Local Multi-Hazard Mitigation Planning Guidance

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FEMA

This guidance represents FEMA's interpretation of a statutory or regulatory requirement. The guidance itself does not impose legally enforceable rights and obligations, but sets forth a standard operating procedure or agency practice that FEMA employees follow to be consistent, fair, and equitable in the implementation of the agency's authorities.

LOCAL MULTI-HAZARD MITIGATION PLANNING GUIDANCE

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INTRODUCTION

PURPOSE

Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. Mitigation activities may be implemented prior to, during, or after an incident. However, it has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

This publication is one of three guidance documents on implementing the Federal Emergency Management Agency's (FEMA) Mitigation Planning regulations under Code of Federal Regulations (CFR), Title 44, Part 201. Separate documents are available for the St*ate Multi-Hazard Mitigation Planning Guidance* (Standard and Enhanced, 44 CFR §201.4 and §201.5) and *Tribal Multi-Hazard Mitigation Planning Guidance* (44 CFR §201.7).

The purpose of this *Local Multi-Hazard Mitigation Planning Guidance* is to provide guidance to local governments to meet the requirements of 44 CFR §201.6, *Local Mitigation Plans*. This *Local Multi-Hazard Mitigation Planning Guidance* was designed with three major objectives:

- To help local jurisdictions develop and adopt new mitigation plans or revise existing mitigation plans to meet the requirements of 44 CFR Part 201;
- To help Federal and State reviewers evaluate mitigation plans from different jurisdictions in a fair and consistent manner; and
- To help local jurisdictions conduct comprehensive reviews and prepare updates to their plans to meet the requirements of 44 CFR Part 201.

This *Local Multi-Hazard Mitigation Planning Guidance,* as interpretation and explanation for the Local Mitigation Plan regulations at 44 CFR Part 201, is FEMA's official source for defining the requirements of original and updated Local Mitigation Plans. It includes references to specific language in 44 CFR Part 201 and descriptions of the relevant requirement to meet the mitigation planning requirements.

This guidance addresses Local Mitigation Plan requirements for local governments, which are defined at 44 CFR §201.2 as:

> *any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.*

INTRODUCTION

Authorities

Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), 42 U.S.C. 5165, as amended by the Disaster Mitigation Act of 2000 (DMA) (P.L. 106-390), provides for States, Tribes, and local governments to undertake a risk-based approach to reducing risks to natural hazards through mitigation planning. The National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4001 *et seq*, reinforced the need and requirement for mitigation plans, linking flood mitigation assistance programs to State, Tribal and Local Mitigation Plans.

FEMA has implemented the various hazard mitigation planning provisions through regulations at 44 CFR Part 201. These reflect the need for States, Tribal, and local governments to closely coordinate mitigation planning and implementation efforts, and describes the requirement for a State Mitigation Plan as a condition of pre- and post-disaster assistance, as well as the mitigation plan requirement for local and Tribal governments as a condition of receiving FEMA hazard mitigation assistance.

The regulations governing the mitigation planning requirements for local mitigation plans are published under 44 CFR §201.6. Under 44 CFR §201.6, local governments must have a FEMA-approved Local Mitigation Plan in order to apply for and/or receive project grants under the following hazard mitigation assistance programs:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)

FEMA may require a Local Mitigation Plan under the Repetitive Flood Claims (RFC) program, at which time this policy will apply to those governments that apply for and/or receive assistance under the RFC program as well.

Special Consideration: Extraordinary Circumstances
Under 44 CFR §201.6 (a)(3), FEMA Regional Administrators may grant an exception to the Local Mitigation Plan requirement in extraordinary circumstances, such as in a small and impoverished community, when justification is provided. In these cases, a plan must be completed within 12 months of award of the project grant.

Key Concepts

Several key concepts are reflected throughout the mitigation planning regulations at 44 CFR Part 201, and are reflected in each of the State, Tribal and Local Mitigation Plan requirements and corresponding guidance. The most successful of mitigation plans — where practical, meaningful mitigation actions resulted — have two common elements:

- Comprehensive risk and capability assessments that form a solid foundation for decision making; and
- Participation by a wide range of stakeholders who play a role in identifying and implementing mitigation actions.

INTRODUCTION

The mitigation plan requirements in 44 CFR Part 201 emphasize greater interaction between State and local mitigation activities, and highlight the need for improved linkage between State and Local Mitigation Plans. Under 44 CFR §201.4(c)(4), States are required to coordinate mitigation planning with Indian Tribal and local jurisdictions, and document funding and technical assistance they will provide to these jurisdictions. The information contained in Local Mitigation Plans is also useful for States developing their State Mitigation Plans. That is, States refer to Local Mitigation Plans to improve the level of detail and comprehensiveness of statewide risk assessments and coordinate State hazard mitigation goals and objectives with local goals and objectives. Similarly, local governments may refer to their State's mitigation plan where information may be useful for local mitigation strategy development.

FEMA also has a continuing interest in streamlining the mitigation planning and implementation process. In hazard mitigation planning, as with most other planning efforts, the actual process of planning is as important as the plan itself. Therefore, FEMA considers the plan as the written record, or documentation, of the planning process. This is why some of the plan requirements ask for a "discussion" or "description" of a process or development of a planning product (such as goals, or hazard identification). The implementation of planned, pre-identified, cost-effective mitigation actions based on a sound hazard identification and assessment of risk will make a major contribution to such streamlining.

Special Considerations:
In reading the mitigation planning regulations at 44 CFR Part 201, an important distinction must be made between the words "shall" and "should." When the word "shall" is used, the requirement is mandatory – *e.g.,* "The risk assessment *shall* include: A description of the type, location, and extent of all natural hazards that can affect the jurisdiction." If the plan does not include this description, it will not be approvable by FEMA. It should also be noted that the word "must" carries the same mandatory nature as the word "shall." For example, "The plan *must* be … resubmitted for approval within five (5) years…" This is a mandatory requirement.

When the word "should" is used, the item is strongly recommended to be included in the plan, but its absence will not cause FEMA to disapprove the plan. For example, where the regulation says, "The plan *should* describe vulnerability in terms of … the types and numbers of existing and future buildings …" this information would make the plan more useful, but the plan could still be approved if it is not included (assuming the plan met all the mandatory requirements).

The use of the words "should," "shall" and "must" in the *Multi-Hazard Mitigation Planning Guidance* documents is consistent with the use of those words in mitigation planning regulations at 44 CFR Part 201. In the Plan Review Crosswalk, the "should" requirements are shaded as a reminder that they are not required for plan approval.

To emphasize the importance of the process, FEMA has taken, to the extent possible, a "performance standard," rather than a "prescriptive" approach to the planning requirements. This means that the requirements are designed to identify, generally, *what* should be done in the process and documented in the plan, rather than specify exactly *how* it should be done. This approach recognizes and appreciates the inherent differences that exist among State, Tribal, and local governments with respect to size, resources, capability, and vulnerability. It also enables the State, Tribal or local government the flexibility to integrate the mitigation plan into other daily and long-term planning initiatives and programs.

USING THE MITIGATION PLANNING GUIDANCE

Organization

The *Local Multi-Hazard Mitigation Planning Guidance* is divided into six sections following this Introduction:

- Prerequisites
- Planning Process
- Risk Assessment
- Mitigation Strategy
- Plan Maintenance
- Local Mitigation Plan Review Crosswalk

The first five sections contain the language of the mitigation planning regulations, an explanation clarifying the intent of the requirements, and references to a series of resources that address particular planning issues in more detail. The last section contains the Local Mitigation Plan Review Crosswalk for evaluating plans.

The regulation is published at 44 CFR Part 201. Language in brackets does not appear in the regulation, but has been added to provide the proper context. For example: "[*The plan must include*] a description of the planning process." An ellipsis has been used to indicate that other phrases precede or follow the requirement language.

Plan Updates

The mitigation planning regulation at 44 CFR §201.6(d)(3) states:

> *A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within five (5) years in order to continue to be eligible for mitigation project grant funding.*

This *Local Multi-Hazard Mitigation Planning Guidance* describes elements of the five-year plan updates as required at 44 CFR §201.6(d)(3). The Local Mitigation Plan Review Crosswalk also reflects both new and updated plan submittals.

Local Mitigation Plan Review Crosswalk

This *Local Multi-Hazard Mitigation Planning Guidance* outlines a process for the review of Local Mitigation Plans based on the requirements described in the mitigation planning regulations under 44 CFR §201.6. The Local Mitigation Plan Review Crosswalk included in this document is an important tool in both the review and development of complete plans, as they mirror the requirements in the mitigation planning regulations at 44 CFR §201.6.

Special Considerations:
States may insert additional State mitigation planning requirements, tailoring the *Local Multi-Hazard Mitigation Planning Guidance* to account for State specific requirements. FEMA reviewers will not consider these additional State requirements in their evaluation nor disapprove a plan based on any additional information included in a plan.

PLAN SUBMITTAL AND REVIEW PROCEDURES

Plan Submittal Procedures

The mitigation planning regulations under 44 CFR Part 201 require that local jurisdictions submit mitigation plans to the State Hazard Mitigation Officer (SHMO) for initial review and coordination, with the State then forwarding the plans to FEMA for formal review and approval. Local mitigation plans should be submitted in an electronic format, either through email, or through the mail on CD/DVD. The following *recommended* submission approaches may also be helpful:

- States and communities should coordinate with each other to identify procedures and schedules that will facilitate State support of local mitigation planning efforts and initial review of Local Mitigation Plans.
- Local jurisdictions may share drafts of their entire plan, or at least the results of the risk assessment (because of the importance of the risk assessment to the quality of the overall plan), with the State well in advance of finalizing the plan. Early feedback from the State will let the jurisdiction know that it is on the right track, that additional material needs to be added, or that major revisions need to be made in time to develop and submit an approvable plan by established deadlines.
- Local jurisdictions are encouraged to submit a final draft of the mitigation plan to the State and FEMA for review **before** seeking formal adoption of the plan by the appropriate officials, agencies, or organizations. If FEMA determines that their plan is "approvable pending adoption" (*i.e.*, the plan meets all requirements except for the formal adoption and final submittal), the jurisdiction can then proceed with the adoption process, knowing the adopted plan will be approved. If FEMA determines the plan is not approvable, the responsible parties will be able to address deficiencies before taking the plan through adoption, therefore avoiding unnecessary delays in plan approval.
- Local jurisdictions should consult with their SHMO early enough to ensure that they will be able to obtain FEMA review and approval of their plans in time to meet established deadlines.

Plan Evaluation Methodology

As required at 44 CFR §201.6(d), Local Mitigation Plans must be submitted to the SHMO for initial review and coordination, and then the SHMO may submit the mitigation plan to the appropriate FEMA Regional Office for formal review and approval. FEMA reviewers document their evaluation of the plan using the Local Mitigation Plan Review Crosswalk.

Local Mitigation Plans are approved when they receive a "Satisfactory" for all requirements under 44 CFR §201.6. Except for prerequisites that are met before the plan can be approved, the reviewer evaluates requirements based on the following system:

- **N Needs Improvement:** The plan does not meet the minimum for the requirement. Reviewer's comments are provided.
- **S Satisfactory:** The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

The final, completed Local Mitigation Plan Review Crosswalk provides the local jurisdiction with:

- a determination for each requirement;
- FEMA reviewer comments for requirements that need improvement;
- FEMA reviewer "recommended revisions" that are not required but offer suggestions on areas to enhance the mitigation plan; and,
- a determination of whether the plan is approved by the State and FEMA.

In those cases where FEMA reviewers provided "recommended revisions", the plan update process provides an excellent opportunity to incorporate these recommendations into the revised plan. When FEMA reviews the updated plan, it will assess whether and how the plan addresses these recommendations, although it is not required that the plan does so.

Special Considerations:
The Local Mitigation Plan Review Crosswalk includes a column (second from left), "*Location in the Plan*," that the State or jurisdiction submitting the plan can complete to assist reviewers in determining where in the plan the requirements are addressed. When reviewing plans, the evaluator may find it helpful to first read the plan and identify the appropriate sections that correspond to the Local Mitigation Plan requirements.

Plan Updates

The mitigation planning regulations at *§201.6(d)(3)* directs the update of Local Mitigation Plans:

> *A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.*

Local Mitigation Plans must be updated and resubmitted to FEMA for approval every five (5) years in order to continue eligibility for FEMA hazard mitigation assistance programs. Plan updates must demonstrate that progress has been made in the past 5 years for Local Mitigation Plans to fulfill commitments outlined in the previously approved plan. This involves a comprehensive review and update of each section of the Local Mitigation Plan and a discussion of the results of evaluation and monitoring activities detailed in the *Plan Maintenance* section of the previously approved plan. Plan updates may validate the information in the previously approved plan, or may involve a major plan rewrite. A plan update is NOT an annex to the previously approved plan; it stands on its own as a complete and current plan.

Local jurisdictions should develop a schedule that allows a plan update and approval to occur within 5 years from the last approval date. All jurisdictions should consider the time needed prior to the expiration of the Local Mitigation Plan. Sufficient time should be allotted for all activities up to and including adoption, such as:

- Application and award for mitigation planning grants (if applicable);
- Contracting for technical or professional services (if applicable);
- Review of mitigation plan;
- Planning process to develop the update;

- State and/or FEMA reviews;
- Revising the updated plan, if necessary based on FEMA review comments; and
- Plan adoption procedures.

It should be noted that States could choose to establish a schedule for more frequent Local Mitigation Plan updates.

Indian Tribal Governments with Expiring Local Mitigation Plans

On October 31, 2007 FEMA published amendments to 44 CFR Part 201 at 72 Fed. Reg. 61720 that created a new type of hazard mitigation plan specific to Indian Tribal governments. Under 44 CFR §201.7(a), Indian Tribal governments with mitigation plans approved by FEMA on or before October 1, 2008, under §201.4 or§201.6 will continue to meet the planning requirements in order to be eligible for FEMA assistance. The approval timeframes for these State or Local Mitigation Plan types will continue to be recognized, and updates as Tribal Mitigation Plans will be required after the approved three years (for plans approved as State Mitigation Plans) or five years (for plans approved as Local Mitigation Plans).

All Indian Tribal governments with mitigation plans approved **after** October 1, 2008 must follow the criteria identified in 44 CFR §201.7, *Tribal Mitigation Plans* in order to be eligible for FEMA assistance. Tribal Mitigation Plans follow the criteria established in 44 CFR §201.7 as a condition of receiving non-emergency Stafford Act assistance as a *grantee,* and the Tribal Mitigation Plan also allows an Indian Tribal government to apply through the State as a *subgrantee* for any FEMA mitigation project grant (*See* the programs affected under the Authorities section). In addition, an Indian Tribal government may choose to address severe repetitive loss properties as a condition of receiving the reduced cost share for the FMA and SRL programs. Tribal Mitigation Plans approved under 44 CFR §201.7 will be approved for a period of five years.

Indian Tribal governments should consult with their FEMA Regional Office early to ensure that they will be able to obtain FEMA review and approval of their plans in time to meet established deadlines. The separate *Tribal Multi-Hazard Mitigation Planning Guidance* (44 CFR §201.7) document provides guidance for the development, adoption, review and update of Tribal Mitigation Plans.

Timeframe for Review

Once a final plan is submitted, the FEMA Regional Office will complete the review within 45 days from the day it is received, *whenever possible*. In the event that the plan is not approved, the FEMA Regional Office will provide comments on the areas that need improvement. FEMA will complete the review of each re-submittal of the Local Mitigation Plan within 45 days from the day it is received, whenever possible, as well.

PLANNING RESOURCES

Planning Guidance, Tools & Training

To help States, Tribes, and local governments better understand the mitigation planning requirements under 44 CFR Part 201, FEMA prepared the *Multi-Hazard Mitigation Planning Guidance under the Disaster Mitigation Act of 2000 (March 2004 with revisions November 2006, June 2007 & January 2008).* This document, *Local Multi-Hazard Mitigation Planning Guidance,* supersedes that previous guidance document for all Local Mitigation Plan requirement under 44 CFR §201.6.

In addition to this document, FEMA provides a number of planning tools to assist localities in developing a comprehensive, multi-hazard approach to mitigation planning, and in preparing plans that will meet the mitigation planning requirements. These tools include:

- *State and Local Mitigation Planning How-to Guides* – intended to help States and communities plan and implement practical, meaningful hazard mitigation actions (FEMA 386-1 through -8); available on the FEMA Web site through http://www.fema.gov/plan/mitplanning/planning_resources.shtm#1.
- *Planning for a Sustainable Future* (FEMA 364) - provides guidance for integrating hazard mitigation and sustainable practices as part of pre- and post-disaster mitigation planning efforts; available on the FEMA Web site through http://www.fema.gov/plan/mitplanning/planning_resources.shtm#1.
- *Multi-Hazard Identification and Risk Assessment (MHIRA)*, available on the FEMA Web site at http://www.fema.gov/plan/prevent/fhm/ft_mhira.shtm.

These publications can be ordered through the FEMA Publications Warehouse at 800-480-2520 or online at FEMA's Information Resource Library http://www.fema.gov/library/index.jsp.

- *Mitigation Benefit Cost Analysis (BCA) Toolkit Compact Disc* includes all the FEMA BCA software, technical manuals, BCA training course documentation, and other supporting material and BCA guidance. The BCA Toolkit is available through FEMA's toll-free Benefit-Cost Analysis Technical Assistance Helpline: 1-866-222-3580 or e-mail: bchelpline@dhs.gov.
- *HAZUS-MH (Hazards U.S. – Multi- Hazard),* a risk assessment software program, available to order on the FEMA Web site at http://www.fema.gov/plan/prevent/hazus/.
- *Community Rating System Coordinator's Manual (FIA-15/2007*), available to order from NFIP/CRS PO Box 501016, Indianapolis, IN 46250-1016, or by email at NFIPCRS@ISO.COM, or for download at http://training.fema.gov/EMIWeb/CRS/.

In addition, FEMA's Emergency Management Institute (EMI) also provides mitigation training to help Federal, State, local, and tribal governments understand mitigation planning through its *Mitigation Planning Workshop for Local Governments* (G318) for the development and review of Local Mitigation Plans.

EMI's curriculum also includes training in BCA, NFIP, HAZUS, the National Hurricane Program and the National Earthquake Hazards Reduction Program. The curriculum includes training courses of varying lengths offered in residence, through field courses, and on-line training through the independent study program. Information on EMI's program can be obtained at http://www.training.fema.gov/.

Special Considerations:
Both the Stafford Act and the National Flood Insurance Act of 1968 specifically require mitigation planning for *natural hazards*, but not for manmade hazards. However, FEMA supports jurisdictions that choose to consider *technological and manmade hazards* in their respective mitigation plans. While it is true that a Local Mitigation Plan does not require manmade hazards to be addressed in order to be approved, the *Local Multi-Hazard Mitigation Planning Guidance* can be helpful in developing and evaluating plans that include these hazards as part of a comprehensive hazard mitigation strategy.

For more information on integrating technological and manmade hazards in mitigation plans, please *See*: *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7); available at http://www.fema.gov/plan/mitplanning/howto7.shtm.

Funding for Plan Development

A Local Mitigation Plan as defined in 44 CFR §201.6 is required for local jurisdictions that elect to participate in FEMA hazard mitigation assistance programs as a subapplicant or subgrantee. The Stafford Act authorizes up to 7 percent of available HMGP funds for State, Tribal, or local mitigation planning purposes. Also, funds from the PDM program may be used to develop mitigation plans, and the FMA program provides annual grant funds for flood mitigation planning.

Funding for hazard mitigation planning may be available from other Federal agencies. For example, the National Oceanic and Atmospheric Administration's Coastal Zone Management (CZM) Program has funded coastal hazard mitigation activities, including planning.

The Local Mitigation Plan requirements encourage agencies at all levels, local residents, businesses, and the nonprofit sector to participate in the mitigation planning and implementation process. This broad public participation enables the development of mitigation actions that are supported by these various stakeholders and reflect the needs of the community. Private sector participation, in particular, may lead to identifying local funding that would not otherwise have been considered for mitigation activities.

FLOOD MITIGATION PLANNING

Flood Mitigation Plans

In order to be eligible for project funds under the Flood Mitigation Assistance (FMA) program authorized by the National Flood Insurance Act of 1968, as amended, communities are required under 44 CFR §79.6(d)(1) to have a mitigation plan that addresses flood hazards. Although communities are not required to have a multi-hazard mitigation plan for the FMA program, they are encouraged to consider all hazards that could impact their community. First, a multi-hazard risk assessment may reveal effects or relationships between different hazards. For example, hurricanes have a combination of flood and wind impacts. Second, addressing all hazards will allow a community to be eligible for a wider range of federal mitigation assistance programs.

On October 31, 2007 FEMA published amendments to the 44 CFR Part 201 at 72 Fed.l Reg. 61720 to incorporate mitigation planning requirements for the FMA program. The amendments impacted 44 CFR §201.6, *Local Mitigation Plans*, as follows:

- Combined the Local Mitigation Plan requirement for all hazard mitigation assistance programs under 44 CFR §201.6 to include the FMA as well as the HMGP, PDM and SRL programs, thus eliminating duplicative mitigation plan regulations;
- Incorporated the requirement for communities with National Flood Insurance Program (NFIP) insured properties that have been repetitively damaged from floods to address such properties in their risk assessment and mitigation strategy; and
- Incorporated the requirement for communities that participate in the NFIP to include a strategy for continued compliance with the NFIP.

The *Local Multi-Hazard Mitigation Planning Guidance* includes these new requirements.

Community Rating System

The Community Rating System (CRS) is a part of the NFIP. When communities go beyond the NFIP's minimum standards for floodplain management and participate in the CRS, discounts may be available on flood insurance premiums for policy holders in those communities.

One of the activities that communities can take to improve their CRS rating (and subsequently lower premiums) is to develop a CRS plan. The CRS 10-step planning process is consistent with the multi-hazard planning regulations under 44 CFR Part 201. However, CRS provides additional points for activities that communities can take during their planning process that go above the minimum described below, thus possibly lowering insurance rates. At a minimum, an *approved* multi-hazard mitigation plan under 44 CFR Part 201 that addresses floods could qualify for CRS credit. Although communities are not required to participate in CRS in order to receive approval of a Local Mitigation Plan, FEMA encourages jurisdictions to integrate the CRS planning steps into their multi-hazard mitigation plans.

Special Consideration: Communities interested in receiving CRS credit for their Local Mitigation Plan submit a separate review request to the ISO/ CRS Specialist. The ISO/CRS Specialist is an employee of the Insurance Services Office, Inc. (ISO). ISO works on behalf of FEMA and the insurance companies to review CRS applications, verify the communities' credit points, and perform program improvement tasks, including the review of plans for CRS credit.

The table below illustrates how the CRS 10-step planning process relates to the four phases of multi-hazard mitigation planning process. The *Local Multi-Hazard Mitigation Planning Guidance* also provides basic guidance on working toward increased CRS points by integrating the CRS 10-step planning process into the four phases of the multi-hazard mitigation plan. More detailed information can be found in Activity 510 of the CRS Coordinator's Manual or in CRS Example Plans which can be accessed on the web at http://training.fema.gov/EMIWeb/CRS/.

Mitigation Plan Requirements **44 CFR §201.6**	**CRS Planning Steps**	**CRS Maximum Points**
Prerequisites		
201.6 (c)(5)	9. Adopt the plan	2
Phase 1: Planning Process		
201.6(c)(1)	1. Organize	10
201.6(c)(1)	2. Involve the Public	85
201.6(b) (2) & (3)	3. Coordinate	25
Phase 2: Risk Assessment		
201.6 (c)(2)(i)	4. Assess the hazard	20
201.6 (c)(2) (ii) & (iii)	5. Assess the problem	35
Phase 3: Mitigation Strategy		
201.6 (c)(3) (i)	6. Set Goals	2
201.6 (c)(3) (ii)	7. Review possible activities	30
201.6 (c)(3) (iii)	8. Draft an action plan	70
Phase 4: Plan Maintenance		
201.6 (c)(4)	10. Implement, evaluate, revise	15
	Total:	294

MULTI-JURISDICTION & OTHER LOCAL ORGANIZATIONS

Section 201.2 of 44 CFR defines Local Government as:

> *any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government.*

FEMA recognizes that local governance structures vary, and that the authority to implement mitigation strategies (*e.g.*, land use planning and zoning, building code enforcement, infrastructure improvements, floodplain management, *etc.*) may not reside within a single governmental entity. In addition, certain FEMA hazard mitigation assistance programs accept applications from private, nonprofit organizations and other quasi-governmental entities that do not necessarily align with traditional geopolitical boundaries. To ensure these potential subapplicants to FEMA mitigation assistance programs meet the eligibility requirements for mitigation plans under 44 CFR §201.6, FEMA has identified procedures for several of these entities.

Multi-Jurisdictional Mitigation Plans

FEMA's Local Mitigation Plan requirements under 44 CFR §201.6 specifically identify criteria that allow for multi-jurisdictional mitigation plans. Many issues are better resolved by evaluating hazards more comprehensively by coordinating at the county, regional, or watershed level.

Although economy-of-scale efforts are apparent and encouraged with multi-jurisdictional plans, FEMA requires that all participating jurisdictions meet the requirements for mitigation plans identified in 44 CFR §201.6. While certain elements are common to all participating jurisdictions (*e.g.,* planning process, hazards, goals, and maintenance), there are some elements that are unique to each participating jurisdiction, including:

- risks, where they differ from the general planning area;
- mitigation actions (actions must be identified for each jurisdiction);
- participation in the planning process (examples of participation include attending meetings, contributing research, data, or other information, commenting on drafts of the plan, *etc.*); and
- adoption (each jurisdiction must formally adopt the plan).

Universities

Under 44 CFR 201, a public college or university may be an active participant in a FEMA-approved State, Tribal or Local Mitigation Plan, or have an approved plan of their own that meets the requirements of 44 CFR §201.6 to be eligible for mitigation project grants.

If a college or university has fully participated in the development and review of a plan in accordance with 44 CFR §201.6(b), Documentation of the Planning Process, it is not necessary for them to approve/adopt the plan, as long as it is adopted by the appropriate State, Tribal or local government.

If a college or university chooses to develop their own plan, adoption of the plan can be accomplished through a resolution or letter from the institution President, Board of Directors or recognized governing body.

In a large and complex State university system, there may be several component universities, each with multiple campuses, extension offices, and other sites. The various universities may be subject to different risks, and each individual university may be best served by developing a stand-alone, single-jurisdiction plan, or be a participant in the planning process for their local government. However, the State university system's Board of Regents or other top-level entity may determine that the State would be best served if planning for all of its component institutions and campuses were coordinated at the highest possible level in order to facilitate capital improvement planning. In such a case, the top-level entity could develop a multi-jurisdictional plan to which the participating component institutions would then be signatories. Regardless of whether planning is distributed or centralized, however, the plans developed will be Local Mitigation Plans, not State Mitigation Plans, even if they are developed by and for State institutions.

Similarly, private institutions may opt to participate in local or regional multi-jurisdictional plans, or they may develop plans of their own. Either way, the key to success is to ensure that all of the requirements established by regulation are met. This includes coordinating the planning activities of each campus with those of the surrounding community and, in the case of a multi-institution plan, ensuring that each institution's unique risks are addressed in addition to those risks affecting the entire university system.

School Districts

School districts or independent school districts, or other special districts are defined as local governments at 44 CFR Part 201.2, and are therefore required to have a FEMA-approved local mitigation plan to be eligible for project grants under FEMA hazard mitigation assistance programs. A school district may also demonstrate their participation as a separate government entity in another local government's approved mitigation plan to be eligible for project grants under FEMA hazard mitigation assistance programs.

School districts do not fall under the definition of private nonprofit organizations (*See* the definition of private nonprofit organization under the Private Nonprofit (PNP) Organizations section below.)

Private Nonprofit (PNP) Organizations

Private nonprofit organizations are not considered governmental entities. This distinction is important, because current regulations under 44 CFR Part 201 provide only for governments (State, Tribal or Local), not PNPs, to meet the planning requirement for having a FEMA-approved Mitigation Plan in order to receive project grant funds. For mitigation planning purposes, PNPs are defined consistently with 44 CFR 206.2(a)(19) as:

> *Any nongovernmental agency or entity that currently has: (i) An effective ruling letter from the U.S. Internal Revenue Service granting tax exemption under section 501 (c), (d), or (e) of the Internal Revenue Code of 1954; or (ii) Satisfactory evidence from the*

State that the organization or entity is a nonprofit one organized or doing business under State law.

Under HMGP regulations at 206.434(a)(1), certain PNPs are eligible subapplicants; however, in those cases, the jurisdiction in which the PNP project is located must have a FEMA-approved Mitigation Plan to be eligible for grant funds. FEMA strongly recommends that PNPs participate in the development of the Local or Tribal Mitigation Plan to ensure that projects funded are consistent with the mitigation strategies of the jurisdiction. If they have fully participated in the development and review of the Local or Tribal Mitigation Plan, it is not necessary for them to approve/adopt the plan, as long as it is adopted by the jurisdiction.

Multi-Jurisdictional Private Nonprofit (PNP) Utilities

Multi-jurisdictional utility private nonprofit organizations (PNPs), including Rural Electric Cooperatives (RECs), are considered PNPs for the purposes of disaster assistance provided by FEMA under the Stafford Act. For PNPs such as RECs, special utility districts, or other multi-jurisdictional utilities, FEMA identifies two ways in which they may meet the mitigation planning requirement that ensure that projects funded by the HMGP are consistent with the mitigation strategies of the State, Tribal, and/or local jurisdiction in which the project is located.

First, the local jurisdiction(s) within which the REC mitigation project is located must have a FEMA-approved Local or Tribal Mitigation Plan under 44 CFR §201.6. FEMA strongly encourages PNPs in general, especially those that may be eligible sub-applicants for mitigation projects, such as RECs, to participate in the development of Local or Tribal Mitigation Plans.

Second, under 44 CFR §201.4, the FEMA approved State Mitigation Plan must address RECs. In the State option, the State may prepare an annex to its State Mitigation Plan specific to RECs and/or other multi-jurisdictional utilities that provide a critical function. The RECs and similar entities must participate with the State in the development of this annex, specifically in the identification of hazards potentially affecting their infrastructure, assessment of the vulnerabilities of the infrastructure to these hazards and identification of mitigation measures to reduce these vulnerabilities. The level of detail of the risk assessment and mitigation strategy of the annex must follow the requirements for Local Mitigation Plans (44 CFR §201.6(c)(2) and (3)), rather than the requirements for Standard State Mitigation Plans, in order to provide site-specific information. Coordination with local jurisdictions within which REC infrastructure is located must be documented in the annex, whether or not they have FEMA approved Local Mitigation Plans. Coordination with these jurisdictions will help ensure that the mitigation measures identified in the plan will be acceptable, and not in conflict with development or other plans of these jurisdictions. The annex must be approved by the State and FEMA, and the REC must participate in future updates of the Plan with respect to the annex.

PREREQUISITES

The local jurisdictions submitting the plan satisfies the following prerequisites before the plan can receive approval by FEMA. The official approval date is indicated on the signed FEMA approval letter. As well as providing the approval date, it also indicates the expiration date of the plan.

ADOPTION BY THE LOCAL GOVERNING BODY

Requirement §201.6(c)(5):	[The local hazard mitigation plan shall include] documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (*e.g.*, City Council, County Commissioner, Tribal Council).
Explanation:	Adoption by the local governing body demonstrates the jurisdiction's commitment to fulfilling the mitigation goals and objectives outlined in the plan. Adoption legitimizes the plan and authorizes responsible agencies to execute their responsibilities. The plan **shall** include documentation of plan adoption, usually a resolution. If the local jurisdiction has not passed a formal resolution, or used some other documentation of adoption, the clerk or city attorney must provide written confirmation that the action meets their community's legal requirements for official adoption and/or the highest elected official or their designee must submit written proof of the adoption. The signature of one of these officials is required with the explanation or other proof of adoption. Minutes of a council or other meeting during which the plan is adopted may be sufficient if local law allows meeting records to be submitted as documentation of adoption. The clerk of the governing body, or city attorney, **must** provide a copy of the law and a brief, written explanation such as, "in accordance with section ___ of the city code/ordinance, this constitutes formal adoption of the measure," with an official signature. Formal adoption of the plan may be completed prior to submission to FEMA for review. However, if adopted after FEMA review, adoption must take place within one calendar year of receipt of FEMA's "Approval Pending Adoption." If the plan is not adopted within one calendar year of FEMA's "Approval Pending Adoption" the jurisdiction must update the entire plan and resubmit it for FEMA review. Approval Pending Adoption is a recommended and potentially time-saving process by which jurisdictions submit the *final draft* mitigation plan for a *review* prior to formal jurisdictional adoption. If the plan meets all of the Local Mitigation Plan requirements, the plan would then be returned to the jurisdiction with an *approvable pending adoption* status. When the *approval pending adoption* plan is adopted by the jurisdiction, and FEMA has received the documentation of adoption, it would then be formally *approved* through a signed FEMA approval letter.

Note: The plan's crosswalk may contain *recommended revisions*, suggesting improvements to the plan. If the jurisdiction opts to incorporate all or some of the *recommendations* then the plan would be resubmitted for another *review*.

If the plan is not adopted, the jurisdiction would not be eligible to apply for and/or receive project grants under the following hazard mitigation assistance programs: Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance FMA), and Severe Repetitive Loss (SRL).

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

Therefore, the updated plan **shall** include a copy of the resolution or other documentation of formal adoption of the updated plan dated within one year of FEMA's "approval pending adoption", regardless of the degree of modification. The resolution or adoption for the previously approved plan will not be accepted for plan updates.

Resources: For more information about adopting the mitigation plan, *See*:

- ✓ Bringing the Plan to Life (FEMA 386-4), Step 1.

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 1: Adopt the Plan The plan shall include documentation of plan adoption, usually a resolution.	**Difference?** CRS: The documentation must say that the plan was adopted rather than approved for CRS and the documentation must be either a resolution or ordinance.	**Step 9: Adopt the Plan** Documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan. The adoption must be either a resolution or ordinance.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

MULTI-JURISDICTIONAL PLAN ADOPTION

Requirement §201.6(c)(5):	For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

Explanation: Each jurisdiction that is included in the plan **must** have its governing body adopt the plan prior to FEMA approval, even when a regional agency has the authority to prepare such plans.

As with single jurisdictional plans, in order for FEMA to give approval to a multi-jurisdictional plan, at least one participating jurisdiction **must** formally adopt the plan within one calendar year of FEMA's designation of the plan as "approvable pending adoption" (*See* page 15 for an explanation of this process).

The plan approval date begins the five-year approval period and sets the expiration date for the plan. The official approval date is indicated on the signed FEMA approval letter. As well as providing the approval date, it also indicates the expiration date of the plan. Plans must be reviewed, revised and resubmitted for approval within five years in order to continue to be eligible for grant project funding (44 CFR §201.6(d)(3)).

Participants of a multi-jurisdictional plan will assume the expiration date five years from the first jurisdiction's approval date regardless of the other participant's subsequent adoption date(s). FEMA recommends that all participating jurisdictions coordinate the adoption process as soon as the plan has received "approvable pending adoption" status to ensure that all participants are covered by a plan for the full five years.

The five-year approval period does not get "re-set" each time another participating jurisdiction adopts the plan. For example, if jurisdiction #1, the first jurisdiction to formally adopt the Blue County Multi-Jurisdictional Hazard Mitigation Plan, receives FEMA's "approval" of the plan on January 15, 2008, the plan will also expire on January 15, 2013, exactly 5-years later. If jurisdiction #2 does not formally adopt the plan until July 15, 2008, its eligibility would expire on January 15, 2013, the same exact date that Blue County's plan received "approval" when the plan was first approved. Thus, jurisdiction #2 does not benefit from the full five-year window, but only 4½ years.

If the plan is not adopted by a participating jurisdiction, that jurisdiction would not be eligible for project grants under the following hazard mitigation assistance programs: HMGP, PDM, FMA, and SRL.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

Each jurisdiction that is seeking approval for the plan **must** have its governing body adopt the updated plan, regardless of the degree of

modifications. The resolution or adoption for the previously approved plan will not be accepted for plan updates.

Resources: For more information about adopting the mitigation plan, *See*:

- ✓ *Bringing the Plan to Life* (FEMA 386-4), Step 1.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 4.

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 1: Prerequisites: Multi-Jurisdictional Plan Adoption Each jurisdiction requesting approval of the plan must document that the plan has been formally adopted.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 9: Adopt the Plan** When a multi-jurisdictional plan is prepared, it must be adopted by the governing body of each community seeking CRS credit.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

MULTI-JURISDICTIONAL PLANNING PARTICIPATION

Requirement §201.6(a)(4):	Multi-jurisdictional plans (*e.g.,* watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process … Statewide plans will not be accepted as multi-jurisdictional plans.
Explanation:	A multi-jurisdictional plan, as prepared by regional planning areas, development authorities (*e.g.* watershed/river basin commission), counties or special districts, is acceptable as a Local Mitigation Plan. However, those jurisdictions within the planning area that do not participate in its development and adopt the mitigation plan will not be eligible for project grants. Therefore, the local mitigation plan **must** document how each jurisdiction that is requesting FEMA approval of the plan participated in the planning process.
Plan Update:	The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding. The updated plan **must** identify the following: • All participating jurisdictions, new or continuing; and, • Jurisdictions that no longer participate in the plan If jurisdictional participation has changed since approval of the previous plan, changes *should* be discussed in the planning process section of the updated plan.
Resources:	For more information on initiating a comprehensive local mitigation planning process, *See*: ✓ *Getting Started* (FEMA 386-1), Steps 1-3 ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 8
Special Considerations:	After a multi-jurisdictional Mitigation Plan has been adopted, and approved by FEMA, additional jurisdictions may wish to become part of the planning process, or "join" the mitigation plan. Additional jurisdictions may be added to an existing, FEMA-approved, mitigation plan, only if the conditions below are met (if all three conditions are not met, the jurisdiction may develop its own mitigation plan).

1. The jurisdiction(s) asking to be included is located within the boundaries of, or adjacent to, the area covered by the multi-jurisdictional mitigation plan.
2. The organization that was responsible for preparing and submitting the multi-jurisdictional mitigation plan to the State and FEMA agrees with the addition of the requesting jurisdiction(s) to the mitigation plan.
3. When the multi-jurisdictional mitigation plan was developed, the risk assessment included an analysis of the major hazards, specifically the natural hazards that have the potential to impact the additional jurisdiction(s).

If these conditions can be met, there are two options that can be used to add additional jurisdictions to a FEMA-approved mitigation plan. Regardless of the option chosen, each jurisdiction joining a multi-hazard planning process and seeking to receive credit from FEMA for an approved mitigation plan must satisfy all of the Local Mitigation Plan requirements identified at 44 CFR §201.6.

Option 1 - Approved Plan with Additional Annex or Appendix. This option is best suited to situations in which the multi-jurisdictional mitigation plan has been recently approved by FEMA and the majority of the mitigation plan's five-year lifespan remains. In these cases, the jurisdictions that participated in the multi-jurisdictional planning process would not be required to take any action. Plan content specific to any new jurisdiction is included in a new annex or appendix to the existing mitigation plan, and no other changes are made to the previously approved mitigation plan.

The following actions must be taken to add new jurisdictions to the existing multi-jurisdictional mitigation plan and enable them to receive approval as part of the mitigation plan:

1. The requesting jurisdiction(s) must review the multi-jurisdictional hazard analysis and determine if there are any additional hazards that have not been addressed and threaten the jurisdiction(s). If none exist, the jurisdiction(s) must document their review process and state that no additional hazards exist. If the review reveals additional hazards, the jurisdiction(s) must analyze the risks it/they face associated with those hazards and include this analysis in their written appendix to the multi-jurisdictional mitigation plan. The existing risk assessment cannot be resubmitted without this additional documentation.

Special Considerations:

2. The requesting jurisdiction(s) must document agreement with the stated mitigation goals of the multi-jurisdictional mitigation plan. Additional goals specific to the requesting jurisdiction may be added. Each additional jurisdiction must also develop a list of proposed mitigation actions appropriate for that jurisdiction. These can include the common actions outlined in the multi-jurisdictional mitigation plan, but must include specific mitigation actions for each profiled hazard the jurisdiction itself.
3. The requesting jurisdiction(s) must document the involvement of both the general public and the local government in the planning process in accordance with 44 CFR §201.6. The level of participation in the multi-jurisdictional mitigation plan must be consistent for the additional jurisdictions.
4. The annex or appendix, along with the multi-jurisdictional mitigation plan, and a letter of concurrence from the agency or organization responsible for the mitigation plan, must be submitted to the State for formal review. When the State finds the mitigation plan approvable, it will forward it to FEMA. When FEMA's review finds the mitigation plan "approvable pending adoption," the new jurisdiction can formally adopt the full mitigation plan and its jurisdiction-specific annex or appendix and submit the mitigation plan in final form through the State to FEMA for approval.

The mitigation plan approval date for the added jurisdictions will continue to be the date given by FEMA for the multi-jurisdictional mitigation plan. This means that the additional jurisdictions will have less than the entire 5-year plan approval window before they will need to engage in the required update for the full multi-jurisdictional mitigation plan.

Option 2 - Revise and Update Full Plan. This option is best suited to situations in which the addition of new jurisdictions to the multi-jurisdictional mitigation plan is occurring far enough along in the five-year lifespan of the original mitigation plan that a full review and revision will begin in the very near future. In these cases, the responsible agency or jurisdiction for the mitigation plan determines that it is an appropriate time for the mitigation plan update process to begin, and the new jurisdiction(s) can participate in a mitigation plan update with the original jurisdictions.

PREREQUISITES

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 1: Prerequisites: Multi-Jurisdictional Plan Participation Multi-jurisdictional plans (*e.g.,* watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process … State-wide plans will not be accepted as multi-jurisdictional plans.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 1: Step 1: Organize to Prepare the Plan.** Multi-jurisdictional plans are encouraged in CRS. Credit is based on each jurisdiction's full participation in the planning process.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

PLANNING PROCESS

The planning process is as important as the plan itself. Hence, the mitigation planning regulation at 44 CFR Part 201 requires a narrative description of the process used to develop the mitigation plan—a systematic account about how the mitigation plan evolved from the moment the planning team was created and the public participated, to how each section of the plan was developed, to what plans or studies were incorporated into the plan, to how it will be implemented.

Any successful planning activity, such as the development of a comprehensive plan, involves bringing together a cross-section of the public to reach consensus on how to achieve a desired outcome or resolve a community problem. Using this inclusive process, the public gains a better understanding of the problem or issue and strives to develop a vision along with goals, priorities, and actions. The result is a common set of community values and widespread support for directing financial, technical, and human resources to an agreed upon course of action, usually identified in a plan. The same is true for mitigation planning. An effective and open public involvement process ensures that all citizens understand risks and vulnerability so that they will work with the jurisdiction and support policies, actions, and tools that over the long-term will lead to a reduction in *future* losses.

A comprehensive description of the planning process informs citizens and other readers about the plan's development. Leadership, staffing, and in-house knowledge in local government may fluctuate over time. Therefore, the description of the planning process serves as a permanent record that explains how decisions were reached on a strategy to reduce losses, and that it was developed with stakeholder input in a methodical and reasonable way. Leaders can then continue to make decisions in a pre- and post-disaster environment to decrease vulnerability to community hazards.

Section 201.6(c)(1) requires the documentation of the planning process, including how the plan was prepared, who was involved in the process, and how the public was involved.

This section includes the following subsection:

- Documentation of the Planning Process

DOCUMENTATION OF THE PLANNING PROCESS

Requirements §201.6(b) and §201.6(c)(1):

An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;

(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and

(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

[The plan shall document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Explanation:

The description of the planning process **shall:**

- Indicate how the public (residents, businesses, and other interested parties) was given the opportunity to comment on the plan during the drafting stage and prior to plan approval (*e.g.* public meetings, interactive Web pages, storefronts, toll-free telephone lines, *etc.*);
- Include a discussion of the opportunity provided to neighboring communities, governmental agencies, businesses, academia, and other relevant private and non-profit interests to be involved in the hazard mitigation planning process; and
- Describe the review of any existing plans, studies, reports, and technical information, and how these are incorporated into the plan.

The plan **shall** document how the plan was prepared (*e.g.,* the time period to complete the plan, the type and outcome of meetings), who was involved in the planning process (*e.g.,* the composition of the planning team), and how the public was involved.

The plan *should* also document how the planning team was formed and how each party represented contributed to the process. Ideally, the local mitigation planning team is composed of local, State, and Federal agency representatives, as well as community representatives, local business and nonprofit leaders, and educators.

The plan *should* describe how public comments and concerns were considered and incorporated into the plan.

Plan Update:

The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

Therefore, the updated plan **shall** describe the process used to review and analyze each section of the plan (*i.e.,* Planning Process, Risk Assessment, Mitigation Strategy, and Plan Maintenance). If the planning team or committee finds that some sections of the plan warrant an update, and others do not, the process the team undertook to make that determination **must** be documented in the plan.

The plan maintenance section requires a description about how the community was kept involved during the plan maintenance process (44 CFR §201.6(c)(4)(iii)) over the previous five years. Since this contributes to the continued planning process, the community may choose to describe this within the planning process section of the plan update rather than the plan maintenance section. The plan maintenance section is intended to be forward-thinking and emphasize future community involvement.

Special Considerations:

The planning team *should* consider including a current description of the jurisdiction in this section or in the introduction of the plan. The general description can include a socio-economic, historic, and geographic profile to provide a context for understanding the mitigation actions that will be implemented to reduce the jurisdiction's vulnerability.

Resources:

For more information on the planning process; ideas on identifying stakeholders and building the planning team, generating public interest, enlisting partners, and choosing an appropriate public participation model; and advice to local governments seeking to initiate a comprehensive local mitigation planning process, *See:*

- ✓ *Getting Started* (FEMA 386-1), Steps 1 – 3.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 17
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386), Phase 3, Step 4.

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 1: Documentation of the Planning Process Documentation of the planning process includes: A description of the process used to prepare the plan and an indication of who was involved in the process. It must also document how the public was involved and demonstrate that an opportunity was given for neighboring communities, local and other interested parties to be involved in the planning process. This phase also requires a description of the review and incorporation of existing plans, studies, reports, and technical information, if appropriate.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 1: Organize to Prepare the Plan, Step 2: Involve the Public and Step 3: Coordinate with other Agencies** Credit is based on how the community organizes to prepare its floodplain management plan. Describe who is involved in the planning process and what their roll is in the development of the plan. The planning process must include an opportunity for the public, neighboring communities and local and regional agencies to comment on the plan during the drafting stage and before plan approval. The term public means residents, businesses, property owners, and tenants in the floodplain and other known hazards areas as well as other stakeholders in the community, such as business leaders, civic groups, academia, non-profit organizations and major employers. The plan must also incorporate and document a review of existing studies, reports, and technical information into the community's needs, goals and plans for the area.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

RISK ASSESSMENT

Section 201.6(c)(2) of the mitigation planning regulation requires local jurisdictions to provide sufficient hazard and risk information from which to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. This includes detailed descriptions of all the hazards that could affect the jurisdiction along with an analysis of the jurisdiction's vulnerability to those hazards. Local risk assessments do not need to be based on the most sophisticated technology, but do need to be accurate, current, and relevant. Local risk assessments coupled with the local mitigation strategies are the basis for the State's evaluation of its resources and facilitate the establishment of statewide goals.

Data needed to complete risk assessments may not be readily available in order for jurisdictions to meet the planning requirements with the submission of their initial plan. Therefore, FEMA recommends that plans identify any data limitations and include actions in the mitigation strategy of the plan to tell how the data will be obtained. The data would then be included in the risk assessment in the next plan update.

During an update to the risk assessment, local jurisdictions consider current and expected future vulnerability to all hazards and to integrate new hazard data such as flood studies. Local jurisdictions are encouraged to incorporate updated estimates of cost of living and replacement costs for vulnerable buildings, reduced vulnerability due to the completed mitigation actions or projects, and impacts of population growth or loss in vulnerable areas.

Even though maps are generally not required as part of the plan, FEMA recommends the use of maps to illustrate the required risk assessment information. To assist communities in hazard vulnerability analysis, FEMA has developed HAZUS (HAZUS-MH), a nationally standardized geographic information system (GIS) software that can be used to assess vulnerability by estimating losses from floods, earthquakes and hurricane wind events. Even though HAZUS is not required in Local Mitigation Plans, communities are encouraged to use HAZUS to form a scientific basis from which the mitigation strategy is developed.

Even though the mitigation planning regulation does not require that plans address manmade hazards, jurisdictions are encouraged to assess risk to these hazards by using FEMA's *Integrating Manmade Hazards into Mitigation Planning (FEMA 386-7)*. This guide is designed to help jurisdictions identify specific actions to reduce loss of life and property from manmade hazards by modifying the built environment. It is not intended to help jurisdictions establish procedures to respond to disasters, write an emergency operations plan, or create a counter-terrorism program. In this context, the goal of mitigation is to decrease the need for response as opposed to simply increasing response capability.

This section includes the following eight (8) subsections as follows:

- Identifying Hazards
- Profiling Hazards
- Assessing Vulnerability: Overview
- Assessing Vulnerability: Identifying Structures
- Assessing Vulnerability: Addressing Repetitive Loss Properties
- Assessing Vulnerability: Estimating Potential Losses
- Assessing Vulnerability: Analyzing Development Trends
- Multi-jurisdictional Risk Assessment

IDENTIFYING HAZARDS

Requirement §201.6(c)(2)(i):	[The risk assessment shall include a] description of the type … of all natural hazards that can affect the jurisdiction …

Explanation: The local risk assessment **shall** identify and describe the hazards likely to affect the planning area. It is critical that the plan identify all the natural hazards that can affect the jurisdiction, because the hazard identification is the foundation for the plan's risk assessment, which in turn is the factual basis for the mitigation strategy. If the hazard identification omits (without explanation) any hazards commonly recognized as threats to the jurisdiction, this part of the plan cannot receive a "Satisfactory" score.

While not required by the mitigation planning regulation at 44 CFR Part 201, the plan *should* describe the sources used to identify hazards. The process for identifying hazards could involve the following:

- Reviewing the State hazard mitigation plan and local or regional reports, plans, flood ordinances, and land use regulations, among others;
- Talking to experts from Federal, State, and local agencies and universities;
- Reviewing past events and declared disasters;
- Searching the Internet and newspapers; and
- Interviewing long-time residents and consulting historical societies or museums.

Events which contain multiple hazards *should* describe each hazard separately to provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions. It is important to consider the multiple aspects of each identified hazard. For instance, hurricanes and tsunamis have distinctly different types of impacts from high winds than flooding and storm surges; severe storms also include both flooding and high winds; and wildfires have immediate fire hazards, but may also produce mudslide hazards when followed by rain. When considering how to approach hazard identification, jurisdictions *should* refer to the State's risk assessment and approach hazard identification similarly.

Plan Update:	The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding. Therefore, the local risk assessment update **shall** address any newly identified hazards that have been determined to pose a threat. If improved descriptions of hazards are available, they *should* be incorporated into this section.
Special Consideration: Using HAZUS-MH to Estimate Potential Losses	To assist communities in hazard vulnerability analysis, FEMA has developed HAZUS (HAZUS-MH), a nationally standardized geographic information system (GIS) software that can be used to assess vulnerability by estimating losses from floods, earthquakes and hurricane wind events. While HAZUS is not required in Local Mitigation Plans, communities are encouraged to use HAZUS to form a scientific basis from which the mitigation strategy is developed. HAZUS can be used to define the area at risk (the planning area) as well as the degree of risk from potential flood, earthquake, and wind hazards. HAZUS is based on a geographic information system platform; therefore, it is possible to overlay information about other hazards on HAZUS maps in order to better understand risk from those hazards.
Resources:	For more information on identifying hazards, *See*: ✓ Understanding Your Risks (FEMA 386-2), Step 1.

Multi-Hazard Planning Phase	**A Comparison of the Community Rating System & Hazard Mitigation Planning**	**CRS Step**
Phase 3: Risk Assessment [The risk assessment shall include a] description of the type … of all natural hazards that can affect the jurisdiction …	**Difference?** All appropriate hazards must be identified and described in the multi-hazard mitigation plan, while the plan for CRS must only identify and describe the flood hazard.	**Step 4: Assess the Hazard** CRS requires at the minimum that the flood hazard be identified including addressing the repetitive loss areas. However, additional credit can be earned for including discussion of all other natural hazards.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

PROFILING HAZARDS

Requirement §201.6(c)(2)(i):	[The risk assessment shall include a] description of the … location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

Explanation: The description of each hazard **shall** include a narrative (and an optional map) of the following information:

- The **location** or geographical areas in the community that would be affected. If a hazard location cannot be geographically determined, such as tornados that can strike anywhere in the community, the plan **must** describe the entire planning area that can be affected by the hazard. However, hazards with known geographic boundaries (*e.g.*, flood, earthquake) **must** specifically identify where the hazard can occur. For example: floodplains indicate areas potentially affected by flooding; inundation areas represent the boundary on a Flood Insurance Rate Map (FIRM) that shows the rising of a body of water and its overflowing onto normally dry land; wildland urban interface (WUI) are areas potentially affected by wildfire where improved property and wildland fuels meet at a well-defined boundary[1].

- The **extent** (*i.e.*, magnitude or severity) of potential hazard events. Magnitude is a measure of the strength of a hazard event. The magnitude (also referred to as severity) of a given hazard event is usually determined using technical measures specific to the hazard[2]. For each identified hazard, plans **shall** indicate the range of magnitude or severity that could be experienced. Discussion of what the community could anticipate *should* be enhanced with scientific scales, such as the Fujita Scale, TORRO Hail Scale, Richter Scale, Beaufort Wind Scale, Saffir-Simpson Scale, and the Palmer Index or by using quantitative measurements such as: miles per hour, flood depth, inches of rain, fire danger rating, and acres burned. Others classify hazards using terms like high, medium, or low (or major, minor, minimum). The plan **must** clearly define any classification methods used to illustrate extent.

- The **probability** is a statistical measure of the likelihood that the hazard event would occur in an area[2].

The plan **shall** also provide a discussion of **past occurrences** of hazard events in or near the community. For example, in areas where tornadoes occur, plans *should* indicate the recorded intensities and dates of previous events. This discussion *should* include:

[1] Source: National Fire Protection Agency (NFPA) 299, Standard for Protection of Life & Property from Wildfire, 1991.
[2] Source: FEMA 433: Using HAZUS-MH for Risk Assessment.

- Information on the damages that occurred (*e.g.*, costs of recovery, property damage, and lives lost) to the extent available;
- Level of severity (*i.e.*, flood depth, wind speeds, earthquake intensity, *etc.*);
- Duration of event;
- Date of occurrence; and
- Sources of information used or consulted for assembling a history of past occurrences.

The hazard analysis *should* also identify on a map the areas affected by each identified hazard. Additionally, a composite map (*i.e.*, map showing combined information from different thematic map layers) *should* be provided for hazards with a recognizable geographic boundary (*i.e.*, hazards that are known to occur in particular areas of the jurisdiction, such as floods, coastal storms, wildfires, tsunamis, and landslides).

The characterization of hazards *should* describe the conditions, such as topography, soil characteristics, meteorological conditions, *etc.*, in the area that may exacerbate or mitigate the potential effects of hazards.

The hazard analysis *should* be detailed enough to allow identification of the areas of the jurisdiction that are most severely affected by each hazard.

The plan *should* describe the analysis or sources used to determine the probability, likelihood, or frequency of occurrence as well as the severity or magnitude of future hazard events.

The plan *should* note any data limitations and identify and include in the mitigation strategy actions for obtaining the data to complete and improve future risk analysis efforts.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

Therefore, the plan update **shall** continue to describe occurrences of hazards included in the previously approved plan, and discuss new occurrences of hazard events. As required under §201.6(d)(3) the updated plan **shall** incorporate any new (*i.e.*, since the previous plan was approved) historical records, or hazard data related to profiling hazards, such as NFIP maps or studies, HAZUS studies, or reports from other Federal or State agencies that describe location, extent, probability, or previous occurrences of hazards.

FEMA recommends that previously approved plans point out any data limitations, and identify actions to obtain the data in the mitigation strategy. If the previously approved plan identified data deficiencies that would be addressed at a later time, then the deficiencies **shall** be incorporated in

	the updated risk assessment. However, if the data deficiencies have not been resolved, they **must** be addressed in the updated plan, accompanied by an explanation of why they remain and an updated schedule to resolve the issue. Any maps included in the updated plan **must** be consistent with the updated information.
Special Consideration: Using HAZUS-MH to Estimate Potential Losses	While HAZUS is not required in Local Mitigation Plans, communities are encouraged to use HAZUS to form a scientific basis from which the mitigation strategy is developed. • HAZUS establishes a **base map** for both single- and multi-jurisdictional boundaries and includes important features such as critical/essential facilities, lifeline facilities, high potential loss facilities, bridges, hazardous materials facilities and limited utilities and road segment data. It is based on the geographic area that the risk assessment will address. • HAZUS includes historical information about earthquake and hurricane hazards.
Special Considerations:	While the mitigation planning regulation at 44 CFR Part 201 does not require the inclusion of maps as part of the mitigation plan, they can be a valuable tool to illustrate the information provided in the risk assessment. If the jurisdiction does not have digital mapping capability (Geographic Information System, Internet maps), paper maps can be scanned and manipulated manually to include in the plan. Maps *should* address hazards in the planning area specific to the jurisdiction(s) or planning area represented in the plan. For example, maps at a State or regional scale may not adequately show information relevant on the local or County/Parish level. It may be useful to consider the following when determining the usefulness of maps: • Avoid using state or national scale maps; • Maps can have multiple layers to clarify each hazard. This is effective for hazards such as flood and hazmat; • Maps should clearly show all participating jurisdictional boundaries; • Maps should be readable at an 8 ½ by 11 inch letter size; • Maps should include a readable legend and scale; • Documentation on the limitations of the data used on the map should be described the plan. Refer to *Understanding Your Risks,* (FEMA 386-2) for more information on maps and mapping techniques.

Resources: For more information on profiling hazards, *See*:

- ✓ *Understanding Your Risks* (FEMA 386-2)
- ✓ *Integrating Manmade Hazards into Mitigation Planning (*FEMA 386-7, Phase 2, Step 2.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 23.

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 3: Risk Assessment [[The risk assessment shall include a] description of the … location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.	**Difference?** For CRS, the plan must identify and describe the flood hazard, including the repetitive loss areas. Whereas the multi-hazard plan must describe the location and extent of all natural hazards that can affect the jurisdiction. The multi-hazard plan must also include information on previous occurrences and on the probability of future hazard events. (This is an option for CRS credit)	**Step 4: Assess the Hazard** Credit is based on what the community includes in its assessment of the hazard. The minimum requirement is for the flood hazard only. However, additional credit can be earned by identifying and including a description of all other natural hazards.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

ASSESSING VULNERABILITY: OVERVIEW

Requirement §201.6(c)(2)(ii):	[The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.

Explanation: An overview of the community's vulnerability is a summary of the hazard's impact on the community and its vulnerable structures. This summary **shall** include, by type of hazard, a general description of the types of structures affected by the hazards. Examples include, but are not limited to, buildings, infrastructure, critical facilities, structures that house the elderly or disabled, and areas where low-income populations reside.

The overview **shall** also include a general description of the hazard's impact to the vulnerable structures. Vulnerable structures include those located *within* geographic areas susceptible to a particular hazard. However, keep in mind that certain hazards may affect the entire community or planning area.

The summary can be presented in terms of dollar value or percentages of damage. If there are any data limitations, 44 CFR §201.6(c)(2)(ii) may be met by identifying the particular limitations and including mitigation strategy actions for obtaining the data necessary to complete and improve future vulnerability assessments.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding

Therefore, the vulnerability overview in the updated plan **shall** describe any changes, clarifications, or refinements to the overview summary described in the previously approved plan. It **shall** continue to include, by type of hazard, a general description of the types of structures affected by the hazard.

The community *should* take into account the following when updating its vulnerability assessment:

- Updates to inventories of existing structures in hazard areas, including new development, redeveloped areas or structures located in annexed areas.
- Potential impacts of future land development, including areas that may be annexed in the future.

- New buildings that house special high-risk populations (*i.e.*, elderly, low-income, disabled)
- Completed mitigation actions that reduced overall vulnerability.

If the previously approved plan noted data limitations related to the vulnerability summary and identified in the mitigation strategy actions to resolve the data deficiency, then the updated plan **shall** discuss how the data was collected and incorporated into the updated risk assessment. If data deficiencies still remain unresolved, the plan **must** discuss in the mitigation strategy what action will be taken to collect the data for the next update.

Special Considerations:	The mitigation planning regulation at 44 CFR Part 201 does not require a discussion about facilities that house special populations at risk, such as the elderly, disabled, or others with special needs. However, FEMA recommends their consideration in the risk assessment to enable the development of appropriate actions to reduce vulnerability to these facilities during and after a disaster, thereby potentially saving lives.

Special Consideration: Using HAZUS-MH to Estimate Potential Losses	HAZUS outputs tables and maps of inventory data and allows the incorporation of local data to consider the assets that can be impacted by the prioritized hazards. HAZUS includes information compiled from national databases to describe the distribution of buildings by their use, construction material, replacement cost, and other characteristics. It also includes data about the location and characteristics of utilities, transportation, populations, and other information that can help communities understand their risk from hazards. It is also possible to use HAZUS to incorporate locally developed hazard data and information about the built and social environment into the risk assessment process. It is recommended that communities take advantage of this capability in order to produce loss estimations that reflect their local conditions as accurately as possible.

Resources: For a discussion on preparing a vulnerability assessment, *See*:

- ✓ *Understanding Your Risks* (FEMA 386-2), Step 3, Worksheet #3a Inventory Assets.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 25.
- ✓ HAZUS-MH at www.fema.gov/plan/prevent/hazus.
- ✓ *Integrating Manmade Hazards into Mitigation Planning (FEMA 386-7), Phase 2, Step 2.*

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 3: Risk Assessment [The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 5: Assess the Problem** Credit is based on what is included in the assessment of vulnerability to the hazards identified. At a minimum the plan must include an overall summary of each hazard and its impact on the community.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

ASSESSING VULNERABILITY: ADDRESSING REPETITIVE LOSS PROPERTIES

Requirement §201.6(c)(2)(ii):	[The risk assessment in all] plans approved after October 1, 2008 must also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged by floods.

Explanation:

Repetitive loss properties are those for which two or more losses of at least $1,000 each have been paid under the National Flood Insurance Program (NFIP) within any 10-year period since 1978. Local governments may obtain information on repetitive loss properties within their jurisdiction by contacting their State NFIP Coordinator. Use of flood insurance claim and disaster assistance information is subject to The Privacy Act of 1974, as amended, which prohibits public release of the names of policy holders or recipients of financial assistance and the amount of the claim payment or assistance. However, maps showing *areas* where claims have been paid can be made public. The data *should* be used for planning purposes and can be very helpful in identifying problem areas that may not be apparent on a floodplain or drainage map.

After October 1, 2008, all Local Mitigation Plans approved by FEMA **must** address repetitive loss structures in the risk assessment by describing the types (residential, commercial, institutional, *etc.*) and estimate the numbers of *repetitive loss properties* located in identified flood hazard areas.

The plan *should* describe vulnerability in terms of an estimate of the potential dollar losses to *repetitive loss properties* and a description of the methodology used to prepare the estimate.

The plan *should* describe vulnerability in terms of providing a general description of land uses and development trends within *repetitive loss areas* so that mitigation options can be considered in future land use decisions.

The plan *should* include a map of the known flood hazards, where "known flood hazards" means the floodplain shown on the FIRM, repetitive loss areas, areas not mapped on the FIRM that have flooded in the past, and surface flooding identified in existing studies. No new studies need to be conducted for this assessment.

Along with flood protection and floodplain management, mitigation plans *should* discuss the unique natural features, natural areas, and other environmental and aesthetic attributes that may be present in the floodplain. Protecting and preserving these natural and beneficial floodplain functions yield flood mitigation benefits and also help integrate floodplain management efforts with other community goals and objectives.

Special Considerations:	States and Tribes are encouraged to include a repetitive loss strategy in their plans that, if approved, would make them eligible under 44 CFR §201.4(c)(3)(v) for a reduced non-Federal cost share under the FMA and SRL hazard mitigation assistance programs. In particular, States address severe repetitive loss properties, which are a subset of repetitive loss. Local jurisdictions are encouraged to also identify and address this subset of properties. Severe repetitive loss properties are defined as single or multifamily residential properties that are covered under an NFIP flood insurance policy and: (1) That have incurred flood-related damage for which 4 or more separate claims payments have been made, with the amount of each claim (including building and contents payments) exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000; or (2) For which at least 2 separate claims payments (building payments only) have been made under such coverage, with cumulative amount of such claims exceeding the market value of the property. (3) In both instances, at least 2 of the claims must be within 10 years of each other, and claims made within 10 days of each other will be counted as 1 claim.
Plan Update:	The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding. Therefore, the plan update **must** continue to address repetitive loss structures in the risk assessment.
Resources:	For information on repetitive loss properties, *See*: ✓ *Understanding Your Risks* (FEMA 386-2).

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 3: Risk Assessment [The risk assessment] must also address National Flood Insurance Program (NFIP) insured structures that have been repetitively flooded.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 5: Assess the Problem** The risk assessment must also address National Flood Insurance Program (NFIP) insured structures that have been repetitively flooded. The community must also address all properties identified in the repetitive loss areas as defined by the community.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

ASSESSING VULNERABILITY: IDENTIFYING STRUCTURES

Requirement §201.6(c)(2)(ii)(A):	The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas …

Explanation: This information *should* be based on an inventory of existing and proposed buildings, infrastructure, and critical facilities (structures) located within identified hazard area boundaries. The inventory may include but is not limited to the following:

- **Building Stock** broadly includes residential, commercial, industrial, and institutional buildings.
- **Critical Facilities** are essential to the health and welfare of the whole population and are especially important following hazard events. Since vulnerability is based on service losses as well as building structure integrity and content value, assess the effects on the service function interruption of critical facilities as well as their physical aspects. For purposes of this mitigation planning guidance, critical facilities may include emergency service facilities such as hospitals and other medical facilities, jails and juvenile detention centers, police and fire stations, emergency operations centers, public works facilities, evacuation shelters, schools, and other uses that house special needs populations.
- **Transportation Systems** include airways (including airports, heliports, *etc.*), roadways (including highways, bridges, tunnels, roadbeds, overpasses, transfer centers, *etc.*), railways and public transit (including trackage, tunnels, bridges, rail yards, depots, *etc.*), and waterways (including canals, locks, seaports, ferries, harbors, dry-docks, piers, *etc.*).
- **Lifeline Utility Systems** such as potable water, wastewater, oil, natural gas, electric power, substations, power lines, *etc.*
- **Communications Systems and Networks** such as telephones, emergency service radio systems, repeater sites and base stations, television and radio stations, *etc.*
- **High Potential Loss Facilities** include facilities that would have a high loss associated with them, such as nuclear power plants or dams.
- **Hazardous Material Facilities** include facilities housing industrial/hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials, and toxins.

- **Economic Elements** include major employers, financial centers, and other business or retail districts in the community that could significantly affect the local or regional economy if interrupted.
- **Special Consideration Areas** include areas of high density residential, commercial, institutional, and industrial development that, if damaged, could result in economic and functional losses and in high death tolls and injury rates.
- **Historic, Cultural, and Natural Resource Areas** may include buildings, structures, objects, sites, national and local historic or significant districts, and historical archival storage facilities.

The structure description *should* also include construction characteristics (*e.g.,* year built, building materials (*e.g.,* light wood frame, concrete frame), freeboard, foundation types (*e.g.,* piers, piles, basement, slab-on-grade)). The community *should* determine how best to indicate structures that are vulnerable to more than one hazard.

The community *should* determine how far into the future they wish to go in considering proposed buildings, infrastructure, and critical facilities, including planned and approved development. The information on future structures may be based on and timed with the data gathering phase of their comprehensive plan or land use plan.

If a local comprehensive plan is not available, State agencies or Regional Planning Commissions may be able to provide regional data about anticipated growth that may affect the community's vulnerability to hazards.

The plan *should* document the process and sources used to identify existing and future structures. If data are not readily available for buildings and infrastructure, the plan *should* provide information on critical facilities within the identified hazard areas and identify the collection of data for buildings and infrastructure as an action item in the mitigation strategy.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect changes in development, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

Therefore, the updated plan *should* include a current inventory of existing and proposed buildings, infrastructure, and critical facilities located within identified hazard area boundaries.

Special Considerations: In addition to reviewing and incorporating data from comprehensive and long-range plans, some communities may opt to conduct a build-out analysis. The analysis involves a projection based on full development of all land in accordance with existing land use regulations such as the zoning ordinance or subdivision regulations. Within this context, the impact of growth on vulnerability could be assessed and included in the risk

	assessment as a means to develop future actions to mitigate the risk.[3]
Special Consideration: Using HAZUS-MH to Estimate Potential Losses	While HAZUS is not required in Local Mitigation Plans, communities are encouraged to use HAZUS to form a scientific basis from which the mitigation strategy is developed. To consider the assets that can be impacted by the prioritized hazards, HAZUS outputs tables and maps of inventory data and allows the incorporation of local data. It provides a means by which the user can document the populations, buildings, transportation infrastructure, utilities, and other elements of the built environment that can be impacted by different hazard events.
Resources:	For a discussion on identifying vulnerable structures and preparing a detailed inventory, *See*: ✓ *Understanding Your Risks* (FEMA 386-2), Step 3, Worksheets #3a and #3b Inventory Assets. ✓ HAZUS-MH at www.fema.gov/plan/prevent/hazus . ✓ *Integrating Manmade Hazards into Mitigation Planning, (*FEMA 386-7), Phase 2, Step 3.

Multi-Hazard Planning Phase	**A Comparison of the Community Rating System & Hazard Mitigation Planning**	**CRS Step**
Phase 3: Risk Assessment For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 4: Step 4: Assess the Hazard& Step 5: Assess the Problem** For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

[3] Source: United States Environmental Protection Agency, http://www.epa.gov/greenkit/build_out.htm

ASSESSING VULNERABILITY: ESTIMATING POTENTIAL LOSSES

Requirement §201.6(c)(2)(ii)(B):	[The plan should describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(i)(A) of this section and a description of the methodology used to prepare the estimate …

Explanation:

Describing vulnerability in terms of dollar losses provides the community and the State with a common framework in which to measure the effects of hazards on vulnerable structures. The Plan *should* include an estimate of losses for the identified vulnerable structures. A monetary estimate *should* be provided for each hazard, and *should* include, when resources permit, structure, contents, and function losses to present a full picture of the total loss for each asset.

Structure loss is defined as a percentage of the Replacement Value x Percentage of Damage. Content loss is defined as a percentage of the Replacement Value x Percentage of Damage. Functional Losses are indirect effects that usually involve interruptions in asset operations. Functional downtime is the average time (in days) during which functions (business or service) is unable to provide its service due to a hazard event.

Where data are limited, the planning team can select the most likely event for each hazard and estimate the losses for that event. In this way, the planning team can identify parts of the jurisdiction that could suffer the greatest losses. In addition, the estimated dollar losses as a result of hazard events can also be used to assess the benefits and costs of proposed mitigation actions.

The methodology used to determine losses *should* also be provided in the plan. It *should* note any data limitations and identify and include in the implementation strategy actions for obtaining the data to complete and improve the future risk assessment analysis efforts.

Plan Update:

The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect changes in development, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The loss estimate *should* be updated to reflect changes to the hazard profile and/or to the inventory of structures. The plan *should* describe any new methodology if the approach for determining the losses has changed since the previous plan approval. The updated plan *should* include, when resources permit, estimates of current structure, contents, and function losses to present a full picture of the total loss for each asset.

If the previously approved plan noted data deficiencies in estimating potential losses and new data is available , then the new information

	should be incorporated into the updated plan. However, if the data deficiencies have not been resolved, the updated plan *should* explain why the data deficiencies remain and a schedule to resolve the issue.
Special Considerations:	Creating a composite loss map depicting high potential loss areas (and identifying the location of critical facilities within the high potential loss areas) from multiple hazards will help the community develop its mitigation priorities based on loss potential.
Special Consideration: Using HAZUS-MH to Estimate Potential Losses	While HAZUS is not required in Local Mitigation Plans, communities are encouraged to use HAZUS to form a scientific basis from which the mitigation strategy is developed. The most important purpose of HAZUS is the ability to estimate losses from natural hazards. Descriptions of losses include both social and economic considerations and they describe both the location and extent of losses.
Resources:	For a step-by-step method for estimating losses, *See*: ✓ *Understanding Your Risks* (FEMA 386-2), Step 4. ✓ HAZUS-MH at www.fema/gov/plan/prevent/hazus . ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 27. ✓ *Integrating Manmade Hazards into Mitigation Planning (FEMA 386-7), Phase 2, Step 4.*

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 3: Risk Assessment [The plan **should** describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(i)(A) of this section and a description of the methodology used to prepare the estimate.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 5: Assess the Problem** CRS credit is given for an assessment that includes a review of all properties that received flood insurance claims (in addition to repetitive loss properties) or an estimate of the potential dollar losses to vulnerable structures. This is optional.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

ASSESSING VULNERABILITY: ANALYZING DEVELOPMENT TRENDS

Requirement §201.6(c)(2)(ii)(C):	[The plan should describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.

Explanation:

The plan *should* provide a general overview of land uses and types of development occurring within each community participating in the plan. This can include existing land uses and development densities in the identified hazard areas, as well as any anticipated future/proposed land uses, including anticipated new development, and redevelopment, and anticipated annexation areas.

An analysis of development trends provides a basis for making decisions on the type of mitigation approaches to consider, and the locations where these approaches can be implemented. This information can also be used to influence decisions regarding future development in hazard areas. A land use map would be useful to depict the descriptive information.

The plan *should* note any data limitations and identify and include in the mitigation strategy actions for obtaining the data necessary to complete and improve the risk assessment in the future.

The Local Mitigation Plan *should* consider any or all of the following when analyzing development trends:

- Describe trends in terms of the amount of change over time (for example, projecting trends based on increases of numbers of permits, including demolition, issued per year) and identify where the development is occurring;
- Differentiate land uses of similar types that have distinctly different densities (for example, single-family homes, attached housing, and multifamily housing);
- Where the future land uses are likely to occur based on comprehensive plans, zoning, redevelopment plans, or proposed annexation areas; or
- The expected growth or redevelopment for some reasonable future timeframe (for example, 10 years). The timeframe could be coordinated with that of a local comprehensive or long-range plan review and update.

Plan Update:

The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect changes in development, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The updated plan *should* include a general overview of land uses and types of development occurring within the community, highlighting any changes since the previously approved plan. The update *should*

specifically include existing and future land uses in identified hazard areas.

If the previously approved plan noted data deficiencies in analyzing development trends and identified actions in the mitigation strategy to address them at a later time, then the new information *should* be incorporated. However, if the data deficiencies have not been resolved, they *should* be addressed in the updated plan, accompanied by an explanation of why they remain and an updated schedule to resolve the issue.

Special Considerations:

To ascertain which jurisdictions statewide are the most vulnerable and to establish priorities for mitigation funding and technical assistance, the State is required under 44 CFR §201.4(c)(2)(ii) to review local risk assessments and information provided in Local Mitigation Plans regarding current and future land uses and anticipated or proposed development. Following the review of Local Mitigation Plans, the State may adjust their own risk assessment to more accurately reflect vulnerability using more detailed data provided in Local Mitigation Plans. States may use this information to prioritize mitigation programming and funding. The integration includes the analysis of:

- Areas of the State that have experienced significant population increases or decreases and/or shifts in population;
- Changes in land use or land use activities in vulnerable areas;
- Implementation of mitigation actions that have ultimately reduced vulnerability.

Special Consideration: Using HAZUS-MH to Estimate Potential Losses

While HAZUS is not required in Local Mitigation Plans, communities are encouraged to use HAZUS to form a scientific basis from which the mitigation strategy is developed.

The HAZUS provided inventory reflects current conditions within a community based on best available national data sources. It is possible for the HAZUS user to replace the out-of-the-box inventory with data that reflects projected community change. While this process can be potentially time consuming and costly depending on the scale of the area under study, it could provide a valuable means by which to assess the risk from anticipated development. This information can then be applied toward making better informed decisions which can guide development within the community.

Resources:

For more information on development trends, consult with your local, State, or regional planning officials. Also *See*:

- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 29.

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 3: Risk Assessment [The plan should describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 5: Assess the Problem** The CRS gives credit for a description of the development, redevelopment, and population trends as well as a discussion of what the future brings for development in the community. This is optional..

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

MULTI-JURISDICTIONAL RISK ASSESSMENT

Requirement §201.6(c)(2)(iii):	For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

Explanation:

The multi-jurisdictional plan **must** present risk assessment information for the planning area as a whole as described in sections 201.6(c)(2)(i) and (ii). However, where hazards and associated losses occur in only part of the planning area, this information **must** be attributed to the particular jurisdiction in which they occur.

The larger the planning area and the more communities participating in a plan, the more likely that unique and varied risk will occur. Consulting the State hazard mitigation plan can help identify the hazards that affect each jurisdiction in the planning area.

Further, where unique construction characteristics or development trends occur, they *should* be indicated in the plan so that appropriate mitigation actions are considered.

Plan Update:

The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect changes in development, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

If new hazards and risks have been identified in the multi-jurisdictional risk assessment, the information **must** be attributed to the appropriate jurisdiction (s) or to the whole planning area, whichever applies.

Where vulnerability to previously identified hazards has changed, the plan **must** incorporate this information into the updated multi-jurisdictional risk assessment and it **must** be attributed to the appropriate jurisdiction (s) or to the whole planning area, whichever applies.

Resources:

For more information on creating a detailed risk assessment, *See*:

- ✓ *Understanding Your Risks* (FEMA 386-2), Steps 1 – 4.
- ✓ HAZUS-MH at www.fema.gov/plan/prevent/hazus.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 21-29.

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 3: Risk Assessment For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 4. Assess the Hazard** & **Step 5: Assess the Problem** For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

MITIGATION STRATEGY

Section 201.6(c)(3) of the mitigation planning regulation requires jurisdictions to develop a mitigation strategy. The mitigation strategy serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The mitigation strategy includes the development of goals, objectives, and prioritized mitigation actions.

The development of goals from which specific actions and projects will be derived is based on the community's existing authorities, policies, programs, and resources and its capability to use local tools to reduce losses and vulnerability from profiled hazards. Goals are long-term policy statements and global visions that support the mitigation strategy. An example of a goal for a wildfire hazard is, "Minimize wildfire losses in the wildland urban interface area." Many communities take an extra step and identify objectives that more narrowly define implementation steps to attain the goals. Unlike goals, objectives are specific and measurable, such as, "Increase educational opportunities for citizens about wildfire defensible space actions."

Following the identification of goals and objectives, the mitigation planning regulation at 44 CFR Part 201 requires that communities identify, analyze, and prioritize alternative actions *by profiled hazard*. The actions are even more specific than objectives. An example of an action for a wildfire hazard is "Sponsor a booth at the community fair to promote wildfire defensible space." Local jurisdictions will benefit by reviewing the State's mitigation strategy to ensure locally identified actions are supported by the State's policies, regulations and programs.

For multi-jurisdictional plans, each participating jurisdiction identifies the specific actions they will undertake for each hazard profiled. Some actions may apply to more than one jurisdiction, but specific mitigation actions are identified for each jurisdiction.

Communities are encouraged to develop actions that can be implemented by using local tools, such as capital improvement budgets, special district funds, or implementing changes in ordinances, policies, or procedures. In addition, communities are encouraged to consider mitigation actions that may not be currently feasible, but may become a realistic possibility following a disaster event. Access to State or Federal funds may enable communities to accomplish actions during post-disaster recovery.

After five years of implementing the mitigation strategy, communities update their goals and actions. In the plan update, goals and objectives may be reaffirmed or updated based on current conditions, including the completion of mitigation initiatives, an updated or new risk assessment, or changes in State priorities. It is useful to review the changes in the community since the previous plan was approved to determine whether goals have been met or if they remain consistent with current conditions.

This section includes the following five (5) subsections:

- Local Hazard Mitigation Goals
- Identification and Analysis of Mitigation Actions
- Implementation of Mitigation Actions
- Implementation of National Flood Insurance Program (NFIP)
- Multi-jurisdictional Mitigation Actions

LOCAL HAZARD MITIGATION GOALS

Requirement §201.6(c)(3)(i):	[The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

Explanation: Goals are broad policy statements that explain what is to be achieved. The community's hazard reduction goals, as described in the plan, along with any corresponding objectives, guide the development and implementation of mitigation actions. This section **shall** list the goals intended to reduce or avoid the effects of the profiled hazards addressed in the risk assessment.

The description *should* include how goals were developed. The goals could be developed early in the planning process and refined based on the risk assessment findings, or developed entirely after the risk assessment is completed. They *should* also be compatible with the goals of the community as expressed in other community plan documents, such as a comprehensive plan.

Although the mitigation planning regulation does not require a description of objectives, communities are encouraged to include objectives developed to achieve the goals so that reviewers understand the connection between goals, objectives, and actions.

The goals and objectives *should*:

- Be based on the findings of the local and State risk assessments; and
- Represent a long-term vision for hazard reduction or enhancement of mitigation capabilities.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect progress in local mitigation efforts and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The plan update provides an opportunity for local jurisdictions to reconsider the goals and objectives identified in the previously approved plan. Goals *should* be reaffirmed or updated based on current conditions, including the completion of mitigation initiatives, an updated or new risk assessment, or changes in State priorities.

It is not necessary to change goals from the previous plan if they remain valid; however, the plan **must** document that goals were re-evaluated and that they were determined to remain valid and effective. If the previously approved plan included objectives, the updated plan *should* document which objectives have been met, and identify new objectives.

The planning team *should* address the following questions when updating the mitigation strategy:

- Do the goals and objectives identified in the previously approved plan reflect the updated risk assessment?
- Did the goals and objectives identified in the previously approved plan lead to mitigation projects and/or changes in policy that helped the jurisdiction(s) to reduce vulnerability?
- Do the goals and objectives identified in the previously approved plan support any changes in mitigation priorities?
- Are goals identified in the updated Local Mitigation Plan reflective of current State goals?

Special Considerations:

Goals are general guidelines that explain what you want to achieve. They are broad policy statements and are usually long-term and represent global visions, such as "Protect Existing Property."

Objectives define strategies or implementation steps to attain the identified goals. Unlike goals, objectives are specific, measurable, and may have a defined completion date. Objectives are more specific, such as "Increase the number of buildings protected from flooding."

The development of effective goals and objectives enables the planning team to evaluate the merits of alternative mitigation actions and the local conditions in which these activities would be pursued. A potential mitigation action that would support the goal and objective goal example above is "Acquire repetitive flood loss properties in the Acadia Woods Subdivision."

Resources:

For more information on developing local mitigation goals and objectives, *See*:

- ✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 1.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 30.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 3, Step 1.

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 4: Mitigation Strategy [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 6: Set Goals** Credit is based on a statement of goals to reduce or avoid long term vulnerability to the identified hazards.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

IDENTIFICATION AND ANALYSIS OF MITIGATION ACTIONS

Requirement §201.6(c)(3)(ii):	[The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

Explanation:

The local jurisdiction **shall** list potential loss reduction actions it has identified in its planning process and analyze various actions that achieve the community's goals and objectives to reduce or avoid the effects of the identified hazards. A *comprehensive range* of specific mitigation actions consists of multiple mitigation actions for each profiled hazard. "No Action" does not qualify as a mitigation action. Mitigation actions **shall** address **existing** and **new** buildings and infrastructure.

Prior to analyzing and prioritizing mitigation actions, it may be useful for communities to sort identified mitigation actions into the following groups:

- **Prevention:** Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and storm water management regulations.
- **Property Protection**: Actions that involve the modification of existing buildings or infrastructure to protect them from a hazard, or removal from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, flood proofing, storm shutters, and shatter-resistant glass.
- **Public Education & Awareness**: Actions to inform and educate citizens, elected officials, and property owners about potential risks from hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.
- **Natural Resource Protection:** Actions that, in addition to minimizing hazard losses also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Structural Projects:** Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include storm water controls (*e.g.*, culverts), floodwalls, seawalls, retaining walls, and safe rooms.

The plan **should** describe the process by which the community decides on particular mitigation actions. This description *should* include who participated in the analysis and selection of actions. Some of the mitigation actions initially identified may ultimately be eliminated in the community's action plan due to limited capabilities, prohibitive costs, low

benefit/cost ratio, or other concerns. The information will also be valuable as part of the alternative analysis for the National Environmental Policy Act (NEPA) review required if projects are Federally funded.

With regard to analyzing mitigation actions, FEMA's *Developing the Mitigation Plan* (FEMA 386-3) highlights the STAPLEE method—a technique for identifying, evaluating, and prioritizing mitigation actions based on existing local conditions.

S	Social	The public must support the overall implementation strategy and specific mitigation actions. Therefore, the projects will have to be evaluated in terms of community acceptance.
T	Technical	It is important to determine if the proposed action is technically feasible, will help to reduce losses in the long term, and has minimal secondary impacts. Determine whether the alternative action is a whole or partial solution, or not a solution at all.
A	Administrative	Under this part of the evaluation criteria, examine the anticipated staffing, funding, and maintenance requirements for the mitigation action to determine if the jurisdiction has the personnel and administrative capabilities necessary to implement the action or whether outside help will be needed.
P	Political	Understanding how your current community and State political leadership feels about issues related to the environment, economic development, safety, and emergency management. This will provide valuable insight into the level of political support have for mitigation activities and programs. Proposed mitigation objectives sometimes fail because of a lack of political acceptability.
L	Legal	Without the appropriate legal authority, the action cannot lawfully be undertaken. When considering this criterion, determine whether your jurisdiction has the legal authority at the State, or local level to implement the action, or whether the jurisdiction must pass new laws or regulations. Each level of government operates under a specific source of delegated authority. As a general rule, most local governments operate under enabling legislation that gives them the power to engage in different activities. Identify the unit of government undertaking the mitigation action, and include an analysis of the interrelationships between local, regional, State, and Federal governments. Legal authority is likely to have a significant role later in

the process when your State, or community will have to determine how mitigation activities can best be carried out, and to what extent mitigation policies and programs can be enforced.

E Economic — Every local and State government experiences budget constraints at one time or another. Cost-effective mitigation actions that can be funded in current or upcoming budget cycles are much more likely to be implemented than mitigation actions requiring general obligation bonds or other instruments that would incur long-term debt to a community. States and local communities with tight budgets or budget shortfalls may be more willing to undertake a mitigation initiative if it can be funded, at least in part, by outside sources. “Big ticket” mitigation actions, such as large-scale acquisition and relocation, are often considered for implementation in a post-disaster scenario when additional Federal and State funding for mitigation is available.

E Environmental — Impact on the environment is an important consideration because of public desire for sustainable and environmentally healthy communities and the many statutory considerations, such as NEPA, to keep in mind when using Federal funds. You will need to evaluate whether, when implementing mitigation actions, there would be negative consequences to environmental assets such as threatened and endangered species, wetlands, and other protected natural resources.

Using criteria such as STAPLEE, local communities can weigh the pros and cons of implementing a particular mitigation action. Jurisdictions *should* evaluate actions based on local conditions that may impact whether or not the *actions* identified in the mitigation action plan could be accomplished. When identifying and evaluating mitigation actions, the following considerations may also be useful:

- Compatibility with goals and objectives identified in the current State hazard mitigation plan;
- Compatibility with goals and objectives identified in the local mitigation strategy;
- An assessment of the impact of identified actions on other jurisdictions within the entire planning area or region (*e.g.* No Adverse Impact[4] watershed area plans)
- Cost/benefit reviews of potential actions;

- Funding priorities identified in the current State hazard mitigation plan; and
- Compatibility with other local or regional plans and programs.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect progress in local mitigation efforts and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The plan update provides an opportunity for local jurisdictions to reconsider the range of specific actions. If the mitigation actions or activities remain unchanged from the previously approved plan the updated plan **should** indicate why changes are not necessary.

Special Considerations: In the course of developing the local hazard mitigation plan, your community may discover and build consensus on preparedness, response, and recovery actions. Although FEMA will not deny a plan for including these types of actions, they do not substitute for the *mitigation* action requirements of a Local Mitigation Plan. In addition, even though actions are listed in the plan, they may not all meet eligibility requirements for FEMA's mitigation grant programs. FEMA encourages communities to formally agree upon mitigation actions that will make the community safer from natural and man-made hazards.

Hazard mitigation is defined as sustained action taken to reduce or eliminate long-term risk to people and property from hazards and their effects. A mitigation action, such as voluntary acquisition and conversion to open space in a floodplain protects the property and the removes the people from harm's way for the long-term. A response action that would not qualify as a mitigation action would be, "Update Emergency Operations Plan" or "Purchase fire trucks."

Special Considerations: The community may review the sections on "State and Local Capability Assessment" in their State's hazard mitigation plan to assess their own existing and planned capabilities to implement the identified mitigation actions. This assessment *should* include a discussion of existing mitigation activities in the community, existing regulatory standards (*e.g.* building codes, zoning ordinances), projects that have already been planned, integration with comprehensive planning and capital improvement programs, *etc.*, as well as the jurisdiction's ability to expand on and improve these existing tools.

Resources: For more information on identifying and evaluating mitigation actions and preparing a capability assessment, *See*:

- ✓ *Developing the Mitigation Plan* (FEMA 386-3), Step 2, Worksheet #1 Identify Alternative Mitigation Actions, Job Aid #1: Alternative Mitigation Actions by Hazard, Worksheet #2 State Mitigation Capability Assessment, Worksheet #3 Local Mitigation Capability

Assessment, Job Aid #2: Local Hazard Mitigation Capabilities, and Worksheet #4 Evaluate Alternative Mitigation Actions.

- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 31.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 3, Step 2.
- ✓ Rebuilding for a More Sustainable Future: An Operational Framework (FEMA 365).

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 4: Mitigation Strategy **[The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.**	**Difference?** The CRS plan must discuss why some activities are appropriate for implementation and also discuss why certain activities are not appropriate for implementation.	**Step 7. Review Possible Activities** **Credit is based on a comprehensive evaluation of hazard mitigation measures reviewed in the plan. The review must include a description of why certain activities were recommended and why others were not.**

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

IMPLEMENTATION OF NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

Requirement §201.6(c)(3)(ii):	[The mitigation strategy] must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.

Explanation:

Participation in the NFIP is based on an agreement between communities and FEMA. The NFIP has three basic aspects: 1) floodplain identification and mapping; 2) floodplain management; and 3) flood insurance. First, NFIP participation requires community adoption of flood maps. Mapping flood hazards creates broad-based awareness of the flood hazards and provides the data needed to administer floodplain management programs and to actuarially rate new construction for flood insurance. Second, to be a participant, the NFIP requires communities to adopt and enforce minimum floodplain management regulations that help mitigate the effects of flooding on new and improved structures. Third, community participation in the NFIP enables property owners to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages.

All Local Mitigation Plans approved by FEMA after October 1, 2008 **must** describe each jurisdiction's participation in the NFIP and **must** identify, analyze and prioritize actions related to continued compliance with the NFIP. Simply stating an action such as, "The community will continue to comply with NFIP," will not meet this requirement. Basic compliance NFIP actions could include, but are not limited to:

- Adoption and enforcement of floodplain management requirements, including regulating all and substantially improved construction in Special Flood Hazard Areas (SFHAs);
- Floodplain identification and mapping, including any local requests for map updates, if needed; or,
- Description of community assistance and monitoring activities.

Not all jurisdictions participate in the NFIP either because the community has not been identified with Special Flood Hazard Area (SFHA), has not been issued a Flood Hazard Boundary Map (FHBM) or a Flood Insurance Rate Map (FIRM), or because the community has not adopted the FEMA-issued flood maps. NFIP participation is voluntary for communities. Jurisdictions that are currently not participating in the NFIP may meet this requirement by describing the reasons why the community does not participate, particularly where a FHBM or FIRM has been issued.

Communities are encouraged to take on additional activities that go above and beyond the minimum requirements of NFIP participation and these are described in the Community Rating System Coordinator's Manual (FIA-15/2007) (*See* http://training.fema.gov/EMIWeb/CRS/).

Another innovative program is FEMA's Cooperating Technical Partners Program (CTP). The main objective of CTP is to increase local involvement in the flood mapping process. With over 20,000 communities in the NFIP, the CTP encourages collaboration with NFIP communities and regional and State agencies who wish to become more active participants in the FEMA flood hazard mapping program.

Special Consideration: NFIP participation is a basic eligibility requirement for funding under certain hazard mitigation grant programs, including FMA, SRL and PDM. Jurisdictions that meet the NFIP requirement under §201.6(c)(3)(ii) in their local mitigation plans do not automatically qualify for funding.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect progress in local mitigation efforts and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

Therefore, the plan update **must** describe each jurisdiction's participation in the NFIP, including any changes since the previously approved plan was adopted, and **must** identify, analyze and prioritize actions related to continued compliance with the NFIP.

Resources: For additional information on the NFIP, *See*:

- ✓ National Flood Insurance Program Description http://www.fema.gov/about/programs/nfip/index.shtm
- ✓ Community Rating Resource Center, http://training.fema.gov/EMIWeb/CRS/.

Multi-Hazard Planning Phase	**A Comparison of the Community Rating System & Hazard Mitigation Planning**	**CRS Step**
Phase 4: Mitigation Strategy [The mitigation strategy] must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.	**Difference?** If the community participates in CRS, they are already in full compliance with NFIP requirements.	**Step 8: Action Plan** CRS credits regulations that go above and beyond the minimum of the NFIP.

(See also the CRS Resource Center at *http://training.fema.gov/EMIWeb/CRS/* for additional information on participation in the Community Rating System.)

IMPLEMENTATION OF MITIGATION ACTIONS

Requirement: §201.6(c)(3)(iii):	[The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

Explanation: After describing the mitigation actions to be included in the mitigation strategy, the local jurisdiction **shall** describe the method for prioritizing the order in which actions will be implemented. Considerations that may be used to prioritize the action plan include: social impact, technical feasibility, administrative capabilities, political and legal effects, and economic, as well as environmental issues. The STAPLEE method may be used to evaluate potential actions for the mitigation strategy, but also to prioritize those that the community selects as its mitigation actions.

When prioritizing mitigation actions, local jurisdictions **shall** consider the benefits that would result from the mitigation actions versus the cost of those actions. Note that the mitigation planning regulation **does not require** plans to include a benefit cost analysis for projects. However, an economic evaluation is essential for selecting one or more actions from among many competing ones. The requirement is met as long as the economic considerations are summarized in the plan as part of the community's analysis. Among ways to address this requirement are:

- Assessing the economic impact of one action compared to another.
- Showing how one type of action costs more than another to achieve the same benefit.
- Showing that funding is available for one type of action but not another.
- Demonstrating that the economic goals of your community are better served by one action instead of another.

This section **shall** also include how actions will be implemented and administered, including the department or agency responsible for carrying out the actions, the potential funding sources, and the implementation timeline. This section *should* also include a cost estimate or budget for each action, when available. If cost estimates are not available, jurisdictions may provide comparative costs (such as high, medium, or low) with defined scales among actions.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect progress in local mitigation efforts and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

Therefore, the updated plan **must** identify the completed, deleted, or deferred actions or activities from the previously approved plan as a benchmark for progress. If the mitigation actions or activities remain unchanged from the previously approved plan, the updated plan **must** indicate why changes are not necessary. Further, the updated plan **shall** include in its prioritization any new mitigation actions identified since the previous plan was approved or through the plan update process.

Resources

For more information on the development of the action plan, *See*:

- ✓ *Developing the Mitigation Plan* (386-3), Phase 3.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 32.
- ✓ *Using Benefit-Cost Review in Mitigation Planning* (FEMA 386-5)

Multi-Hazard Planning Phase	**A Comparison of the Community Rating System & Hazard Mitigation Planning**	**CRS Step**
Phase 4: Mitigation Strategy [The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.	**Difference?** For CRS credit, the action plan must identify for each action item who does what (what department or agency), when it will be done (deadline), and how it will be financed (community or outside funding).	**Step 8: Draft an Action Plan** Credit is based on an action plan that identifies who does what, when it will be done, and how it will be financed. The actions must be prioritized and include a review of the benefits of the proposed projects and their associated costs.

(See also the CRS Resource Center at *http://training.fema.gov/EMIWeb/CRS/* for additional information on participation in the Community Rating System.)

MULTI-JURISDICTIONAL MITIGATION ACTIONS

Requirement §201.6(c)(3)(iv):	For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

Explanation: The multi-jurisdictional plan **must** link the proposed mitigation actions to the applicable jurisdictions. Any jurisdiction within the planning area requesting approval for the plan **must** be able to point to specific actions to be pursued. Actions by individual jurisdictions may be part of or contribute to an area-wide mitigation action. The scope of any action may be entirely within the jurisdiction or may be part of a larger action involving some or all of the other jurisdictions covered in the plan.

Each jurisdiction **must** have participated in identifying and analyzing a comprehensive range of mitigation actions for each profiled hazard, which can result in an achievable mitigation action plan (*See* §201.6(c)(3)(ii)). As with single-jurisdictional plans, a *comprehensive range* of specific mitigation actions consists of multiple mitigation actions for each profiled hazard and for each jurisdiction participating in the plan.

This section **must** also include how actions will be implemented and administered. The plan **must** include the jurisdiction, department responsible for carrying out the actions, the potential funding sources, and the implementation timeline. This section *should* also include a cost estimate or budget for each action, when available.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect progress in local mitigation efforts and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The updated multi-jurisdictional plan **must** identify the completed, deleted or deferred actions from the previously approved plan as a benchmark for progress. Further, the updated plan **shall** include any new mitigation actions identified in its evaluation and prioritization since the previous plan was approved or through the plan update process.

If the mitigation actions remain unchanged from the previously approved plan, the updated plan **must** indicate why changes are not necessary.

Resources: For more information on the development of the action plan, *See*:

- ✓ *Developing the Mitigation Plan* (FEMA 386-3), Phase 3.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 32.
- ✓ *Using Benefit-Cost Review in Mitigation Planning,* (FEMA 386-5).

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 4: Mitigation Strategy For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan	**Difference?** The CRS requires that an Action Plan must include mitigation measures from at least two of the six floodplain management review categories.	**Step 8: Draft an Action Plan** For CRS credit, when a multi-jurisdictional plan is prepared, it must have action items from at least two of the six categories that directly benefit each community seeking CRS credit.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

PLAN MAINTENANCE PROCESS

Section 201.6(c)(4) of 44 CFR requires a formal plan maintenance process to ensure that the mitigation plan remains an active and relevant document. The plan maintenance process includes a method and schedule for monitoring, evaluating, and updating the plan at least every five (5) years. This also includes an explanation of how local governments intend to incorporate their mitigation strategies into existing planning mechanisms, such as comprehensive or capital improvement plans, or zoning and building codes. Lastly, this section requires that there be continued public participation throughout the plan maintenance process.

When the plan is updated, local jurisdictions assess how the Local Mitigation Plan maintenance process worked and identify whether changes to the process are needed. Taking into consideration future updates, adjustments to the method and schedule for maintaining the plan may be necessary to ensure its value for comprehensive risk reduction.

As the mitigation plan evolves through updates, the plan maintenance process serves as the basis for the next update, and the process of updating the plan provides local jurisdictions with an opportunity to document progress in achieving mitigation goals.

When the community prepares a plan update, the mitigation planning regulation at 44 CFR Part 201 requires that the plan discuss how the community was kept involved during the plan maintenance process over the previous five years. This discussion may take place within the planning process section of the plan update rather than the plan maintenance section. The plan maintenance section is intended to be forward-thinking and emphasize future plan maintenance.

This section includes the following three subsections:

- Monitoring, Evaluating, and Updating the Plan
- Incorporation into Existing Planning Mechanisms
- Continued Public Involvement

MONITORING, EVALUATING, AND UPDATING THE PLAN

Requirement §201.6(c)(4)(i):	[The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

Explanation: The local jurisdiction **shall** describe how, when, and by whom the plan will be **monitored.** It is only necessary to provide the department or agency responsible for carrying out the actions, not individuals. Monitoring may include periodic reports by agencies involved in implementing projects or activities, site visits, phone calls, and meetings conducted by the person responsible for overseeing the plan, or the preparation of annual reports that capture the highlights of the previously mentioned activities.

The plan **shall** also include a description of how, when, and by whom the plan will be **evaluated**, and *should* include the criteria used to evaluate the plan. The evaluation *should* assess, among other things, whether:

- The goals and objectives address current and expected conditions.
- The nature, magnitude, and/or type of risks have changed.
- The current resources are appropriate for implementing the plan.
- There are implementation problems, such as technical, political, legal, or coordination issues with other agencies.
- The outcomes have occurred as expected (a demonstration of progress).
- The agencies and other partners participated as originally proposed.

The plan **shall** describe how, when, and by whom the plan will be **updated**. The mitigation planning regulation requires that the plan be updated within five years from the date of FEMA approval. FEMA recommends that the plan be reviewed and updated on an annual basis or after a hazard occurrence to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities. Monitoring, evaluation, and updating activities should take place continuously within the five-year timeframe.

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The previously approved plan identified procedures to **monitor**, **evaluate**, and **update** its mitigation plan and track mitigation activities. The results of this evaluation and monitoring will assist local government in updating each section of the plan as part of the established update schedule. In

particular, the plan maintenance section of the previously approved plan should assist in establishing a process for updating the plan.

As a part of the planning process, the community reviews and analyzes the previously approved plan's method and schedule for monitoring and updating the plan, such as strengths and weaknesses and what elements, if any, have changed. The updated plan **must** include the method and schedule to be used over the next five years to monitor, evaluate, and update the plan.

Resources: For guidance on monitoring, evaluating, and updating the plan, *See*:

- ✓ *Bringing the Plan to Life* (FEMA 386-4), Steps 2 – 4.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 35.
- ✓ *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7), Phase 4, Step 3.

Multi-Hazard Planning Phase	**A Comparison of the Community Rating System & Hazard Mitigation Planning**	**CRS Step**
Phase 5: Plan Maintenance [The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.	**Difference?** The CRS requires annual progress reports as well as an update of the plan every five years.	**Step 10: Draft an Action Plan** Credit is based on how a community monitors and evaluates its plan on an annual basis and updates it on a five-year cycle.

(See also the CRS Resource Center at *http://training.fema.gov/EMIWeb/CRS/* for additional information on participation in the Community Rating System.)

INCORPORATION INTO EXISTING PLANNING MECHANISMS

Requirement §201.6(c)(4)(ii):	[The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvements, when appropriate.

Explanation: The plan **shall** specify how the mitigation strategy, including the goals and objectives, and mitigation actions will be incorporated *into* other planning mechanisms. Jurisdictions **shall** also indicate how information contained in the plan, including hazard identification and the risk assessment, will be integrated into other planning mechanisms.

Communities that do not have comprehensive plans, capital improvement plans or other long-range plans, *should* explain how the mitigation actions would be implemented into zoning and building codes, subdivision regulations, site reviews, permitting, job descriptions, staff training, or other planning tools where such tools are the appropriate vehicle for implementation. For mitigation actions that may use other means of implementation, these other tools *should* be described.

Local government functions provide a myriad of methods in which to implement actions identified in the mitigation strategy. Among them is the comprehensive plan. Others include but are not limited to the following:

Plans	
Local Comprehensive Plan	***Land Use***
General Land Use Plan	
Sustainability Plan	
Capital Improvements Plan	
Redevelopment Plan	
Post-Disaster Redevelopment / Recovery Plan	
Regional Development Plans	
Watershed Protection/Enhancement Plan	
Open Space Plan	
Flood Mitigation Plan	
Military Base Development/Redevelopment/Reuse Plan	
College Campus Plans	

Comprehensive Emergency Management Plan	***Emergency Operations***
Evacuation Plan	
Codes, Regulations, & Procedures	***Land Use***
Zoning Ordinance	
Subdivision Regulations	
Building Code / Permitting	
Landscape Code	
Solid Waste & Hazardous Materials Waste Regulations	
Property Deed Restrictions	
Tree Protection Ordinance	
Site Plan Review	
Architectural/Design Review	
Storm Water Management	
Soil Erosion Ordinance	
Programs	***Land Use***
Beach Conservation & Restoration Program	
Historic Preservation Program	
Construction/Retrofit Program	
Transportation Improvement/Retrofit Program	
School District Facilities Plan	
Environmentally Sensitive Purchase / Protection Program	
Long-Range Recreation Facilities Program	
Economic Development Authority	
Land Buyout Program	
Downtown Redevelopment Authority	
Local and/or Regional Evacuation Programs	
“Firewise” and other Fire Mitigation	
Fire Rescue Long-Range Programs	
Mutual Aid Agreement	
Temporary Animal Relocation Program	

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

The updated plan **must** explain how the local government incorporated the mitigation plan into other planning mechanisms, when appropriate, as a demonstration of progress in local mitigation efforts.

The updated plan **shall** continue to describe how the mitigation strategy, including the goals and objectives, and mitigation actions will be incorporated into other planning mechanisms, and also indicate how information contained in the plan, including hazard identification and the risk assessment, will be integrated into other planning mechanisms.

Resources: For more information on incorporating hazard mitigation activities in other initiatives, *See*:

- ✓ *Getting Started* (FEMA 386-1), Step 2
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 29.
- ✓ *Planning for a Sustainable Future: The Link Between Hazard Mitigation and Livability* (FEMA 364)

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 5: Plan Maintenance [The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvements, when appropriate.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 3: Coordination with Other agencies.** If the plan includes a review of existing studies, reports, and technical information for the needs goals and plan for that area.

(*See* also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ for additional information on participation in the Community Rating System.)

CONTINUED PUBLIC INVOLVEMENT

Requirement §201.6(c)(4)(iii):	[The plan maintenance process shall include a] discussion on how the community will continue public participation in the plan maintenance process.

Explanation: The plan **shall** describe what opportunities the broader public (*i.e.*, stakeholders who are not part of the planning team) will have during the mitigation plan's periodic review to comment on the progress made to date and the proposed plan revisions. Plans *should* describe the mechanisms for keeping the public involved (*e.g.*, holding strategic meetings, posting the proposed changes to the plan on the Web, *etc.*)

Plan Update: The local jurisdiction is required by 44 CFR §201.6(d)(3) to review and revise its plan, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

When the community prepares a plan update, the mitigation planning regulation at 44 CFR Part 201 requires that the plan discuss how the community was kept involved during the plan maintenance process over the previous five years. It is suggested that this discussion take place within the planning process section of the plan update rather than the plan maintenance section. The plan maintenance section is intended to be forward-thinking and emphasize future community involvement.

The updated plan **shall** describe how the community will involve the public during the plan maintenance process over the next five years.

Resources: For more information on keeping the public involved, *See*:

- ✓ *Getting Started* (FEMA 386-1), Step 3.
- ✓ *Bringing the Plan to Life* (FEMA 386-4), Steps 2 and 3.
- ✓ *Multi-Jurisdictional Mitigation Planning* (FEMA 386-8), p. 38.

Multi-Hazard Planning Phase	A Comparison of the Community Rating System & Hazard Mitigation Planning	CRS Step
Phase 5: Plan Maintenance [The plan maintenance process shall include a] discussion on how the community will continue public participation in the plan maintenance process.	**Difference?** CRS Step is consistent with Multi-Hazard Planning Phase.	**Step 10: Impalement, evaluate and revise** The community must have procedures for monitoring implementation, reviewing progress, and recommending revisions to the plan in and annual evaluation report.

(See also the CRS Resource Center at http://training.fema.gov/EMIWeb/CRS/ *for additional information on participation in the Community Rating System.)*

INSTRUCTIONS FOR USING THE PLAN REVIEW CROSSWALK FOR REVIEW OF LOCAL MITIGATION PLANS

Attached is a Plan Review Crosswalk based on the ***Local Multi-Hazard Mitigation Planning Guidance***, published by FEMA in June, 2008. This Plan Review Crosswalk is consistent with the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (Stafford Act), as amended by Section 322 of the *Disaster Mitigation Act of 2000* (P.L. 106-390), the *National Flood Insurance Act of 1968,* as amended by the *National Flood Insurance Reform Act of 2004* (P.L. 108-264) and *44 Code of Federal Regulations (CFR) Part 201 – Mitigation Planning,* inclusive of all amendments through October 31, 2007.

SCORING SYSTEM
N – Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.
S – Satisfactory: The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Each requirement includes separate elements. All elements of a requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a summary score of "Satisfactory." A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing.

When reviewing single jurisdiction plans, reviewers may want to put an N/A in the boxes for multi-jurisdictional plan requirements. When reviewing multi-jurisdictional plans, however, all elements apply. States that have additional requirements can add them in the appropriate sections of the *Local Multi-Hazard Mitigation Planning Guidance* or create a new section and modify this Plan Review Crosswalk to record the score for those requirements. Optional matrices for assisting in the review of sections on profiling hazards, assessing vulnerability, and identifying and analyzing mitigation actions are found at the end of the Plan Review Crosswalk.

The example below illustrates how to fill in the Plan Review Crosswalk.:

Assessing Vulnerability: Overview

Requirement §201.6(c)(2)(ii): *[The risk assessment **shall** include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan include an **overall summary** description of the jurisdiction's **vulnerability** to each hazard?	Section II, pp. 4-10	The plan describes the types of assets that are located within geographically defined hazard areas as well as those that would be affected by winter storms.		☐
B. Does the **new or updated** plan address the **impact** of each hazard on the jurisdiction?	Section II, pp. 10-20	The plan does not address the impact of two of the five hazards addressed in the plan. **Required Revisions:** • Include a description of the impact of floods and earthquakes on the assets. **Recommended Revisions:** This information can be presented in terms of dollar value or percentages of damage.	☐	
		SUMMARY SCORE	☐	

LOCAL MITIGATION PLAN REVIEW SUMMARY

The plan cannot be approved if the plan has not been formally adopted. Each requirement includes separate elements. All elements of the requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a score of "Satisfactory." Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer's comments must be provided for requirements receiving a **"Needs Improvement"** score.

Prerequisite(s) (Check Applicable Box)	**NOT MET**	**MET**
1. Adoption by the Local Governing Body: §201.6(c)(5) OR		
2. Multi-Jurisdictional Plan Adoption: §201.6(c)(5) **AND**		
3. Multi-Jurisdictional Planning Participation: §201.6(a)(3)		

Planning Process	**N**	**S**
4. Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)		

Risk Assessment	**N**	**S**
5. Identifying Hazards: §201.6(c)(2)(i)		
6. Profiling Hazards: §201.6(c)(2)(i)		
7. Assessing Vulnerability: Overview: §201.6(c)(2)(ii)		
8. Assessing Vulnerability: Addressing Repetitive Loss Properties. §201.6(c)(2)(ii)		
9. Assessing Vulnerability: Identifying Structures, Infrastructure, and Critical Facilities: §201.6(c)(2)(ii)(B)		
10. Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B)		
11. Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C)		
12. Multi-Jurisdictional Risk Assessment: §201.6(c)(2)(iii)		

*States that have additional requirements can add them in the appropriate sections of the *Local Multi-Hazard Mitigation Planning Guidance* or create a new section and modify this Plan Review Crosswalk to record the score for those requirements.

SCORING SYSTEM

Please check one of the following for each requirement.

N – Needs Improvement: The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.

S – Satisfactory: The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Mitigation Strategy	**N**	**S**
13. Local Hazard Mitigation Goals: §201.6(c)(3)(i)		
14. Identification and Analysis of Mitigation Actions: §201.6(c)(3)(ii)		
15. Identification and Analysis of Mitigation Actions: NFIP Compliance. §201.6(c)(3)(ii)		
16. Implementation of Mitigation Actions: §201.6(c)(3)(iii)		
17. Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(iv)		

Plan Maintenance Process	**N**	**S**
18. Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(ii)		
19. Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(ii)		
20. Continued Public Involvement: §201.6(c)(4)(iii)		

Additional State Requirements*	**N**	**S**
Insert State Requirement		
Insert State Requirement		
Insert State Requirement		

LOCAL MITIGATION PLAN APPROVAL STATUS

PLAN NOT APPROVED	
See Reviewer's Comments	
PLAN APPROVED	

LOCAL MITIGATION PLAN REVIEW CROSSWALK

Local Mitigation Plan Review and Approval Status

Jurisdiction:	**Title of Plan:**	**Date of Plan:**
Local Point of Contact:	**Address:**	
Title:		
Agency:		
Phone Number:	**E-Mail:**	

State Reviewer:	**Title:**	**Date:**

FEMA Reviewer:	**Title:**	**Date:**
Date Received in FEMA Region [Insert #]		
Plan Not Approved		
Plan Approved		
Date Approved		

Jurisdiction:	**NFIP Status***			
	Y	**N**	**N/A**	**CRS Class**
1.				
2.				
3.				
4.				
5. [ATTACH PAGE(S) WITH ADDITIONAL JURISDICTIONS]				

*** Notes:** **Y = Participating** **N = Not Participating** **N/A = Not Mapped**

PREREQUISITE(S)

1. Adoption by the Local Governing Body

***Requirement §201.6(c)(5)*:** *[The local hazard mitigation plan **shall** include] documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council).*

Element	**Location in the Plan** (section or annex and page #)	Reviewer's Comments	SCORE NOT MET	SCORE MET
A. Has the local governing body adopted **new or updated** plan?				
B. Is supporting documentation, such as a resolution, included?				
		SUMMARY SCORE		

2. Multi-Jurisdictional Plan Adoption

***Requirement §201.6(c)(5)*:** *For multi-jurisdictional plans, each jurisdiction requesting approval of the plan **must** document that it has been formally adopted.*

Element	**Location in the Plan** (section or annex and page #)	Reviewer's Comments	SCORE NOT MET	SCORE MET
A. Does the **new or updated** plan indicate the specific jurisdictions represented in the plan?				
B. For each jurisdiction, has the local governing body adopted the **new or updated** plan?				
C. Is supporting documentation, such as a resolution, included for each participating jurisdiction?				
		SUMMARY SCORE		

3. Multi-Jurisdictional Planning Participation

***Requirement §201.6(a)(3)*:** *Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process … Statewide plans will not be accepted as multi-jurisdictional plans.*

Element	**Location in the Plan** (section or annex and page #)	Reviewer's Comments	SCORE NOT MET	SCORE MET
A. Does the **new or updated** plan describe **how** each jurisdiction participated in the plan's development?				
B. Does the updated plan identify all participating jurisdictions, including new, continuing, and the jurisdictions that no longer participate in the plan?				
		SUMMARY SCORE		

PLANNING PROCESS: *§201.6(b): An open public involvement process is essential to the development of an effective plan.*

4. Documentation of the Planning Process

Requirement §201.6(b): *In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process* ***shall*** *include:*
(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and
(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

Requirement §201.6(c)(1): *[The plan* ***shall*** *document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the plan provide a narrative description of the process followed to prepare the **new or updated** plan?				
B. Does the **new or updated** plan indicate who was involved in the **current** planning process? (For example, who led the development at the staff level and were there any external contributors such as contractors? Who participated on the plan committee, provided information, reviewed drafts, *etc.*?)				
C. Does the **new or updated** plan indicate how the public was involved? (Was the public provided an opportunity to comment on the plan during the drafting stage and prior to the plan approval?)				
D. **Does the new or updated plan discuss the** opportunity for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved in the planning process?				
E. Does the planning process describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?				
F. Does the updated plan document how the planning team reviewed and analyzed each section of the plan and whether each section was revised as part of the update process?				
		SUMMARY SCORE		

RISK ASSESSMENT: *§201.6(c)(2): The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.*

5. Identifying Hazards

Requirement §201.6(c)(2)(i): *[The risk assessment **shall** include a] description of the type … of all natural hazards that can affect the jurisdiction.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan include **a description** of the types of **all natural hazards** that affect the jurisdiction?				
		SUMMARY SCORE		

6. Profiling Hazards

Requirement §201.6(c)(2)(i): *[The risk assessment **shall** include a] description of the … location and extent of all natural hazards that can affect the jurisdiction. The plan **shall** include information on previous occurrences of hazard events and on the probability of future hazard events.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the risk assessment identify the **location** (*i.e.*, geographic area affected) of each natural hazard addressed in the **new or updated** plan?				
B. Does the risk assessment identify the **extent** (*i.e.*, magnitude or severity) of each hazard addressed in the **new or updated** plan?				
C. Does the plan provide information on **previous occurrences** of each hazard addressed in the **new or updated** plan?				
D. Does the plan include the **probability of future events** (*i.e.*, chance of occurrence) for each hazard addressed in the **new or updated** plan?				
		SUMMARY SCORE		

7. Assessing Vulnerability: Overview

Requirement §201.6(c)(2)(ii): *[The risk assessment **shall** include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan include an **overall summary** description of the jurisdiction's **vulnerability** to each hazard?				
B. Does the **new or updated** plan address the **impact** of each hazard on the jurisdiction?				
		SUMMARY SCORE		

8. Assessing Vulnerability: Addressing Repetitive Loss Properties

Requirement §201.6(c)(2)(ii): *[The risk assessment] **must** also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged floods.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the new or updated plan describe vulnerability in terms of the types and numbers of *repetitive loss properties* located in the identified hazard areas?		***Note: This requirement becomes effective for all local plans approved after October 1, 2008.***		
		SUMMARY SCORE		

9. Assessing Vulnerability: Identifying Structures

Requirement §201.6(c)(2)(ii)(A): *The plan **should** describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area … .*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan describe vulnerability in terms of the **types and numbers** of **existing** buildings, infrastructure, and critical facilities located in the identified hazard areas?		***Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.***		
B. Does the **new or updated** plan describe vulnerability in terms of the **types and numbers** of **future** buildings, infrastructure, and critical facilities located in the identified hazard areas?		***Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.***		
		SUMMARY SCORE		

10. Assessing Vulnerability: Estimating Potential Losses

Requirement §201.6(c)(2)(ii)(B): *[The plan **should** describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate … .*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan estimate **potential dollar losses** to vulnerable structures?		***Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.***		
B. Does the **new or updated** plan describe the **methodology** used to prepare the estimate?		***Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.***		
		SUMMARY SCORE		

11. Assessing Vulnerability: Analyzing Development Trends

Requirement §201.6(c)(2)(ii)(C): *[The plan **should** describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan describe land uses and development trends?		***Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.***		
		SUMMARY SCORE		

12. Multi-Jurisdictional Risk Assessment

Requirement §201.6(c)(2)(iii): *For multi-jurisdictional plans, the risk assessment **must** assess each jurisdiction's risks where they vary from the risks facing the entire planning area.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan include a risk assessment for each participating jurisdiction as needed to reflect unique or varied risks?				
		SUMMARY SCORE		

MITIGATION STRATEGY: *§201.6(c)(3): The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.*

13. Local Hazard Mitigation Goals

Requirement §201.6(c)(3)(i): *[The hazard mitigation strategy **shall** include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A Does the **new or updated** plan include a description of mitigation **goals** to reduce or avoid long-term vulnerabilities to the identified hazards?				
		SUMMARY SCORE		

14. Identification and Analysis of Mitigation Actions

Requirement §201.6(c)(3)(ii): *[The mitigation strategy **shall** include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan identify and analyze a **comprehensive range** of specific mitigation actions and projects for each hazard?				
B Do the identified actions and projects address reducing the effects of hazards on **new** buildings and infrastructure?				
C. Do the identified actions and projects address reducing the effects of hazards on **existing** buildings and infrastructure?				
		SUMMARY SCORE		

15. Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance

Requirement: §201.6(c)(3)(ii): *[The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.*

Element	**Location in the Plan** (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the new or updated plan describe the jurisdiction (s) participation in the NFIP?		***Note: This requirement becomes effective for all local mitigation plans approved after October 1, 2008.***		
B. Does the mitigation strategy identify, analyze and prioritize actions related to continued compliance with the NFIP?		***Note: This requirement becomes effective for all local mitigation plans approved after October 1, 2008.***		
		SUMMARY SCORE		

16. Implementation of Mitigation Actions

Requirement: §201.6(c)(3)(iii): *[The mitigation strategy section **shall** include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization **shall** include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.*

Element	**Location in the Plan** (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the **new or updated** mitigation strategy include how the actions are **prioritized**? (For example, is there a discussion of the process and criteria used?)				
B. Does the **new or updated** mitigation strategy address how the actions will be implemented and administered, including the responsible department , existing and potential resources and the timeframe to complete each action?				
C. Does the **new or updated** prioritization process include an emphasis on the use of a **cost-benefit review** to maximize benefits?				
D. Does the **updated** plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged (*i.e.*, deferred), does the updated plan describe why no changes occurred?				
		SUMMARY SCORE		

17. Multi-Jurisdictional Mitigation Actions

Requirement §201.6(c)(3)(iv): *For multi-jurisdictional plans, there* ***must*** *be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.*

Element	**Location in the Plan** (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A Does the **new or updated** plan include identifiable **action items** for each jurisdiction requesting FEMA approval of the plan?				
B. Does the **updated** plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged (*i.e.*, deferred), does the updated plan describe why no changes occurred?				
		SUMMARY SCORE		

PLAN MAINTENANCE PROCESS

18. Monitoring, Evaluating, and Updating the Plan

Requirement §201.6(c)(4)(i): *[The plan maintenance process* ***shall*** *include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.*

Element	**Location in the Plan** (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the **new or updated** plan describe the method and schedule for **monitoring** the plan, including the responsible department?				
B. Does the **new or updated** plan describe the method and schedule for **evaluating** the plan, including how, when and by whom (*i.e.* the responsible department)?				
C. Does the **new or updated** plan describe the method and schedule for **updating** the plan within the five-year cycle?				
		SUMMARY SCORE		

19. Incorporation into Existing Planning Mechanisms

Requirement §201.6(c)(4)(ii): *[The plan **shall** include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan identify other local planning mechanisms available for incorporating the mitigation requirements of the mitigation plan?				
B. Does the **new or updated** plan include a process by which the local government will incorporate the mitigation strategy and other information contained in the plan (*e.g.*, risk assessment) into other planning mechanisms, when appropriate?				
C. Does the **updated** plan explain how the local government incorporated the mitigation strategy and other information contained in the plan (*e.g.*, risk assessment) into other planning mechanisms, when appropriate?				
		SUMMARY SCORE		

Continued Public Involvement

Requirement §201.6(c)(4)(iii): *[The plan maintenance process **shall** include a] discussion on how the community will continue public participation in the plan maintenance process.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE N	SCORE S
A. Does the **new or updated** plan explain how **continued public participation** will be obtained? (For example, will there be public notices, an on-going mitigation plan committee, or annual review meetings with stakeholders?)				
		SUMMARY SCORE		

MATRIX A: PROFILING HAZARDS

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure that their plan addresses each natural hazard that can affect the jurisdiction. **Completing the matrix is not required**.

Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each *applicable* ***hazard. An "N" for any element of any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.***

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Location		B. Extent		C. Previous Occurrences		D. Probability of Future Events	
	Yes	N	S	N	S	N	S	N	S
Avalanche	☐	☐	☐	☐	☐	☐	☐	☐	☐
Coastal Erosion	☐	☐	☐	☐	☐	☐	☐	☐	☐
Coastal Storm	☐	☐	☐	☐	☐	☐	☐	☐	☐
Dam Failure	☐	☐	☐	☐	☐	☐	☐	☐	☐
Drought	☐	☐	☐	☐	☐	☐	☐	☐	☐
Earthquake	☐	☐	☐	☐	☐	☐	☐	☐	☐
Expansive Soils	☐	☐	☐	☐	☐	☐	☐	☐	☐
Levee Failure	☐	☐	☐	☐	☐	☐	☐	☐	☐
Flood	☐	☐	☐	☐	☐	☐	☐	☐	☐
Hailstorm	☐	☐	☐	☐	☐	☐	☐	☐	☐
Hurricane	☐	☐	☐	☐	☐	☐	☐	☐	☐
Land Subsidence	☐	☐	☐	☐	☐	☐	☐	☐	☐
Landslide	☐	☐	☐	☐	☐	☐	☐	☐	☐
Severe Winter Storm	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tornado	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tsunami	☐	☐	☐	☐	☐	☐	☐	☐	☐
Volcano	☐	☐	☐	☐	☐	☐	☐	☐	☐
Wildfire	☐	☐	☐	☐	☐	☐	☐	☐	☐
Windstorm	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other _____	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other _____	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other _____	☐	☐	☐	☐	☐	☐	☐	☐	☐

To check boxes, double click on the box and change the default value to "checked."

Legend:

§201.6(c)(2)(i) Profiling Hazards
A. Does the risk assessment identify the location (*i.e.*, geographic area affected) of each hazard addressed in the **new or updated** plan?
B. Does the risk assessment identify the extent (*i.e.*, magnitude or severity) of each hazard addressed in the **new or updated** plan?
C. Does the plan provide information on previous occurrences of each natural hazard addressed in the **new or updated** plan?
D. Does the plan include the probability of future events (*i.e.*, chance of occurrence) for each hazard addressed in the plan?

MATRIX B: ASSESSING VULNERABILITY

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure that the new or updated plan addresses each requirement. **Completing the matrix is not required**.

Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each ***applicable*** *hazard. An "N" for any element of any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk. Note: Receiving an N in the shaded columns will not preclude the plan from passing.*

To check boxes, double click on the box and change the default value to "checked."

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	§201.6(c)(2)(ii) Assessing Vulnerability: Overview					§201.6(c)(2)(ii) Assessing Vulnerability: Identifying Structures					§201.6(c)(2)(ii) Assessing Vulnerability: Estimating Potential Losses				
		A. Overall Summary Description of Vulnerability		B. Hazard Impact			A. Types and Number of Existing Structures in Hazard Area (Estimate)		B. Types and Number of Future Structures in Hazard Area (Estimate)			A. Loss Estimate		B. Methodology		
	Yes	N	S	N	S		N	S	N	S		N	S	N	S	
Avalanche	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Coastal Erosion	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Coastal Storm	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Dam Failure	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Drought	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Earthquake	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Expansive Soils	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Levee Failure	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Flood	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Hailstorm	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Hurricane	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Land Subsidence	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Landslide	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Severe Winter Storm	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Tornado	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Tsunami	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Volcano	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Wildfire	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Windstorm	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Other _____	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Other _____	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	
Other _____	☐	☐	☐	☐	☐		☐	☐	☐	☐		☐	☐	☐	☐	

Legend:

§201.6(c)(2)(ii) Assessing Vulnerability: Overview

A. Does the **new or updated** plan include an overall summary description of the jurisdiction's vulnerability to each hazard?

B. Does the **new or updated** plan address the impact of each hazard on the jurisdiction?

§201.6(c)(2)(ii)(A) Assessing Vulnerability: Identifying Structures

A. Does the **new or updated** plan describe vulnerability in terms of the types and numbers of existing buildings, infrastructure, and critical facilities located in the identified hazard areas?

B. Does the **new or updated** plan describe vulnerability in terms of the types and numbers of future buildings, infrastructure, and critical facilities located in the identified hazard areas?

§201.6(c)(2)(ii)(B) Assessing Vulnerability: Estimating Potential Losses

A. Does the **new or updated** plan estimate potential dollar losses to vulnerable structures?

B. Does the **new or updated** plan describe the methodology used to prepare the estimate?

MATRIX C: IDENTIFICATION AND ANALYSIS OF MITIGATION ACTIONS

This matrix can assist FEMA and the State in scoring each hazard. Local jurisdictions may find the matrix useful to ensure consideration of a range of actions for each hazard. **Completing the matrix is not required.**

Note: First, check which hazards are identified in requirement §201.6(c)(2)(i). Then, place a checkmark in either the N or S box for each ***applicable*** *hazard. An "N" for any identified hazard will result in a "Needs Improvement" score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.*

Hazard Type	Hazards Identified Per Requirement §201.6(c)(2)(i)	A. Comprehensive Range of Actions and Projects	
	Yes	N	S
Avalanche	☐	☐	☐
Coastal Erosion	☐	☐	☐
Coastal Storm	☐	☐	☐
Dam Failure	☐	☐	☐
Drought	☐	☐	☐
Earthquake	☐	☐	☐
Expansive Soils	☐	☐	☐
Levee Failure	☐	☐	☐
Flood	☐	☐	☐
Hailstorm	☐	☐	☐
Hurricane	☐	☐	☐
Land Subsidence	☐	☐	☐
Landslide	☐	☐	☐
Severe Winter Storm	☐	☐	☐
Tornado	☐	☐	☐
Tsunami	☐	☐	☐
Volcano	☐	☐	☐
Wildfire	☐	☐	☐
Windstorm	☐	☐	☐
Other _____	☐	☐	☐
Other _____	☐	☐	☐
Other _____	☐	☐	☐

To check boxes, double click on the box and change the default value to "checked."

Legend:
§201.6(c)(3)(ii) Identification and Analysis of Mitigation Actions
A. Does the **new or updated** plan identify and analyze a comprehensive range of specific mitigation actions and projects for each hazard?