

Hazard Mitigation Planning Guide

***Note:** The original Hazard Mitigation Planning Template (2015), created by FEMA Region 6, was reviewed by local planners and emergency managers who participated in a research study conducted by the Southern Climate Impacts Planning Program (SCIPP) and National Hazard Mitigation Association (NHMA). This planning guide builds upon the prior template and incorporates the ideas and recommendations from the research participants, including the document title. The Oklahoma Department of Emergency Management's Hazard Mitigation Plan Format Example document was also used, with permission, to add details and examples to this guide. SCIPP and NHMA encourage a mitigation subject matter expert at FEMA Region 6 to review this document in its entirety to ensure accurate information, revise it accordingly, then implement it as a resource for state and local hazard mitigation practitioners. Due to time and resource constraints, this guide does not yet reflect any hazard mitigation policy changes that occurred since January 2025.*

Purpose

The Hazard Mitigation Planning Guide for jurisdictions in FEMA Region 6 is intended to assist those making local hazard mitigation plans. It includes all plan requirements broken down by plan section and resources to find generalized information. Relevant contacts, organizations, and resources are provided in the appendix.

Instructions

This guide reflects FEMA's [Local Plan Review Guide](#) (October 2011), the [Local Mitigation Planning Handbook](#) (June 2025), and the [Local Mitigation Planning Policy Guide – Planning Review Tool](#) (April 2025) references when relevant. To effectively use this document, it must be utilized in color. References to the Local Plan Review Guide (PRG) will be in **PURPLE**, the Local Mitigation Planning Handbook (HB) will be in **RED**, and the Planning Review Tool (PRT) within the Local Mitigation Planning Policy Guide will be in **BLUE**. For elements with multiple requirements, the references will be separated with commas.

For a **complete list of all required elements**, please refer to the Planning Review Tool located near the end of the FEMA Local Mitigation Planning Policy Guide.

1. INTRODUCTION

• Overview of Planning Area

- Provide a short description of the planning area. This can include any relevant information, including population, commerce, topography, etc. Maps may be included but are not required. (**HB Task 1**)

• Participating Jurisdictions (**PRT**, **Element A1-b**)

- List all the participating jurisdictions in the plan. This includes a county, each municipality, school district, or educational institution, as appropriate. Unincorporated communities should not be listed as jurisdictions, because they fall under the County jurisdiction. However, you can mention them with the county if you would like to cite them in the plan.
- If this is a plan update, and there is a jurisdiction who participated in the previous plan, but decided not to participate in the plan update, please cite this. Conversely, if a plan update includes a new jurisdiction that did not participate in the previous plan, cite that as well.

2. PLANNING PROCESS

- How was the plan prepared from start to finish?

2.1 Overview of the Current Planning Process (PRT, Element A1-a; PRG p14-17)

- Provide a description of the planning process. This should include a narrative description of the process but may also include other records such as copies of meeting minutes, sign-in sheets or newspaper articles. (HB p40-41)

2.2 Planning Participants (PRT, Element A1-b)

- Who are the participants involved in the planning process and what did they contribute to the plan? (CFR 201.6 (c)(1)) (PRG p15; HB Task 2)
- Include the name, title, and agency/jurisdiction for each person included. Putting this information into a table is not required but can be helpful to ensure all required information is included. If there are multiple individuals listed for the same jurisdiction, please identify who is the lead POC.

2.3 Stakeholders (PRT, Element A2-a)

- The plan must provide documentation of an opportunity for stakeholders to be involved in the current planning process. Documentation of this opportunity must identify how each of the following types of stakeholders were presented with this opportunity, as applicable:
 - Local and regional agencies involved in hazard mitigation activities
 - Agencies that have the authority to regulate development (includes zoning, planning, community and economic development departments, planning commissions, and others)
 - Neighboring communities
 - Representatives of business, academia, and other private organizations
 - Representatives of nonprofit organizations, including community-based organizations (includes housing, healthcare, or social service agencies)
- Who are the stakeholders (name/title) and how were they invited to participate? Stakeholders must include local/regional agencies, agencies that have the authority to regulate, and neighboring communities. (CFR 201.6 (b)(2)) (PRG p15-16; HB p19-26)
- Putting this information into a table is not required but can be helpful to ensure all required information is included.

2.4 Public Involvement (PRT, Element A3-a)

- Discuss how the public was given the opportunity to be involved in the planning process and how their feedback was incorporated into the plan. (PRG p16; HB Task 3) This information can include dates of public meetings, discussion on surveys distributed, how the public had access to review the draft plan, how their input was incorporated into the prioritization of action items, and/or any other relevant data which highlights this process.
- How will the public be invited during the update? (CFR 201.6 (b)(1) and (c)(4)(iii)) (PRG p17)

2.5 Plans, Documents, and Literature Reviewed (PRT, Element A4-a)

- What plans were used in the development in the plan and how? (CFR 201.6 (b)(3)) (PRG p17; HB p14-15)
- Examples of the types of existing sources reviewed can include the State Hazard Mitigation Plan, local

comprehensive plans, hazard-specific reports, flood insurance studies, and any other relevant documents reviewed. The plan must document how this information was incorporated into the mitigation plan. (Incorporating means to reference or include information from other existing sources to form the content of the mitigation plan.) Although tables are not required, they can be very helpful in organizing data.

- When citing literature and studies, be sure to include the date of publication. Also, for jurisdictions with structures for which National Flood Insurance Program (NFIP) coverage is available, regulatory flood mapping products are required to be reviewed during the planning process.

3. HAZARD IDENTIFICATION AND RISK ASSESSMENT

This risk assessment provides the basis for the actions in the Mitigation Strategy, so local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards (HB Task 4).

3.1 List of Identified Hazards (PRT, Element B1-a)

- List all hazards included in the plan. If the State plan lists a hazard that affects your jurisdiction, but that hazard is excluded in this plan, provide a brief narrative explaining why the hazard(s) was excluded.
- For multi-jurisdictional plans, when hazard risks differ across the planning area and between participating jurisdictions, the plan must specify the unique and varied risk information for each applicable jurisdiction and their assets outside the planning area. (PRT, Element B1-f).

3.2 Declared Disaster History (PRT, Element B1-d)

- Include any state and federal major disaster declarations for the planning area since the last update, including the disaster number, declaration date, and incident type (type of hazard). If there have been no disaster declarations, please state that in this section.
- Federal disaster declarations by state or county: [link](#)
- Disaster declarations by Tribal Nation: [link](#)

3.3 Hazard Probability Rating (PRT, Element B1-e)

- Describe what method was used to determine the probability of future hazard events. Probability means the likelihood of the hazard occurring and may be defined in a variety of terms.
- For Example:

Probability can be determined by calculating the:

$$\frac{\text{Total number of events}}{\text{Total number of years}} = \text{Probability \% of event occurring each year}$$

Based on the above calculation, probability is quantified as follows:

High	=	> 90%
Medium	=	30 - 89%
Low	=	10 - 29%
Very Low	=	< 10%

3.4 Hazard Profiles

- Each hazard listed in the plan must be profiled individually, and should include the following sections: Description, Location, Extent, Previous Occurrences, Probability of Future Events, and Vulnerability and Impact.

- For each hazard, follow the profile layout below.

Description (PRT, Element B1-a)

Identify and describe each hazard: (HB p45-49)

- The [Simple Planning Tool for Climate Hazards](#), hosted by the Southern Climate Impacts Planning Program, includes a definition and description of each hazard in Arkansas, Louisiana, Oklahoma, and Texas that may be used for this section. For New Mexico, some relevant data tools can be found within the Simple Planning Tool or visit the [Western Regional Climate Center](#).

Location (PRT, Element B1-b)

Discuss which planning jurisdictions are affected by the hazard, and provide any relevant information needed to describe location. It is acceptable to simply state “(Hazard) affects the entire planning area.” If a hazard does not affect all of the jurisdictions, please state which jurisdictions are affected. For clarification purposes, please also state which jurisdictions are not affected the hazard. (CFR 201.6 (c)(2)(i)) (PRG p19; HB p46)

- The Simple Planning Tool for Climate Hazards contains links to data tools that may be used to show the location of hazards. [Link](#)

Extent (PRT, Element B1-c)

Describe the range of magnitude of each hazard the planning area expects to experience. This is accomplished by listing what scientific scale/chart/duration method is used to measure the hazard, and what low and high range on that scale/chart/method the planning area can experience. Provide the scientific scale/chart/duration methods that are cited. If the range of magnitude is different for individual jurisdictions, please annotate that as appropriate. (CFR 201.6 (c)(2)(i)) (PRG p19; HB p46-47)

- Scientific scales for hazards:
 - **Air quality:** Air Quality Index ([link](#))
 - **Dam and Levee Failure:** You may use flood inundation maps that show the depth of flooding in each jurisdiction that may result if a dam failure would occur. If dam inundation information is lacking, the plan can declare a data deficiency, and an action item must be included in the plan that addresses this deficiency.
 - **Drought:** U.S. Drought Monitor ([link](#)); various drought indices ([link](#))
 - **Earthquake:** Richter Scale ([link](#)); Modified Mercalli Intensity Scale ([link](#))
 - **Extreme Cold:** Wind Chill ([link](#)); National Weather Service Winter Weather Advisories, Watches, and Warnings, which are tailored to each NWS Weather Forecast Office, may be available online on each NWS office page ([link](#) to main NWS site, click on map to find the local office)
 - **Extreme Heat:** Heat Index ([link](#)); Wet Bulb Globe Temperature ([link](#); guidelines can vary by location, so you may search for your local NWS office or state athletic association)
 - **Hail:** NOAA hail size descriptions ([link](#))
 - **Heavy Rainfall/Flooding:** NOAA Atlas 14 ([link](#)); FEMA Flood Maps ([link](#)); historical river crest heights ([link](#); instructions can be found under the Heavy Rainfall and Flooding section of the [Simple Planning Tool for Climate Hazards](#))
 - **Hurricanes/Tropical Storms:** Saffir-Simpson Hurricane Wind Scale ([link](#))
 - **Lightning:** Lightning severity is not rated, but new detection systems enable analysis of lightning frequency. A NOAA satellite became operational in 2017 and contains the Geostationary Lightning Mapper that can detect the presence of total lightning.
 - **Severe Thunderstorm Winds:** Beaufort Wind Scale ([link](#)); FEMA Wind Zone Map ([link](#) – pg. 6)
 - **Tornado:** Fujita Scale (prior to 2007) and Enhanced Fujita Scale ([link](#))
 - **Wildfire:** National Fire Danger Rating System ([link](#)); Keetch-Byrum Drought Index with fire risk

([link](#))

- **Winter storms (ice, sleet, snow):** Sperry-Piltz Ice Accumulation Index ([link](#)); Wind Chill ([link](#)); National Weather Service Winter Weather Advisories, Watches, and Warnings, which are tailored to each NWS Weather Forecast Office, may be available online on each NWS office page ([link](#) to main NWS site, click on map for local office)

Previous Occurrence ([PRT](#), [Element B1-d](#))

Include hazard events (or at minimum any state or federal disaster declarations) from at least the past 5 years, or the end of the last plan. This information helps the planning team understand what has happened. This can include information from scientific databases and local citizen sources. Include any relevant information needed to give a complete picture of previous occurrences. Listing the previous occurrences in table format is not required, but it can be helpful. For hazards that occur frequently throughout the year, it might be more useful to consolidate this information into categories, such as wind speeds over 50 mph, etc.

- What are the previous occurrences for each hazard and jurisdiction? (CFR 201.6 (c)(2)(i)) ([PRG p20](#); [HB p47-48](#))
- The Simple Planning Tool for Climate Hazards contains links to data tools that can be used to fulfill this section. For states outside of Arkansas, Louisiana, Oklahoma, or Texas, the tool can still be helpful, as it includes many regional and national products. [Link](#)

Probability of Future Events ([PRT](#), [Element B1-e](#))

The plan must include the probability of future events, or the likelihood of the hazard occurring or reoccurring, for the identified hazards that can affect the planning area. It may be defined in historical frequencies, statistical probabilities, hazard probability maps, and/or general descriptors (correlated to the Probability calculation/categories that the planning team defines in Section 3.3).

Plan must also include a brief discussion on the probability of any long-term changes to the location, frequency, or magnitude of the profiled hazard, and how the effects of those changes are expected to impact the planning area.

- What is the probability of each hazard for each jurisdiction when it varies? (CFR 201.6 (c)(2)(i)) ([PRG p20](#); [HB p48-49](#))
- The Simple Planning Tool for Climate Hazards contains links to data tools that can be used for this section to find the number of hazard events over time. It also contains climate change trends statements within each hazard section that includes summary information that might be useful. [Link](#)
- Other useful resources include the NOAA State Climate Summaries ([link](#)), material produced by your state climate office ([link](#)), 2017 *Climate Science Special Report* ([link](#)), and 5th *National Climate Assessment* ([link](#)).

Vulnerability and Impact ([PRT](#), [Element B2-a](#), [B2-b](#))

Describe the vulnerability of each participant to the identified hazards. The description must include current and future assets (including people) and the risk that makes them susceptible to damage from the identified hazards. The risk assessment must describe the vulnerability of plan participant(s) to each identified hazard. The vulnerability description must include a summary (such as a problem statement) of the hazard and its consequences or effects on the participant(s) and their assets. A list of assets without context is not sufficient.

The plan must also describe the potential impacts on each participating jurisdiction and its identified assets. Impacts must include the effects of any identified climatological change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development.

The plan must address repetitively flooded National Flood Insurance Program-insured structures by including the estimated numbers and types (residential, commercial, institutional, etc.) of repetitive/severe repetitive loss

properties. Participants should consider addressing all properties at high risk of flooding that may not be repetitive loss properties.

- Discuss vulnerability and impacts to each hazard for each jurisdiction (HB p59-60). A paragraph is needed for each jurisdiction that explains all the hazards to which it is vulnerable. For flooding hazard, identify the number and type of repetitive loss properties. (CFR 201.6 (c)(2)(ii)) (PRG p20-21; HB p65)
- For the plan update, describe any development (e.g., residential, commercial, changes to the land) that has occurred and discuss how those changes have affected each jurisdiction's vulnerability and impact. (PRG p26; HB p60)

4. MITIGATION STRATEGY

The mitigation strategy serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The Stafford Act directs local mitigation plans to describe hazard mitigation actions and establish a strategy to implement those actions. Therefore, all other requirements for a local mitigation plan lead to and support the mitigation strategy as a means to reduce risk and vulnerabilities over the long term.

4.1 Capabilities Assessment (PRT, Element C1-a; HB Task 5)

- Describe how the existing authorities, policies, programs, funding, and resources of each participant are available to support the mitigation strategy. This must include a discussion of the existing building codes and land use and development ordinances or regulations. Capabilities may be described in a table or narrative.
- The following examples were pulled from the Oklahoma Hazard Mitigation Plan Format Example document and show example tables for various capabilities.

Example: Existing Institutions, Plans, and Ordinances

The checkmarks in the following example indicate that the jurisdiction reported to have the authority to implement the specified regulatory tool and that the tool is currently in place. This example was provided by the Oklahoma Department of Emergency Management's Oklahoma Hazard Mitigation Plan Format Example.

Jurisdiction	Building Code	Zoning Ordinance	Subdivision Ordinance	Special Purpose Ordinance	Growth Management	Site Plan Review Requirements	Comprehensive Plan	Capital Improvement Plan	Economic Development Plan	Emergency Response Plan	Post-Disaster Recovery Plan
County		√	√	√			√	√	√	√	√
City	√	√	√	√		√	√	√	√	√	√
Town		√					√				

Example: Administrative and Technical Capability

The following example was provided by the Oklahoma Department of Emergency Management's Oklahoma Hazard Mitigation Plan Format Example.

Jurisdiction	Planner(s) or Engineer(s) with knowledge of land development and management practices	Engineer(s) or professional(s) trained in construction practices related to buildings and fire	Planner(s) or Engineer(s) with an understanding of natural and/or human caused hazards	Floodplain Manager	Surveyors	Staff with education or expertise to assess the communities vulnerability to hazards	Personnel skilled in GIS and/or HAZUS	Scientists familiar with the hazards of the community	Emergency Manager	Grant writers
County	√	Contract only	√	√	√	√	√	√	√	√
City	√			√		√		√	√	
Town		√		√		√		√	√	√

Example: Financial Capabilities

The following example was provided by the Oklahoma Department of Emergency Management's Oklahoma Hazard Mitigation Plan Format Example.

Jurisdiction	Capital Improvements Project Funding	Authority to levy taxes for specific purposes	Water, Sewer, Gas, or Electric service Fees	Incur fees for new development	Incur debt through general obligation funds and/or special tax bonds	Community Development Block Grant	Federal funding programs	State funding programs
County	√	√			√		√	√
City	√	√	√	√	√	√	√	√
Town	√	√	√		√	√	√	√

Example: Education and Outreach Capabilities

The following example was provided by the Oklahoma Department of Emergency Management's Oklahoma Hazard Mitigation Plan Format Example.

Jurisdiction	Local citizen groups/Non-profit organizations willing to assist with mitigation activities	Ongoing public education or information programs	Natural disaster or safety related programs	StormReady Certification	Firewise Communities Certification	Public-Private partnership initiatives addressing disaster-related issues
County	√	√	√	√		√
City	√	√	√	√		√
Town	√	√	√			√

Example: School District Capability Assessment

School districts included as a jurisdiction in the plan should provide information on their capabilities. The following example table covers wide range of potential capabilities and was provided by the Oklahoma Department of Emergency Management's Oklahoma Hazard Mitigation Plan Format Example.

Jurisdiction	Capital Improvement Plan	Emergency Management Plan and/or procedures in place	Budget to raise funds for mitigation (bond)	Ways to raise funds through public partnerships, corporate donations etc.	Designated emergency manager (even as a secondary position)	PTO/PTA	Training for teachers to practice natural hazard response	Training for teachers/coaches to ensure consistency in evaluating lightning	Post-Disaster Recovery Plan
PS #1	√	√	√	√	√	√	√	√	√
PS #2	√	√	√			√	√	√	√

In addition to the capabilities listed, please have each participating school district answer the following questions:

1. Has your school district had positive responses to bond issues?
2. Based on population, is the school district population growing or declining?

- **How Each Jurisdiction Can Build on Their Capabilities (PRT, Element C1-b)**

- Describe the ability of each participant to expand on and improve the capabilities described in the plan. If the participants do not have the ability or authority to expand and/or improve their capabilities, the plan must describe this lack of ability or authority.

4.2 NFIP (National Flood Insurance Program) Participation

- Describe participation in the [NFIP](#) for each participant, as applicable, in accordance with NFIP regulatory requirements. (CFR 201.6 (c)(3)(ii)) ([PRG p20, 23](#); [HB Task 5.3, p76-81](#))

- Information must include:
 1. Adoption of NFIP minimum floodplain management criteria via local regulation.
 2. Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable.
 3. Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs.
 4. Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP.
 5. Description of how participants implement the substantial improvement/substantial damage provisions of their floodplain management regulations after an event.
- For jurisdictions that have received a Flood Boundary Map or a Flood Insurance Rate Map, but still do not participate in the NFIP, plan must describe why they do not participate.

4.3 Mitigation Goals (PRT, Element C3-a; CFR 201.6 (c)(3)(i))

- The plan must include goals to reduce the risk of the identified hazards. The goals must be consistent with the hazards identified in the plan. Goals may be presented as general statements applying to more than one hazard, or they may be itemized to each of the identified hazards. (PRG p24; HB p82-84)
- Goals are broad, long-term policy and vision statements that explain what is to be achieved by implementing the mitigation strategy.

4.4 Mitigation Action Items (PRT, Element C4-a/b, C5-b; HB Task 6.3)

- Include a mitigation action that includes an analysis of a comprehensive range of actions or projects that the participants considered to specifically address vulnerabilities identified in the risk assessment. Actions considered must emphasize reducing risk to existing buildings, structures and infrastructure, as well as limiting risk to new development and redevelopment.
- A mitigation action is a measure, project, plan, or activity to reduce current and future vulnerabilities described in the risk assessment. Each plan participant must identify **one or more mitigation actions** the participant(s) intends to implement for each hazard addressed in the risk assessment.
- It is important for all actions considered to be documented, be as specific as possible, and be clearly linked to the vulnerabilities and impacts identified in the risk assessment. This includes actions for alleviating data deficiencies or building up capabilities related to mitigation implementation. Documenting all ideas provides a record of what actions were considered, and why. Additionally, this creates a list of actions that can be reconsidered as conditions change.
- The mitigation action must identify: (CFR 201.6 (c)(3)(iii)) (PRG p24-25; HB p82-91)
 1. Action to be accomplished
 2. Hazard addressed
 3. Jurisdictions affected by hazard
 4. Specific position, office, department, or agency responsible for implementing the action
 5. Potential timeline for implementation
 6. Approximate cost of the action
 7. What funding sources will be used to pay for the action
- For reference, five broad categories of mitigation actions are:
 1. **Local Plans and Regulations:** Using authorities, policies, and codes to influence development.
 2. **Structure/ Infrastructure Projects:** Modifying or removing infrastructure to mitigate hazard.
 3. **Natural System Protection:** Minimizing damage by preserving natural system functions.

4. Education and Awareness Programs: Informing citizens on how to mitigate hazards.

5. 5% Projects: Actions not quantifiable by a Benefit Cost Analysis, (i.e., sirens, generators, etc.).

- **Example Mitigation Action Item Tables:**

The following example table was provided by the Oklahoma Department of Emergency Management's Oklahoma Hazard Mitigation Plan Format Example as an example mitigation action that is relevant to tornado, flood, high wind, and lightning.

Action Item 1	Additional County-Wide Outdoor Warning Devices					
Hazard(s) Addressed	Tornado, Flood, High Wind, Lightning					
Mitigation Action Type (Highlight box that applies.)	Local Plans and Regulations	Structure and Infrastructure Projects	Natural Systems Protection	Education and Awareness Programs	5% Projects	
Jurisdiction(s)	All jurisdictions					
Action	Purchase and install additional outdoor warning devices for the incorporated communities in order to supplement current devices. The Emergency Management Directors should review the effectiveness of the current warning devices and upgrade as needed. Some current devices are not reaching all areas of the communities as growth has caused expansion beyond the capabilities of the original devices. Current systems need additional capability to warn communities of more than one hazard.					
Responsible Party	XX County EM, town Ems, and school superintendents					
Potential Implementation Timeline	12-24 months					
Cost	10 units, \$30,000 per unit. Total \$300,000					
Potential Funding Sources	HMGP, Community Budget, REAP funds, Dept. of Agriculture and Dept. of Public Safety					

4.5 Mitigation Action Item Prioritization (PRT, Element C5-a)

- Describe the criteria used for prioritizing the implementation of the actions. The criteria must include an emphasis on the extent to which benefits are maximized, in relation to the associated costs of the action (cost vs. benefit). (CFR 201.6 (c)(3)(iv) and (CFR 201.6 (c)(3)(iii))) (PRG p25; HB Task 6.4, p93-95)
- Although a full benefit-cost analysis (BCA) is not necessary, the plan must demonstrate that proposed mitigation actions will be prioritized by weighing the cost of the action versus the benefits the action will produce, in addition to other prioritization factors.
- One set of criteria that is used to prioritize mitigation actions is identified by the STAPLE(E) - Social, Technical, Administrative, Political, Legal, Economic, and Environmental - Method.
- Please note that STAPLEE and BCA are different items, they are not sub parts of each other.
 - **Benefit Cost Analysis:** a comparison between the monetary cost of a project and the project's benefits, to establish whether the benefits outweigh the cost.
 - **STAPLE(E):** a method to assess the feasibility of alternative considerations. It is used to identify any limitations/impacts to action items, and it uses 7 different categories in which to view those limitations/impacts: Social, Technical, Administrative, Political, Legal, Economic, and Environmental.

- Social: Is the hazard mitigation strategy socially acceptable?
 - Technical: Is the proposed action technically feasible, and cost effective, and does it provide the appropriate level of protection?
 - Administrative: Does the community have the capability to implement the action, and is the lead agency capable of carrying out oversight of the project?
 - Political: Is the hazard mitigation action politically acceptable?
 - Legal: Does the community have the authority to implement the proposed action?
 - Economic: Do the economic base, projected growth, and opportunity costs justify the hazard mitigation project? Benefit cost-analysis is a mathematical method for comparing costs to the benefits to the community of a hazard mitigation action. If the benefits are greater than the costs, the project is cost effective. Comparing the ratios of benefits to costs for several hazard mitigation projects helps to identify those that offer the “greatest bang for the community’s buck.” Benefit-cost analysis gives decision makers an understandable way to explain and defend their decisions. For many grant programs, FEMA and the State will use benefit-cost analysis to determine whether a project is eligible. The community can save time and energy by limiting planning activities to projects that will be more likely to receive funding.
 - Environmental: Does the proposed action meet statutory considerations and public desire for sustainable and environmentally healthy communities?
- Note: Discussion about possible mitigation actions and how to prioritize them should occur during the planning process. Accurate answers require jurisdictions to state how actions will be prioritized.

5. PLAN MAINTENANCE

The mitigation plan is a living document that guides actions over time. Plan maintenance means keeping the plan accurate, current, and relevant over the five-year approval period. It includes monitoring, evaluating and updating the plan – and generally keeping the planning process active. Plan maintenance is critical to ensure participants use the plan to continually reduce hazard risk.

5.1 Continued Public Involvement (PRT, Element D1-a)

- Describe how the participant(s) will continue to seek public participation after the plan has been approved and during the plan’s implementation, monitoring, and evaluation. This can include future surveys, notifying the public of plan updating meetings, posting monitoring/evaluation results on jurisdiction websites and providing a link for feedback, etc.

5.2 Plan Monitoring, Evaluation, and Updates (PRT, Element D2-a/b/c)

- Describe **how**, **when**, and **by whom** the plan will be monitored, evaluated, and updated, to include the title of the individual or name of the department/agency responsible for leading each of these efforts. It can be helpful to write a brief paragraph for each of the actions below. (CFR 201.6 (c)(4)(i)) (PRG p17; HB Task 7.1 and 7.2, p105-111)
 - Monitoring: The process that will be followed to track the progress/status of the mitigation actions identified within the Mitigation Strategy section, along with how often this process will occur and who will be responsible for the process.
 - Evaluation: The assessment of the plan’s effectiveness at achieving its stated purpose and goals, along with how often this process will occur and who will be responsible.
 - Updates: Includes reviewing and revising the plan every five years. This can also include a discussion on updating the plan when relevant changes occur within the five-year update cycle.

5.3 Integration of Data, Goals, and Action Items into Other Planning Mechanisms (PRT, Element D3-a/b/c)

- The plan must describe the community's process to integrate the plan's data, information, and hazard mitigation goals and actions into other planning mechanisms. This is useful because information from this plan may help or inform others. The plan must identify the local planning mechanisms where hazard mitigation information/ actions may be integrated. Note: The identified list of planning mechanisms must not contradict what is listed in the capabilities section.
 - **Integrate** means to include hazard mitigation principles, vulnerability information, and mitigation actions into other existing community planning to leverage activities that have co-benefits, reduce risk and increase resilience.
 - **Planning mechanisms** refers to the governance structures used to manage local land use development and community decision-making, such as budgets and various plans.
 - Other relevant plans or documents that could be integrated include: comprehensive plans, emergency operations plans, capital improvement plans, economic development strategies, floodplain management documents, land use plans, master drainage plans, or other long-range plans.
- A multi-jurisdictional plan must describe each participant's individual process for integrating information from the mitigation strategy into their identified planning mechanisms. This element may be met with a general narrative description if the process is applicable to each of the plan participants; however, any participant who cannot apply the same process as other plan participants must include their unique process for integration. (CFR 201.6 (c)(4)(ii)) (PRG p25; HB p18, 96-98; p103-104)

6. PLAN UPDATE

To continue to effectively represent the jurisdiction's overall strategy for reducing its risks from natural hazards, the mitigation plan must reflect how current conditions have changed since the last plan.

- This will require an assessment of the current development patterns and development pressures (e.g. new commercial and residential buildings, critical infrastructure, changes to land, etc.), as well as an evaluation of any new hazard or risk information. The plan update is an opportunity for the jurisdiction to assess its previous goals and action plan, evaluate progress in implementing hazard mitigation actions, and adjust its actions to address the current realities. (PRT, Element E1-a and E2-a/b)
 - It may be helpful to include previous actions in a table to show if they were completed and still relevant.
- For plan updates, describe if and how any priorities changed since the previously approved plan. If no priorities have changed, plan updates may state previous information remains valid. (PRT, Element E2-a; PRG p27; HB p109-110)
- Describe how jurisdictions integrated the mitigation plan, when appropriate, into other planning mechanisms. (PRT, Element E2-c)

APPENDICES

A. HELPFUL CONTACTS

- **State Hazard Mitigation Officer:**
 - **AR:**
 - Lacye Blake, Arkansas Division of Emergency Management
Phone: (501) 683-6724
Lacye.Blake@adem.arkansas.gov

- **LA:**
 - Jeffrey Giering, Governor's Office of Homeland Security & Emergency Preparedness
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- **NM:**
 - Jeremy Klass, Ph.D., New Mexico Department of Homeland Security & Emergency Management
Phone: (505) 479-0170
Jeremy.Klass@dhsem.nm.gov
- **OK:**
 - Michael D'Arcy, Oklahoma Department of Emergency Management
Phone: (405) 618-3717
michael.darcy@oem.ok.gov
- **TX:**
 - Michelle Ellis, Texas Division of Emergency Management
Phone: (512) 936-7489
Michelle.Ellis@tdem.texas.gov
- **FEMA Region 6 Contacts**
 - General: 940-898-5399
 - Technological Hazards: FEMA-R6-REPP@fema.dhs.gov
 - Exercise Officer: FEMA-R6-Exercise@fema.dhs.gov
 - Tribal Affairs: FEMA-R6-Tribal-Affairs@fema.dhs.gov
 - Arkansas: TBD
 - Louisiana: TBD
 - New Mexico: TBD
 - Oklahoma: TBD
 - Texas: TBD
- **State/Regional Entities**
 - **Arkansas**
 - Arkansas Division of Emergency Management: [link](#)
 - State authority for hazard mitigation
 - Arkansas Planning and Development Districts: [link](#)
 - Planning and development districts often assist with local hazard mitigation plans
 - **Louisiana**
 - Louisiana State University Stephenson Disaster Management Institute: [link](#)
 - SDMI creates parish-level hazard mitigation plans across Louisiana
 - Governor's Office of Homeland Security & Emergency Preparedness: [link](#)
 - State authority for hazard mitigation
 - **New Mexico**
 - New Mexico Department of Homeland Security and Emergency Management: [link](#)
 - State authority for hazard mitigation
 - New Mexico Regional Planning Districts/Council of Governments: [link](#)
 - Planning districts and councils of governments may assist with local hazard mitigation plans
 - **Oklahoma**
 - Oklahoma Department of Emergency Management: [link](#)
 - State authority for hazard mitigation
 - Oklahoma regional Councils of Government (COGs): [link](#)

- Regional councils of governments may assist with local hazard mitigation plans
- **Texas**
 - Texas Division of Emergency Management: [link](#)
 - State authority for hazard mitigation
 - Texas Association of Regional Councils: [link](#)
 - Regional councils of governments may assist with local hazard mitigation plans

B. GRANT OPPORTUNITIES AND INCENTIVE PROGRAMS

- **FEMA Hazard Mitigation Grant Program**
 - Description: The FEMA HMGP provides funding to state, local, tribal and territorial governments so they can develop hazard mitigation plans and rebuild in a way that reduces, or mitigates, future disaster losses in their communities. This grant funding is available after a presidentially declared disaster.
 - Contact: State Hazard Mitigation Officer (see Appendix A)
 - [Link](#)
- **EPA Climate Pollution Reductions Grant**
 - Description: The EPA CPRG program provides grants to states, metro areas, tribes, and territories to develop and implement plans for reducing greenhouse gas emissions and other harmful air pollution. EPA provides tools, technical resources and training to assist planning grant funding recipients in meeting the requirements of the planning grants. The CPRG Training, Tools, and Assistance site also contains a table of federal funding opportunities by sector related to greenhouse gas reduction measures and CPRG planning training webinars.
 - Contact: Regional EPA Representative or CPRG@epa.gov
 - [Link](#)
- **Department of Energy Grid and Transmission Funding**
 - Description: The DOE GDO has several transmission and grid resilience financing programs. The Grid and Transmission Program Conductor is an interactive tool that navigates the various funding opportunities and helps identify which financing program is most appropriate for individual projects.
 - Contact: Transmission@hq.doe.gov
 - [Link](#)
- **Economic Development Administration Planning Program**
 - Description: The Economic Development Planning Assistance program provides essential investment support to district organizations, Native American organizations, states, sub-state planning regions, urban counties, cities and other eligible recipient to assist in planning. The two categories of the Planning Assistance program are: (a) planning investments for District Organizations, Indian Tribes and other eligible entities; and (b) short-term planning investments to states, sub-state planning regions and urban areas. Eligible activities under this program include developing, maintaining, and implementing a Comprehensive Economic Development Strategy (CEDS) and related short-term planning activities.
 - Contact: EDA Austin Regional Office (includes FEMA Region 6 states): [link](#)
 - Program 1-pager [link](#); Main Planning page [link](#)
- **Community Rating System**
 - Description: The CRS is a voluntary incentive program that recognizes and encourages community floodplain management practices that exceed the minimum requirements of the National Flood Insurance Program (NFIP). In CRS communities, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community's efforts that address the three goals of the program: (1) Reduce and avoid flood damage to insurable property, (2) Strengthen and support the insurance aspects of the National Flood Insurance Program, and (3) Foster comprehensive floodplain management.

- Contact: fema-crs@fema.dhs.gov or your local FEMA Region 6 contact (see Appendix A)
- [Link](#)
- **US Forest Service - Community Wildfire Defense Grant Program**
 - Description: (CWDG) help communities and Tribes plan for and reduce wildfire risk and implement the [National Cohesive Wildland Fire Management Strategy](#). Funds can be used to develop and revise [Community Wildfire Protection Plans](#) or implement projects described in a Community Wildfire Protection Plan that are less than ten years old.
 - Contact: [Regional office contact information](#)
 - Main landing page [link](#)
- **Simple Planning Tool for Climate Hazards – Incentive and Action Programs for Hazard Risk Reduction section**
 - Description: The Simple Planning Tool for Climate Hazards, created by the Southern Climate Impacts Planning Program at the University of Oklahoma, includes a menu item *Incentive and Action Programs for Hazard Risk Reduction* for each state in the tool (Arkansas, Louisiana, Oklahoma, and Texas). While the list is not comprehensive, it describes several incentive and action programs by hazard and includes the web link to the program. While New Mexico is not specifically included, many of the resources listed cross state boundaries and may still be applicable. Click on your state (or nearby state) from the home page to access the state-specific information.
 - Contact: scipp@southernclimate.org
 - [Link](#)
- **FEMA Community Development Block Grant**
 - Description: Community Development Block Grant Disaster Recovery (CDBG-DR) grant funds are appropriated by Congress and allocated by HUD to rebuild disaster-impacted areas and provide crucial seed money to start the long-term recovery process. These flexible grants help cities, counties, Indian tribes, and States recover from Presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations. Since CDBG-DR assistance may fund a broad range of recovery activities, HUD can help communities and neighborhoods that otherwise might not recover due to limited resources.
 - Contact: [U.S. Housing and Urban Development Local Office Directory](#)
 - [Link](#)