E/L/K0103: Planning: Emergency Operations

Student Manual

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FEMA

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Acronyms Used in This Course

CEMP	Comprehensive Emergency Management Plan
CIKR	Critical Infrastructure and Key Resources
CMS	Centers for Medicare and Medicaid Services
CONOPS	Concept of Operations
CPG	*Comprehensiveness Preparedness Guide*
EMAC	Emergency Management Assistance Compact
EMPG	Emergency Management Performance Grant
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ESSD	Exercise Simulation System Document
FIOP	Federal Interagency Operational Plan
HIRA	Hazards Identification and Risk Assessment
HHS	U.S. Department of Health and Human Services
HSEEP	Homeland Security Exercise and Evaluation Program
IAP	Incident Action Plan
NEMBA	National Emergency Management Basic Academy
NGO	Nongovernmental Organization
NIMS	National Incident Management System
NMSZ	New Madrid Seismic Zone
NORTHCOM	U.S. Northern Command
NPS	National Preparedness System
POETE	Plans, Organization, Equipment, Training, and Exercise
PPD-8	Presidential Policy Directive 8
RAPT	Resilience Analysis and Planning Tool
SME	Subject Matter Expert

SOG	Standard Operating Guideline
SOP	Standard Operating Procedure
SPR	Stakeholder Preparedness Review
THIRA	Threat and Hazard Identification and Risk Assessment
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

Unit 1: Course Welcome

Visual 1: *E/L/K0103: Planning: Emergency Operations*

E/L/K0103: Planning: Emergency Operations

Visual 2: Key Points

This unit includes the following:

Unit	Time
Course Introduction	30 min
Participant Introductions	25 min
Pre-Assessment	35 min
Total Unit Time	**1 hr 30 min**

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- This unit provides the course overview.
- This unit should take approximately 1 hr and 30 min to complete.

Visual 3: Instructor Introductions

- Instructors
- Course Manager(s)
- Other Course Personnel

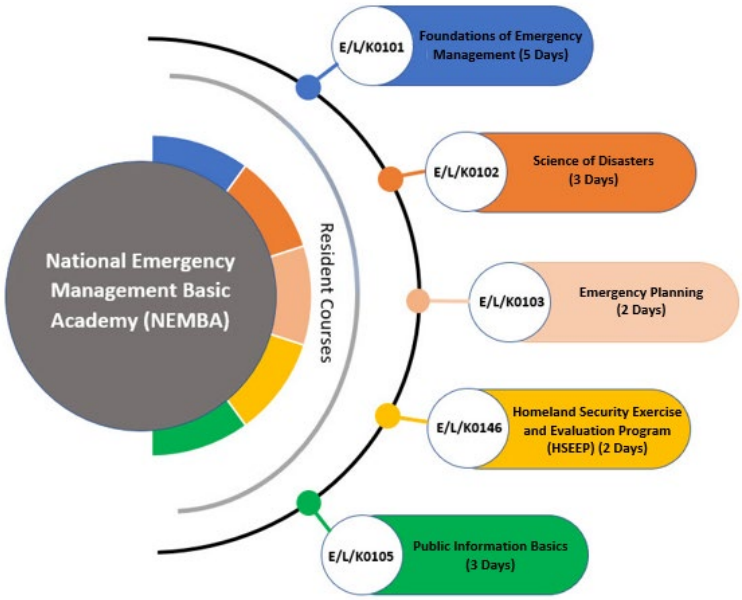
Visual 4: Administrative Information

- Emergency exits
- Restrooms
- Pagers and cell phones
- Other logistics

Visual 5: Course Goals

- To promote effective emergency management planning practices.
- To enhance planning skills through application exercises.

Visual 6: NEMBA Resident Courses



National Emergency Management Basic Academy (NEMBA) Resident Courses

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National Emergency Management Basic Academy resident courses include:

- ELK0101: Foundations of Emergency Management (5 days)
- ELK0102: Science of Disasters (3 days)
- ELK0103: Emergency Planning (2 days)
- ELK0146: Homeland Security Exercise and Evaluation Program (2 days); and
- ELK0105: Public Information Basics (3 days)

Visual 7: Participant Introductions

- Name
- Agency/organization
- Position/title
- Prior experience with emergency operations planning
- Training expectations

Visual 8: Course Agenda

Day 1
Unit 1: Course Welcome
Unit 2: Planning Overview
Unit 3: Identifying Threats and Hazards and Assessing Risks
Unit 4: The Planning Process

Day 2
Unit 4: The Planning Process (cont'd)
Unit 5: Emergency Operations Planning Activity
Unit 6: Course Summary
Post-Assessment

Visual 9: Course Expectations

- Punctuality
- Participation
- Positive attitude
- Professionalism
- Flexibility
- Commitment

Visual 10: Methods

- Presentations
- Discussions and activities
- Resources for continued learning
- Resource Guide (*formerly Individual Action Workbook*)

Visual 11: Participant Materials and Resources

- Student Manual
- Resource Guide
- *CPG 101: Developing and Maintaining Emergency Operations Plans*
- *CPG 201: Threat and Hazard Identification and Risk Assessment*
- Exercise Simulation System Document (ESSD)

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You need to have the following materials and resources available for participation in this class:

- Student Manual
- Resource Guide
- *CPG 101: Developing and Maintaining Emergency Operations Plans*
- *CPG 201: Threat and Hazard Identification and Risk Assessment*
- Exercise Simulation System Document (ESSD)

Visual 12: Resource Guide Follow-Up

- Have you completed or made progress in the tasks you identified for your community? Provide examples.
- For information that you did not know during class, what methods did you use to find the information?
- Have you met with your identified mentor since *E/L0101*? How has that person continued to help you grow in the emergency management profession?

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Refer to the *E/L/K0103* Resource Guide.

Visual 13: Assessment and Evaluation Process

- Pre-Assessment (no grade)
- Post-Assessment
  - 75% or better passing grade
- Participation:
  - Daily attendance, participation, and interactions
  - Completion of Activity Worksheets

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- The Pre-Assessment is not graded.
- The Post-Assessment is graded, and a 75% or better is required for a passing grade.
- Participation is critical. It includes:
  - Daily attendance, participation, and interactions
  - Completion and submission of Activity Worksheets

Visual 14: Pre-Assessment

Instructions: Working individually:

1. Write your name on the question packet and answer sheet.
2. Tear the Pre-Assessment Answer Sheet off the assessment packet. Use this sheet to record your answers.
3. Once you have completed the assessment, turn it in to the instructors.

Visual 15: Unit 1 Q & A

Unit 2: Planning Overview

Visual 1: Unit 2 Overview

Unit 2: Planning Overview

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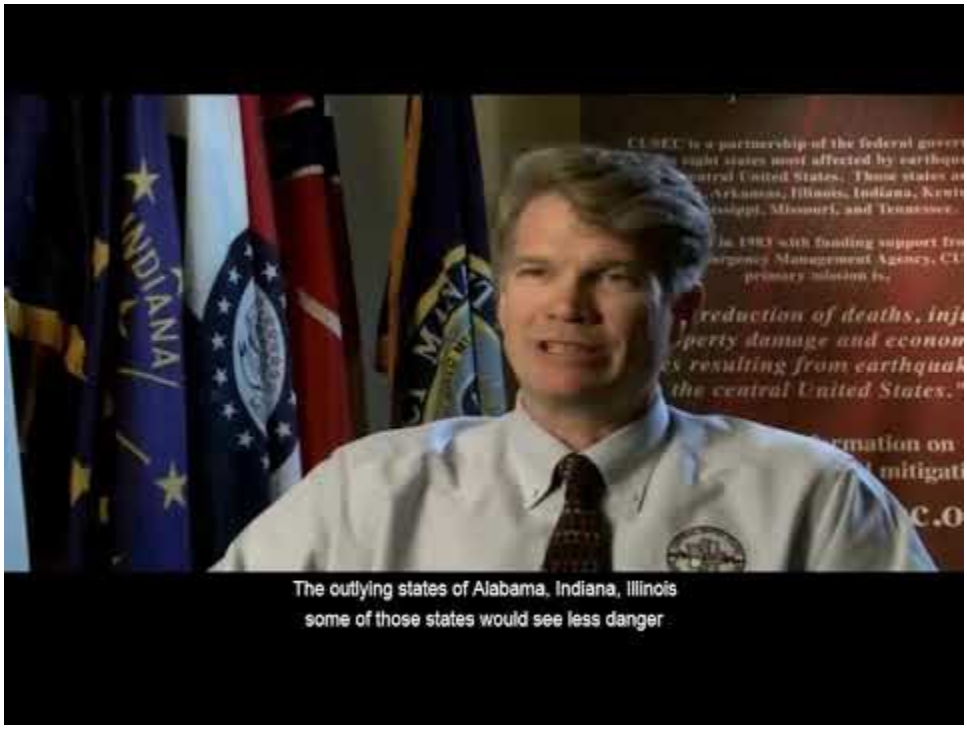
This unit provides the big picture of planning and where emergency operations planning fits in to the planning spectrum.

Visual 2: Case Study: New Madrid



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Students will watch the *Case Study – New Madrid* (FEMA, 2021) video, available at https://www.youtube.com/watch?v=3MKMVYYZUr0.

Video Transcript:

[Narrator] For the simple folk who populated the Mississippi river valley, life on the frontier was quiet, for the most part. Uneventful, bucolic—that is, until one dark night that would literally shake the country's middle right down to its foundation.

It was early morning on December 16th—"witching hours," some would call it—about 2 a.m. when the first violent tremor struck close to the New Madrid area, startling those on land.

[Eliza Bryan, eyewitness] We were visited by a violent shock of an earthquake accompanied by a very awful noise resembling loud but distant thunder, but more hoarse and vibrating, which was followed in a few minutes by the complete saturation of the atmosphere with sulfurous vapor, causing total darkness.

[Narrator] And on the water…

[Mathias Speed, eyewitness] We were affrighted with the appearance of a dreadful rapid or falls in the river just below us. We were so far in the sump

that it was impossible now to land. All hope of surviving was now lost, and certain destruction appeared to await us.

[Narrator] It was the first salvo in a series of earthquakes that would shake the central and eastern U.S. for the next 6 months.

[John Bradbury, eyewitness] In the night, I was awakened by a most tremendous noise, accompanied by an agitation of the boat so violent that it appeared in danger of upsetting.

[Firmin La Roache, eyewitness] Everywhere there was noise like thunder, and the ground was shaking the trees down and the air was thick with something like smoke. There was much lightning. We believed we must surely die.

[Narrator] The initial shock, about 7.7 on the Richter scale, struck near the town of New Madrid. In the immediate area, settlers were thrown from their beds as timbers crashed down and chimneys crumbled to dust. Glass exploded and shattered. Barns and fences collapsed as fire consumed many buildings. The Mississippi River was muddied by tons of earth from dislodged banks sliding into her swift currents.

[Vincent Nolte, eyewitness] The Mississippi foamed up like the water in a boiling cauldron, and the stream flowed rushing back, while the forest trees near which we lay came crackling and thundering down.

[Narrator] All told, four major shocks hit the central United States over a period of several weeks. The initial shock at 2:15 a.m. on December 16th was followed by another large one about 8 that morning. Then on January 23rd, a third large tremor struck as big as the first two. This was followed by a fourth huge quake on February 7th, probably the largest of the bunch. In between these big shocks, and for months after, the area was shaken by almost constant smaller aftershocks.

[Gary Patterson, Director, Education & Outreach, C.E.R.I.] An engineer in Kentucky named Jared Brooks set up, after he felt the first earthquake in December of 1811—set up a crude pendulum seismograph. And over a period of 6 months, he recorded about 1,800 earthquakes that were probably large enough to be felt.

[Narrator] So, accounting for the tremors he might have missed, we're talking about well over 2,000 possible earthquakes to rattle the district of New Madrid, beginning on December 16th, 1811. What happened in 1811 was not a freak occurrence, a one-time anomaly.

[Dr. Chris Cramer, Research Associate Professor, C.E.R.I.] Paleo, old, liquefaction features that have been dated and show that earthquakes in the last couple thousand years have repeated, on average, about every 500 years.

[Narrator] The central U.S. has been shaken by large seismic events throughout history—most notably in the years 500, 900, and 1450. Since the huge sequence 200 years ago, scientists have come to realize that what we

have here is a very active system. One which takes its name from the frontier town on the Mississippi: the New Madrid Seismic Zone.

[Jim Wilkinson, Director, Central U.S. Earthquake Consortium] It runs from about 35 miles northwest of Memphis all the way up to southern Illinois. It is made up of three separate fault systems. Unlike the western part of the country where you can see the fault, ours is too deeply buried. So, it's really a look from what the instruments tell us as to where the fault really lies, but it covers a very large area.

[Narrator] The New Madrid Seismic Zone lies almost in the center of the country—running in a jagged line from Cairo, Illinois to Marked Tree, Arkansas, about 30 miles northwest of Memphis. The zone itself encompasses an eight-state region. Eight states, and potentially 12 million people, who could suffer the consequences of a large quake.

[Jim Wilkinson, Director, Central U.S. Earthquake Consortium] A magnitude 7- to 7.5-type event, we would expect to impact at least eight states, dramatically affecting seven of those states that fall along the Mississippi River. The outlying states of Alabama, Indiana, Illinois—some of those states would see less damage than you would see in the central part of the fault system.

[Narrator] To some, the threat of an earthquake to our heartland may come as a surprise. We're familiar with those which strike the western U.S., which has been shaken many times in the last century. The San Francisco earthquake of 1906 caused much damage and a fire that almost destroyed the city. In 1989, a 6.9 struck the San Francisco Bay area. Sixty-three people died, and thousands were left homeless. A 1994 Northridge earthquake had a magnitude of 6.7. It killed 60 and caused 20 billion dollars in damage. So why are earthquakes more common on the West Coast? The earth's crust is made up of plates that fit together like a jig-saw puzzle. The constant shifting of superheated rock inside the earth generates and stores energy which presses upward against the boundaries of these tectonic plates, which are known as "rifts" or "faults."

[Dr. Chris Cramer, Research Associate Professor, C.E.R.I.] Basically, it's when part of the earth's crust is moving past another part on a surface, usually that we call a "fault." And when it slips quickly, it generates seismic waves that are felt by people.

[Narrator] When this slippage occurs, the seams snap like a rubber band, resulting in an earthquake. And even though there appears to be no good reason for seismic activity in the central U.S...

[Dr. Charles Langston, Director, C.E.R.I.] We have at least 200 small earthquakes, less than magnitude 4, occur each year. And it seems to be occurring at a constant rate.

[Gary Patterson, Director, Education & Outreach, C.E.R.I.] We have a large earthquake today in southern California, its barely felt 250 miles away in Las

Vegas. Whereas, it's proposed, the large earthquakes that occurred here in the central U.S. 200 years ago, were felt 1,200 miles away in Canada.

[Narrator] In the quakes of 1811 and [18]12, there wasn't much actual damage due to the sparse population in the central U.S. However, the effects were felt all across the country. The tremors even ringing church bells in Charleston.

[Dr. Kent Moran, Research Associate, C.E.R.I.] It rang for a period of about 10 seconds, and people came up to the church and asked, "Is there a fire?" Because the fire watch was in the steeple at the time, and the gentlemen replied, "No it had not. The bell rang by itself."

[Narrator] Scientists believe that the very feature that makes the New Madrid zone so unusual is responsible for the enormous power of its earthquakes. If it's true that what's past is indeed prologue then, the New Madrid earthquakes could be dire portents. A major seismic event would be vastly more destructive than 200 years ago. Computer projections indicate that over an eight-state region, a 7.7-magnitude earthquake could result in almost 90,000 injuries and deaths and over 300 billion dollars in economic losses. A threat which Emergency Managers are taking very seriously.

[James Bassham, Director, TN Emergency Management Agency] We expect to have an awful lot of flooding, a lot of property damage, a lot of buildings down, a lot of people needing shelters, a lot of people needing rescue. It would be a catastrophic event for Tennessee.

[Narrator] Which means a major interruption of communications and transportation. Urban infrastructure will be severely damaged with widespread power and water outages, as well as ruptured gas lines.

[James Bassham, Director, TN Emergency Management Agency] We expect we'll have a number of bridges out and a number of overpasses down, there will be a lot of fire, and there will be lot of fire that burns until the fire goes out. Probably won't be much water pressure—our conventional way of fighting fire will probably go by the wayside.

[Narrator] A large earthquake in the central U.S. is considered to be a high-impact, low-probability event. Which would be felt not just regionally, but globally. But the question remains, how likely is it that the New Madrid Seismic Zone will experience a catastrophic quake in our lifetime?

[Dr. Chris Cramer, Research Associate Professor, C.E.R.I.] The probabilities of a repeat of the New Madrid earthquakes of 1811–1812 is 7–10% in the next 50 years. A magnitude 6 and greater, the probabilities are a little larger for a 50-year period, and that's 25–40%.

[Narrator] The quakes of 1811 and [18]12 are now a distant part of our historical record; however, on the afternoon of August 23rd, 2011, a magnitude-5.8 earthquake struck the state of Virginia, about 80 miles from Washington, DC. Many structures were damaged in the nation's capital, and

the tremors from this relatively small quake were felt all over the eastern U.S.

[Gary Patterson, Director, Education & Outreach, C.E.R.I.] It was felt 700 miles away in Chicago, it was felt in Minneapolis, it was felt in Memphis, Tennessee, and Atlanta. Hundreds and hundreds miles away.

[Dr. Charles Langston, Director, C.E.R.I.] That's direct evidence on how well the seismic waves can propagate in the crust in this area.

[Narrator] Which just goes to further the respect and curiosity scientists have for potential earthquakes in the central United States.

[Gary Patterson, Director, Education & Outreach, C.E.R.I.] At the end of day for New Madrid Seismic Zone, we're uncertain about a lot of things. But what we know is that large earthquakes have happened here repeatedly in the past that were really big and that could really happen again in the future.

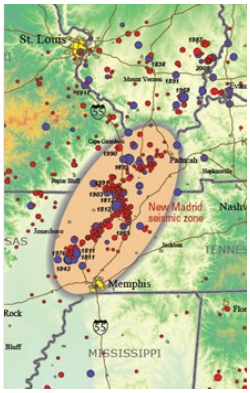
[Narrator] Many questions remain unanswered when it comes to the New Madrid Seismic Zone, but most agree that a large earthquake, when it occurs, will be sudden, and it will be disastrous.

Visual 3: Case Study: Discussion

If you were an emergency manager in Tennessee, what actions (if any) would you consider taking in the New Madrid Seismic Zone (NMSZ)?

Visual 4: NMSZ Planning

- Contributes to achieving the National Preparedness Goal
- Integrates planning efforts of the whole community
- Provides a layered approach for synchronized planning at all levels
- Provides interdependent guides and processes spanning the five mission areas



Discuss

Has anyone participated in any of the initiative's activities?

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- As part of FEMA's Catastrophic Disaster Planning Initiative, FEMA is working with the eight states (i.e., Alabama, Arkansas, Illinois, Indiana, Kentucky, Missouri, Mississippi, and Tennessee) of the New Madrid Seismic Zone (NMSZ) in the central United States to develop catastrophic earthquake disaster response plans. The initiative, known as the NMSZ Catastrophic Earthquake Disaster Response Planning Initiative, involves partnerships and collaboration with hundreds of government agencies, businesses, industry partners, voluntary organizations, scientific institutions, and academic institutions.
- The NMSZ collaborative planning is designed to identify high risk areas, assess current disaster response capabilities, identify anticipated response shortfalls, and develop comprehensive planning strategies in the eight NMSZ states. The emphasis is on building local and state capabilities that are integrated with federal capabilities.
- The initial phase of the initiative uses scenario-driven workshops in the NMSZ states and local-level tabletop exercises. Workshop participants include operational and planning personnel from all levels of government and the private and academic sectors. State and local participants include emergency services coordinators, emergency management staff, county emergency managers, state and local law enforcement, fire and emergency medical personnel, public works, and public health personnel. FEMA Headquarters, four FEMA Regions, the U.S. Geological Survey (USGS), the U.S. Department of Health and Human Services (HHS), the U.S. Army Corps of Engineers (USACE), U.S. Northern Command (NORTHCOM), the American Red Cross, and more than 200 local governments are participating in the initiative.
- Refer to the NMSZ Catastrophic Earthquake Planning fact sheet for additional information, available at https://www.fema.gov/pdf/media/factsheets/2010/dod_cat_earthquaker.pdf.

Visual 5: Unit Objectives

At the end of this unit, you will be able to explain the relationships among preparedness, Threat and Hazard Identification and Risk Assessment (THIRA), Stakeholder Preparedness Review (SPR), and emergency operations planning. You will also be able to:

- Explain how planning relates to preparedness.
- Discuss the National Planning System and the planning architecture.
- Describe key principles of emergency planning.

Visual 6: National Preparedness

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Refer to *Job Aid 1: Preparedness and Planning* in your Resource Guide.

- Presidential Policy Directive 8 (PPD-8) describes the nation's approach to national preparedness. By doing so, PPD-8 links together national preparedness efforts using the following key elements:
  - National Preparedness System (i.e., how we get there)
  - National Planning System (i.e., what we deliver)—a series of National Frameworks and Federal Interagency Operational Plans (FIOPs)
  - Annual National Preparedness Report (i.e., how well we are doing)
  - Whole Community Initiative (i.e., whom we engage)—a campaign to build and sustain preparedness
- National preparedness is a shared responsibility. The PPD is designed to facilitate an integrated, all-of-nation/whole community, capabilities-based approach to preparedness. Involving the whole community—federal partners; state, local, and tribal leaders; the private sector; nongovernmental organizations; community groups, including disability services and advocacy organizations and private-sector programs; and most importantly, the general public—is vital to keeping people and communities safe and preventing the loss of life and property when disasters strike.
- Additional information on each of these preparedness elements can be found at the National Preparedness FEMA web page (https://www.fema.gov/national-preparedness-system).

Visual 7: Preparedness

National Preparedness Goal:

The goal is to achieve a secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.

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National Preparedness Goal:

- The National Preparedness Goal defines what it means for the whole community to be prepared for all types of disasters and emergencies.
- It was released in 2011 in response to PPD-8.
- It describes security and resilience in terms of core capabilities within each of the mission areas that are necessary to deal with great risks.

Visual 8: National Preparedness System

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Achieving the Preparedness Goal

- The National Preparedness System (NPS) provides the means for achieving the National Preparedness Goal.
- The National Preparedness System has six major components:
  - Identifying and assessing risk
  - Estimating capability requirements
  - Building and sustaining capabilities
  - Planning to deliver capabilities
  - Validating capabilities
  - Reviewing and updating

Refer to *Job Aid 2: National Preparedness System Components* in your Resource Guide.

Visual 9: Mission Areas and Core Capabilities

The National Preparedness Goal establishes core capabilities across five mission areas: prevention, protection, mitigation, response, and recovery.

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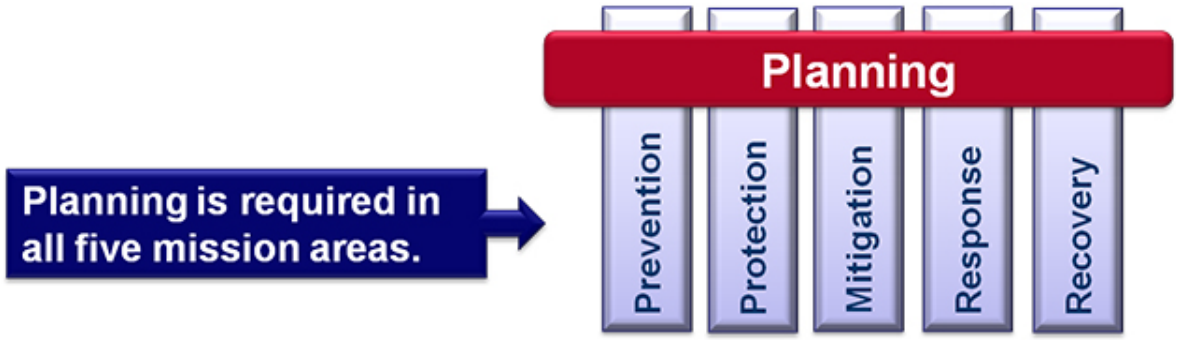
The National Preparedness Goal establishes core capabilities. These core capabilities are executed through five mission areas:

- Prevention
- Protection
- Mitigation
- Response
- Recovery

Visual 10: Core Capabilities: Planning

Definition: The planning core capability is the ability to conduct a systematic process engaging the whole community, as appropriate, in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.



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- The National Preparedness Goal defines the planning core capability as the ability to "conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives."
- As mentioned before, not only is planning a core capability that is required across all five mission areas, but it is also one of the major components of the National Preparedness System for prevention, protection, mitigation, response, and recovery.
- There are three core capabilities that span all five mission areas: planning, operational coordination, and public information and warning.

Visual 11: Capability-Based Preparedness Paradigm

Preparedness = building and sustaining core capabilities

- Core capabilities are what you need to build and sustain to have a safe and resilient community.
- Achieving these capabilities:
  - Is essential for preparedness
  - Requires the combined efforts of the whole community
  - Leads to safe and resilient communities
  - Requires planning

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Preparedness results from building and sustaining core capabilities in all five mission areas. The core capabilities are distinct, critical elements necessary to meet the National Preparedness Goal.

You may find it helpful to refer to the Core Capability Development Sheets found at https://www.fema.gov/emergency-managers/national-preparedness/mission-core-capabilities/development-sheets.

Visual 12: National Planning System

National Planning System

- Planning is fundamental for our national preparedness.
- Provides a unified approach and common terminology to plan for all threats and hazards and across all mission areas.
- Planning has two parts:
  - Planning architecture
  - Planning process

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The current homeland security environment is complex and involves an increasing number and type of partners who must work together to meet preparedness objectives. The National Planning System enables a consistent approach to planning across multiple organizations, facilitating better collaboration, situational awareness, and unity of effort while remaining flexible and adaptable to changing conditions. The architecture and process contained in the National Planning System integrates elements of the entire National Preparedness System.

Refer to *Job Aid 3: National Planning System Fact Sheet* in your Resource Guide. This document can also be found at https://www.fema.gov/sites/default/files/2020-04/National_Planning_System_20151029.pdf.

Visual 13: Planning Architecture

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A plan is a set of intended actions through which one expects to achieve a goal. Communities and organizations use plans to guide action; these plans need review and adjustment to address changes over time. The National Planning System architecture consists of three levels of planning: strategic, operational, and tactical.

- **Strategic-level planning** sets the context and expectations for operational planning. It is very broad, includes all threats/hazards, and is capability/capacity-building.
- **Operational-level planning** provides the tasks and resources needed to execute the strategy. It includes all threats/hazards, is capability-organized, and is risk-based.
- **Tactical-level planning** shows how to apply resources to complete the operational tasks within a given timeframe. It is incident/objective-based and occurs in a limited operational period.

The three levels of planning generally fall into two categories:

- **Deliberate planning** involves developing plans to prevent, protect against, and mitigate the effects of, respond to, and recover from threats or hazards.
- **Incident action planning** involves developing rapidly adaptable operational and tactical plans in response to an imminent or ongoing incident.

Visual 14: Strategic Level Planning

- Provides framework for guiding activities
- Focuses on longer-term efforts
- Elected or appointed officials play an essential role by providing the vision and priorities for the planning process
- Results provide a foundation for policy, operational planning, and resource decisions

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- Strategic-level planning provides a framework for guiding homeland security activities. This level of planning allows stakeholders the opportunity to focus on the longer-term goals and articulate, monitor, and evaluate efforts to prevent, protect against, mitigate, respond to, and recover from all threats and hazards that might affect a jurisdiction or an organization.
- Strategic-level planning is also a mechanism for unifying the efforts of multiple organizations or components of an organization in support of a comprehensive and effective approach to homeland security.
- Elected or appointed officials of a jurisdiction or organization play a critical role by providing the vision and priorities for the planning process. The results of this planning provide a foundation for policy, operational planning, and resource decisions.
- Leadership guidance also defines priorities and provides direction for addressing the capability requirements identified through an identification and risk assessment process, such as the Threat and Hazard Identification and Risk Assessment (THIRA) (http://www.fema.gov/threat-and-hazard-identification-and-risk-assessment) identified in *Comprehensive Preparedness Guide 201*.

Visual 15: Strategic Level Examples

- National: National Cohesive Wildland Fire Management Strategy
- State: Maryland Emergency Preparedness Strategic Plan
- Local: hazard mitigation strategy

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Examples of strategic-level planning include:

- **National strategies:** These plans identify a national vision for a specific threat or hazard. They typically establish national-level goals, objectives, and potential challenges while establishing national priorities to achieve the desired goals.
  - As an example, the National Cohesive Wildland Fire Management Strategy outlines a new approach to coordinating and integrating efforts to prepare communities for fire season, and to better address the nation's wildland fire threats.
- **State homeland security strategy:** These plans establish the priorities and processes by which a state will build, sustain, and prepare to deliver the core capabilities identified in the National Preparedness Goal. Leadership intent, policy and legal requirements, and an understanding of risk drive these priorities.
  - As an example, the Maryland Emergency Preparedness Strategic Plan presents the state's strategy for emergency preparedness and describes the Maryland Emergency Preparedness Program.
- **Local hazard mitigation strategy:** These plans establish a community's strategy for addressing risk and reducing losses based on local vulnerability analyses and risk assessments, such as the Hazards Identification and Risk Assessment (HIRA). These plans describe mitigation goals and objectives and identify existing and necessary capabilities and resources to support the goals.

Visual 16: Operational Level Planning

- Influenced by objective and priorities of strategic-level plans
- Describe roles and responsibilities, tasks, integration requirements, actions, and other expectations
- May also address delivery of capabilities in support of steady-state activities.

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- Operational-level planning is influenced by the objectives and priorities identified through strategic-level planning and an understanding of the risks that affect an organization or jurisdiction.
- Operational plans describe roles and responsibilities, tasks, integration requirements, actions, and other expectations of an organization or jurisdiction during actual or potential incidents. These plans may also address the delivery of capabilities in support of steady-state activities (e.g., risk management plans and physical security plans).
- Operational plans may include the coordination and integration of activities and resources from other departments, agencies, and organizations within a jurisdiction and across the whole community.

Visual 17: Operational Level Examples

- National: Mitigation Federal Interagency Operations Plan
- State/local: emergency operations plans
- Pre-disaster recovery plans
- Nongovernmental and private-sector organization plans
- Individual and household plans

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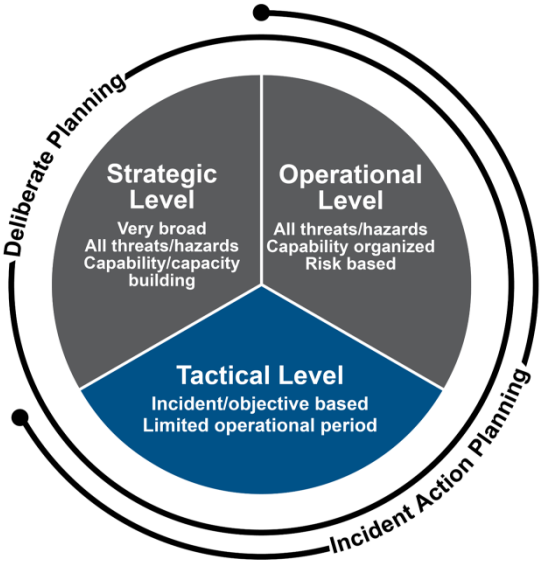
Examples of operational level planning include:

- **Federal Interagency Operational Plans (FIOPs):** The FIOPs describe the Federal Government's concept of operations for each mission area, including how the Federal Government supports local, state, tribal, territorial, and insular area plans. Federal interagency plans may also exist to address risks for a particular region, sector, or function.
- For example, the Mitigation FIOP describes the concept of operations for integrating and synchronizing existing national-level federal capabilities to support local, state, tribal, territorial, insular area, and federal plans.
- **Local, state, tribal, territorial, and insular area mitigation plans:** Mitigation plans developed at the local, state, tribal, territorial, and insular area government levels identify the natural hazards that affect a geographical area or individual jurisdiction. These plans identify policies and actions that an organization can implement over the long term to reduce risk and future losses.
- **State/local emergency operations plans (EOPs):** EOPs are plans for managing a wide variety of potential threats and hazards. These plans detail who is responsible for conducting specific actions; identify personnel, equipment, facilities, supplies, and other resources available; and outline how actions will be coordinated.

- **Pre-disaster recovery plans:** Businesses, communities, and governments develop pre-disaster recovery plans to establish priorities, set roles and expectations, and coordinate resources to assist the timely restoration, strengthening, and revitalization of assets and services following a disaster.
- **Nongovernmental and private-sector** plans describe how an organization will respond to disasters and emergencies (e.g., shelter-in-place plans and business continuity plans). Ready Business—an extension of the Ready campaign—provides guidance for the development, implementation, and sustainment of all threats and hazards plans for businesses.
- **Individuals and families** need to engage in planning processes as well. Individuals and families should identify threats and hazards that have occurred or could occur in their area and plan for the unique actions needed for each. These plans can include how to get to a safe place, how to contact one another, and how the family reunites following a disaster.

Visual 18: Tactical Level Planning

- Focuses on managing resources such as personnel and equipment during an incident or event
- Can integrate capabilities of multiple stakeholders
- Often outlines the actions necessary to accomplish goals identified in an operational plan



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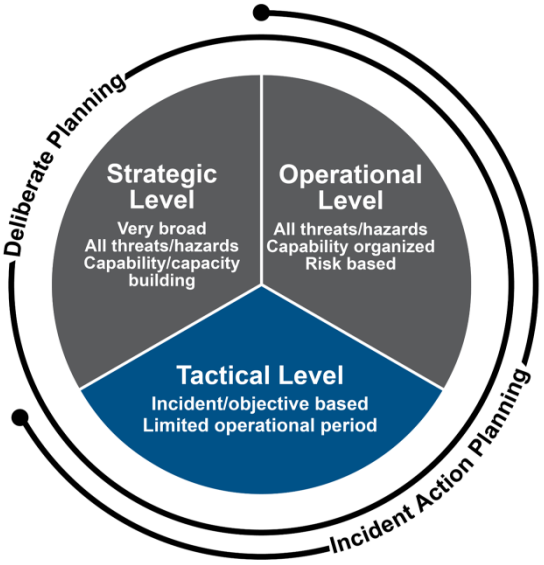
- Tactical plans focus on managing resources such as personnel and equipment that play a direct role in an incident or event. Tactical plans can integrate the capabilities and resources of multiple stakeholders.
- Pre-incident tactical planning, based upon existing operational plans, provides the opportunity to pre-identify personnel, equipment, and other execution needs. Tactical plans often outline the detailed actions necessary to accomplish goals identified in an operational plan.
- Real-time tactical planning occurs in the short-term or immediate operational period and takes into account the circumstances of an actual incident, risk, or threat.

Visual 19: Tactical Level Examples

- Special events planning
- Incident action plans



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Examples of tactical level planning include:

- **Special events planning:** An example of this type of planning occurs for special events or venues, whereby planners determine resource assignments, routes, and staging for potential incidents in advance. Planning teams then fill identified gaps through various means, such as mutual aid.
- **Incident action plan (IAP):** One example of tactical planning in real-time is the development of an incident action plan (IAP) to support response activities. The incident action planning process is time-constrained and happens as an incident unfolds to execute specific actions and to direct resources. The IAP may include a comprehensive listing of the actions, resources, and support needed to accomplish each incident objective over a single operational period.

Visual 20: Two Broad Categories

Strategic, operational, and tactical plans fall into two broad categories:

- Deliberate plans
- Incident plans

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These three tiers of planning typically fall into two broad categories of plans: deliberate and incident.

- **Deliberate plans** are developed under normal, non-emergency conditions over a period of weeks and months, and outline a concept of operations (CONOPS) with detailed information on:
  - personnel,
  - resources,
  - projected timelines,
  - planning assumptions, and
  - risk analysis.
- **Incident plans** are developed in response to actual or impending incidents or credible threats, with much shorter timelines. This category of plans uses actual situational information to replace some, or all, of the planning assumptions used in deliberate plans.

Planning teams typically modify deliberate plans to create incident plans. As a result, jurisdictions should understand the linkages between deliberate and incident plans and develop strategies to operationalize deliberate plans through incident planning.

Comprehensive and integrated planning can help other levels of government plan their response to an incident within a jurisdiction. By knowing the extent of the jurisdiction's capabilities, supporting planners can pre-identify shortfalls and develop pre-scripted resource requests.

Visual 21: Activity 2.1 – Types of Plans

Purpose:

The purpose of this activity is to identify examples of plans for each category.

Instructions:

Working in your small group:

1. Identify three to five plans that fall into each category (i.e., strategic, operational, and tactical). Consider plans in your jurisdiction, in partnering agencies, and plans you have seen throughout your career.
2. Record your answers on the easel pad.
3. Select a spokesperson to share your answers with the class.

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Activity 2.1 – Types of Plans

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2. Record your answers on the easel pad. If this is a virtual class, one member should take notes for the group.
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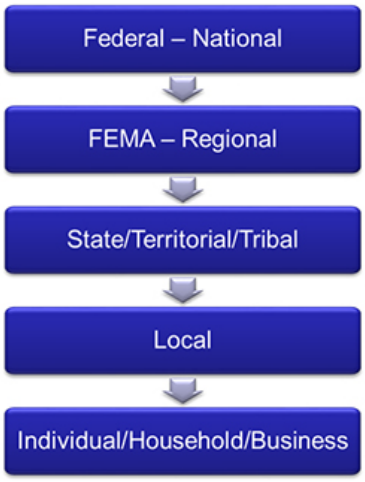
Visual 22: Plan Integration (1 of 2)

The intent of the National Planning System is vertical and horizontal plan integration. Let's look first at vertical integration.

Vertical integration:

- Is working with groups at different levels than your organization
- Promotes complementary goals and strategies
- Reduces fragmentation
- Ensures a common focus



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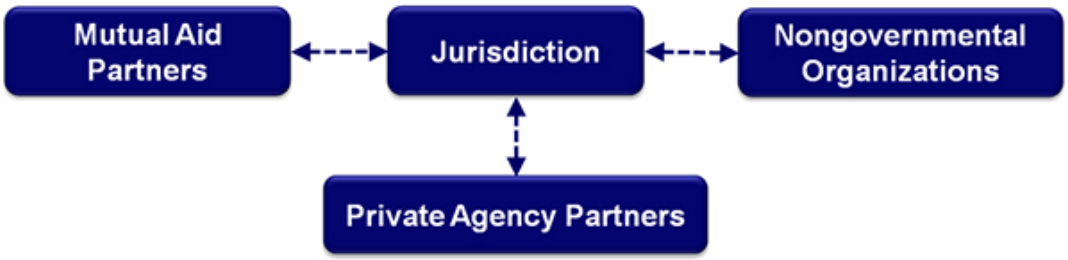
- The intent of the National Planning System is vertical and horizontal plan integration. Let's look first at vertical integration.
- Vertical integration is the meshing of planning both up and down the various levels of government. Jurisdictions' plans should be coordinated and integrated among all levels of government and with critical infrastructure planning efforts. Planning must be vertically integrated to ensure that all response levels have a common operational focus. It promotes complementary goals and strategies while also reducing fragmentation.
- The foundation for operations is at the local level, and support from federal, state, territorial, tribal, regional, and private-sector entities is layered onto the local activities. As a planning team identifies a support requirement from a "higher level" during the planning process, the two levels work together to resolve the situation.

Note: Tribal governments may choose to work with the state or directly with the Federal Government, which may change the dynamic of who are their vertical partners versus who are their horizontal partners.

Visual 23: Plan Integration (2 of 2)

Horizontal integration:

- Is working with groups at a similar level to your organization
- Fosters cooperation and teamwork
- Integrates operations across a jurisdiction
- Ensures plans will be coordinated with neighboring jurisdictions



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- Planners at each level must ensure that department and supporting agency plans fit into their jurisdiction's concept of operations through horizontal integration.
- Horizontal integration integrates operations across a jurisdiction. For example, a jurisdiction's plan should include information about mission assignments that it executes in conjunction with, in support of, or with support from its neighbors or partners. An agency, department, or sector would write its plan or standard operating procedures/guidelines (SOPs/SOGs) for its role in an evacuation to fit the controlling jurisdiction's plan for such an evacuation.
    - This fosters cooperation and teamwork. It allows departments and support agencies to produce plans that meet their internal needs or regulatory requirements and still integrate into the EOP.
    - It ensures that a jurisdiction's set of plans supports its neighboring or partner jurisdictions' similar sets of plans.

Visual 24: Integrated Planning Example

Disaster planning:

- Household and family plans
- Local and community emergency plans
- Private-sector and business plans
- Nongovernmental organization plans
- State emergency operations plans
- National planning frameworks

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Planning for a disaster provides an example of how family, household, community, private-sector, local, state, and federal plans integrate into a planning system. This example demonstrates the need for a coordinated and integrated National Planning System.

- **Household and family plans:** These plans should include steps on how the family will communicate during disasters and how to ensure that all family members will be located, reunited, and protected. These plans are dependent on local emergency planners to provide information on the types of natural disasters that the area is prone to, and the steps to take to evacuate or shelter-in-place.
- **Local and community emergency plans:** These plans typically identify types of natural disasters that an area is prone to and steps a community will take to communicate with, evacuate, or shelter-in-place the public. However, these plans may be dependent on private-sector support (e.g., media and local retail businesses), the nongovernmental organization sector (e.g., local religious organizations), and state and federal agencies during response to significant disasters.
- **Private-sector and business plans:** These plans need to include steps on how to protect workers during a disaster and how the business will continue during and after the disaster. The plans also need to identify what resources and services the organization depends upon local responders to provide, and whether local responders are dependent upon any of its services and products (e.g., gas stations).
- **Nongovernmental organization plans:** These plans are similar to private sector plans but may provide unique services for the local community (e.g., shelter). These plans need to align with local and other government plans.
- **State EOPs:** These plans outline how states organize their resources and services and the steps local governments can take to request services, as well as how to address conflicts for resources.

- **National planning frameworks:** These plans identify specific roles and responsibilities, coordinating structures, and practices for managing incidents that range from those managed locally to larger-scale incidents, including catastrophic natural disasters.

Visual 25: Activity 2.2 – Plan Integration

Purpose:

The purpose of this activity is to reflect on your jurisdiction's experience with plan integration.

Instructions:

1. Working individually in your Resource Guide, answer the questions on Worksheet 2.2.
2. Discuss the questions/answers within your table groups.
3. For question 3, note any solutions provided by your table group during the discussion.
4. Be prepared to share your answers with the class.

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Activity 2.2 – Plan Integration

Purpose:

The purpose of this activity is to reflect on your jurisdiction's experience with plan integration.

Instructions:

1. Working individually in your Resource Guide, answer the questions on Worksheet 2.2.
2. Record your answers on the easel pad. If this is a virtual class, one member should take notes for the group.
3. For question 3, note any solutions provided by your table group during the discussion.
4. Select a spokesperson to share your answers with the class.
5. Be prepared to share your answers with the class.

Visual 26: Planning Principles (1 of 3)

Planning must:

- Represent the whole community and its needs
- Include participation from all stakeholders
- Involve senior leaders throughout the process

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Principles of effective planning include the following:

- **Whole community approach:** Planning must not only be representative of the actual population within the community, but also must involve the whole community in the planning process. Understanding the composition of the population—such as accounting for people with disabilities, for others with access and functional needs, and for the needs of children—must occur from the outset of the planning effort.

  A description of FEMA's whole community initiative can be obtained at https://www.fema.gov/glossary/whole-community.

- **Stakeholder participation:** Planning must include participation from all stakeholders in the community. Effective planning ensures that the whole community is represented and involved in the planning process. The most realistic and complete plans are prepared by a diverse planning team, including representatives from the jurisdiction's departments and agencies, civic leaders, businesses, and organizations (e.g., civic, social, faith-based, humanitarian, educational, advocacy, and professional) who are able to contribute critical perspectives or have a role in plan execution.
- **Involvement of senior officials:** Planning includes senior officials throughout the process to ensure both understanding and approval. Senior official buy-in helps the planning process meet requirements of time, planning horizons, simplicity, and level of detail.

Visual 27: Planning Principles (2 of 3)

Planning:

- Uses a logical and analytical problem-solving process
- Considers all threats and hazards
- Is capabilities-based
- Should be flexible enough to address both traditional and catastrophic incidents

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- **Problem solving:** Planning uses a logical and analytical problem-solving process to help address the complexity and uncertainty inherent in potential threats and hazards. By following a set of logical steps that includes gathering and analyzing information, determining operational objectives, and developing alternative ways to achieve the objectives, planning allows a jurisdiction to work through complex situations.
- **All-threat and hazard approach:** Although the causes of emergencies can vary greatly, many of the effects do not. Planners can address common operational functions in their basic plans instead of having unique plans for every type of threat or hazard. Planning for all threats and hazards ensures that, when addressing emergency functions, planners identify common tasks and those responsible for accomplishing the tasks.
- **Capabilities-based planning:** This approach focuses on a jurisdiction's capacity to take a course of action. Capabilities-based planning answers the question, "Do I have the right mix of training, organizations, plans, people, leadership and management, equipment, and facilities to perform a required emergency function?"
- **Flexibility:** Planning should be flexible enough to address both traditional and catastrophic incidents. Scalable planning solutions are the most likely to be understood and executed properly by the operational personnel who have practice in applying them.

Visual 28: Planning Principles (3 of 3)

Planning:

- Establishes measurable goals
- Depicts the anticipated environment for action
- Identifies tasks, resources, and accountability
- Does not need to start from scratch

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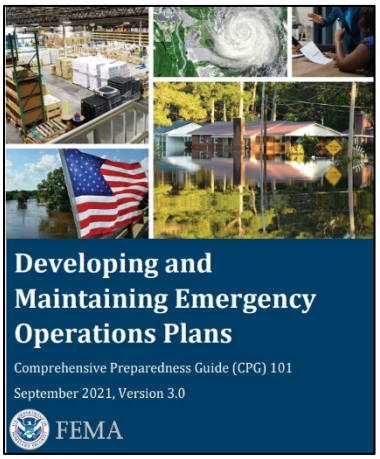
- **Measurable goals:** Planning establishes measurable goals and clearly identifies the desired results. Measurable goals enable unity of effort and consistency of purpose among all who must execute the plan and make it possible to gauge progress in closing capability gaps.
- **Anticipated environment:** Anticipating the environment for action promotes early understanding and agreement on planning assumptions and risks, as well as the context for interaction. In situations where a specific threat or hazard has not been experienced, planning provides the opportunity to anticipate conditions and systematically identify potential problems and workable solutions.
- **Tasks, resources, and accountability:** Planning identifies tasks, allocates resources to accomplish those tasks, and establishes accountability. Decision makers must ensure that they provide planners with clearly established priorities and adequate resources. Planners and plan participants should be held accountable for effective planning and execution.
- **Not from scratch:** Planners should take advantage of the experience of other planners, as well as plans generated by other jurisdictions and the state. Examples of available resources include Threat and Hazard Identification and Risk Assessments (THIRAs), state standards and guidance, FEMA-provided guidance and training, and plans produced by key infrastructure owners.

Refer to *Job Aid 4: Planning Principles* in your Resource Guide.

Visual 29: *Comprehensive Preparedness Guide (CPG) 101*

- Provides a practical application of the planning principles
- Applies to tactical, operational, and strategic planning
- Is adaptable to:
  - All government levels
  - Private entities and nongovernmental organizations



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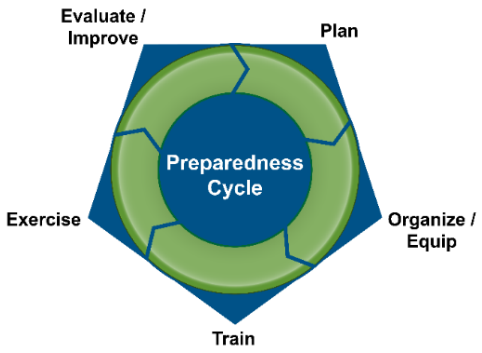
Planning Guidance:

- *CPG 101* provides important guidance for emergency planners. It employs a detailed planning process that leads to complete, more accurate, and more relevant emergency plans.
- *CPG 101* methods are applicable to tactical, operational, and strategic planning efforts. They are also adaptable to all levels of government, as well as to private entities and nongovernmental organizations.
- Review the *CPG 101* Table of Contents, available at https://www.fema.gov/sites/default/files/documents/fema_cpg-101-v3-developing-maintaining-eops.pdf .

Visual 30: Emergency Planning

- Is a key component of the preparedness cycle
- Is a process to manage risk
- Indicates:
  - What to do
  - Why to do it
  - Who is responsible
  - Where to get support
  - How activities coordinate



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Emergency planning is a key component of the preparedness cycle:

- Plans are continuously evaluated and improved through a cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action.

Planning is fundamentally a process to manage risk:

- In the risk management process, we define context; identify and assess risks; and analyze, decide upon, implement, monitor, and evaluate courses of action for managing those risks.
- As part of the process, planning is a tool that allows for systematic risk management to reduce or eliminate risks in the future.

Planning indicates what, why, who, where, and how:

- Plans must communicate clearly to operational personnel and support providers what should happen, why it is done, and what to expect from it.
- Plans should delineate roles and responsibilities. There should be no ambiguity regarding who is responsible for major tasks.
- Plans should make clear where to obtain resources and how those outside the jurisdiction can lend support.
- Plans should clarify how functions and activities are to be coordinated and how they complement one another. This enables personnel to operate more effectively as a productive team, reducing duplicative efforts and enhancing the benefits of collaboration.
- Planning is often considered to be both an art and a science in that successful planners are able to draw from operational experience and an understanding of emergency management principles, but are also intuitive, creative, and have the ability to anticipate the unexpected.
- Mastering the balance of art and science is the most challenging aspect of becoming a successful planner.

Visual 31: Unit Summary

Planning is a key component of preparedness.

- Building and sustaining capabilities is essential for ensuring preparedness at all levels.
- The National Planning System provides a unified approach and common terminology to plan for all threats across all mission areas.
- Plans should:
  - Represent the whole community and its needs
  - Be integrated vertically and horizontally

 Student Manual	• This unit has provided a course overview and a brief overview of preparedness and planning. • The next two units will describe the emergency planning process and how threat and hazard identification, as well as risk assessments, contribute to that process.

Visual 32: Unit 2 Q & A

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Unit 3: Identifying Threats and Hazards and Assessing Risks

Visual 1: Unit 3 Overview

Unit 3: Identifying Threats and Hazards and Assessing Risks

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Unit 3 provides information about identifying threats and hazards and assessing risks. This unit will use the federal Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) process as a backdrop for working through the process. It provides opportunities to assess and consider your communities threat/hazard risk analysis processes. This unit should take approximately 2.5 hr to complete.

Visual 2: Unit Objectives

At the end of this unit, you will be able to identify the steps in a risk assessment and the expected outcomes. You will also be able to:

- Identify the steps to identify threats and hazards in a community.
- Identify the steps to assess risk in a community.
- Indicate how outputs of THIRA can be used in emergency operations planning.
- Analyze a threat or hazard to determine key concerns, indicators, impacts, and implications for emergency planning.
- Evaluate a community profile for adequacy of the information provided.

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- Review the unit objectives.
- Note: In this course, the terms *jurisdiction* and *community* are used interchangeably.

Visual 3: Discussion Question

Why should your community identify your threats and hazards and then assess the risks?

Visual 4: Guidance on Identification and Assessment

Programs that historically require identification of threats and hazards and/or a risk assessment to be performed:

- Emergency Management Performance Grant (EMPG)
- The Joint Commission
- Centers for Medicare & Medicaid Services (CMS)
- American Water Infrastructure Act

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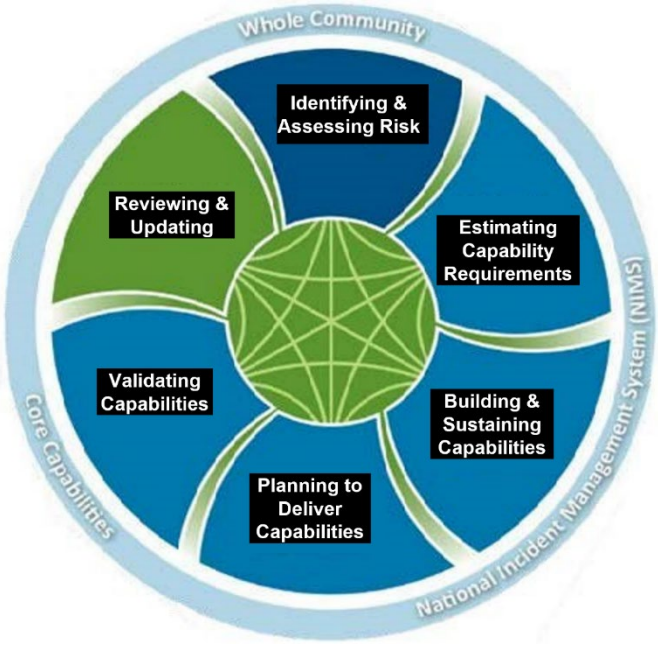
Many programs require organizations to identify threats and hazards and/or assess risks. Here are a few that have historically required these:

- Emergency Management Performance Grant (EMPG)
- The Joint Commission
- Centers for Medicare & Medicaid Services (CMS)
- American Water Infrastructure Act

The EMPG requires participating in the THIRA process, as well as the SPR. The THIRA is usually done at the state level but can be done at any level of government or at any organization.

Visual 5: National Preparedness System



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The National Preparedness System (NPS) is made up of six components:

- Identifying and assessing risk
- Estimating capability requirements
- Building and sustaining capabilities
- Planning to deliver capabilities
- Validating capabilities
- Reviewing and updating

The first two components are the goals of the THIRA/SPR process, providing a foundation to achieve the remaining components of the NPS.

Identifying and assessing risk

Identify threats and hazards of concern and describe their impacts.

Estimating capability requirements

Develop capability targets, assess current capabilities, and identify capability gaps.

Building and sustaining capabilities

Prioritize investments in areas that address identified capability gaps and sustainment needs.

Planning to deliver capabilities

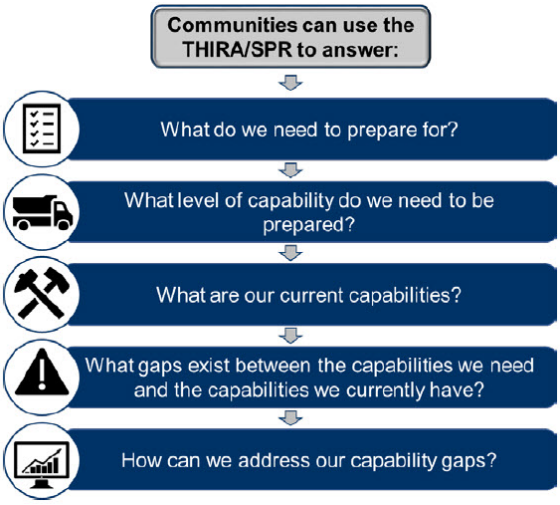
Use capability targets when assessing performance in real-world incidents and as evaluation criteria in exercises.

Reviewing and updating

Use evaluation results to drive continuous improvement and update the THIRA/SPR.

Visual 6: Five Key Questions

Any process that is used to identify threat and hazards and assess risk should be able to answer these five questions:



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The five questions:

What do we need to prepare for?

What level of capability do we need to be prepared?

What are our current capabilities?

What gaps exist between the capabilities we need and the capabilities we currently have?

How can we address our capability gaps?

Risk is the potential for an unwanted outcome resulting from an incident or occurrence, as determined by its likelihood and the associated consequences. Communities identify risks with the potential to most challenge their capabilities and expose areas in which the community is not as capable as it aims to be. These areas, called **capability gaps**, create barriers in a community's ability to prevent, protect against, mitigate, respond to, and recover from a threat or hazard.

When communities understand the risks they face, it will be easier for them to determine what level of capability they should plan to build and sustain. Communities can use the information that comes from a process like the THIRA/SPR to answer five key strategic questions about their preparedness risks and capabilities. Answering these questions helps them better understand the risks their communities face. This helps communities make important decisions on how to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risks.

Visual 7: THIRA/SPR

THIRA/SPR is a process for:

- Identifying and assessing risk
- Estimating capability requirements

The outputs from this process and others like it provide the basis for all types of planning, including deliberate planning.

THIRA and SPR are interconnected processes that, together, communities use to evaluate their preparedness.

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THIRA/SPR is a process for:

- Identifying and assessing risk
- Estimating capability requirements

The outputs from this process and others like it provide the basis for all types of planning, including deliberate planning. THIRA and SPR are interconnected processes that, together, communities use to evaluate their preparedness.

Importance of Community-Wide Involvement

The outputs of the THIRA/SPR process inform all other preparedness activities; helping communities identify challenges, driving priorities, and closing gaps in capabilities. For this reason, when developing and updating THIRA/SPRs, communities should ensure their assessment and planning efforts include community-wide input and perspectives.

Visual 8: THIRA Overview

The THIRA is a three-step risk assessment. It helps communities answer the following questions:

- What threats and hazards can affect our community?
- If they occurred, what impacts would those threats and hazards have on our community?
- Based on those impacts, what capabilities should our community have?

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FEMA recommends communities complete the THIRA on a 3-year cycle, rather than annually.

FEMA recommends completing the SPR on an annual cycle.

The THIRA process consists of the following steps:

1. Identify the Threats and Hazards of Concern (List of Threats/Hazards)
2. Give the Threats and Hazards Context (Context descriptions for Threats/Hazards)
3. Establish Capability Targets (Capability Target Statements)

The THIRA helps communities understand their risks and determine the level of capability they need in order to address those risks. The outputs from this process lay the foundation for determining a community's capability gaps during the SPR process.

CPG 201: Threat and Hazard Identification and Risk Assessment (THIRA) describes the THIRA process (https://www.fema.gov/media-library/assets/documents/165308).

Visual 9: Step 1: Identify the Threats and Hazards

Identify the threats and hazards of concern based on a combination of past experience, forecasting, and expert judgment, as well as available resources.

Develop a list of threats and hazards that could affect the community, and organize them according to the following categories:

- **Natural hazards:** acts of nature
- **Technological hazards:** accidents or failures of systems and structures
- **Threats or human-caused hazards:** intentional actions of an adversary

What threats or hazards is your jurisdiction concerned about?

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The first step is to identify threats and hazards of concern to the jurisdiction based on past experience, forecasting, expert judgment, and available resources.

Natural hazards are those resulting from acts of nature, such as hurricanes, earthquakes, or tornadoes, as well as disease outbreaks or epidemics.

Note: Human-caused actions can exacerbate natural hazards. Building a parking lot and not ensuring proper drainage can cause localized flooding, adding to flooding that has historically occurred in an area. When possible, consider these factors as part of natural hazards.

Technological hazards are those resulting from accidents or the failures of systems and structures, such as hazardous material spills or dam failures.

Threats or human-caused incidents are those resulting from intentional actions of an adversary, such as a threatened or actual chemical or biological attack, or a cyber event.

Communities should consider two questions when identifying threats and hazards for the assessment:

- Is the threat or hazard reasonably likely to affect the community?
- Does the impact of the threat or hazard challenge at least one of the core capabilities more than any other threat or hazard?

As a single incident may most challenge the ability to perform multiple core capabilities, the number of threats and hazards that each community includes will depend on the specific risk profile of the community. See *CPG 201* for examples.

Refer to *Job Aid 5: Types of Threats and Hazards* in your Resource Guide.

Visual 10: Step 2: Give Threats and Hazards Context

When selecting the threats and hazards of greatest concern to the community, there are two components to include:

- Context descriptions
- Impact numbers

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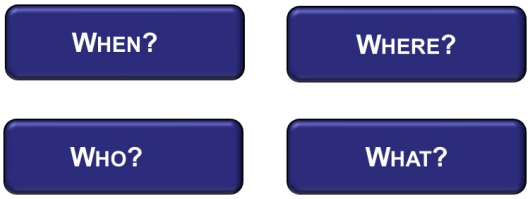
Step 2 is to select the threats/hazards of greatest concern and to describe the factors that would make each threat or hazard more challenging for your community.

The output of Step 2 is context descriptions for each threat and hazard identified in Step 1 and impact numbers identifying the impacts a scenario would have on their community if the threat or hazard occurred. These context descriptions and impact numbers will be used in Step 3 of the THIRA process.

Visual 11: Context Description

Describe the factors that would make each threat or hazard more challenging for your community. Include the following:



Include critical details such as location, magnitude, and time of an incident.

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Context descriptions are the details about a threat or hazard needed to identify the impacts it will have on a community. They include critical details such as location, magnitude, and time of an incident.

If an element of the scenario is essential to understanding the impact of an incident and the capabilities required to manage it, that element should be included in the context description.

To help create a context description, describe the factors that would make each threat or hazard more challenging for your community.

Key questions for Step 2 include:

- When might it occur (time of day/season)?
- Where might it occur (populated areas, coastal zones, industrial areas, etc.)?
- Who might be most affected?
- What are the conditions that would escalate the level of concern in the jurisdiction?

When creating context descriptions and estimating impacts, communities should consider community-wide sources, such as real-world incidents, subject matter experts (SMEs), exercises, response and recovery plans, modeling, or tools. Identifying different sources provides communities with key data points that they can use to determine how a threat or hazard may affect their community. For example, SMEs can help shape context descriptions by outlining the time, place, and location of the threat or hazard in a way that shows how it challenges a community's capabilities.

Identifying sources of information is extremely important for continuity of the assessment process. Communities may not update the THIRA for several years, so there may be changes in staff involved in the process between updates. The potential resulting loss in knowledge and experience after staff turnover can make it challenging to maintain continuity between updates. Citing sources helps to complete future THIRA updates, increasing consistency, improving data credibility, and reducing duplication of effort.

Refer to *Job Aid 6: Best Practices for Developing Context Descriptions* in your Resource Guide.

Visual 12: Example of Sufficient Detail

Review the example of context descriptions in your student manual regarding an active shooter. What makes the sufficient level of detail example better than the insufficient level of detail example?

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Insufficient Level of Detail Example

An active shooter incident occurs, involving multiple gunmen and many potential victims. There are dozens of fatalities and injuries, and first responders arrive at the scene quickly. There are reports that the incident may be related to terrorism.

Sufficient Level of Detail Example

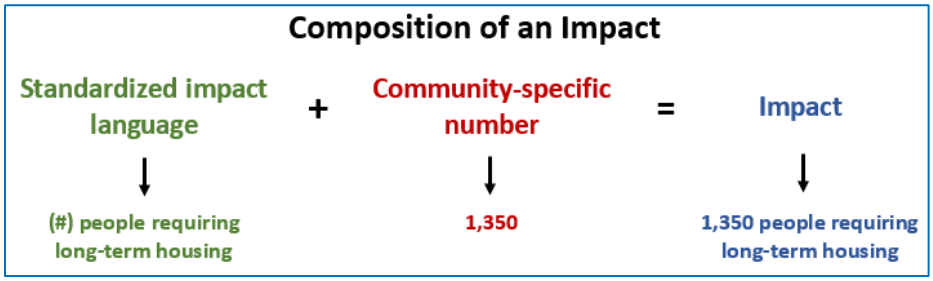
At approximately 2:00 p.m. on a Sunday afternoon, local police and state troopers are dispatched to Thiraland City Mall, responding to reports of an active shooter situation. According to 9-1-1 calls from patrons, there are between one and four shooters, with varying reports of the types of weapons, number of weapons, and number of injured people. At the time of the incident—among the busiest the mall experiences during a normal week—the 1,200,000-square foot facility was occupied by approximately 8,500 shoppers and employees. Upon arrival, authorities find crowds pouring out of the mall's exits. Some are unharmed while others are severely injured. Advanced life support (ALS) and basic life support (BLS) units are en route, with mutual aid EMS being dispatched. Shots are still heard inside, and the injury count cannot be immediately estimated. The closest hospital facility is approximately 3 miles from Thiraland City Mall. The closest Level I Trauma Center is approximately 18 miles from Thiraland City Mall. The medical facilities have been notified of the incoming patients, but the unknown number and extent of injuries, ongoing shortages of IV bags, and understaffing raise concern about the facilities' ability to care for the incoming victims. Within an hour, the state fusion center is receiving credible intelligence of a terrorism link to the attack.

What makes the second example better than the first example?

This is an example of a context description with sufficient level of detail. This example can be found in *CPG 201*.

Visual 13: Estimate Impacts

- Estimate the impacts on the community if the threat or hazard occurs.
- Use a standardized impact language based on how you represent metrics in your community.
- This will help you establish capability targets in THIRA Step 3.



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Communities write impacts in the language of common emergency management metrics, such as affected population, number of people requiring shelter, or number of people requiring screening. The THIRA process uses a uniform set of these common metrics, or standardized impact language (see Figure 9). The standardized impact language represents metrics estimated by every community, and in most cases, across multiple different threats and hazards. The estimated impact from this step provides the basis for creating capability target statements in Step 3 of the THIRA process.

Ideally, communities will estimate all standardized impacts for each threat or hazard scenario. However, at a minimum, to develop capability targets in THIRA Step 3, communities will develop an estimate for each standardized impact at least once across all included threats and hazards.

For example: If a community identified hurricanes, tornados, and winter storms as hazards, then developing a capability target for long-term housing in Step 3 of the THIRA will require assessing the number of people requiring long-term housing for each of the hazards; hurricanes, tornados, and winter storms.

Note: The impact with the largest number is not necessarily always the most challenging to address. For example, it may be more challenging to provide medical care to a smaller number of individuals affected by a radiological attack (which may include additional considerations like decontamination or personal protective equipment) than a larger number of hurricane survivors.

Visual 14: Step 3: Establish Capability Targets

- Capability targets are measurable goals about where the community wants to be to appropriately be prepared for the identified threats and hazards.
- Capability targets use standardized language to make the goals measurable.
- Capability targets may not reflect what a community is capable of right now—that difference is the capability gap.

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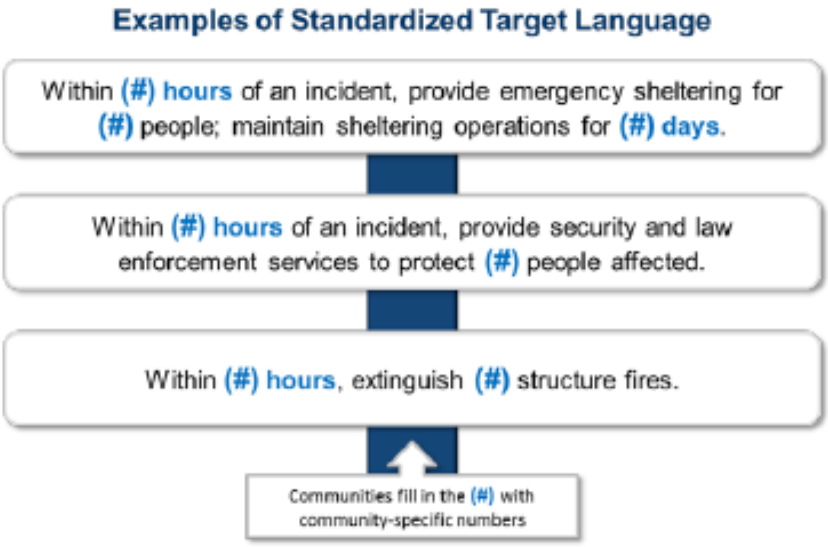
In Step 3 of the THIRA process, communities establish **capability targets**, which describe the level of capability a community plans to work toward achieving—for each of the core capabilities. These capability targets are not a reflection of a community's current capability and may represent a long-term desired capability level.

To develop capability targets, communities need to consider what is required to address the impacts of their threats and hazards. In addition to the risks posed by their threats and hazards, communities should also take into account expected resources and other factors to determine the level of capability their community plans to work toward achieving.

Visual 15: Example of Standardized Language



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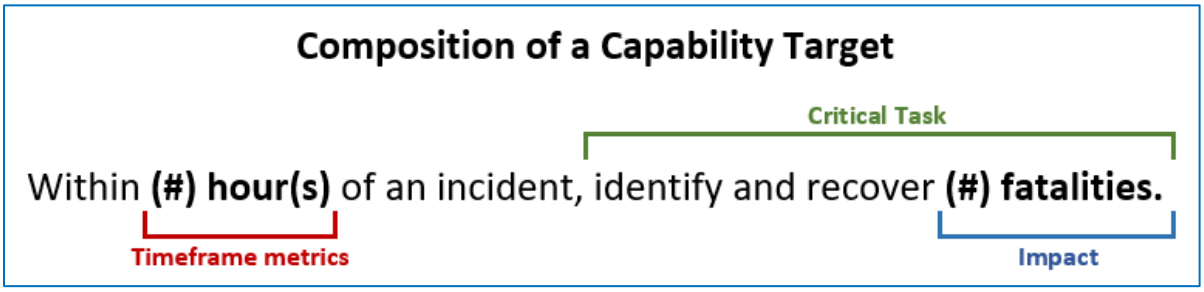
The intent of standardized target language is to create measurable indicators of preparedness, not a comprehensive list of everything a community must do to achieve each of the core capabilities successfully. In addition to setting capability targets using the standardized language, communities may also develop non-standardized capability targets if they find it beneficial to capture other elements of their core capabilities.

Visual 16: Capability Targets



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Each capability target describes a critical task that, when completed, helps communities successfully manage a threat or hazard.

These critical tasks:

- Are based on the activities that emergency managers plan for
- Define activities that must be performed for a wide variety of threats and hazards, not only the ones identified in the THIRA

Capability targets include:

- Impact: The size of the capability requirement
- Timeframe metrics: The timeframe in which the action must be performed
- Critical tasks: The specific actions that must be taken by the community for the identified threat or hazard

More information on capability targets can be found in *CPG 201*.

Visual 17: Types of Capability Targets

These are two common ways capability targets may be written:

Driven by Quantitative Impacts	Driven by Measurable Objectives
Within (#) months of an incident, reopen (#) businesses closed due to the incident.	Coordinate across state, local, and federal communities, and integrate with partners community-wide to effectively invest (#)% of all available mitigation funding within (#) years.
Within (#) hours of an incident, complete triage, begin definitive medical treatment, and transfer to an appropriate facility (#) people requiring medical care.	Every (#) months, (#)% of critical infrastructure facilities conduct a risk assessment and accompanying facility security level (FSL) determination for assessing and addressing changes in threats and vulnerabilities.

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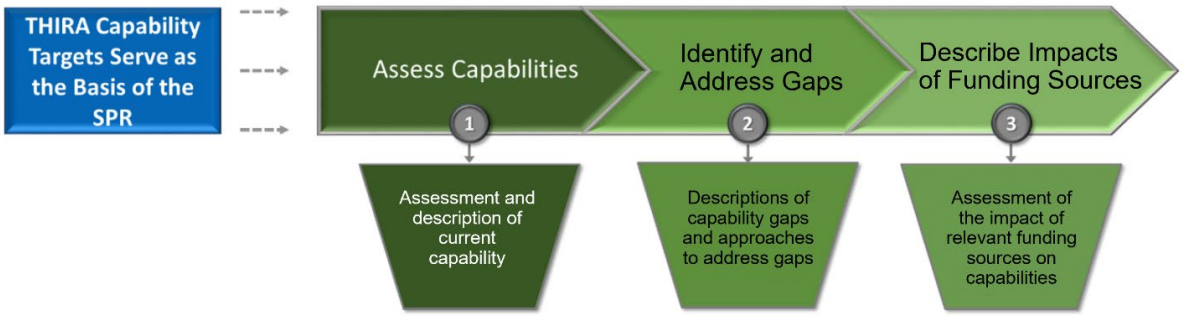
The table shows two common ways capability targets may be written. A community's risk assessment may use one or both of these ways, depending on the identified threat or hazard.

Visual 18: The SPR Process



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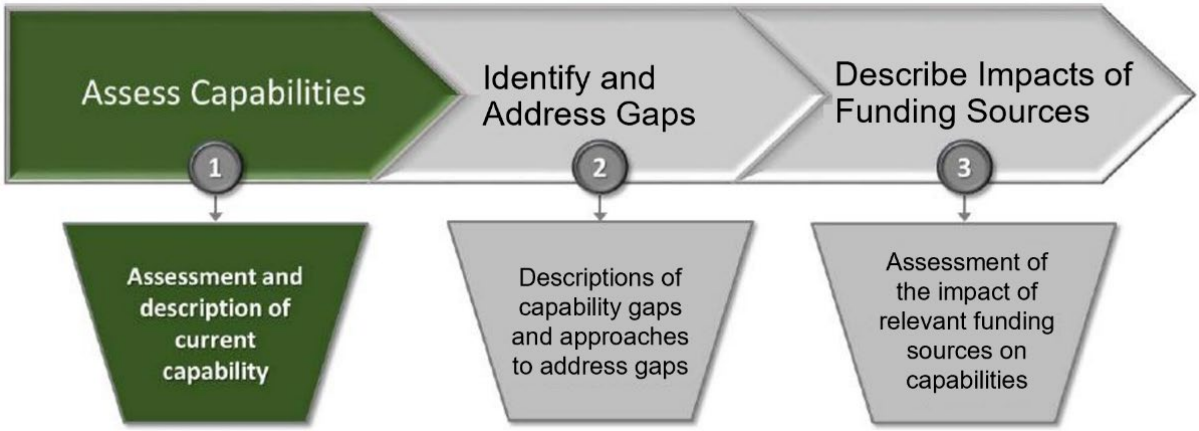
The SPR builds off the capability targets developed in the THIRA. Developing an accurate and complete SPR requires the perspectives of a broad range of informed stakeholders and SMEs from a variety of fields. Communities are encouraged to seek input from community stakeholders and SMEs, including local governments, businesses, faith-based organizations, nonprofit organizations, and institutions of higher education.

Visual 19: Step 1: Assess Capabilities



The purpose of Step 1 of the SPR is to assess and describe a community's current capability and how the capability has changed during the last year:

- *Quantitatively* assess capability and how it has changed.
- *Qualitatively* describe how their capabilities have changed.
- Provide context on how they estimated the current capability and their confidence levels in that estimation.

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Step 1.1: Quantitatively Assess Capability

- Identify how a community's capabilities have changed over the last year and how those changes affect the community's current capability. This step requires determining five quantitative data-points:
  - Beginning Capability: How much capability did the community have at the start of the year being assessed?
  - Capability Lost: How much capability did the community lose over the course of the year?
  - Capability Sustained: How much of the capability that the community started the year with still remains?
  - Capability Built: How much capability did the community add during the year?
  - Current Capability: How much capability does the community have now?

Step 1.2: Describe Current Capabilities and Capability Changes

- Elaborate on the quantitative assessment of the capability change provided in Step 1.1. Communities identify the Plans, Organization,

- Equipment, Training, and Exercise (POETE) areas (model that divides capabilities into meaningful, broad categories of activity) in which they lost, sustained, and built capability, and develop free-text descriptions explaining:
    - What caused the reported level of capability lost over the last year?
    - What actions did the community take to sustain the reported level of capability sustained over the last year?
    - What actions did the community take to achieve the reported capability built over the last year?
    - How might existing mutual aid agreements help bridge the gap between the capability target and current capability?

Step 1.3: Provide Context on Current Capability Estimations

- Provide additional context for the responses provided in Step 1.1 and Step 1.2. Communities do this in three ways:
    - Describe their level of confidence in the accuracy of their quantitative assessment.
    - Identify the sources used to determine their responses.
    - Provide any other useful context to better understand their quantitative responses.
- The standard format for reporting confidence in the SPR is to use a 5-point Likert scale where a score of 1 is lower confidence and a score of 5 is higher confidence.

Refer to *Job Aid 7: Rational for Confidence Levels Example* in your Resource Guide.

Visual 20: Assess Capabilities – Example

- Capability lost
- Capability sustained
- Capability built
- Mutual aid to fill the gap

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This is one example showing how Step 1: Assess Capability might be written.

SPR Step 1.1 – Quantitative

Capability Lost	Capability Sustained	Capability Built	Mutual Aid to Fill Gap
Lost capability to shelter 3,000 people	Sustained capability to shelter 12,000 people	Built capability to shelter 1,000 people	N/A

SPR Step 1.2 – Qualitative

Capability Lost	Capability Sustained	Capability Built	Mutual Aid to Fill Gap
Jurisdiction lost the capability due to…	Jurisdiction was able to sustain the capability due to…	Jurisdiction was able to build the capability due to…	Jurisdiction has standing agreement with …

SPR Step 1.3 – Confidence Levels 1–5

Confidence Level 1

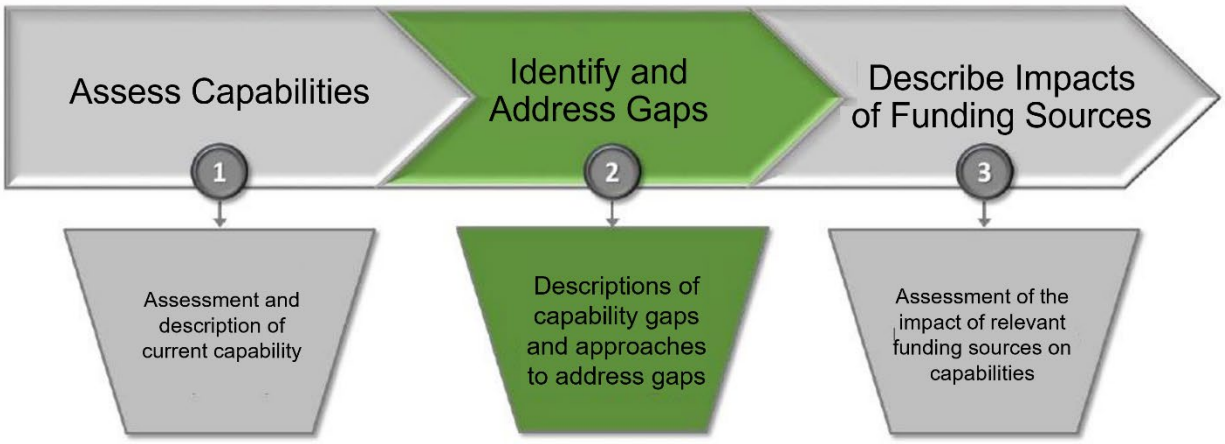
- They have not performed a large-scale sheltering mission in over 13 years and have no after-action reports to review.
- No past exercises focusing on their sheltering capability were performed; they have minimal subject-matter expertise.
- The capability estimate is based on that of similar surrounding states, but they have very little confidence that it is accurate.

Confidence Level 5

- They performed a large-scale sheltering mission 2 years ago where they had a peak sheltering capacity of 14,200 people.
- The list of available locations for sheltering is less than a year old and includes recent additions of private-sector facilities with agreements to provide shelter.
- They participated in a regional sheltering and mass care exercise last year (including private-sector partners and several large counties).

Based on their capability in the recent incident, the validation provided by the regional exercise, and the formal agreements with the private sector, they are confident that they can now shelter a maximum of 15,500 people.

Visual 21: Step 2: Identify and Address Gaps



- Communities identify and provide free-text descriptions of the capability gaps in relevant plans, organization, equipment, training, and exercise (POETE) areas.
- Communities describe how they plan to address their capability gaps and sustainment needs in relevant POETE areas.

Student Manual

Step 2.1: Identify and Describe Capability Gaps

Identify and contextualize the capability gap between a community's capability target and their estimated current capability (i.e., Capability Target - Estimated Current Capability = Capability Gap). The remaining questions in this step allow communities to add context to that capability gap and explain why the capability gap exists. By understanding capability gaps, communities can begin to prioritize their building and sustainment activities. After identifying that capability gap, communities assign a priority rating (High Priority, Medium Priority, and Low Priority) to identify how important it is to achieve that capability target. Communities should attempt to assign priority ratings relative to their other targets and avoid providing the same priority rating for all or most capability targets. This will result in more useful data, as it will clearly demonstrate which capability gaps are more important to address.

Step 2.2: Describe Approaches to Address Gaps and Sustainment Needs

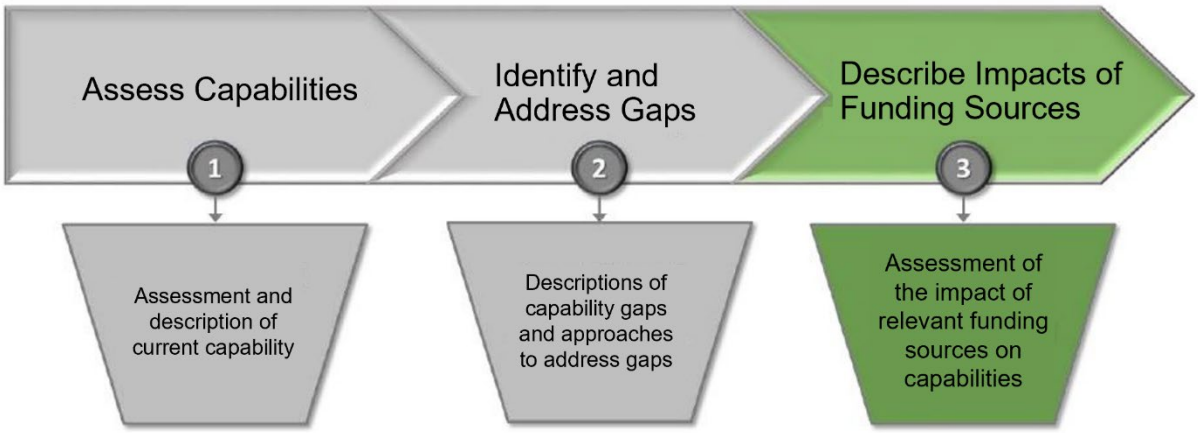
Once communities have identified their capability gaps, they identify their intended approaches for addressing the capability gaps or sustainment needs. This information will help communities use SPR results to drive their strategic planning and investment strategies. Communities identify

approaches for sustainment or filling the capability gap(s) in the relevant POETE area and then add specific information, including:

- Over what timeframe does this intended approach cover?
- What activities or investments will need to occur to address the existing capability gap or support sustainment?
- What partners may support the efforts?

Refer to *Job Aid 8: Identifying and Assessing Capability Gaps* in your Resource Guide.

Visual 22: Step 3: Describe Impacts of Funding Sources



There are two primary elements to this step:

- Assess the degree to which specific funding sources had a role in building and sustaining the capability assessed by the capability target.
- Qualitatively assess how your community used capabilities built and sustained with funding in a real-world incident over the past year.

Student Manual

Step 3.1: Assess the Role of Funding for Building and Sustaining Capabilities

Estimate the degree to which various funding sources, such as communities' own resources and federal and state grants, impacted the building and sustainment of the capabilities assessed by the capability targets.

When answering these questions, communities consider the relevant POETE area activities or resources that they supported with each funding source. Communities should try to estimate, with reasonable accuracy, which efforts and investments are relevant to each capability target they funded with each source. Then, among those efforts and investments, communities identify whether they were used primarily to sustain an existing capability, to build new capability, or both.

A coordinated approach to track investments using different funding sources can help drive investments to be increasingly effective. This enhances communities' ability to understand the return on investment of their funding sources. Identifying the sources of funding for specific, quantitative changes in capability can guide communities' strategic planning considerations and help them make

resource allocation decisions to build and sustain capabilities as effectively as possible.

Step 3.2: Assess the Role of Funding in Real-World Incidents

Describe the impact that capabilities built or sustained with different funding sources had in real-world incidents over the past year. This is intended to capture how they used previous years' investments since the last assessment. While this question is concerned with capabilities used over the past year, the funding can be from any year in the past.

Communities attempt to answer the following questions:

- Was the capability used to address a real-world incident? If so, how?
- What would have been the impact on the community's ability to deliver the capability had it not received funding?
- What impact would that change in capability have had on survivors, infrastructure, or the response and recovery mission overall?

Answering these questions enables communities to report positive examples of how they used specific funding sources to increase or sustain preparedness capabilities and make a difference during response to real-world incidents. Communities will also be able to describe how sustainment of their capabilities would be negatively impacted by reduced funding—whether it is the community's own capital, state or federal grants, or another source—despite reporting no capability built by that funding. This can help communities think strategically about how to spend their money and consider whether they are doing so efficiently.

Visual 23: Putting It All Together

Compile and analyze all the information, including:

- Threat/hazard data
- Jurisdiction characteristics
- Response capabilities
- Impact assessments

Organize the information into a format that is usable by the planning team.

Organizing and analyzing the information will enable you to develop goals and objectives.

Student Manual

Let's take a moment to review the key points about THIRA:

THIRA	THIRA Does Not
• Is a comprehensive process for identifying threats and hazards, along with their associated capabilities. • Engages the whole community in establishing desired outcomes. • Focuses on a jurisdiction's unique threats and hazards. • Supports planning for all mission areas by establishing capability targets. • Provides a basis for identifying resource gaps. • Allows for assessment and reporting on preparedness.	• Replace the need for strategic, mitigation, and operational planning. • Narrow its scope to a single threat or hazard. • Stand alone. It is an integral part of the overall National Preparedness System. • Limit input to traditional preparedness partners. • Focus on current capabilities, but rather establishes targets for desired levels.

Refer to *Job Aid 9: THIRA/SPR Process* in your Resource Guide.

You can also learn more about THIRA by completing the FEMA independent study course *IS-2001 – Threat and Hazard Identification and Risk Assessment (THIRA).*

Visual 24: How Does This Tie to Planning?

- A process of identifying threats and hazards and assessing risk, like the THIRA/SPR, lays the foundation for creating detailed implementation plans.
- It identifies capabilities based on a specific jurisdiction's risk and creates capability targets the organization can work towards.
- Capability targets can be used to support many different planning processes and are a key component in the evaluation of exercises.

Visual 25: Activity 3.1 – Identifying Threats and Hazards in My Community

Purpose:

The purpose of this activity is to identify a realistic threat or hazard, give it context and impact through capability targets, and assess the risk to a jurisdiction through a resource analysis.

Instructions:

Working in your table group:

1. Each person in the group should identify one threat or hazard of great concern to their jurisdiction. As a group, select one threat or hazard to use for the following activity.
2. As a group, discuss the following and record your answers on the easel pad:
    - Determine the appropriate capability to which this risk relates.
    - Describe factors that would make having to deal with this risk more challenging.
    - Identify or create at least two capability targets for this risk.
    - Identify resource requirements (personnel and/or equipment) for these capability targets.
    - Identify the resources (personnel and/or equipment) currently in place; for example, jurisdiction for these capability targets.
    - Determine ways to fill the resource needs in the capability gap.
3. Select a spokesperson to share your answers with the class.

Student Manual

Activity 3.1 – Types of Plans

Purpose: The purpose of this activity is to identify examples of plans for each category.

Instructions: Working in your table group:

1. Each person in the group should identify one threat or hazard of great concern to their jurisdiction. As a group, select one threat or hazard to use for the following activity.
2. As a group, discuss the following and record your answers on the easel pad. If this is a virtual class, one member should take notes for the group.
    - Determine the appropriate capability to which this risk relates.
    - Describe factors that would make having to deal with this risk more challenging.
    - Identify or create at least two capability targets for this risk.
    - Identify resource requirements (personnel and/or equipment) for these capability targets.

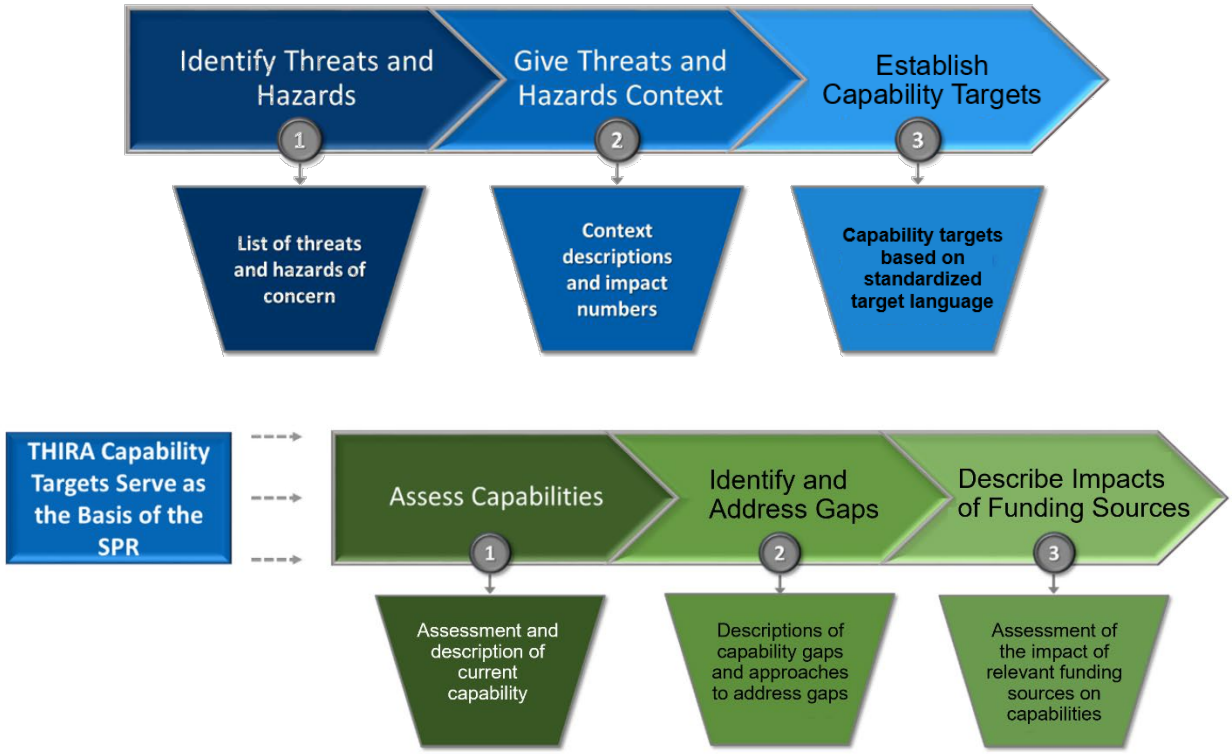
- Identify the resources (personnel and/or equipment) currently in place; for example, jurisdiction for these capability targets.
- Determine ways to fill the resource needs in the capability gap.

3. Select a spokesperson to share your answers with the class.

Note: Your group will use the capability targets in this activity as the basis of Activity 4.4.

Visual 26: Unit Summary

- Jurisdictions should identify threats and hazards and assess risk on a regular basis; identify your specific legal, regulatory, or industry-standards for specific schedules.
- The THIRA/SPR outlined in *CPG 201* is a process that can be used by anyone in a community.



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Refer to *Job Aid 10: THIRA Examples* in your Resource Guide for additional THIRA examples you can review on your own if you want to learn more.

Visual 27: Unit 3 Q & A

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Unit 4: The Planning Process

Visual 1: Unit 4 Overview

Unit 4: The Planning Process

Student Manual

Unit 4 presents information on the emergency planning process. This unit should take approximately 5 hr and 30 min to complete.

Visual 2: Unit Objectives

After completing this unit, you will be able to describe the purpose and components of an emergency operations plan. You will also be able to:

- Identify the content of an emergency operations plan (EOP) as defined in *CPG 101*.
- Indicate how THIRA outputs can be used in plan development.
- Plan a threat/hazard/incident-specific annex to an EOP.
- Identify individual action steps for emergency operations planning.

Student Manual

Review the unit objectives.

Visual 3: Emergency Planning Process

Student Manual

This unit covers the six steps in the emergency planning process, as described in *CPG 101*:

Step 1: Form a Collaborative Planning Team

- Identify core planning team
- Engage the whole community in planning

Step 2: Understand the Situation

- Understand risk
- Use the results of risk analysis

Step 3: Determine Goals and Objectives

- Determine operational priorities
- Set goals and objectives

Step 4: Develop the Plan

- Develop and analyze courses of action
- Identify resources
- Identify information and intelligence needs

Step 5: Prepare and Review the Plan

- Write the plan
- Review the plan
- Approve and disseminate the plan

Step 6: Implement and Maintain the Plan

- Train on the plan
- Exercise the plan
- Review, revise and maintain the plan

Visual 4: Step 1: Form a Collaborative Planning Team

- Identify a core planning team.
- Engage the whole community in planning.

Student Manual

The first step in emergency planning is to form a collaborative planning team.

By developing a collaborative planning team, jurisdictions or other organizations engage the whole community in the planning effort.

Building the team is one of the most important efforts in the planning process because the trust and working relationships fostered by participating together as members of the team will:

- Pay dividends in more comprehensive and creative planning
- Extend into operations when the same people work together during emergencies

Visual 5: Benefits of a Collaborative Team

Forming a collaborative planning team:

- Expands membership to include the entire community
- Builds relationships and improves trust
- Extends the relationships to operations
- Improves the planning effort

Review *Job Aid 11: Potential Members of a Community Planning Team* in your Resource Guide.

What traits do you want to see from someone who will be joining your collaborative planning team?

Student Manual

Forming a collaborative planning team:

- Builds and expands membership on the core planning team to include representatives of the entire community
- Builds relationships and improves trust, both of which will be valuable assets during an actual emergency/operations
- Extends the relationships to operations
- Improves the planning effort because the full resources of the community are tapped

A community benefits from the participation of a diverse variety of stakeholders in the planning process. Some tips for assembling the team include the following:

- **Plan ahead.** The planning team should receive adequate advance notice regarding the location and time of the planning meeting. If time permits, ask the team members to identify time(s) and place(s) that work for them.
- **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 how contributions lead to more effective operations. In addition, planners should outline the budget and other project management concerns early in the process.
- **Ask the elected or appointed official or designee to sign the meeting announcement.** A directive from the executive office carries the authority of the elected and/or appointed official. The directive notifies the participants of their expected attendance and

participation and the importance of operational planning to the community.

- **Allow flexibility in scheduling after the first meeting.** Not all team members need to attend all meetings. In some cases, task forces or subcommittees can complete the work. When the planning team uses this option, it should provide project guidance (e.g., timeframes, 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.

Refer to *Job Aid 11: Potential Members of a Community Planning Team* in your Resource Guide.

Visual 6: Who is in Your Community?

Discuss:

- Who is in your community?
- How do you ensure they have a say in your plans, even if they aren't in your core group?

Student Manual

What groups in your community deserve representation on your planning team? How do you ensure they are represented?

Visual 7: Be Inclusive

- Build on the whole community approach.
- Include formal and opinion leaders:
  - Civic leaders
  - Members of the public
  - Representatives of community-based organizations and the private sector

Student Manual

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 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.

When building a planning team, be inclusive. Your planning team should look like your community.

Build on the whole community approach established for THIRA.

Include both formal leaders and opinion leaders. Opinion leaders on the planning team will have an emphatic influence on the success of the planning effort.

Be sure the team includes:

- Civic leaders
- Members of the public
- Community groups, including disability services, advocacy organizations, and private-sector programs

Visual 8: Activity 4.1 – Engaging the Whole Community

Purpose: This activity will challenge students to consider specific needs for segments of a community when conducting planning activities.

Instructions:

Working in your table group:

1. Identify your assigned segment:
   - Persons with disabilities or other access and functional needs
   - Nonprofits, NGOs, and other community organizations
   - Private sector—retail, small businesses, and large employers
   - Owners and operators of critical infrastructure
   - Schools, colleges, and universities
2. Develop a list of strategies for engaging this community segment in emergency planning.
   - Consider how would you get them to the table and how you will keep them involved
3. Record your answers on the chart paper.
4. Select a spokesperson and be prepared to report to the class in 15 min.

Student Manual

Working in your table group:

1. Identify your assigned segment:
   a. Persons with disabilities or other access and functional needs
   b. Nonprofits, NGOs, and other community organizations
   c. Private sector—retail, small businesses, and large employers
   d. Owners and operators of critical infrastructure
   e. Schools, colleges, and universities
2. Develop a list of strategies for engaging this community segment in emergency planning.
   a. Consider how you would get them to the table and how you will keep them involved.
3. Record your answers on the chart paper. If this is a virtual class, one member should take notes for the group.
4. Select a spokesperson and be prepared to report to the class in 15 min.

Visual 9: Activity 4.2 – Your Planning Team

Purpose: The purpose of this activity is to offer students the opportunity to consider how their current planning teams are organized, who is on those teams, and what gaps exist in having good representation from the community on the planning team.

Instructions:

Working individually:

1. Complete Activity 4.2 Worksheet in your Resource Guide.
2. Share your answers with the class.

Student Manual

Working individually:

1. Complete Activity 4.2 Worksheet in your Resource Guide.
2. Share your answers with the class.

Visual 10: Step 2: Understand the Situation

There are two components to understanding the situation:

- Understand risk
- Use the results of risk analysis

Student Manual

This step of the planning process is critical to confirming that a jurisdiction's plans are risk-based, reflect the needs of the population, and account for resources that may be required to assist individuals affected by disasters. One initial action is to build a solid understanding of the socio-demographic characteristics of the community and to think critically about how this information can inform EOP development, including advancing equity through fair and impartial treatment of all community members. Community information provides the basis for estimating support needs, such as sheltering, transportation, or disability and access and functional needs accommodations.

Visual 11: Understand Risk

Understanding a jurisdiction's risks helps planners:

- Anticipate response and recovery requirements
- Estimate the likelihood and magnitude of incidents that may occur

One method to do this is through a threat and hazard identification process and a risk assessment, such as the THIRA process we discussed in the previous unit.

Student Manual

Risk is the potential for an unwanted outcome resulting from an incident or occurrence, as determined by its likelihood and the associated consequences. One method to identify risks is through FEMA's THIRA/SPR processes. They provide guidance on identifying and categorizing threats and hazards. The THIRA/SPR processes help planners determine the levels of capability needed to respond to those threats and hazards. Finally, by clarifying the response capabilities needed, the THIRA/SPR processes assist jurisdictions in addressing the preparedness gaps.

Regardless of the process employed, planners should start risk assessment efforts by conducting research and analysis on the jurisdiction's threats and hazards. Threats may include things like terrorist attacks, while hazards include both natural phenomena such as hurricanes and wildfires, as well as technological incidents like a chemical release or a dam failure. Planners should consider drivers of risk such as climate change (which can affect the frequency and severity of different hazards) or income inequality (which can magnify the consequences of a disaster). They should also consider non-traditional events where emergency management organizations may play a supporting role (e.g., cyber incidents or public health emergencies).

Visual 12: Adding Context to Threats and Hazards

Considerations to add context to threats and hazards to help understand risk:

- Probability or frequency of occurrence
- Magnitude (i.e., the physical force associated with the hazard or threat)
- Intensity and severity of the threat or hazard (i.e., the expected impact or damage and the potential for changes to estimated intensity and severity due to climate change)
- Speed of onset (i.e., how fast the hazard or threat can impact the public)
- Time to warn the community
- Time to implement protective actions
- Duration (i.e., how long the hazard or threat will be active)
- Location of the incident
- Potential size of the affected area
- Cascading effects and potential impacts for all members of the jurisdiction

Student Manual

Planners must add context to each threat or hazard to help analyze the potential consequences of an event within the jurisdiction.

Planners can build context by combining threat and hazard information with socio-demographic, ecological, and critical infrastructure datasets to examine how disaster consequences may impact the jurisdiction and which segments of the community may be most impacted (e.g., people of color; others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality; or those with disabilities or access and functional needs).

Using these inputs, planners can characterize risk qualitatively (e.g., high, medium, low) or quantitatively (e.g., a specific return period for a flood with discrete consequence metrics for population and infrastructure impacts). Planners should use the method that best enables risk-informed planning for their jurisdiction. This characterized risk may present itself in qualitative or quantitative form, based on the threat or hazard. For example, if a community is susceptible to wildfires, the risk may normally be described as high, medium, or low. If there are historical records on past wildfires, however, that information may enable planners to characterize the risk more precisely using a numeric scale.

More information on this process can be found in *CPG 201*.

Visual 13: Understand Risk: Jurisdiction Profile

A jurisdiction profile is a document that gives an overview of the community. It includes:

- Population demographics
- Property types and location
- Geographic characteristics
- Area(s) likely to be affected
- Infrastructure
- Resource base
- Current capability levels
- Impact of threats/hazards on jurisdiction capabilities

Student Manual

Another step in understanding the situation is to compile information about the jurisdiction and develop (or update) the jurisdiction profile. Include such information as:

- Demographics:
  - Population in the affected area, including people with disabilities who have access and functional needs or people with other requirements relevant to emergency planning
  - Animal populations, including household pets, service animals, and livestock
- The type(s) of property in the area and their locations
- Geographic and topological characteristics that could affect the impact of threats/hazards on the jurisdiction or could affect emergency operations
- Areas likely to be affected by the different threats/hazards
- Infrastructure in the affected area
- The jurisdiction's resource base (both in the jurisdiction and in jurisdictions with which there are mutual aid agreements, standby contracts, the Emergency Management Assistance Compact [EMAC], and other agreements)
- Current capability levels relative to the capability targets identified in THIRA
- Likely impact of threats/hazards on jurisdiction capabilities

These types of jurisdiction information are useful for emergency planning. For example, a jurisdiction with a large number of residents with limited English proficiency 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 identify types of resources needed for the community's children during and following a disaster.

Visual 14: Sources of Information for Jurisdiction Profiles

- State, tribal, and local hazard mitigation plans
- FEMA's Resilience Analysis and Planning Tool (RAPT)
- Hazard maps from federal and state agencies
- Local planning and zoning department
- Tax assessor
- Building inspection office
- Local public works or civil engineering department
- Social Vulnerability Index
- Census data

Discuss: Where else can you find information?

Student Manual

A number of resources are available outside of the jurisdiction for gathering information about your jurisdiction. Other resources are available from within the jurisdiction and will vary from one jurisdiction to the next. Examples of sources are listed on the visual.

Visual 15: Activity 4.3 – Jurisdiction Profile

Purpose: This individual activity will require students to consider their own jurisdiction profiles and discuss in their small groups.

Instructions:

Working Individually:

1. Complete Activity 4.3 Worksheet in your Resource Guide.
2. Discuss your answers in your table groups, identifying lessons learned among your peers.
3. Share lessons learned with the class.

Visual 16: Using the Results of Risk Analysis

Risk assessments generate facts and assumptions:

- **Facts** are verified pieces of information, such as laws, regulations, terrain maps, population statistics, resource inventories, and prior occurrences.
- **Assumptions** are elements of information accepted by planners as true in the absence of facts; assumptions enable planners to envision expected conditions in an operational environment.

Research increases the proportion of facts over assumptions!

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Risk assessments generate facts and assumptions.

- Facts are verified pieces of information, such as laws, regulations, terrain maps, population statistics, resource inventories, and prior occurrences
- Assumptions are elements of information accepted by planners as true in the absence of facts; assumptions enable planners to envision expected conditions in an operational environment.

As plans are implemented, planners replace assumptions with facts from the actual situation. 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. If a flood event does occur, the actual data should inform an update to the assumptions in the plan. The improved understanding of the community's situation considering the risk assessment can help planners determine response goals and objectives (Step 3), identify response courses of action (Step 4), evaluate the validity of the plan (Step 5), and exercise the plan and identify training requirements (Step 6).

Visual 17: Step 3: Determine Goals and Objectives

Goals and objectives:

- Are based on:
  - Capabilities for responding to and recovering from high-risk and/or high-impact threats/hazards
  - Likely response constraints, demands, or needs associated with the threat/hazard
- Should include:
  - Determining operational priorities
  - Setting goals and objectives

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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 the process of building an incident scenario, the planning team identifies the capability requirements generated by the threat or hazard, by the response, and by constraints/restraints.

Capabilities can stem from the nature of the threat or hazard and the required actions in response to the threat/hazard. An example is the potential need for emergency refueling during a large-scale evacuation.

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.

Operational priorities specify what the responding organizations are to accomplish to achieve a desired end-state for the operation. By using information from THIRA and the risk profile developed as part of the analysis process, the planning team establishes how the threat or hazard would evolve in the jurisdiction and what defines a successful outcome for responders, disaster survivors, and the community—in other words, what capabilities are required to successfully manage the situation.

Visual 18: Goals and Objectives

Use relevant capability targets from a threat and hazard identification and risk assessment as the basis for establishing goals and objectives.

Goals	Objectives
• Broad, general statements of what personnel and equipment are supposed to achieve • Capabilities required for a successful operation	• More specific and identifiable actions that participants in the operation must accomplish

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Goals and objectives describe the desired outcomes and interim steps to achieve them. Clearly specifying goals and objectives and having buy-in from all partners fosters unity of effort and consistency of purpose across the individuals and organizations involved in executing the plan.

- **Goals** are general statements that describe the intended outcomes. Often expressed as descriptions of the desired outcome, state, local, tribal, territorial, and insular area goals are what personnel and equipment resources are intended to achieve. Goals help identify when major elements of the response and recovery are complete and when the operation is successful.
- **Objectives** are specific and identifiable actions conducted during the operation. They lead to achieving response goals and determining the actions that participants in the operation should accomplish. Translating these objectives into activities leads to the development of courses of action as well as the capability estimate (see Step 4).

EOP Objectives and Incident Objectives

The objectives for an EOP that planners identify should not be confused with incident objectives—or with emergency operations center (EOC) objectives—which incident commanders (or the unified commands) establish during actual incident operations as a step in incident action planning.

- EOP objectives are typically broad and define what the EOP should achieve.
- Incident objectives identify the specifics of what the incident commander or unified command wants to achieve during the next one or more operational periods.

Some EOPs or hazard-specific annexes include suggested incident or EOC objectives for the initial operational periods for incident commanders, unified commands, or EOC leadership to use or modify.

Visual 19: Goals and Objectives Example

Capability Target	Goals	Objectives
Within 72 hr, rescue: • 2,500 people in 500 completely collapsed buildings • 5,000 people in 1,000 non-collapsed buildings • 10,000 people in 2,500 buildings • 500 people from collapsed light structures	Safely rescue the greatest number of people possible within the shortest time	Responders will search 500 completely collapsed buildings and rescue 2,500 people within 72 hr after an earthquake.

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Capability targets may be written from a local, regional, or state perspective. The examples here are from a state perspective. Remember, capability targets were likely created as part of the threat and hazard identification process. When reaching this step in the planning process, use the resources already available as a baseline, then modify those to fit the information for your jurisdiction based on your jurisdiction profile. You may be able to use the capability target already as written.

Visual 20: Activity 4.4 – Goals and Objectives

Purpose: The purpose of this activity is for students to practice using capability targets to develop goals and objectives that clearly state desired outcomes and how they will be achieved.

Instructions:

Working in your table group:

1. Identify the capability targets you created in Activity 3.1.
2. Select one of those capability targets and create one goal and one objective for it.
3. Select a spokesperson and be prepared to share your answers with the class in 10 min.

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Working in your table group:

1. Identify the capability targets you created in Activity 3.1.
2. Select one of those capability targets and create one goal and one objective for it.
3. Select a spokesperson and be prepared to share your answers with the class in 10 min.

Visual 21: Step 4: Develop the Plan

- Develop and analyze courses of action.
- Identify resources.
- Identify information and intelligence needs.

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Develop and analyze courses of action

This step involves generating, comparing, and selecting possible solutions for achieving the goals and objectives identified in Step 3. Planners consider requirements, goals, and objectives to develop several response alternatives, essentially asking, "How are we going to accomplish our objectives?" The art and science of planning help determine how many solutions or alternatives to consider; however, planning teams should always consider at least two options. Developing only one solution may speed up the planning process, but it could result in an inadequate response.

When developing courses of action, 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 focused on mid-incident, and tasks that affect long-term operations. The planning team should use tools that help members visualize operational flow, such as a whiteboard, sticky note chart, or project management or planning software. Community lifelines are another useful resource that can inform planning team efforts. The lifelines framework can help planners as they identify and prioritize potential actions to stabilize lifelines by reestablishing key services or developing contingency options.

Developing a course of action follows these steps:

- Estimate a timeline
- Identify and depict decision points
- Identify and depict operational tasks
- Select courses of action

These steps can be addressed using a number of methods. The method selected for developing a course of action is less important than ensuring the outcome of each step is derived.

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 (e.g., mutual aid partners) might fill. The resource base should include a list of facilities vital to emergency operations and indicate how individual hazards might affect the facilities.

Whenever possible, planners should match resources with other geographical or regional needs to identify multiple demands for the same or similar resources and resolve conflicts. This step provides planners an opportunity to identify and communicate resource shortfalls to higher levels of government and prepare draft resource requests, as appropriate.

The EOP should also account for unsolvable resource shortfalls, so they are not disregarded. The capability estimate process is essential to this effort. A capability estimate is a planner's assessment of a jurisdiction's ability to take a given course of action. Capability estimates:

- Help planners decide if a course of action is realistic and supportable
- Help planners project and understand what might take place during an operation
- Inform the resource section of the plan or annex
- Ultimately determine whether a given course of action is feasible for the jurisdiction

Planners can capture capability estimates as documents, tables, or presentations and use them for both current and future operational planning.

At a minimum, planners should prepare capability estimates for personnel, administration and finance, operational organizations (e.g., fire, law enforcement, EMS), logistics, communications, equipment, and facilities. Capability estimates should identify the criteria to evaluate each area; facts and assumptions that affect those areas; and the issues, differences, and risks associated with a course of action.

Identify information and intelligence needs

Another outcome from developing courses of action is a list of the information needs for each of the response participants. Planners should identify the information they need and the deadline(s) for receiving it to drive decisions and trigger actions. The planning team should capture these needs.

Visual 22: EOP Format

Various formats can be used:

- Function-Focused Format
  - Most common EOP Format
  - Flexibly accommodates a wide range of jurisdictional strategies
- Agency- or Department-Focused Format
  - Addresses each department or agency's tasks in a separate section
  - Allows EOP users to review only their department or agency's procedures without having to review other agencies' response tasks

Discussion Question: What format is used for your plan?

Student Manual

Traditionally, the EOP has been the focus of a jurisdiction's operational planning effort. EOPs help to define the scope of preparedness and emergency management activities necessary for that jurisdiction.

Emergency management involves several kinds of plans, just as it involves several kinds of actions. While many jurisdictions consider the EOP the centerpiece of their planning effort, it is not the only plan that addresses emergency management functions.

Function-Focused Format

The functional structure is probably the most commonly used EOP format. Traditionally, a function-focused format has three major sections: the base plan, functional annexes, and hazard-specific annexes. More about these sections will follow later in this unit.

The functional EOP format also uses a specific outline to define the elements of each annex. Using this format enables EOP users to find information more easily because the same type of information is in the same location in each annex.

The function-focused format flexibly accommodates a wide range of jurisdictional strategies. The planning team can add functional annexes as new functions are identified. Similarly, the team can quickly separate an operational function (e.g., mass care) into two separate annexes (e.g., sheltering and feeding, distribution of emergency supplies). New hazard or threat annexes can be added quickly when new threats or hazards are identified.

Agency/Department-Focused Format

This EOP format addresses each department or agency's tasks in a separate section. In addition to the base plan, this format includes lead and support agency sections and hazard-specific procedures for the individual agencies.

This format allows EOP users to review only their department's or agency's procedures without having to review other agencies' response tasks. The individual annexes/sections still reference the unique relationships with other agencies during a disaster. However, they do not contain details on the other departments' or agencies' strategies. If needed, users of the plan can refer to the other departments' or agencies' annexes/sections and review their procedures to understand the bigger picture. The level of detail in each annex/section varies according to the needs of the specific department or agency. Agencies or departments that maintain detailed standard operating procedures/guidelines (SOPs/SOGs) may not need much information in their portion of the plan, while others may need to provide more details in the EOP.

An EOP is a public document that describes what the local government will do when conducting emergency operations. The plan addresses:

- Protection of people and property
- Assignment of responsibility for specific emergency actions
- Identification of personnel, equipment, facilities, supplies, and other resources within the jurisdiction or by agreement with other jurisdictions
- Coordination of authority and activity among the agencies within the jurisdiction and other organizations

The EOP is the primary example used in this course; however, there are other plans to which these steps can apply.

Visual 23: Common EOP Sections

Basic Plan: Broad information relevant to whole plan, including policies, organization, and assignments

Functional Annexes: Individual sections focused on missions specific to a function

Supporting Annexes: Methods, procedures, and actions of critical operational functions

Threat/Hazard/Incident-Specific Annexes: Response strategies for specific situations

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The basic plan provides an overview of the jurisdiction's emergency management system, including its preparedness and response strategies.

Functional annexes are individual sections focused on missions (e.g., communications, damage assessment, private sector coordination). These annexes describe the organizations that support the function; their actions, roles, and responsibilities; and the resources, capabilities, and authorities that each organization brings to the response. Functional annexes describe how the jurisdiction manages the function before, during, and after the emergency.

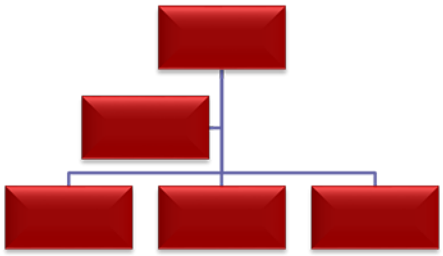
Support annexes identify agencies that play supporting roles during emergencies and describe or address the strategies that the supporting agencies implement. In this way, support annexes describe other mechanisms that private sector, nonprofit organizations, and government partners use to organize support. Support annexes describe essential supporting processes and considerations common to most incidents. For example, the National Response Framework support annexes include financial management, international coordination, public affairs, tribal relations, volunteer and donations management, and worker safety and health. A recovery annex could also reflect recovery support functions and address issues such as community planning and capacity building, economic recovery, health and social services, housing, infrastructure systems, and natural and cultural resources.

Threat- or hazard-specific annexes describe the policies, situation, Concept of Operations (CONOPS), and responsibilities for particular threats and hazards. They explain the procedures that are unique to a threat or hazard type. For example, the mutual aid/multi-jurisdictional coordination annex may describe how a jurisdiction obtains resources from neighboring jurisdictions. The pandemic annex may note that neighboring jurisdictions may not be able to share resources due to their own needs. This information should be included in the pandemic annex because it differs from the strategy outlined in the mutual aid annex. Strategies already outlined in a functional annex should not be repeated in a threat- or hazard-specific annex.

Visual 24: Basic Plan

Provides an overview of the emergency management and response program by:

- Documenting emergency response policies
- Describing the response organization
- Assigning tasks



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The basic plan section in each format type provides an overview of the jurisdiction's emergency management and response program by:

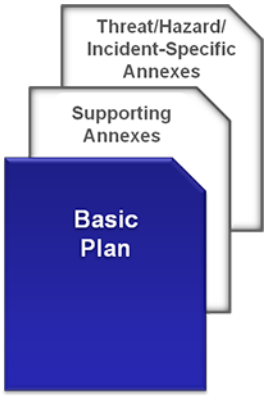
- Documenting emergency response policies
- Describing the response organization
- Assigning tasks

The basic plan guides the development of the supporting operational and function-based annexes of the EOP.

The organizational structure used for the basic plan also should carry over to the annexes.

Visual 25: Elements of the Basic Plan

- Introductory Material
- Purpose, Scope, Situation, Assumptions
- Concept of Operations (CONOPS)
- Organization, Assignment of Responsibilities



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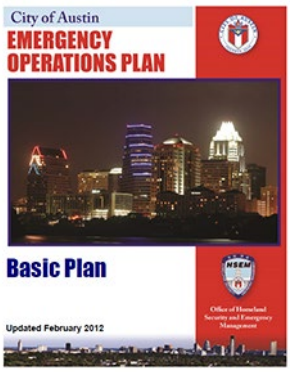
- Basic plan sections include Concept of Operations (CONOPS) Organization, Assignment of Responsibilities, Direction, Control, Coordination, Information Collection, Analysis, Dissemination, Communications, Administration, Finance, Logistics, Plan Development, Maintenance, Authorities, and References.
- An EOP is a public document, although some parts of the plan may contain sensitive information and may not be suitable for release to the public.
- Some states require a Comprehensive Emergency Management Plan (CEMP), which is similar. Some states have templates to be used in creating the plan.
- EOPs also must comply with the Americans with Disabilities Act.
- *Job Aid 12: Basic Plan Content Checklists* in your Resource Guide provides a series of checklists that may assist with more difficult sections of the basic plan.

Visual 26: The EOP…



- Describes how people and property will be protected
- Details who is responsible for conducting specific actions
- Identifies available resources
- Outlines how actions will be coordinated

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Traditionally, the EOP has been the focus of a jurisdiction's operational planning effort. EOPs help to define the scope of preparedness and emergency management activities necessary for that jurisdiction. This chapter provides examples for jurisdictions to use in developing or updating their EOPs. The structures and concepts it presents are based on an EOP that consists of a base plan supplemented by some number of annexes. The annexes typically provide details on specific functions, such as emergency sheltering or search and rescue, and may also address specific hazards, such as earthquakes, hazardous materials spills, and power failures. The EOP format is very flexible and works well for conventional and complex emergency operations.

Emergency management involves several kinds of plans, just as it involves several kinds of actions. While many jurisdictions consider the EOP the centerpiece of their planning effort, it is not the only plan that addresses emergency management functions.

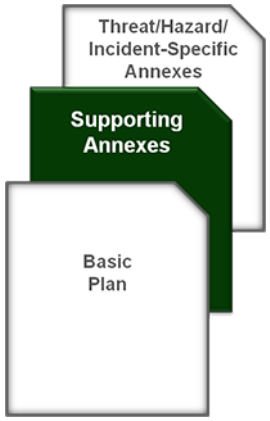
A jurisdiction's EOP is a document that:

- Identifies the organizations and individuals who are responsible for conducting specific actions during an emergency
- Explains the pertinent lines of authority and organizational relationships
- Provides a description on how activities are coordinated to unify response and recovery efforts
- Describes how people (including unaccompanied minors, individuals with disabilities, others with access and functional needs, and individuals with limited English proficiency) and property are protected

- Addresses the disproportionate impact of incidents on people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality
- Identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions
- Describes how resource requirements are coordinated with neighboring jurisdictions, private sector entities, and nonprofit organizations
- Complements and integrates with plans that address other mission areas

Visual 27: Supporting Annexes

- Add specific information and direction
- May include functional, support, emergency phase, or agency-focused annexes
- Focus on critical operational functions
- Indicate specific responsibilities, tasks, and operational actions related to a particular function



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Supporting annexes add specific information and direction to the EOP. They may include functional, support, emergency phase, or agency-focused annexes.

Focus on critical operational functions. It is important to identify the functions that are critical to successful emergency response. These core functions become the subjects of the separate annexes. Indicate specific responsibilities, tasks, and operational actions related to a particular function. While no single list of functions applies to all jurisdictions, the core functions warrant special attention because they may require specific actions during emergency response operations.

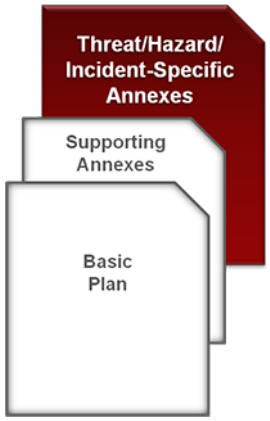
The following list of core functions is not comprehensive. Each jurisdiction must assess its own needs, and additional or different annexes should be prepared at the planning team's discretion.

- Direction, Control, and Coordination
- Information Collection, Analysis, and Dissemination
- Communications
- Transportation
- External Affairs/Emergency Public Information
- Population Protection
- Mass Care, Emergency Assistance, Housing, and Human Services
- Public Health and Medical Services
- Resource Management
- Continuity of Government/Operations
- Critical Infrastructure and Key Resources (CIKR) Restoration
- Damage Assessment

- Firefighting
- Logistics Management and Resource Support
- Search and Rescue
- Oil and Hazardous Materials Response
- Agriculture and Natural Resources
- Energy
- Public Safety and Security
- Long-Term Community Recovery
- Financial Management
- Mutual Aid/Multi-Jurisdictional Coordination
- Private Sector Coordination
- Volunteer and Donations Management
- Worker Safety and Health
- Prevention and Protection

Visual 28: Threat/Hazard/Incident-Specific Annexes

- Focus on special planning needs generated by a threat, hazard, or incident
- Address unique or specific:
  - Response details
  - Risk areas and evacuation routes
  - Provisions for emergency public information
  - Protective equipment for responders
- Include tabbed maps, charts, inventories, and other work aids



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Threat, hazard, or incident-specific annexes focus on special planning needs generated by individual threats/hazards. Threat/hazard- or incident-specific annexes usually:

- Contain unique and regulatory response details that apply to a single threat/hazard or type of incident
- Identify threat/hazard-specific risk areas and evacuation routes
- Specify provisions and protocols for warning the public and disseminating emergency public information
- Specify the types of protective equipment and detection devices for responders

Threat/hazard/incident-specific annexes follow the basic plan's content organization. They may include tabs that serve as work aids for items such as maps, charts, tables, checklists, resource inventories, and summaries of critical information.

Visual 29: Developing an Annex

- Focus on the special planning needs generated by the threat/hazard.
- Include unique and regulatory response details related to the threat/hazard.

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When developing a threat/hazard/incident-specific annex, focus on the special planning needs generated by the threat/hazard. Include unique and regulatory response details related to the threat/hazard.

Visual 30: Annex Organization

Follow the basic plan's content organization:

- Purpose, Scope, Situation Overview, and Planning Assumptions
- CONOPS
- Organization and Assignment of Responsibilities
- Direction, Control, and Coordination
- Information Collection, Analysis, and Dissemination
- Communications
- Administration, Finance, and Logistics
- Plan Development and Maintenance
- Authorities and References

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The organization of the annex should follow the organization used in the basic plan. For example, if a traditional functional format for the EOP is used, the following topics would be also included in the annex:

- Purpose, Scope, Situation Overview, and Planning Assumptions
- CONOPS
- Organization and Assignment of Responsibilities
- Direction, Control, and Coordination
- Information Collection, Analysis, and Dissemination
- Communications
- Administration, Finance, and Logistics
- Plan Development and Maintenance
- Authorities and References

Visual 31: Operations Information in an Annex

In the annex CONOPS section, provide threat/hazard-specific operations information, including:

- Assessment and control
- Unique prevention and protection actions
- Public warning
- Stabilization and recovery actions

Student Manual

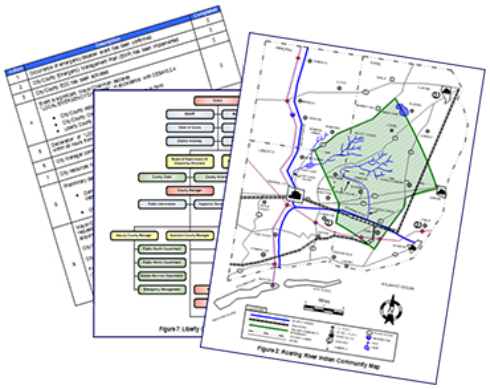
Operations information related to the threat/hazard is usually placed in the CONOPS section of the annex. Include the following types of information:

- Assessment and control of the threat/hazard
- Unique prevention and protection actions to address the hazard
- Public warning
- Stabilization and recovery actions

Visual 32: Implementing Instructions

Annexes may include implementing instructions, as attachments or references:

- SOPs/SOGs
- Maps
- Charts and tables
- Forms
- Checklists



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Each annex, as well as the basic plan, may use implementing instructions in the form of standard operating procedures (SOPs), standard operating guidelines (SOGs), maps, charts, tables, forms, and checklists. These items may be included as attachments or references.

The EOP planning team may use supporting documents, as needed, to clarify the contents of the plan or annex. For example, a winter storm annex may be made clearer by attaching maps marked with snow emergency routes. A flood annex might include designated shelters outside the floodplain.

Visual 33: Tips for Plan Development

- Consider multiple solutions.
- Address “What,” “Who,” “Where,” and “When" for each solution.
- Align procedures and resources to related capabilities identified in THIRA.
- Identify what information/intelligence participants need to perform their tasks.

Student Manual

Tips for plan development include the following:

- **Consider multiple solutions.** 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 up the planning process, but it will probably provide for an inadequate response, leading to more damaging effects on the affected population or environment.
- **Address “What,” “Who,” “Where,” and “When” for each solution.**
  - What is the action? What resources does the person/entity need in order to perform the action?
  - Who is responsible for the action?
  - Where are the potential impact areas, key facilities, resources, etc., located?
  - 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?
- **Align procedures and resources to related capabilities identified in THIRA.** Remember, emergency planning should be capabilities-based, and capability estimates are 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.
- **Identify what information and intelligence response participants need to perform their tasks.** Planners should identify the information and intelligence they will need and their deadline(s) for receiving it to drive decisions and trigger critical actions.

Visual 34: Enhancing Inclusiveness in EOPs

- Preparations for protecting people when a disaster or emergency strikes must account for all people.
- Planners must address the fact that people require different types of protection and assistance.

Children	Individuals with Disabilities or Access and Functional Needs	Household Pets and Service Animals
• Preparedness • Evacuation Support • Shelter Operations • Public Information and Outreach	• Preparedness • Evacuation Support • Shelter Operations • Public Information and Outreach	• Preparedness • Evacuation Support • Shelter Operations • Public Information and Outreach • Intake, Registration, and Record Keeping

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Preparations for protecting people when a disaster or emergency strikes must account for all people. In addition to dealing with the complexity of different threats and hazards and potential for shortfalls in response capabilities, planners must address the fact that people require different types of protection and assistance.

Appendix D of *CPG 101* provides many examples of access and functional needs. It reflects feedback received from whole community partners during the most recent revision of *CPG 101*, as well as the collective experience of the nation's emergency management community. Individuals with access and functional needs include, but are not limited to, the following:

- Caregivers
- Children in special education
- Children, infants, and unaccompanied minors
- Diverse racial and ethnic populations
- Elderly persons
- Families using supported decision-making or guardianship
- Homeless individuals
- Immigrants
- Incarcerated individuals, people in jails or prison, and people on parole

- Individuals with:
  - Mental health needs
  - Limited cultural and English proficiency
  - Household pets
  - Emotional support or therapy animals
  - Limited or no transportation resources or those who need public transportation to access essential services, commodities, and resources
  - Little or no trust in government
  - Special dietary concerns (e.g., life-threatening food allergies, fed by tube)
- Individuals requiring:
  - Durable medical and backup power suppliers
  - Power for ventilators or other life-sustaining/assistive technology

Visual 35: Activity 4.5 – Annex Development

Purpose: The purpose of this activity is to understand what is different in an annex versus a basic EOP and be able to identify threat/hazard/incident-specific annexes.

Instructions:

Working in your table group:

1. Identify your assigned area.
    a. Natural threat/hazard: winter storm, earthquake, or wildfire (select one)
    b. Natural threat/hazard: public health threat (pandemic flu)
    c. Technological threat/hazard: hazardous materials release (transportation)
    d. Human-caused threat/hazard: terrorist act against a public venue
    e. Human-caused threat/hazard: cyberattack on government systems
2. Briefly review the Liberty County EOP in the ESSD (Annex 8.0).
3. Develop an outline of the information and procedures you would include in your annex in the provided outline space below.
4. Answer the following questions:
    a. Who would you ask to assist with developing and writing this annex?
    b. Who would review and approve the annex?
5. Select a spokesperson and be prepared to share your answers with the class in 30 min.

Student Manual

Scenario: You are part of a planning team that is updating the EOP for Liberty County. As part of that effort, the threat/hazard/incident-specific annexes will be added. Your working group will be assigned one of those threats/hazards. As a team, **develop an outline** of the information and procedures you would include in your annex.

- Exercise Simulation System Document (ESSD) available at training.fema.gov/programs/essd/curriculum/1.html
- The Liberty County EOP is Annex 8.0

Working in your table group:

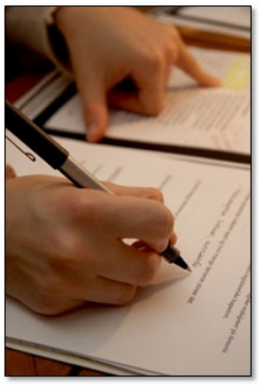
1. Identify your assigned area.
    a. Natural threat/hazard: winter storm, earthquake, or wildfire (select one)
    b. Natural threat/hazard: public health threat (pandemic flu)
    c. Technological threat/hazard: hazardous materials release (transportation)
    d. Human-caused threat/hazard: terrorist act against a public venue

e. Human-caused threat/hazard: cyberattack on government systems

2. Briefly review the Liberty County EOP in the ESSD (Annex 8.0).
3. Develop an outline of the information and procedures you would include in your annex in the provided outline space below.
4. Answer the following questions:
   a. Who would you ask to assist with developing and writing this annex?
   b. Who would review and approve the annex?
5. Select a spokesperson and be prepared to share your answers with the class in 30 min.

Visual 36: Step 5: Prepare and Review the Plan

- Write the plan.
- Review the plan.
- Approve and disseminate the plan.



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Plan preparation, review, and approval involves:

- Writing and validating the plan that was conceptualized in Step 4
- Reviewing the plan
- Approving and disseminating the plan

Visual 37: Writing Process

- Develop a plan outline.
- Develop the content for the draft plan and annexes.
- Allow for review by all who have plan responsibilities.
- Develop the final draft.

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The outline and rough draft of an EOP are based on the research and activities undertaken to develop viable strategies in the previous steps.

Develop the content of the draft basic plan and supporting and threat/hazard/incident-specific annexes as part of the outline and draft process.

Commit to a cycle of careful reviews to refine the plan and develop the final draft. Include all organizations with plan responsibilities and other stakeholders in the review process.

Visual 38: Tips for Writing the Plan

- Keep the language simple and clear.
- Summarize important information with visual aids.
- Avoid jargon and minimize acronyms.
- Use short sentences and active voice.
- Provide detail without speculation.
- Format the plan for ease of use.
- Focus on providing mission guidance.
- Develop accessible tools and documents.

Student Manual

Follow these simple rules to write plans and procedures that readers and users can easily access and effectively use:

- 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 active, not passive, voice.
- Provide enough detail to convey an easily understood plan that is actionable, taking into consideration the target audience and the amount of certainty about the situation.
- Format the plan and organize its contents so that readers can quickly find solutions and options.
- Focus on providing mission guidance (i.e., insight into intent and vision) rather than discussing policy and regulations, which can be documented in detail in SOPs/SOGs.
- Develop accessible tools and documents (e.g., plans, fact sheets, checklists) that users can easily adapt or convert into alternate formats.

Active Versus Passive Voice Sentences

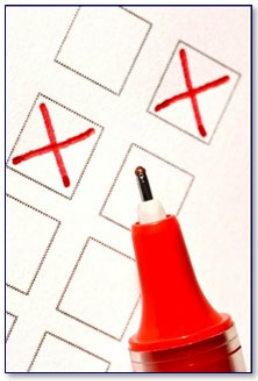
- Passive voice sentences are not always clear because they de-emphasize who or what is acting.
- The action happens to the subject. For example, “The EOC is then activated.”
- Active voice sentences are direct because they indicate who or what is doing the action. The subject performs the action.
- For example, “The emergency manager then activates the EOC.”

Use active voice sentences whenever possible in plans.

Visual 39: Review the Plan

Review the plan. The plan must be:

- Adequate
- Feasible
- Acceptable
- Complete
- Compliant



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- Adequacy
  - The scope and concept of the plan's response or recovery operations identify essential tasks.
  - The plan describes measures that accomplish the assigned mission and comply with pertinent guidance.
  - The plan's assumptions are valid.
- Feasibility
  - The organization can accomplish the assigned mission and critical tasks with available resources within the time. contemplated by the plan.
  - The organization allocates 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, local, tribal, territorial, and insular area regional or federal assistance agreements.
- Acceptability
  - Meets the requirements driven by a threat or incident
  - Meets decision maker intent
  - Adheres to cost and time constraints
  - Is consistent with the law
- Completeness
  - 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, diverse racial and ethnic populations, and historically underserved communities
  - Provides a complete picture of the sequence and scope of the planned response operation (i.e., what should happen, when, and at whose direction)
  - Includes time estimates for achieving objectives
  - Identifies success criteria and a desired end state
- Compliance
  - The plan should be consistent with guidance and doctrine, which provide a baseline that facilitates both planning and execution.

Real-world events may force planners to review and revise plans quickly. Certain incidents, such as the COVID-19 pandemic, which impacted communities throughout the country, had such far-reaching and cascading effects that they warranted the review of plans well beyond those focused on public health emergencies. These impacts caused planners to account for public health measures as they revised plans for a variety of threats and hazards. Based on this experience, planning teams may wish to consider establishing a mechanism for the accelerated review and revision of plans when confronting hazards with far reaching effects.

Refer to *Job Aid 13* in your Resource Guide for a sample *Plan Review Rating Form.*

Visual 40: Approve and Disseminate the Plan

- Obtain approval from appropriate senior or elected officials.
- Promulgate the plan.
- Post plan as required by law.
- Ensure all appropriate stakeholders have a copy of the plan.

Discuss: Who in your community has authority to approve EOPs?

Student Manual

Once the plan has been validated, the planner should present it to the appropriate elected officials and obtain official approval to promulgate the plan.

Promulgation officially announces a plan. Promulgation should comply with pertinent statutes, laws, or ordinances. Obtaining the senior official's support and approval is vital to gaining acceptance for the plan. Promulgation also documents who has the authority to make changes 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 it.

Sunshine laws may require that the jurisdiction post a copy of the plan on its website or place the plan in some other publicly accessible location. The plan should be available in alternate formats for wide accessibility and to remain compliant with relevant laws and policies (e.g., American with Disabilities Act).

Visual 41: Step 6: Implement and Maintain the Plan

- Train on the plan.
- Exercise the plan.
- Review, revise, and maintain the plan.

Student Manual

Step 6 of the planning process is plan implementation and maintenance. The tasks involved in this final step are:

Train on the plan

After developing a plan, organizations disseminate it and train their personnel on its content. Training equips individuals with the knowledge, skills, and abilities they need to perform their respective tasks as identified in the plan. Personnel should also receive training on organization-specific procedures necessary to implement the plan.

Additional training for relevant organizations helps implement the EOP. FEMA's National Training and Education System consists of a nationwide network of training providers who help build and sustain capabilities across multiple professional disciplines in emergency management, including planning. Through specialized training, emergency management personnel achieve critical skills and measurable capabilities, enabling jurisdictions and organizations to effectively plan for and have confidence in their personnel responding to emergencies, as well as those from other entities providing mutual assistance.

Finally, an informed public is also key to the successful implementation of the EOP. Public outreach and training can raise awareness within communities about important topics such as emergency information protocols, shelters, and potential evacuation processes.

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.

Exercising helps a planning team validate the EOP or supporting guidance to determine if the plan is adequate, feasible, acceptable, complete, and compliant. FEMA's Homeland Security Exercise and Evaluation Program (HSEEP) provides guiding principles for exercise programs and a consistent approach to exercise program management, design and development, conduct, evaluation, and improvement planning.

The HSEEP includes an integrated preparedness cycle that connects the jurisdiction's planning, organizing, equipping, training, exercising, evaluating, and improving through an Integrated Preparedness Planning Workshop and resulting Integrated Preparedness Plan that establishes multiyear preparedness priorities. Planners should consider using the results of the risk analysis conducted in Step 2 to guide preparedness priorities and activities and determine exercise needs. Planners should also consider how each element of the Integrated Preparedness Cycle—such as corrective actions, changes in the organization/jurisdiction structure and available equipment, and training needed to execute the EOP—relates to the EOP.

Exercises help responders and other response and recovery partners understand the plan, the responsibilities and authorities of various players, and the relationships among those players. Exercising also supports the premise that communities train as they expect to respond. Improvement planning helps a planning team identify specific areas for improvement and corrective actions for the EOP.

Improvement planning is based on collecting and analyzing exercise after-action reports, post-incident critiques, self-assessments, audits, administrative reviews, or lessons learned. Through improvement planning, jurisdictions and organizations document areas for improvement and track implementation of corrective actions to improve plans, build and sustain capabilities, and improve preparedness. Following exercises and real-world events, the EOP planning team should discuss findings and consider whether and how to improve the EOP or supporting guidance.

For EOPs, corrective actions may involve revising planning assumptions and operational concepts, changing organizational tasks or modifying organizational implementing instructions (i.e., the SOPs/SOGs). Corrective actions may also involve providing refresher training. Ultimately, the planning team should assign responsibility for taking the corrective actions.

Review, revise, and maintain the plan

This step completes this iteration of the planning process. It adds information gained through exercises and actual incidents to the research collected in Step 2 and starts the planning process over again. Plans should change and

improve as jurisdictions learn lessons, obtain new information and insights, and update priorities.

Planning teams should establish a process to review and revise the plan on a recurring basis. Some jurisdictions have found it useful to review and revise portions of their EOPs every month, while others accomplish their reviews annually.

Teams should 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 time the plan is used
- Major exercises
- Changes in the jurisdiction's demographics or hazard or threat profile
- Changes in the jurisdiction's tolerance of identified risks
- The enactment of new or amended laws or ordinances

Visual 42: Tips for Plan Implementation

- Use training events, exercises, and real-world incidents to gauge success.
- Use a remedial action process and tracking mechanism to correct problems.
- Use lessons learned to update the EOP and THIRA.
- Use other communities' lessons and practices to improve your plan.

Student Manual

When implementing the plan:

- Use training events, exercises, and real-world incidents to determine whether the plan led to a successful response.
- Use a remedial action process and tracking mechanism to correct any problems that are identified.
- Use lessons learned to update the EOP and THIRA.
- Be aware of lessons and practices from other communities and build on them to improve your own plan.

FEMA Training Resources to Support EOP Development and Maintenance

FEMA supports a nationwide emergency management training and education network. The network includes the Center for Domestic Preparedness, the Emergency Management Institute, the National Fire Academy, the Center for Homeland Defense and Security, the National Domestic Preparedness Consortium, the Rural Domestic Preparedness Consortium, the FEMA Continuing Training Grants program partners, and the FEMA Higher Education Program. Together, these organizations offer more than 600 courses covering a wide range of topics and skill levels. Instruction is delivered through on-campus courses, mobile delivery, and virtual training, such as independent study courses and webinars.

The following FEMA independent study courses are recommended for planning team members:

- *IS-130: Exercise Evaluation and Improvement Planning*
- *IS-235: Emergency Planning*
- *IS-366: Planning for the Needs of Children in Disasters*

- *IS-368: Including People with Disabilities and Others with Access and Functional Needs in Disaster Operations*
- *IS-1300: Introduction to Continuity of Operations*

Visual 43: Activity 4.6 – Your EOP

Purpose: This activity will allow students to identify individual action steps relating to their own emergency operations planning efforts.

Instructions:

Working Individually:

1. Complete Activity 4.6 Worksheet in the Resource Guide.
2. Be prepared to share your answers with the class.

Student Manual

Working Individually:

1. Complete Activity 4.6 Worksheet in the Resource Guide.
2. Be prepared to share your answers with the class.

Visual 44: Unit Summary

CPG 101 provides guidance for emergency planning.

Student Manual

The planning process described in *CPG 101* includes the following steps:

1. Form a Collaborative Planning Team
2. Understand the Situation
3. Determine Goals and Objectives
4. Develop the Plan
5. Prepare and Review the Plan
6. Implement and Maintain the Plan

The outputs of THIRA can be used at each step in this process to enhance the planning process and the planning outcomes.

Refer to *Job Aid 14: Emergency Planning Process* in your Resource Guide.

Visual 45: Unit 4 Q & A

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Unit 5: Emergency Operations Planning Activity

Visual 1: Unit 5 Overview

Unit 5: Emergency Operations Planning Activity

Student Manual

Unit 5, Emergency Operations Planning Activity, provides an opportunity to apply concepts learned in earlier units. This unit should take approximately 3 hr and 5 min to complete.

Visual 2: Unit Objective

After completing this unit, you will be able to apply the emergency planning principles and process in evaluating an emergency operations plan. You will also be able to:

- Analyze the effectiveness of an emergency operations plan in addressing the needs of the whole community and identify strategies to improve the plan.

Student Manual

Review the unit objective.

Visual 3: Activity 5.1 – Whole Community Planning – Part 1

Purpose: Apply the emergency planning principles and process in evaluating the effectiveness of an emergency operations plan in addressing the needs of the whole community. Identify strategies to improve the plan.

Scenario: You are part of a planning team whose goal is to update the Liberty County Emergency Operations Plan and related planning materials (e.g., threat/hazard assessments, community profile).

Your team will serve as a focus group for an assigned community segment. You will examine the materials from the perspective of your assigned community segment and provide suggestions on how to better meet their needs in the updated plan.

More information is provided in your Student Manual.

Student Manual

Purpose: Apply the emergency planning principles and process in evaluating the effectiveness of an emergency operations plan in addressing the needs of the whole community. Identify strategies to improve the plan.

Part 1 Instructions:

1. Review the scenario.
2. Your team will be assigned a community segment.
3. As a team, complete the materials review and discussion as described in the worksheet for your assigned community segment.

Scenario: You are part of a planning team whose goal is to update the Liberty County Emergency Operations Plan and related planning materials (e.g., threat/hazard assessments, community profile).

Your team will serve as a focus group for an assigned community segment. You will examine the materials in the online Exercise Simulation Systems Document (ESSD) from the perspective of your assigned community segment and provide suggestions on how to better meet their needs in the updated plan.

Questions:

1. Who would you include in the planning team?

2. What steps will you recommend to ensure that this group is fully engaged in the planning process and that the end product (the plan) will address their needs?
3. As a group, discuss the planning considerations for your community segment. What are key issues that should be addressed for this group?
4. Review the current Liberty County materials, and answer the following questions:
   - What must the revised plan include?
   - What planning materials will you need to ensure the plan will fully represent the community segment?
   - What should be added or changed to better represent this group? (Be specific.)

Community Segments

a. Children of all ages
b. People in congregate living arrangements (e.g., dormitories, group homes, long-term care facilities, prisons, and homeless shelters)
c. Undocumented immigrants
d. Individuals with disabilities and other access and functional needs
e. People with limited English proficiency

Visual 4: Activity 5.1 – Whole Community Planning – Part 2

Team Reports:

- What is your community segment?
- Who will be on the planning team?
- How will you ensure engagement?
- What key issues should be addressed for your community segment?
- What must a revised plan include?
- What materials will you need?
- What needs to be changed?

Student Manual

Part 2 Instructions:

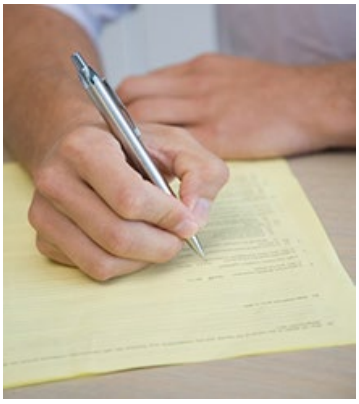
Report your group's findings, including the following:

- What is your community segment?
- Who will be on the planning team?
- How will you ensure engagement?
- What key issues should be addressed for your community segment?
- What must a revised plan include?
- What materials will you need?
- What needs to be changed?

Unit 6: Course Summary and Post-Assessment

Visual 1: Unit 6 Overview

Unit 6: Course Summary and Post-Assessment



Visual 2: Course Summary (1 of 3)

- A key principle of emergency planning is the use of a logical and analytical problem-solving process to address the complexity and uncertainty of potential threats and hazards.
- *CPG 101* provides such a process.

Student Manual

This unit covers the six steps in the emergency planning process, as described in *CPG 101*:

Step 1: Form a Collaborative Planning Team

- Identify core planning team
- Engage the whole community in planning

Step 2: Understand the Situation

- Understand risk
- Use the results of risk analysis

Step 3: Determine Goals and Objectives

- Determine operational priorities
- Set goals and objectives

Step 4: Develop the Plan

- Develop and analyze courses of action
- Identify resources
- Identify information and intelligence needs

Step 5: Prepare and Review the Plan

- Write the plan

- Review the plan
- Approve and disseminate the plan

Step 6: Implement and Maintain the Plan

- Train on the plan
- Exercise the plan
- Review, revise and maintain the plan

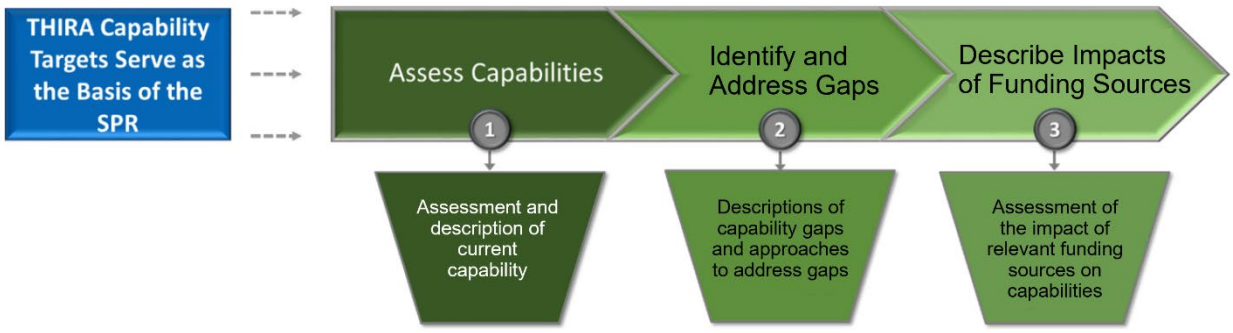
Visual 3: Course Summary (2 of 3)

- *CPG 201* provides a process for identifying threats and hazards and assessing risks.
- These processes are crucial to ensure preparedness and manage risks.
- Community preparedness depends on the development of emergency operations plans that represent the needs of the whole community.

THIRA Process

Visual 4: Course Summary (3 of 3)

Stakeholder Preparedness Review (SPR) Process



Student Manual

Do you have any questions about the concepts covered in this course?

Visual 5: Review Course Expectations

- Did this course meet your expectations?
- Do you have any questions regarding this course?

Student Manual

Recall the expectations your expressed on Day 1. Have those expectations been met?

Visual 6: Activity 6.1 – Summary Activity

Purpose: The purpose of this activity is to provide students with the opportunity to reflect on what they have learned in this course and how they can apply it in their daily work.

Instructions:

Working Individually:

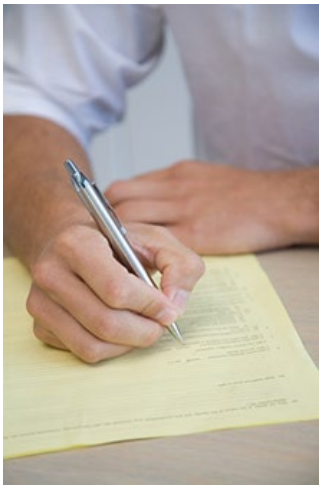
1. Take a few minutes and consider your activity worksheets in your Resource Guide, the answers you provided, and learning you participated in.
2. Review the Action Plan Job Aid in the Resource Guide.
3. Share:
   - One interesting skill or knowledge you learned in this class.
   - One thing you are going to do differently after learning information from this course.
   - One "To-Do" you identified for when you return to your jurisdiction or office.

Student Manual

Working Individually:

1. Take a few minutes and consider your Resource Guide, the answers you provided, and learning you participated in.
2. Review the Action Plan Job Aid in your Resource Guide.
3. Share:
   - One interesting skill or knowledge you learned in this class.
   - One thing you are going to do differently after learning information from this course.
   - One "To-Do" you identified for when you return to your jurisdiction or office.

Visual 7: Post-Assessment



Instructions:

1. Take a few minutes to review the course contents in your Student Manual and Resource Guide.
2. Next, complete the Post-Assessment.
3. Be prepared to submit your Post-Assessment in 30 min.

Student Manual

The instructor will distribute the post-assessment.

Visual 8: Feedback

- Any other comments or questions?
- Please complete the course evaluation form.
- Your comments are important!
- Thank you for your participation.

Student Manual

Congratulations! You have completed the course *Planning: Emergency Operations*. Thank you for your participation and for your contributions to the discussions.

We value your input. Please provide your feedback on the provided form.