- Understanding the operational environment (e.g., geography, demography, economy, culture)
- Establishing a potential adversary's identity, resources, tactics, and possible courses of action
- Evaluating the plan under multiple scenarios and a wide range of circumstances using tabletop exercises, facilitated seminars, and computer models and simulations to aid in analysis.

Red teams should foster a culture of critical thinking, intellectualism, and self-criticism. Red team members should be creative, objective, intellectually curious, and able to manage their egos. Red teams must act with ingenuity and enthusiasm to develop and apply customized approaches to every problem. Red teams need to cultivate expertise, recognize the limitations of their own knowledge, constantly seek and evaluate new insights, and have access to the opinions and understanding of truly informed experts. Finally, red teams need to avoid being confrontational. Red team members need to work closely and solicit information from the staff; however, it is best if they conduct their work in the background to avoid interference from staff members who may have a vested interested in a particular course of action.

Red-teaming is most successful when senior officials endorse and support it. Participants must be able to make their comments in an atmosphere of confidentiality and non-attribution.

Identify Resources

Once courses of action are selected, the planning team identifies resources needed to accomplish tasks without regard to resource availability. The object is to identify the resources needed to make the operation work. Once the planning team identifies all the requirements, they begin matching available resources to requirements. By tracking obligations and assignments, the planning team determines resource shortfalls and develops a list of needs that private suppliers or other jurisdictions might fill. The resource base should also include a list of facilities vital to emergency operations, and the list should indicate how individual hazards might affect the facilities. Whenever possible, planners should match resources with other geographical/regional needs so that multiple demands for the same or similar resources can be identified and conflicts resolved. This step provides planners an opportunity to identify resource shortfalls to pass to higher levels of government and to prepare pre-scripted resource requests, as appropriate. The EOP should account for unsolvable resource shortfalls so they are not just "assumed away." The capability estimate process is critical to this effort.

A capability estimate is a planner's assessment of a jurisdiction's ability to take a course of action. Capability estimates help planners decide if pursuing a particular course of action is realistic and supportable. They help planners better project and understand what might take place during an operation. Simply stated, the capability estimate represents the capabilities and resource types needed to complete a set of courses of action. The resulting capability estimate will feed into the resource section of the plan or annex.

Capability estimates may be written documents, tables or matrices, or oral presentations. The information provided in a capability estimate should be able to answer most questions about a jurisdiction's ability to support a given course of action. Planners can use capability estimates for both future and current operational planning. At a minimum, planners should prepare separate capability estimates for personnel, administration and finance, operational organizations (e.g., fire, law enforcement, EMS), logistics, communications, equipment, and facilities. Each capability estimate compares the courses of action being considered for a particular operation. They make recommendations as to which course of action best supports the operation. Capability estimates should also identify the criteria used to evaluate each area; facts and assumptions that affect those areas; and the issues, differences, and risks associated with a course of action. Figure 4.4 provides a suggested format for a capability estimate.

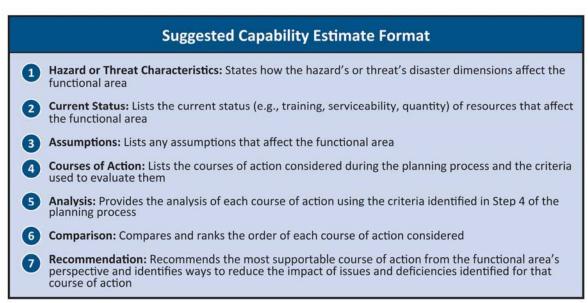


Figure 4.4: Suggested Capability Estimate Format

Resource identification is particularly important for supporting children; individuals with disabilities, access, and functional needs; and household pets and service animals. These individuals will require a range of communication, transportation, sheltering, human service, medical, and other resources throughout the life of an incident. Examples include, but are not limited to, durable medical equipment, oxygen,

When identifying resources, the needs of children are often forgotten, including diapers, formula and food appropriate for all ages, portable cribs/ playpens and the capability to supervise unaccompanied children.

paratransit vehicles, accessible shelters, personal assistance services, and sign language interpreters. Identifying these requirements and the resources for meeting them ahead of time will help planners fully support individuals with disabilities and others with access and functional needs.

Identify Information and Intelligence Needs

Another outcome from course of action development is a "list" of the information and intelligence needs for each of the response participants. Planners should identify the information and intelligence they will need and their deadline(s) for receiving it to drive decisions and trigger critical actions. These needs eventually find their way into plan information collection matrices.

When developing courses of action, the process should be periodically "frozen" so the planning team can:

- Identify progress made toward the end-state, including goals and objectives met and new needs or demands
- Identify "single point failures" (i.e., tasks that, if not completed, would cause the operation to fall apart)
- Check for omissions or gaps
- Check for inconsistencies in organizational relationships
- Check for mismatches between the jurisdiction's plan and plans from other jurisdictions with which they are interacting.

Step 5: Plan Preparation, Review, and Approval

Write the Plan

This step turns the results of course of action development into an EOP. The planning team develops a rough draft of the basic plan, functional annexes, hazard-specific annexes, or other parts of the plan as appropriate. The recorded results from Step 4 provide an outline for the rough draft. As the planning team works through successive drafts, the members add necessary tables, charts, and other graphics. The planning team prepares and circulates a final draft to obtain the comments of organizations that have responsibilities for implementing the plan. (See Chapter 3 for more information on plan formats.)

Following these simple rules for writing plans and procedures will help ensure that readers and users understand their content:

- Keep the language simple and clear by writing in plain English. Summarize important information with checklists and visual aids, such as maps and flowcharts.
- Avoid using jargon and minimize the use of acronyms.
- Use short sentences and the active voice. Qualifiers and vague wording only add to confusion.
- Provide enough detail to convey an easily understood plan that is actionable. The amount of detail a plan should provide depends on the target audience and the amount of certainty about the situation.

- Format the plan and present its contents so that its readers can quickly find solutions and options. Focus on providing mission guidance and not on discussing policy and regulations. Plans should provide guidance for carrying out common tasks, as well as enough insight into intent and vision so that responders can handle unexpected events. However, when writing a plan, "stay out of the weeds." Procedural documents (e.g., SOPs/SOGs) should provide the fine details.
- Ensure accessibility by developing tools and documents (e.g., print, electronic, video) so they can be easily converted to alternate formats.

Review the Plan

Planners should check the written plan for its conformity to applicable regulatory requirements and the standards of Federal or state agencies, as appropriate, and for its usefulness in practice. Planners should consult the next level of government about its plan review cycle. Reviews of plans allow other agencies with emergency or homeland security responsibilities to suggest improvements to a plan on the basis of their accumulated experience. For example, states may review local plans, and, upon request, FEMA regional offices may assist states in the review of EOPs. Hazard-specific Federal programs, such as the Radiological Emergency Preparedness Program, require periodic review of certain sections of the all-hazards plan and may require review of associated SOPs/SOGs.

Commonly used criteria can help decision makers determine the effectiveness and efficiency of plans. These measures include adequacy, feasibility, and acceptability. Decision makers directly involved in planning can employ these criteria, along with their understanding of plan requirements, not only to determine a plan's effectiveness and efficiency but also to assess risks and define costs. Some types of analysis, such as a determination of acceptability, are largely intuitive. In this case, decision makers apply their experience, judgment, intuition, situational awareness, and discretion. Other analyses, such as a determination of feasibility, should be rigorous and standardized to minimize subjectivity and preclude oversights.

- *Adequacy*. A plan is adequate if the scope and concept of planned operations identify and address critical tasks effectively; the plan can accomplish the assigned mission while complying with guidance; and the plan's assumptions are valid, reasonable, and comply with guidance.
- *Feasibility*. A plan is feasible if the organization can accomplish the assigned mission and critical tasks by using available resources within the time contemplated by the plan. The organization allocates available resources to tasks and tracks the resources by status (e.g., assigned, out of service). Available resources include internal assets and those available through mutual aid or through existing state, regional, or Federal assistance agreements.
- Acceptability. A plan is acceptable if it meets the requirements driven by a threat or incident, meets
 decision maker and public cost and time limitations, and is consistent with the law. The plan can be
 justified in terms of the cost of resources and if its scale is proportional to mission requirements.
 Planners use both acceptability and feasibility tests to ensure that the mission can be accomplished
 with available resources, without incurring excessive risk regarding personnel, equipment, material,
 or time. They also verify that risk management procedures have identified, assessed, and applied
 control measures to mitigate operational risk (i.e., the risk associated with achieving operational
 objectives).
- Completeness. A plan is complete if it:
 - Incorporates all tasks to be accomplished
 - Includes all required capabilities

- Integrates the needs of the general population, children of all ages, individuals with disabilities and others with access and functional needs, immigrants, individuals with limited English proficiency, and diverse racial and ethnic populations
- Provides a complete picture of the sequence and scope of the planned response operation (i.e., what should happen, when, and at whose direction)
- Makes time estimates for achieving objectives
- Identifies success criteria and a desired end-state.
- *Compliance*. The plan should comply with guidance and doctrine to the maximum extent possible, because these provide a baseline that facilitates both planning and execution.

When using these five criteria, planners should ask the following questions:

- Did an action, a process, a decision, or the operational timing identified in the plan make the situation worse or better?
- Were new alternate courses of action identified?
- Were the requirements of children, individuals with disabilities, others with access and functional needs, immigrants, individuals with limited English proficiency, and diverse racial and ethnic populations fully addressed and integrated into all appropriate aspects of the plan?
- What aspects of the action, process, decision, or operational timing make it something to keep in the plan?
- What aspects of the action, process, decision, or operational timing make it something to avoid or remove from the plan?
- What specific changes to plans and procedures, personnel, organizational structures, leadership or management processes, facilities, or equipment can improve operational performance?

Additionally, when reviewing the plan, a jurisdiction does not have to provide all of the resources needed to meet a capability requirement established during the planning effort. However, the plan should explain where the jurisdiction will obtain the resources to support those required capabilities. For example, many jurisdictions do not have the bomb squads or urban search and rescue teams required to meet certain capabilities. Neighboring jurisdictions can provide those resources (or capability elements) through MAAs, MOAs, MOUs, regional compacts, or some other formal request process.

When conducting this review, the checklist in Appendix C will provide a useful benchmark to ensure all planning elements are addressed. In particular, those elements related to planning for children, individuals with access and functional needs, and those with household pets and service animals are critical to each component of the planning process. When planning for these groups, consider the following questions, while being mindful of specific concerns for immigrant, racial/ethnic communities, and individuals with limited English proficiency:

Incorporating Children⁸

- Preparedness
 - Does the planning group include individuals with expertise in pediatric issues, as well as relevant advocacy groups, service providers, and subject matter experts?

⁸ For additional information, please see the *National Commission on Children and Disasters—2010 Report to the President and Congress* (http://www.childrenanddisasters.acf.hhs.gov/20091014_508IR_partII.pdf).



- Does the plan include demographic data and information on the number of children and where they tend to be (e.g., schools, daycare facilities)?
- Does the plan identify the agency with the lead role for coordinating planning efforts and ensuring that children are incorporated into all plans?
- Does the plan identify support agencies to assist the lead agency in coordinating planning efforts and ensuring that children are incorporated into all plans?
- Does the plan identify a child coordinator to provide expertise for the emergency planning process and to support the Incident Commander, the Planning Section, and/or the Operations Section during an emergency?
- Does the plan include mechanisms or processes to effectively identify children and families who will need additional assistance with their specific health-related needs in advance of, during, and following an emergency?
- Does the plan include mechanisms or processes to secure medical records to enable children with disabilities and/or other special health care needs to receive health care and sustained rehabilitation in advance of, during, and following an emergency?
- Does the plan identify which position/agency is authorized to direct supporting departments and agencies to furnish materials and commodities for children with disabilities and/or other special health care needs?
- Does the plan identify critical human services and ways to reestablish these services following a disaster for children and their families?
- Does the plan identify roles and responsibilities for supporting children?
- Does the plan prioritize governmental, nongovernmental, and private sector resources to meet critical needs such as accessible housing, rental assistance, debris removal, and emergency repairs for families of children with special health care needs?
- Does the plan describe vetting, training, and use of spontaneous volunteers who may offer their services to families with children?
- Does the plan include mechanisms or processes for provision of emergency childcare services?
- Does the plan include mechanisms or processes for the reunification of children with families?
- Do exercises include children and child congregate care settings such as school, childcare, child welfare, and juvenile justice facilities?

Evacuation Support

- Does the plan identify which official has the authority to order an evacuation?
- Does the plan identify the roles and responsibilities for advanced/early evacuation, which is often necessary to accommodate children with mobility issues?
- Does the plan identify the agency that has the lead role in coordinating an evacuation and ensuring children are incorporated into all evacuation considerations and planning?
- Does the plan include mechanisms or processes for providing safe evacuation/transportation assistance to unaccompanied minors?
- Does the plan include mechanisms or processes for tracking children, especially unaccompanied minors, during an evacuation?

- Does the plan include affirmative recognition of the need to keep children with disabilities with their caregivers, mobility devices, other durable medical equipment, and/or service animals during an evacuation?
- Does the plan include mechanisms or processes to ensure the availability of sufficient and timely accessible transportation to evacuate children with disabilities whose families do not have their own transportation resources?
- Does the plan identify means and methods by which evacuation transportation requests from schools, specifically schools with children who have disabilities, are collected and consolidated?
- Does the plan identify means by which incoming transportation requests will be tracked, recorded, and monitored as they are fulfilled?
- Does the plan identify accessible transportation resources (including paratransit service vehicles, school buses, municipal surface transit vehicles, drivers, and/or trained attendants) that can provide needed services during an evacuation?
- Does the plan address re-entry?

Shelter Operations

- Does the plan include mechanisms or processes for ensuring there will be adequate accessible shelters that fully address the requirements of children, including those with medical needs?
- Does the plan address adequate shelter space allocation for families who have children with special needs (i.e., disabilities and chronic medical needs) who may need additional space for assistive devices (e.g., wheelchairs, walkers)?
- Does the plan address necessary developmentally appropriate supplies (e.g., diapers, formula, age appropriate foods), staff, medicines, durable medical equipment, and supplies that would be needed during an emergency for children with disabilities and other special health care needs?
- Does the plan include mechanisms or processes for handling of and providing for unaccompanied minors in shelters?

• Public Information and Outreach

- Does the plan identify ways to promote personal preparedness among children, as well as their families and caregivers (including school and daycare personnel)?
- Does the plan identify mechanisms for disseminating timely and accessible emergency public information using multiple methods (e.g., television, radio, Internet, sirens) to reach families of children with sensory and cognitive disabilities, as well as families with limited English proficiency?

Incorporating Individuals with Access and Functional Needs

Preparedness

- Does the planning group include individuals with disabilities and others with access and functional needs, as well as relevant advocacy groups, service providers, and subject matter experts?
- Does the plan include a definition for "individuals with disabilities and others with access and functional needs," consistent with all applicable laws?
- Does the plan include demographic data and information on the number of individuals in the community with disabilities and others with access and functional needs (using assessment and current registry data, if available)?

- Does the plan identify the agency with the lead role for coordinating planning efforts and ensuring that individuals with access and functional needs are incorporated into all plans?
- Does the plan identify support agencies to assist the lead agency in coordinating planning efforts and ensuring individuals with access and functional needs are incorporated into all plans?
- Does the plan identify a disability advisor to provide expertise for the emergency planning process and to support the Incident Commander, the Planning Section, and/or the Operations Section during an emergency?
- Does the plan include mechanisms or processes to effectively identify people who will need additional assistance and their specific health-related needs in advance of, during, and following an emergency?
- Does the plan include mechanisms or processes to secure medical records to enable persons with disabilities or access and functional needs and acute health care needs to receive health care and sustained rehabilitation in advance of, during, and following an emergency?
- Does the plan identify which position/agency is authorized to direct supporting departments and agencies to furnish materials and commodities for individuals with disabilities and others with access and functional needs?
- Does the plan identify critical human services and ways to reestablish these services following a disaster for individuals with disabilities and others with access and functional needs to enable individuals to regain and maintain their previous level of independence and functioning?
- Does the plan identify roles and responsibilities for supporting individuals with disabilities and others with access and functional needs during both the short- and long-term recovery process?
- Does the plan prioritize governmental, nongovernmental, and private sector resources to meet critical needs such as accessible housing, rental assistance, debris removal, and emergency repairs for individuals with disabilities and others with access and functional needs?
- Does the plan include mechanisms or processes for the training and use of spontaneous volunteers who may offer their services to individuals with disabilities and others with access and functional needs to assist with physical, programmatic, and communications access and other functional needs?

Evacuation Support

- Does the plan identify which official has the authority to order an evacuation?
- Does the plan identify the roles and responsibilities for advanced/early evacuation, which is often necessary to accommodate persons with mobility issues?
- Does the plan identify the agency that has the lead role in coordinating an evacuation and ensuring those individuals with disabilities and others with access and functional needs are incorporated into all evacuation considerations and planning?
- Does the plan include affirmative recognition of the need to keep people with disabilities with their support systems, mobility devices, other durable medical equipment, and/or service animals during an evacuation?
- Does the plan include mechanisms or processes to ensure the availability of sufficient and timely accessible transportation to evacuate individuals with disabilities and others with access and functional needs who do not have their own transportation resources?

- Does the plan identify means and methods by which evacuation transportation requests from individuals with disabilities and others with access and functional needs are collected and consolidated?
- Does the plan identify means by which incoming transportation requests will be tracked, recorded, and monitored as they are fulfilled?
- Does the plan identify accessible transportation resources (including paratransit service vehicles, school buses, municipal surface transit vehicles, drivers, and/or trained attendants) that can provide needed services during an evacuation?
- Does the plan address re-entry?

Shelter Operations

- Does the plan include mechanisms or processes for ensuring that general population shelters are accessible and have planned to fully address the physical, programmatic, and communications accessibility requirements of individuals with disabilities and others with access and functional needs?
- Does the plan address the need for adequate shelter space allocation for individuals with disabilities and others with access and functional needs who may need additional space for assistive devices (e.g., wheelchairs, walkers)?
- Does the plan include mechanisms or processes for ensuring Americans with Disabilities Act Accessibility Guidelines govern the shelter site selection and operation?
- Does the plan address necessary staff, medicines, durable medical equipment, and supplies that would be needed during an emergency for individuals with disabilities and others with access and functional needs?

Public Information and Outreach

- Does the plan identify ways to promote personal preparedness among individuals with disabilities and others with access and functional needs, as well as their families and service providers?
- Does the plan identify mechanisms for disseminating timely and accessible emergency public information using multiple methods (e.g., television, radio, Internet, sirens) to reach individuals with sensory, intellectual, and cognitive disabilities, as well as individuals with limited English proficiency?

Incorporating Household Pets and Service Animals

Preparedness

- Does the plan describe the partnership between the jurisdiction's emergency management agency, the animal control authority, the mass care provider(s), and the owner of each proposed congregate household pet sheltering facility?
- Does the plan have or refer to an MOA/MOU or MAA that defines the roles and responsibilities of each organization involved in household pet and service animal response?
- Do organizations with agreed upon responsibilities in the plan have operating procedures that govern their mobilization and actions?
- Does the plan recommend just-in-time training for spontaneous volunteers and out-of-state responders?

Does the plan encourage household pet owners and service animal owners to make arrangements for private accommodations for themselves and their household pets and service animals prior to a disaster or emergency situation?

Evacuation Support

- Does the plan address the evacuation and transportation of household pets from their homes or by their owners or those household pets rescued by responders to congregate household pet shelters?
- Does the plan address how owners will be informed where congregate household pet shelters are located and which shelter to use? Does the plan provide for the conveyance of household pets or service animals whose owners are dependent on public transportation?
- Does the plan address how household pets that are provided with evacuation assistance are registered, documented, tracked, and reunited with their owners if they are separated during assisted evacuations?
- Does the plan address the responsibility of transportation providers to transport service animals with their owners?

Shelter Operations

- Does the plan identify the agency responsible for coordinating shelter operations?
- Does the plan provide guidance to human shelter operators on the admission and treatment of service animals?
- Does the plan identify an agency in the jurisdiction that regulates nonemergency, licensed animal facilities (e.g., animal control shelters, nonprofit household pet rescue shelters, private breeding facilities, kennels)?
- Does the plan establish criteria that can be used to expeditiously identify congregate household pet shelters and alternate facilities?
- Does the plan provide guidance about utility provisions, such as running water, adequate lighting, proper ventilation, electricity, and backup power, at congregate household pet shelters?
- Does the plan include mechanisms or processes to reduce/eliminate the risk of injury by an aggressive or frightened animal, the possibility of disease transmission, and other health risks for responders and volunteers staffing the congregate household pet shelter?
- Does the plan recommend a pre-disaster inspection and development of agreements for each congregate household pet facility?
- Does the plan provide for the care and maintenance of each facility while in use as a shelter?
- Does the plan identify equipment and supplies that may be needed to operate each congregate household pet shelter, as well as supplies that household pet owners may bring with them to the congregate shelter?
- Does the plan provide for the physical security of each congregate household pet facility, including perimeter controls and security personnel?
- Does the plan provide for acceptance of donated resources (e.g., food, bedding, containers)?
- Does the plan provide for the acquisition, storage, and security of food and water supplies? Does the plan provide for the diverse dietary needs of household pets?

Registration and Animal Intake

- Does the plan establish provisions for the sheltering of unclaimed animals that cannot be immediately transferred to an animal control shelter?
- Does the plan provide for segregation or seizure of household pets showing signs of abuse?
- Does the plan provide for household pet registration? Does the plan provide for installation and reading of microchip technology for rapid and accurate identification of household pets?
- Does the plan provide for technical consultation/supervision by a veterinarian or veterinary technician as official responders?
- Does the plan identify the need for all animals to have a current rabies vaccination?
- Does the plan provide for the case when non-eligible animals are brought to the shelter?⁹

Animal Care

- Does the plan provide for the housing of a variety of household pet species (e.g., size of crate/cage, temperature control, appropriate lighting)?
- Does the plan provide for separation of household pets based on appropriate criteria and requirements?¹⁰
- Does the plan provide for the consultation of a veterinarian or animal care expert with household pet sheltering experience regarding facility setup and maintenance?
- Does the plan provide for the setup and maintenance of household pet confinement areas (e.g., crates, cages, pens) for safety, cleanliness, and control of noise level?
- Does the plan recommend the setup of a household pet first aid area inside each shelter?
- Does the plan provide for the control of fleas, ticks, and other pests at each congregate household pet shelter?
- Does the plan provide criteria for designating and safely segregating aggressive animals?
- Does the plan provide for the segregation or quarantine of household pets to prevent the transmission of disease?
- Does the plan recommend the relocation of a household pet to an alternate facility (e.g., veterinary clinic, animal control shelter) due to illness, injury, or aggression?
- Does the plan recommend providing controlled areas (indoor or outdoor) for exercising dogs?
- Does the plan provide for household pet waste and dead animal disposal?
- Does the plan provide for the reunion of rescued animals with their owners?
- Does the plan include mechanisms or processes to address the long-term care, permanent relocation, or disposal of unclaimed household pets?

• Public Information and Outreach

- Does the plan provide mechanisms for continually updating public statements on shelter capacity and availability as people/animals are coming to shelters?
- Does the plan provide for a public education program?

¹⁰ Animal Welfare Publications and Reports. United States Department of Agriculture, Animal and Plant Health Inspection Service. http://www.aphis.usda.gov/animal_welfare/publications_and_reports.shtml.



⁹ According to FEMA Disaster Assistance Policy 9523.19, household pets do not include reptiles (except turtles), amphibians, fish, insects/arachnids, farm animals (including horses), and animals kept for racing purposes.

- Does the plan provide for the coordination of household pet evacuation and sheltering information with the jurisdiction's public information officer or Joint Information Center?
- Does the plan provide for communication of public information regarding shelter-in-place accommodation of household pets, if available?

Record Keeping

- Does the plan define the methods of pre- and post-declaration funding for the jurisdiction's household pet and service animal preparedness and emergency response program?
- Does the plan describe how to capture eligible costs for reimbursement by the Public Assistance Program as defined in Disaster Assistance Policy (DAP) 9523.19, Eligible Costs Related to Pet Evacuations and Sheltering?
- Does the plan describe how to capture eligible donations for volunteer labor and resources as defined in DAP 9525.2, Donated Resources?
- Does the plan describe how to capture eligible donations for mutual aid resources as defined in DAP 9523.6, Mutual Aid Agreements for Public Assistance and Fire Management Assistance?

Similar checklists can be developed as appropriate by the jurisdiction to address other critical population sectors, including populations with diverse languages and culture, populations with economic challenges, populations that depend on public transportation, and nonresident visitors.

Approve and Disseminate the Plan

Once the plan has been validated, the planner should present the plan to the appropriate elected officials and obtain official promulgation of the plan. The promulgation process should be based in a specific statute, law, or ordinance. Obtaining the senior official's approval through a formal promulgation documentation process is vital to gaining the widest acceptance possible for the plan. It is also important to establish the authority required for changes and modifications to the plan.

Once the senior official grants approval, the planner should arrange to distribute the plan and maintain a record of the people and organizations that received a copy (or copies) of the plan. "Sunshine" laws may require that a copy of the plan be posted on the jurisdiction's website or be placed in some other public accessible location. The plan should be available in alternate formats, upon request, to maintain compliance with the Americans with Disabilities Act.

Step 6: Plan Implementation and Maintenance

Training

After developing a plan, it must be disseminated and managers must be required to train their personnel so they have the knowledge, skills, and abilities needed to perform the tasks identified in the plan. Personnel should also be trained on the organization-specific procedures necessary to support those plan tasks.

Exercise the Plan

Evaluating the effectiveness of plans involves a combination of training events, exercises, and real-world incidents to determine whether the goals, objectives, decisions, actions, and timing outlined in the plan led to a successful response. In this way, homeland security and other emergency preparedness exercise programs become an integral part of the planning process. Similarly, planners need to be aware of lessons and practices from other communities. The Lessons Learned Information Sharing website

(http://www.llis.dhs.gov) provides an excellent forum for evaluating concepts identified in a jurisdiction's plan against the experiences of others.

A remedial action process can help a planning team identify, illuminate, and correct problems with the jurisdiction's EOP. This process captures information from exercises, post-disaster critiques, self-assessments, audits, administrative reviews, or lessons-learned processes that may indicate that deficiencies exist. Members of the planning team should reconvene to discuss the problem and to consider and assign responsibility for generating remedies across all mission areas. Remedial actions may involve revising planning assumptions and operational concepts, changing organizational tasks, or modifying organizational implementing instructions (i.e., the SOPs/SOGs). Remedial actions may also involve providing refresher training for an organization's personnel.

The final component of a remedial action process is a mechanism for tracking and following up on the assigned actions. As appropriate, significant issues and problems identified through a remedial action process and/or the annual review should provide the information needed to allow the planning team to make the necessary revision(s) to the plan.

Review, Revise, and Maintain the Plan

This step closes the loop in the planning process. It focuses on adding the information gained by exercising the plan to the research collected in Step 2 and starting the planning cycle over again. Remember, planning is a continuous process that does not stop when the plan is published. Plans should evolve as lessons are learned, new information and insights are obtained, and priorities are updated.

"Living" Plans

Plans must not be placed on a shelf to collect dust!

Whenever possible, training and exercise must be conducted for each plan to ensure that current and new personnel are familiar with the priorities, goals, objectives and courses of action.

Plan maintenance is also critical to the continued utility of the plans an organization has developed. A number of operations have had setbacks due to old information, ineffective procedures, incorrect role assignments, and outdated laws. Further, the priorities for a jurisdiction may change over time as the makeup of the included communities change, as resources expand or contract, and as capabilities evolve.

Routinely Review Your Plans!

Planning teams should establish a process for reviewing and revising the plan. Reviews should be a recurring activity. Some jurisdictions have found it useful to review and revise portions of their EOPs every month. Many accomplish their reviews on an annual basis. In no case should any part of the plan go for more than two years without being reviewed and revised. Teams should also consider reviewing and updating the plan after the following events:

- A major incident
- A change in operational resources (e.g., policy, personnel, organizational structures, management processes, facilities, equipment)
- A formal update of planning guidance or standards
- A change in elected officials
- Each activation
- Major exercises
- A change in the jurisdiction's demographics or hazard or threat profile
- A change in the acceptability of various risks
- The enactment of new or amended laws or ordinances.

