

4 Training and Exercises

Unit Objectives

After the damage assessment plan is developed, it will need to be exercised for verification that it works and so all who perform damage assessment will be familiar with the processes, methods, forms, and responsibilities in the plan. If the plan sits on the shelf and no one uses it until an actual hazard event, chances are high that no one will remember what the plan contains or understand how to work together effectively during the response.

By the end of this unit, you will be able to:

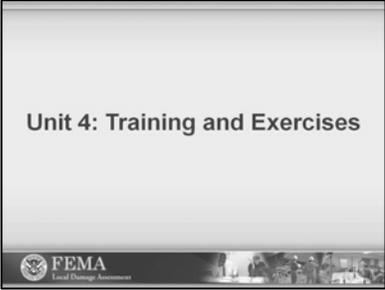
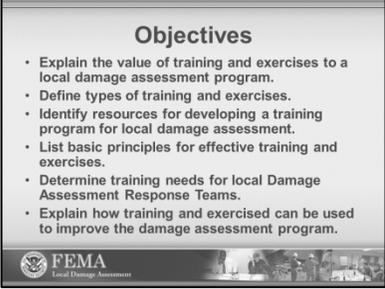
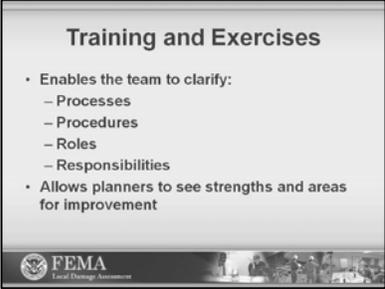
- Explain the value of training and exercises to a local damage assessment program.
- Define types of training and exercises.
- Identify resources for developing a training program for local damage assessment.
- List basic principles for effective training and exercises.
- Determine training needs for local Damage Assessment Response Teams.
- Explain how training and exercises can be used to improve the damage assessment program.

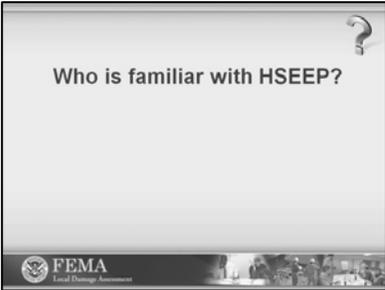
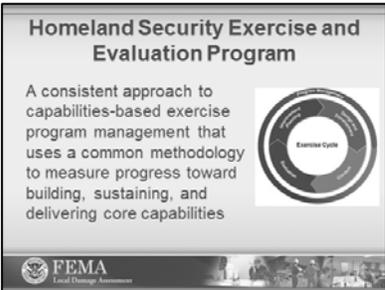
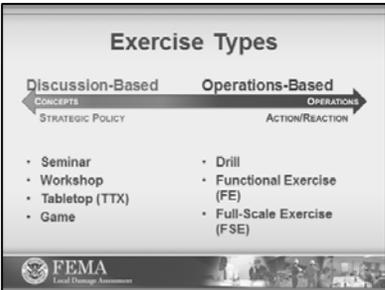
Content Outline

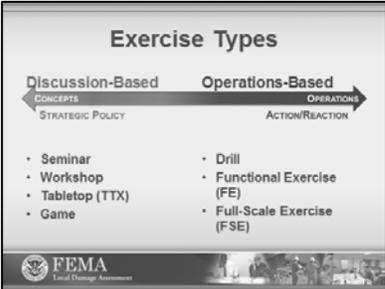
Unit Topics	Estimated Time
Unit Overview	5 Minutes
Types of Training and Exercises	20 Minutes
Basic Principles for Effective Training and Exercises*	20 Minutes
Activity: Hazard Event Trainings	20 Minutes
Using Training and Exercises to Improve the Program*	5 Minutes
Activity: After-Action Report	15 Minutes
Unit Summary	5 Minutes
TOTAL	1 Hour, 30 Minutes

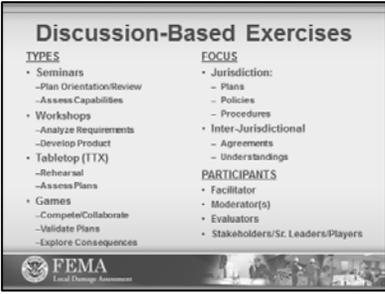
**The time estimate for this topic does not include the activity, which is listed separately.*

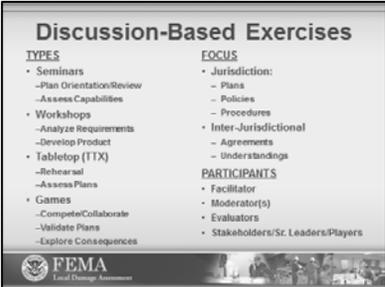
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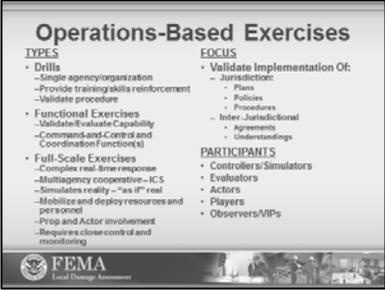
Notes	Content
<p style="text-align: center;">Visual 4-1</p> 	<p>Unit Overview</p> <p>After the damage assessment plan is developed, it will need to be exercised for verification that it works and so all who perform damage assessment will be familiar with the processes, methods, forms, and responsibilities in the plan. If the plan sits on the shelf and no one uses it until an actual hazard event, chances are high that no one will remember what the plan contains or understand how to work together effectively during the response.</p>
<p style="text-align: center;">Visual 4-2</p> 	<p>Unit Objectives</p> <p>This unit will enable you to:</p> <ul style="list-style-type: none"> • Explain the value of training and exercises to a local damage assessment program. • Define types of training and exercises. • Identify resources for developing a training program for local damage assessment. • List basic principles for effective training and exercises. • Determine training needs for local Damage Assessment Response Teams. • Explain how training and exercised can be used to improve the damage assessment program.
<p style="text-align: center;">Visual 4-3</p> 	<p>Types of Training and Exercises</p> <p>Training and exercises allow the Damage Assessment Response Team to clarify the processes, procedures, roles, and responsibilities that will be required of them following a hazard. Training and exercises also help team members develop their individual performance while learning to work together as part of a multi-agency (and perhaps multi-jurisdictional) team.</p> <p>The feedback and observations gleaned during the training and exercises will allow planners to see strengths of and areas for improvement to the program. This information can be used to find resource gaps and to improve the program. In addition to practicing processes, procedures, roles, and responsibilities, training provides occasion for team building which enhances inter- and intra-agency coordination.</p>

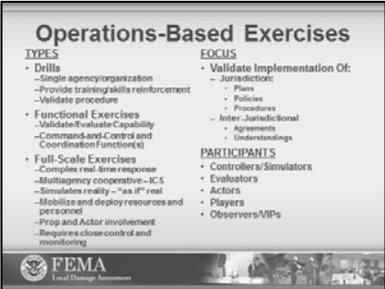
Notes	Content
<p style="text-align: center;">Visual 4-4</p> 	<p>Who is familiar with the Homeland Security Exercise and Evaluation Program (HSEEP)?</p>
	<p>HSEEP Overview</p>
<p style="text-align: center;">Visual 4-5</p> 	<p>HSEEP is a consistent approach to capabilities-based exercise program management that uses a common methodology for designing, developing, conducting, and evaluating exercises to measure progress toward building, sustaining, and delivering core capabilities. The program is designed to encourage the use of national best practices and is adaptable to the needs of each jurisdiction regardless of size.</p> <p>As a key component of national preparedness—exercises provide elected and appointed officials and stakeholders from across the Whole Community with the opportunity to shape planning, assess and validate capabilities, and address areas for improvement.</p>
<p style="text-align: center;">Visual 4-6</p> 	<p>Exercise Types</p> <p>The exercise type is selected based on the purpose of the exercise. If the intent is to review and discuss a new policy, plan, or set of procedures, a discussion-based exercise may be appropriate. If the intent is to assess the responders' knowledge, skills, and abilities in implementing a plan, policy, or set of procedures, an FE or FSE may be appropriate.</p> <p>Exercise planners select the exercise type that is appropriate to the capabilities and risks that will be the focus of the exercise. A comprehensive, integrated exercise program will use a progression of exercise types chosen so that when done in series they address program priorities by assessing the full range of preparedness activities for each mission area—from underlying procedural concepts through full mobilization of stakeholder organizations.</p>

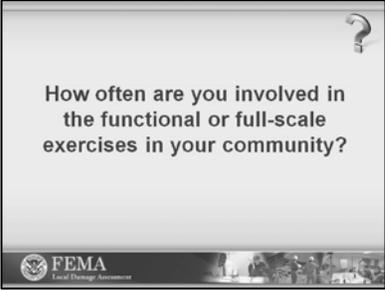
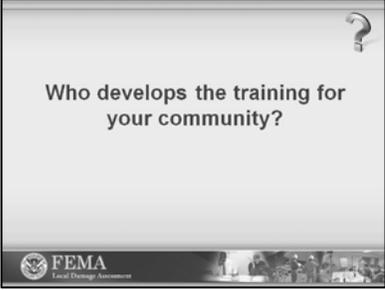
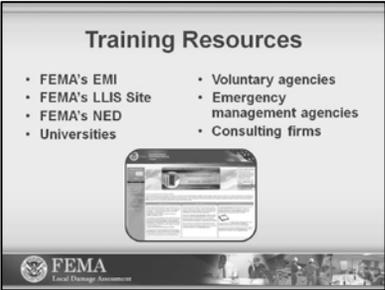
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<p style="text-align: center;">Visual 4-6 (Continued)</p>  <p>The diagram, titled "Exercise Types", illustrates a spectrum of exercises. On the left, under "Discussion-Based", are "CONCEPTS" and "STRATEGIC POLICY". On the right, under "Operations-Based", are "OPERATIONS" and "ACTION/REACTION". A double-headed arrow connects the two sides. Below the spectrum, two columns list activities: Discussion-Based includes Seminar, Workshop, Tabletop (TTX), and Game; Operations-Based includes Drill, Functional Exercise (FE), and Full-Scale Exercise (FSE). The FEMA logo is at the bottom left.</p>	<p>Discussion-based exercises focus on strategic, policy-oriented issues and include seminars, workshops, tabletop exercises (TTXs), and games. These types of exercises are used to familiarize players with current plans, policies, agreements, and procedures or to develop new plans, policies, agreements, and procedures. Facilitators/presenters usually lead the discussion, and are critical for keeping participants on track toward meeting exercise objectives.</p> <p>Operations-based exercises are characterized by actual reaction to an exercise scenario designed to simulate a real-world event and may involve actual mobilization of personnel and resources. Operations-based exercises include drills, functional exercises (FEs), and full-scale exercises (FSEs). These are used to validate functional response actions where plans, policies, agreements, and procedures are implemented “as if” responding to actual incident. They are used to validate appropriateness of player actions based on assigned roles and responsibilities and are used to identify resource gaps across the scope of response—including the policy and planning basis that sets forth standard operating procedures followed during response activities.</p> <p>As you may expect, due to their scope and complexity, the level of support and time needed to plan, design, develop, and conduct operations-based exercises is considerably greater than those required for discussion-based exercises.</p>

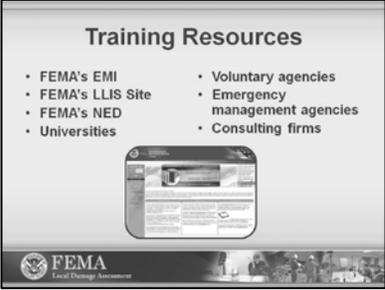
Notes	Content
<p style="text-align: center;">Visual 4-7</p> 	<p>Discussion-Based Exercises</p> <p>The first level of exercises is discussion-based exercises.</p> <p>Discussion-based exercises include seminars, workshops, tabletop exercises (TTXs), and games. These types of exercises can be used to familiarize players with current plans, policies, agreements, and procedures or to develop new plans, policies, agreements, and procedures. Discussion-based exercises focus on strategic, policy-oriented issues.</p> <p>Seminars generally orient participants to, or provide an overview of, authorities, strategies, plans, policies, procedures, protocols, resources, concepts, and ideas. As a discussion-based exercise, seminars can be valuable for entities that are developing or making major changes to existing plans or procedures. Seminars can be similarly helpful when attempting to gain awareness of, or assess, the capabilities of interagency or inter-jurisdictional operations.</p> <p>Similar to seminars, workshops differ in two important aspects: participant interaction is increased, and the focus is placed on achieving or building a product. Effective workshops entail the broadest attendance by relevant stakeholders. Products include new Standard Operating Procedures (SOPs), Emergency Operations Plans, Continuity of Operations Plans, and Mutual Aid Agreements. The workshop format is open and adaptable to different purposes. They can be done in a tabletop format with scenario and presentation visuals but be designed to have players actually develop a procedure or procedural step, or design a plan or plan element. While they can be conducted in many different ways, to be effective, workshops should focus on a specific issue, focused objective, product, or goal that is clearly defined.</p>

Notes	Content
<p style="text-align: center;">Visual 4-7 (Continued)</p> 	<p>Tabletop exercises which are commonly referred to by their acronym—TTXs—are aimed at facilitating conceptual understanding, identifying strengths and areas for improvement, and/or achieving changes in perceptions. Players are encouraged to discuss issues in depth, collaboratively examining areas of concern and solving problems. The effectiveness of a TTX is derived from the energetic involvement of participants and their assessment of recommended revisions to current policies, procedures, and plans; therefore facilitation is critical to keeping participants focused on exercise objectives. They come in a variety of <i>flavors</i> that fall into two types—the traditional basic or advanced TTX. Basically, an advanced TTX provides more complex exercise play that can combine certain disciplines, with small teams or task-level or functional area players working on games in coordination with senior-level players using a scenario that improves or moves forward over time in a series of moves over several modules. The idea is to use TTXs as a way to look at traditional functional and task-level policies and procedures, and especially where these involve coordination across multiple jurisdictions or organizations in order to identify potential improvements.</p> <p>A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedures designed to depict an actual or hypothetical situation. Depending on the game’s design, the consequences of player actions can be either pre-scripted or decided dynamically. Identifying critical decision-making points is a major factor in the success of games because players make their evaluated moves at these crucial points.</p>

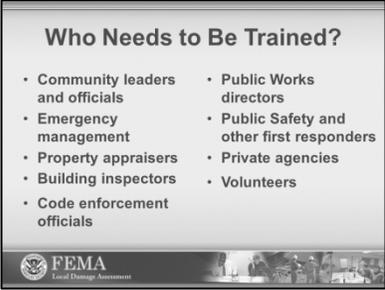
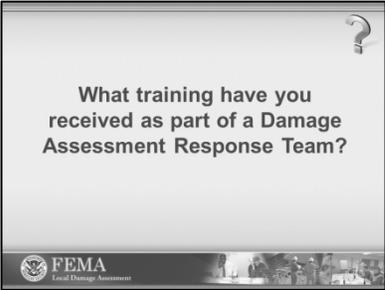
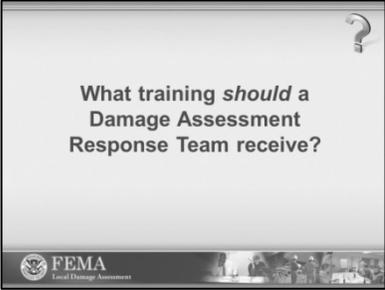
Notes	Content
<p style="text-align: center;">Visual 4-8</p>  <p>The infographic titled "Operations-Based Exercises" is divided into three main sections: TYPES, FOCUS, and PARTICIPANTS. Under TYPES, it lists Drills, Functional Exercises, and Full-Scale Exercises with their respective characteristics. FOCUS lists the implementation of Jurisdiction, Plans, Policies, Procedures, Inter-Jurisdictional Agreements, and Understandings. PARTICIPANTS lists Controllers/Simulators, Evaluators, Actors, Players, and Observers/VIPs. The FEMA logo is at the bottom left.</p>	<p style="text-align: center;">Operations-Based Exercises</p> <p>Operations-based exercises are more complex and include <i>drills</i>, <i>functional exercises (FEs)</i>, and <i>full-scale exercises (FSEs)</i>. These exercises are used to validate plans, policies, agreements, and procedures; clarify roles and responsibilities; and identify resource gaps. Operations-based exercises are characterized by actual <i>implementation of response activities</i> in reaction to an exercise scenario.</p> <p>A drill is a coordinated, supervised activity usually employed to validate a specific function or capability in a single agency or organization. Drills are commonly used to provide training on tasks specific to new equipment or procedures, to introduce or validate procedures, or to practice and maintain current skills. Drills can also be used to determine if plans can be executed as designed, to assess whether more training is required, or to reinforce best practices. During drills, the command and control or coordination of agency or organizational elements are simulated or not in play.</p> <p>A drill is useful as a stand-alone tool when implementing the use of new equipment or procedures within a single agency or organization, but a series of drills can also be used to prepare several agencies and organizations to collaborate in a Full-Scale Exercise or FSE.</p>

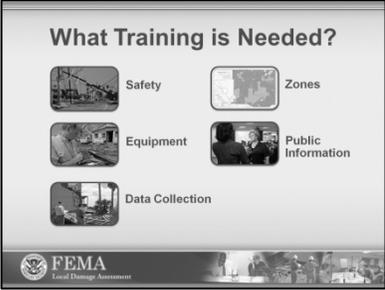
Notes	Content
<p style="text-align: center;">Visual 4-8 (Continued)</p>  <p>The infographic titled "Operations-Based Exercises" is divided into three main sections: TYPES, FOCUS, and PARTICIPANTS. The TYPES section lists Drills, Functional Exercises, and Full-Scale Exercises with their respective characteristics. The FOCUS section details the validation of implementation of jurisdiction, plans, policies, procedures, inter-jurisdictional agreements, and understandings. The PARTICIPANTS section lists Controllers/Simulators, Evaluators, Actors, Players, and Observers/VIPs. The FEMA logo is visible at the bottom left of the infographic.</p>	<p>Functional Exercises or FEs are traditionally used to evaluation coordination of management-level command and control functions and are designed to validate and evaluate capabilities, multiple functions and/or sub-functions, or interdependent groups of functions. As they are traditionally used, FEs focus on exercising plans, policies, procedures, and staff members involved in management, direction, command, and control branches of the Incident Command System (ICS) and Unified Command, or multiagency coordination centers (e.g., Emergency Operations Centers [EOCs]) where movement of personnel and equipment and task-level activities are usually simulated. FSEs are typically the most complex and resource-intensive type of exercise and include command-and-control, functional, and task-level components. They are conducted in a real-time, stressful environment intended to mirror a real incident where many activities occur simultaneously throughout the duration of the exercise. In an FSE, events are projected through an exercise scenario with event updates that drive activity at the operational level. They involve multiple agencies, organizations, and jurisdictions and validate many facets of preparedness operating under the Incident Command System (ICS) and Unified Command, or multiagency coordination centers (e.g., Emergency Operations Centers [EOCs]). Personnel and resources may be mobilized and deployed to the scene where actions would be conducted as if a real incident had occurred. The FSE simulates reality by presenting complex and realistic problems that require critical thinking, rapid problem-solving, and effective responses by trained personnel. The level of support needed to conduct an FSE is greater than that needed for other types of exercises. Safety issues, particularly regarding the use of props and special effects, must be monitored and the exercise site or venue is usually large, therefore site logistics require careful planning and close monitoring.</p> <p>Not every exercise you can do will neatly fit into these seven exercise types. This is especially true as you move towards the use of games as operational exercises that may have elements of one or more exercise types.</p>

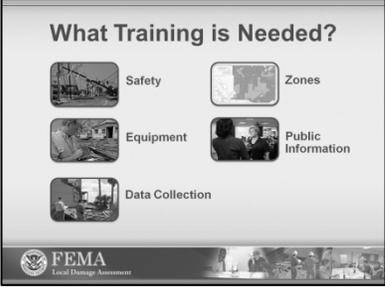
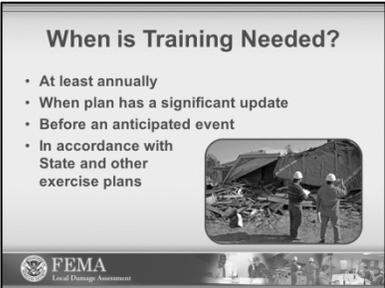
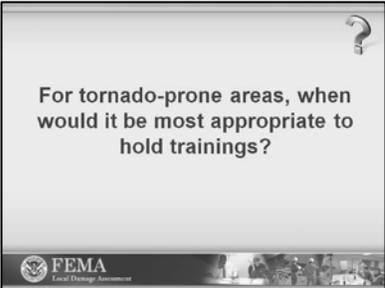
Notes	Content
<p>Visual 4-9</p> 	<p>How often are you involved in the functional or full-scale exercises in your community?</p>
<p>Visual 4-10</p> 	<p>Who develops the training for your community?</p>
<p>Visual 4-11</p> 	<p>Training Resources</p> <p>Although the most effective training experiences you can provide are those that consider the community's specific hazards and vulnerabilities, it may not be necessary to develop all-new training. When determining that new, community-specific training is necessary, you don't have to create it alone.</p> <p>There are several potential resources available for training.</p> <p>EMI Training Opportunities</p> <p>The following courses, available from EMI, are recommended for those involved in developing exercises:</p> <ul style="list-style-type: none"> • IS-0120a, <i>An Introduction to Exercises</i> • IS-0139, <i>Exercise Design</i> • L0146, <i>HSEEP Training Course</i> • Master Exercise Practitioner Program (MEPP)

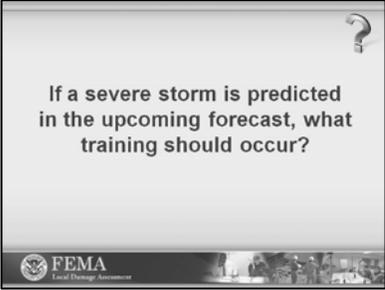
Notes	Content
<p style="text-align: center;">Visual 4-11 (Continued)</p> 	<p><i>Lessons Learned Information Sharing (LLIS)</i></p> <p>Lessons Learned Information Sharing (LLIS.gov) is a Department of Homeland Security/Federal Emergency Management Agency program. LLIS.gov serves as the national, online network of lessons learned, best practices, and innovative ideas for the emergency management and homeland security communities.</p> <p>This information and collaboration resource helps emergency response providers and homeland security officials prevent, protect against, respond to, and recover from terrorist attacks, natural disasters, and other emergencies. LLIS.gov provides Federal, state, and local responders and emergency managers with a wealth of information and front-line expertise on effective planning, training, and operational practices across homeland security functional areas.</p> <p>Additional resources for training include:</p> <ul style="list-style-type: none"> • FEMA's National Exercise Division (NED) • Universities • Voluntary agencies • State and local emergency management agencies and training offices • Consulting firms

Notes	Content
<p style="text-align: center;">Visual 4-12</p> <div data-bbox="240 327 625 617" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Training and Exercises Must...</p> <ul style="list-style-type: none"> • Be based on relevant, true-to-life scenarios • Test all aspects of the plan • Be objectives-based • Move from simple to complex • Be focused on actions, not individuals  </div>	<p>Basic Principles for Effective Training and Exercises</p> <p>Exercises must be capability/objectives-based, well-designed, and planned if they are to be effective. Be sure to design training and exercises to test your existing plans, policies, and procedures. The following characteristics are key to successful training and exercises:</p> <ul style="list-style-type: none"> • They must be based on relevant, true-to-life scenarios. • They test all aspects of the plan. • The questions and problems must be objectives-based and move from simple to complex. • Evaluation should be focused on actions, not on individuals. <p>In other words, the exercises should challenge participants with real-life situations in a no-failure environment. It is important that the focus of after-action analysis is on what went wrong, and not who is to blame, because many of the best lessons are learned from failed attempts.</p> <p>Remember to include damage assessment in broader, multi-agency full-scale disaster exercises as well, so that all team members can work together efficiently. Another useful practice is to encourage like training across multiple jurisdictions and agencies. Having similar training programs can help teams work together more efficiently following a disaster.</p>
<p style="text-align: center;">Visual 4-13</p> <div data-bbox="240 1415 625 1705" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Who on the Damage Assessment Response Team would need to participate in training?</p>  </div>	<p>Who on the Damage Assessment Response Team would need to participate in training?</p>

Notes	Content
<p style="text-align: center;">Visual 4-14</p> 	<p>Who Needs to Be Trained?</p> <p>Anyone involved in damage assessment needs to participate in the training and exercise program. These individuals may include:</p> <ul style="list-style-type: none"> • Community leaders and officials • Emergency management • Property appraisers • Building inspectors • Code enforcement officials • Public Works directors • Public Safety and other first responders • Private agencies • Volunteers <p>In addition, you should provide training to any other individuals with specific damage assessment roles and responsibilities. Training should also be provided to anyone who could be called in as a “backup” to help your community with damage assessment.</p>
<p style="text-align: center;">Visual 4-15</p> 	<p>What training have you received as a part of a Damage Assessment Response Team?</p>
<p style="text-align: center;">Visual 4-16</p> 	<p>What training should a Damage Assessment Response Team receive?</p>

Notes	Content
<p style="text-align: center;">Visual 4-17</p> 	<p>What Training is Needed?</p> <p>Safety</p> <p>One of the most important areas in which teams should be trained is safety. Keeping team members safe during damage assessment is critical. They should be trained to report life safety issues immediately and know what to do to keep themselves and their fellow team members safe from harm. If Personal Protective Equipment (PPE) is required, they must be trained on its proper use and maintenance.</p> <p>Data Collection</p> <p>Another significant area for training is the collection of data. Teams must know where to find the appropriate damage assessment forms, how to complete forms correctly, and what to do with the forms once they have been completed. If electronic forms are to be submitted, teams must be trained on the use of the equipment, and paper backups must be available.</p> <p>Equipment</p> <p>If electronic forms are to be submitted, teams must be trained on the use of the equipment. Other equipment used by Damage Assessment Response Teams, such as communication tools and other technology, may also require training to ensure that it is used properly and that all members of the team know how to use it. During response and recovery, things are too hectic for team members not to know how something works.</p> <p>Zones</p> <p>Teams need to be aware of their designated zones and assignments prior to a hazard. Zone familiarization is important so that teams are aware of what their assigned zones look like prior to a hazard in order to be able to effectively identify damages. They should also be aware of all vulnerabilities that exist within their assigned area, including location of power lines, the type of construction used for the buildings in those zones, and the presence of any hazardous material.</p> <p>To some degree, inspectors should know what's in other zones, because they may need to fill in for someone else. Some zones may be so damaged that they require additional inspectors. For these reasons, cross-training on damage assessment zones is important.</p>

Notes	Content
<p style="text-align: center;">Visual 4-17 (Continued)</p> 	<p>Public Information</p> <p>Damage Assessment Response Teams need to be trained for dealing with the public as well as the media. Each community will need to set its own policies and train the teams accordingly.</p>
<p style="text-align: center;">Visual 4-18</p> 	<p>When is Training Needed?</p> <p>So that all Damage Assessment Response Team members are prepared for a hazard event, training should occur at least annually and in accordance with state and other exercise plans. Refresher training should be conducted prior to any anticipated event.</p> <p>Training should occur when assignments change and when new employees come on board. Training should also be scheduled any time there is a significant update to the plan or when significant changes or expansions occur to systems or infrastructure.</p> <p>Training should also be scheduled any time there is a significant update to the plan. Just-in-time briefings for the leadership should be held prior to teams being sent out so that they have the most recent information available when they need it most.</p> <p>When scheduling annual training, consider the hazard for which the team is preparing.</p>
<p style="text-align: center;">Visual 4-19</p> 	<p>For tornado-prone areas, when would it be most appropriate to hold trainings?</p>

Notes	Content
<p style="text-align: center;">Visual 4-20</p> 	<p>If a severe storm is predicted in the upcoming forecast, what training should occur?</p>
<p style="text-align: center;">Visual 4-21</p> 	<p>Group Activity: Hazard Event Trainings</p>

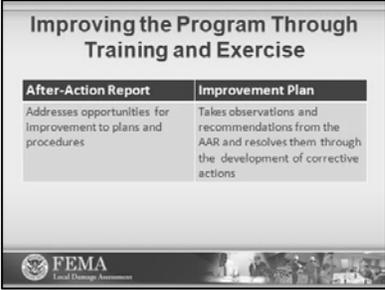
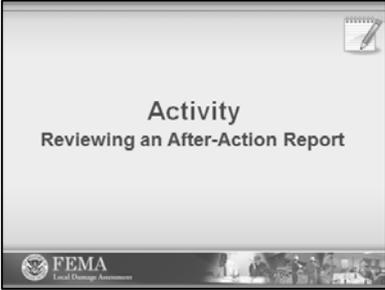
Hazard Event Trainings

Instructions:

Read the following scenario, and then answer the questions below in the space provided.

A winter storm has rolled in, and your community has received 8 inches of snow on top of freezing rain. The first-in team has cleared the main roads and reported areas with downed power lines, and public works is currently working with the local utility companies to repair the lines. The first-in team has provided a list of safe areas to enter for beginning damage assessment.

1. When would it be most appropriate to hold trainings for this event?
2. What information should be provided to Damage Assessment Response Teams prior to being deployed to their zones?
3. What possible cascading emergencies could occur during the storm and immediately after the storm?
4. How would the team need to prepare for the severity and magnitude of these events?

Notes	Content
<p style="text-align: center;">Visual 4-22</p>  <p>The slide is titled "Improving the Program Through Training and Exercise". It features two columns: "After-Action Report" and "Improvement Plan". Under "After-Action Report", it says "Addresses opportunities for improvement to plans and procedures". Under "Improvement Plan", it says "Takes observations and recommendations from the AAR and resolves them through the development of corrective actions". The FEMA logo is at the bottom left.</p>	<p style="text-align: center;">Using Training and Exercises to Improve the Program</p> <p>Through conducting training and exercises and evaluating the results, you can improve your damage assessment program. Two documents generated by the exercise team that will help are:</p> <ul style="list-style-type: none"> • The After-Action Report (AAR) – The AAR addresses opportunities for improvement of plans and procedures. The AAR can also be used in the development of exercise scenarios. • The Improvement Plan (IP) – The IP takes the observations and recommendations from the draft AAR and resolves them through the development of concrete corrective actions. It is important that the focus of after-action analysis is on <i>what</i> went wrong, and not <i>who</i> is to blame, because many of the best lessons are learned from failed attempts. <p>The Damage Assessment Planning Team should not merely take these documents and file them away. Instead, After-Action Review Meetings should be held with the team to go over the results.</p> <p>When conducting After-Action Reviews, remember not to place blame or point fingers. The focus of these meetings should be to celebrate successes and identify needs for improvement to the plan. This critical evaluation step leads to better preparedness of your program.</p>
<p style="text-align: center;">Visual 4-23</p>  <p>The slide is titled "Activity Reviewing an After-Action Report". It features a notepad icon in the top right corner. The FEMA logo is at the bottom left.</p>	<p style="text-align: center;">Group Activity: Reviewing an After-Action Report</p>

After-Action Report

Instructions:

Read the following excerpt from a real After-Action Report. Then record your group's responses to the questions in the space provided.

Within hours after the response to the fire, it became apparent that the services of a structural engineer would be required prior to emergency responders entering the fire scene.

Within an hour of the request, a structural engineer was located that was willing and qualified to enter the fire zone to evaluate the strength of the facility for purposes of the safety of fire and rescue personnel.

Fortunately, sufficient fire turnout apparel and equipment was available to outfit the engineers whose services were to be required for days to come.

Source: After-Action Report, Imperial Sugar Dixie Crystal Plant, February 7, 2008
Chatham Emergency Management Agency.

Based on the information from the After-Action Report, what recommendations would you make to improve response actions in future similar situations?

Explain your rationale behind those recommendations.

Notes	Content
<p style="text-align: center;">Visual 4-24</p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p style="text-align: center;">Unit Summary</p> <ul style="list-style-type: none"> • Why are training and exercises important for Damage Assessment Response Teams? • What are different types of exercises and training? • Who needs to be trained? • When should Damage Assessment Response Teams be trained?  </div>	<p>Unit Summary</p> <p>In this lesson, you learned about the importance of training and exercising your damage assessment plan. You learned about different types of exercises that can be used to practice the plan, facilitate effective inter- and intra-agency coordination, and clarify processes and procedures.</p> <p>You also learned who needs training, what training they need, and when they need it. Resources were provided for developing training and exercises. In addition, you learned that after-action review is critical to identifying areas for improvement and enhancing the readiness of your community.</p>