

What is mitigation?

Mitigation is the on-going effort to lessen the impact disasters have on people and property from natural or man-made disasters.

Why should I mitigate?

By taking steps to minimize the impact of a disaster you can protect your family from personal injury and economic injury. You can also increase the odds of your most important personal belongings surviving the disaster.

It is vital for business owners should take actions to keep their business operating following a disaster. They should consider not just protecting the structure and inventory but should also make sure to backup their business records at another location. Approximately one-third of businesses that are forced to close because of a natural disaster go out of business permanently.

When is a good time to mitigate?

Now. Construction of a new building offers many opportunities to make your structure disaster resistant, and during the reconstruction phase following a disaster, it might be easier to take mitigation actions, but any time is a good time to take action.

How expensive is it to mitigate?

Some mitigation actions can be very inexpensive, like placing items in your basement on cinderblocks. Building a disaster resistant home can add up to 5% to the cost of your house, but the value of protecting your family is incalculable.

Why does the government fund mitigation activities?

The National Institute of Building Sciences released a study in 2005 that quantified the savings from FEMA funds spent on mitigation as \$4 for every dollar spent.

Can a person mitigate against tornadoes?

Yes. Identifying a safe area in your home or business is the first step. A safe room can provide protection from 98% of all tornadoes. Insurance can provide the means to recover economically from the damages. It is also possible to build a home to withstand most winds associated with tornadoes.

Does the State provide funding for safe rooms?

No funds are available for private individuals to build safe rooms in their homes. It is possible that funds might be available for building a shelter for a public place.

Where can I get additional information on disaster resistant construction?

There are a numerous locations on the internet to get more details on disaster resistant construction. Safe Home Illinois is a joint project between IEMA and the American Red Cross –Chicago to promote better building techniques <http://www.safehomeillinois.org/>

The Institute for Building and Home Safety has information on how to minimize damages from disasters. <http://www.ibhs.org/> . FEMA provides numerous documents on how to prepare for disasters <http://www.fema.gov/plan/prevent/howto/index.shtm>

If my structure was built to code haven't I built it as well as possible?

No, Building codes are usually minimal standards for life-safety issues. There are many steps you can take to exceed the code and make your structure safer.

How can I lessen the damage from an earthquake?

Many of the same actions that protect against high winds also protect against earthquake damage. There are a lot of inexpensive methods that can minimize the damage caused by an earthquake. Water heaters, bookcases, and cabinets should be strapped to the wall to prevent them from falling. Gas shut-off valves are an inexpensive way to greatly reduce the risk of fire caused by broken gas lines.

How can I mitigate against flooding?

There are a variety of ways to minimize the damage from flooding on your structure. These include wet floodproofing, dry floodproofing, elevation, and acquisition. The first step is to be in compliance with your local floodplain ordinance. Flood insurance is available to anyone in a participating community and can provide the means to recover from a flood.

What is wet floodproofing?

Wet floodproofing assumes that water will get into the building. To prevent damage property owners can elevate appliances, electrical devices, etc. Placing items in the basement on cinderblocks is a very cheap yet potentially effective method. Water-resistant materials are used below the flood line. It can be a very inexpensive yet effective method of reducing damages. It does limit the use of the area.

What is dry floodproofing?

Dry floodproofing is any number of small projects that can be highly effective in keeping water out of the building. Sump pumps are the most commonly employed method of dry floodproofing, but make sure you have an alternative source of power since it is possible to lose your electricity in a storm. Other methods include disconnecting downspouts from the sewer line and running downspouts away from foundations.

More expensive methods include installing backflow valves and sealing walls, stairwells and openings to keep the water out. Dry floodproofing is not foolproof; protection methods are only reliable to a certain height and then hydrostatic pressure can breach the barrier. Many methods are also dependent on human intervention, so if you are out of your home you might not be protected.

What are the advantages to elevating a structure?

If a structure is known to flood the most cost-effective form of mitigation might be elevation. This is especially true in areas with development pressure. Elevation works best in areas with shallow flooding and flooding that has a short duration.

The Increased Cost of Compliance (ICC) rider of a flood insurance policy can potentially fund the elevation of a structure.

What are the problems with elevating a structure?

The costs of elevating a structure can be high; expect a minimum of \$20,000 for a stick built home. Your home might be inaccessible for the duration of the flood.

There is a temptation to store items in the lower floodprone area, which exposes them to flooding. Some structures that are elevated are unattractive. As your circumstances change, you might find climbing the stairs to be a burden.

How can I get my home bought out?

In extreme cases it is possible for government funds to purchase floodprone structures. The structures are then demolished and restrictions are placed on the deed requiring it to remain open space in perpetuity. Homeowner's receive the property's preflood fair market value.

The purchase must be coordinated through your local government. If you are interested you should contact your local ESDA coordinator or State Hazard Mitigation Officer, Ron Davis at 217-782-8719.

Why doesn't the government just build a levee?

Levees can be very effective but even beyond their high cost they have many shortcomings. Levees have actually been found to increase the amount of damage from flooding because they provide a false sense of security and when they fail it results in increased damage. The water held back by the levee is pushed onto someone else's property and can increase their damages. Beyond the initial construction costs, levees have high maintenance costs and the costs to the environment can be very high. The amenities of being located next to a river can also be lost by the construction of a levee.

What is the Hazard Mitigation Grant Program?

Authorized under Section 404 of the Stafford Act, the Hazard Mitigation Grant Program (HMGP) administered by the Federal Emergency Management Agency (FEMA) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

Who is eligible to apply?

Hazard Mitigation Grant Program funding is only available to applicants that reside within a Presidentially declared disaster area. Eligible applicants are

- State and local governments
- Indian tribes or other tribal organizations
- Certain non-profit organizations

Individual homeowners and businesses may not apply directly to the program; however a community may apply on their behalf.

What types of projects can be funded by the HMGP?

HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters. Projects must provide a long-term solution to a problem, for example, elevation of a home to reduce the risk of flood damages as opposed to buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. Examples of projects include, but are not limited to:

- Acquisition of real property for willing sellers and demolition or relocation of buildings to convert the property to open space use
- Retrofitting structures and facilities to minimize damages from high winds, earthquake, flood, wildfire, or other natural hazards
- Elevation of flood prone structures
- Development and initial implementation of vegetative management programs
- Minor flood control projects that do not duplicate the flood prevention activities of other Federal agencies
- Localized flood control projects, such as certain ring levees and floodwall systems, that are designed specifically to protect critical facilities
- Post-disaster building code related activities that support building code officials during the reconstruction process

How are potential projects selected and identified?

The State's administrative plan governs how projects are selected for funding. However, proposed projects must meet certain minimum criteria. These criteria are designed to ensure that the most cost-effective and appropriate projects are selected for funding. Both the law and the regulations require that the projects are part of an overall mitigation strategy for the disaster area.

The State prioritizes and selects project applications developed and submitted by local jurisdictions. The State forwards applications consistent with State [mitigation planning](#) objectives to FEMA for eligibility review. Funding for this grant program is limited and

States and local communities must make difficult decisions as to the most effective use of grant funds.

What are the minimum project criteria?

There are five issues you must consider when determining the eligibility of a proposed project.

- Does your project conform to your State's Hazard Mitigation Plan?
- Does your project provide a beneficial impact on the disaster area, i.e. the State?
- Does your application meet the environmental requirements? [FEMA Environmental Program Site](#)
- Does your project solve a problem independently?
- Is your project cost-effective?

How much money is available in the HMGP?

The amount of funding available for the HMGP under a particular disaster declaration is limited. The program may provide a State with up to 7.5 percent of the total disaster grants awarded by FEMA. FEMA can fund up to 75% of the eligible costs of each project. The State or grantee must provide a 25% match, which can be fashioned from a combination of cash and in-kind sources. Funding from other Federal sources cannot be used for the 25% share with one exception. Funding provided to States under the Community Development Block Grant program from the Department of Housing and Urban Development can be used to meet the non-federal share requirement.

How do I apply for the HMGP?

Following a disaster declaration, the State will advertise that HMGP funding is available to fund mitigation projects in the State. Those interested in applying to the HMGP should contact their local government to begin the application process. Local governments should contact their State Hazard Mitigation Officer.

What is the deadline for applying for HMGP funds?

Applications for mitigation projects are encouraged as soon as possible after the disaster occurs so that opportunities to do mitigation are not lost during reconstruction. The State will set a deadline for application submittal. You should contact your State Hazard Mitigation Officer for specific application dates.

How long will it take to get my project approved?

It is important for applicants to understand the approval process. Once eligible projects are selected by the State, they are forwarded to the FEMA Regional Office where they are reviewed to ensure compliance with Federal laws and regulations. One such law is the National Environmental Policy Act, passed by Congress in 1970, which requires FEMA to evaluate the potential environmental impacts of each proposed project. The time required for the environmental review depends on the complexity of the project.

Will I be forced to sell my home if my community is granted funding for an HMGP acquisition project?

Acquisition projects funded under the HMGP are voluntary and you are under no obligation to sell your home. Communities consider other options when preparing projects, but it may be determined by State and local officials that the most effective mitigation measure in a location is the acquisition of properties and the removal of residents and structures from the hazard area. Despite the effectiveness of property acquisitions, it may not make you or your family whole again. Acquisition projects are based on the principle of fair compensation for property. Property acquisitions present owners with an opportunity to recoup a large part of their investment in property that probably has lost some, if not most of its value due to damage. But, it will not compensate you or your family for your entire emotional and financial loss.

Why didn't I receive HMGP funds when some of my neighbors did?

The HMGP is administered by the State, which prioritizes and selects project applications developed and submitted by local jurisdictions. The State forwards applications consistent with State mitigation planning objectives to FEMA for eligibility review. Although individuals may not apply directly to the State for assistance, local governments may sponsor an application on their behalf. Funding for the grant program is limited and States and local communities must make difficult decisions as to the most effective use of available grant funds.

Will someone be able to rebuild and make a profit on the property I sell in an HMGP acquisition project?

Under the Stafford Act, any land purchased with HMGP funds must be restricted to open space, recreational, and wetlands management uses in perpetuity. Most often, a local government takes responsibility, but even if a State or Federal Agency takes ownership of the land, the deed restrictions still apply.

How can I get more information about the HMGP?

For more information on the Hazard Mitigation Grant Program, contact your State Hazard Mitigation Officer, Ron Davis at 217-782-8719.

Mitigation Planning Grants

Question 1: Are HMGP planning grants subject to a benefit-cost analysis in order to be eligible for funding?

Answer: The Disaster Mitigation Act of 2000 authorizes up to 7% of the HMGP ceiling to be used for the development of State, Indian Tribal, and/or local mitigation plans that meet the planning criteria outlined in 44 CFR Part 201. A benefit-cost analysis is not required for the use of the 7% planning funds.

Question 2: Are jurisdictions that are not participating in the NFIP eligible to receive HMGP Planning grants?

Answer: Yes. Non-participating jurisdictions are eligible for planning grants under the HMGP. Because of the post-disaster aspect of HMGP, FEMA wants to provide an opportunity to encourage sound mitigation planning, which may in turn serve to motivate non-participating jurisdictions to participate in the NFIP. Up to 7% of the total disaster HMGP funds may be used for State and local planning activities. For example, if a state receives \$1 Million in HMGP, up to \$70,000 could be used for planning grants to sub-applicants.

Question 3: If a jurisdiction does not have an approved plan when a disaster is declared, can the jurisdiction receive an HMGP project grant?

Answer: Yes. A local government can receive an HMGP project grant as long as the plan is approved prior to the grant award. In extraordinary circumstances, as defined by FEMA, FEMA Regional Directors may grant an exception to the local plan requirement. In these cases, a plan must be completed within 12 months of award of the project grant.

Local governments would also be eligible to receive an HMGP planning grant to develop or finalize their plan.

Question 4: Must a local jurisdiction amend a previously approved plan to add mitigation projects eligible for PDM-C funding?

Answer: No. There is no need for additional "mitigation actions" to be added to FEMA-approved multi-hazard mitigation plans to remain eligible

for PDM-C funding if the project is consistent with the goals and objectives of both the State or Tribal State-level mitigation plan, and the local or tribal local mitigation plan. If local governments wish to report to FEMA that they have updated their plans, they may do so, but there is no requirement for this action. FEMA does not desire nor require the updating and resubmission of local plans for PDM-C or HMGP eligibility if the plan is already FEMA-approved and the project is consistent with the plan's goals and objectives. This is also true for universities with their own approved mitigation plan.

Question 5: Are annual EMPG funds contingent upon a State meeting the Section 322 planning requirements?

Answer: No, EMPG funding will not be withheld from a State that does not update its mitigation plan in compliance with 44 CFR Part 201. However, FEMA does emphasize the need to encourage planning assistance and training with the EMPG funds. A State may choose to use the funding they receive under the EMPG to develop specific pieces of their plan as they relate to all hazards.

Question 6: Are separate plans required from State agencies when they are subgrantees to the State agency serving as the grantee to FEMA?

Answer: Not usually. State agency issues should be addressed in the State Mitigation Plan, and potential projects or funded activities should be included in the plan. The State has two options for addressing other State agency mitigation issues in a plan. The preferred option is to ensure participation in the State mitigation planning process by requiring each participating agency to sign-off on the State Mitigation Plan as a condition of mitigation project grant funding. State agencies should identify issues of particular interest to them, summarizing any specific projects, activities, or mitigation commitments in a brief document that can be an addendum to the State Mitigation Plan. The second option is: if agencies do not participate in the Statewide planning process, then they must prepare a separate plan in order to be eligible for mitigation project grant funding.

Risk Assessments

Question 1: What level of detail is necessary for a Risk Assessment?

Answer: The short answer to this question is "It depends."

As stated in 44 CFR §201.6(c)(2), the risk assessment should provide enough information to enable the jurisdiction to identify and prioritize

appropriate mitigation actions. The risk assessment must include a description of the vulnerability that includes the potential impact of each hazard on the community. This type of information can be portrayed in many ways, but must be based on best available data. The following provides examples of the variety of ways vulnerability can be depicted; each of the examples below could meet DMA criteria if it is determined that the approaches and data used represent the community's best-faith efforts to obtain the most recent, accurate data available.

Communities A, B and C each contain 5,000 households and 100 businesses (based on Census data and the local community plan). The communities each have a 100-year floodplain running through them, but there is no detailed information as to how many buildings lie in the floodplain, nor is there detailed information on what the depth of the 100-year flood would be at the buildings. The communities can demonstrate their vulnerability in the following ways:

Scenario 1: Community A's planning team obtains the tax maps (containing parcel-level information) for the community and transfers the FIRM boundaries onto it. It then counts the number of homes and businesses within the floodway and floodplain boundaries. The planning team determines that there are 500 households and 28 businesses within the floodplain, 100 of which are within the floodway. By obtaining the backup information from the FIRM from the study contractor that performed their currently effective Flood Insurance Study, they determine that the average 100-year flood depth in the floodway is 9 feet, and the average 100-year floodplain depth is 6 feet. They also determine that there are areas of high flow velocity in certain reaches of the stream, indicating that localized erosion may be a problem.

Scenario 2: Community B does not have detailed flood mapping; they have flood boundary information. The planning team estimates that, based upon the density and pattern of development in the community, approximately 15% of the housing and 20% of the businesses in the community lie in the 100-year floodplain. This is estimated visually by transferring the FIRM boundaries onto a land use map previously developed by the planning department. By multiplication, they determine that approximately 750 homes and 20 businesses are in the floodplain. The team then takes a USGS quadrangle map and estimates the average ground elevations within the floodway, and within the floodplain, and compares them with the average base flood elevation obtained from the FIRM. They determine that the average depth in the floodplain is 5 feet.

As the vulnerability assessment is completed, it is noted that given the zoning designation of currently vacant land within the floodplain, there is

the potential for an additional 100 houses to be built in the floodplain. This is brought to the attention of the planning director.

Scenario 3: Community C works with the local university to have students do a "windshield survey" of the homes and businesses located in the flood plain. The students first obtain Q3 flood boundaries from www.hazardmaps.gov, and transfer them onto a new street map. They then use an old tax map to begin counting structures within the flood boundaries. Lastly, they take to the streets to visually count the number of homes and businesses that likely lie within the flood boundaries delineated on their street map. They determine there are 425 homes and 22 businesses within the flood boundaries.

In the examples above, each community arrived at the number of structures within the floodplain in a different manner, using the best data available to them, and using methods that matched the resources of the community. In each case, the community attempted to locate the best available data. None of these communities utilized GIS, a tool often used in risk assessment activities.

Question 2: Does FEMA require the use of HAZUS-MH for risk assessment?

Answer: No. HAZUS-MH is an outstanding tool for multihazard loss estimation and risk assessment, but it is not required for compliance with the risk assessment requirements promulgated in the Interim Final Rule and explained in the Multi-Hazard Mitigation Planning Guidance.

Jurisdictions are required to analyze their risks to the greatest extent possible. This means that the best data and techniques available to the community at the time of plan development must be used. While a small and impoverished community's plan cannot be rejected for failing to include a HAZUS-MH analysis (or even to include hazard maps at all), a plan developed in a major metropolitan area or in a community with robust economic and technical capabilities will be expected to reflect a more sophisticated level of analysis.

Although the use of HAZUS-MH for risk assessment is not required, it is strongly encouraged. Not only does the software estimate losses to several different types of hazards, but users can also tap HAZUS-MH databases to profile their community, identify critical facilities, and integrate data from manmade hazard models to support a wide variety of planning activities. To help users achieve maximum success, FEMA aggressively supports the HAZUS-MH user community with a program of training, guidance documents, technical support, and additional software packages that facilitate the use of HAZUS-MH for meeting the risk assessment requirements promulgated in the Rule. In addition, HAZUS User Groups

provide invaluable peer-to-peer support for all levels of users from novices to experienced practitioners.

While the HAZUS-MH software is available free of charge from FEMA, ESRI's ArcView software is required to run HAZUS-MH. In cases where resource constraints or other reasons prohibit the use of advanced GIS, other capability-enhancing resources may be used. For example, ESRI offers a free GIS data viewing application called ArcExplorer that allows users to perform basic GIS functions such as viewing and querying data and producing maps.

Additionally, interactive web sites such as FEMA's HazardMaps.gov and the U.S. Geological Survey's National Atlas and National Map allow users to produce a variety of detailed, customized hazard maps using only a standard Web browser. These three sites offer many of the features available in commercially-available GIS applications yet cost nothing to use and require no formal training.

Environmental Assessments

Question 1: Do the States have to prepare environmental assessments and collect data?

Answer: The regulations for enhanced plans at 206.5(b)(2)(iii) require "Demonstration that the State has the capability to effectively manage the HMGP as well as other mitigation grant programs, including a record of the following (B) Preparing and submitting accurate environmental reviews.

The States are not required to prepare the formal environmental documents, but FEMA does expect them to perform much of the data gathering and coordination necessary to support the environmental review process.

FEMA's environmental regulations at 44 CFR Part 10.7 discuss FEMA's overall approach to integrating National Environmental Policy Act (NEPA) considerations with mitigation planning and project development. Paragraph 10.7(a) directs the FEMA Regional Director to "integrate the NEPA process with other planning at the earliest possible time to ensure that planning decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts."

To facilitate compliance with this approach, FEMA sets out its expectations for applicants for FEMA assistance, generally States, tribal and local governments, in Paragraph 10.7(c)(2):

(2) To facilitate compliance with the requirements of paragraph (a) of this section, applicants and other non-Federal entities are expected to:

(i) Contact the Regional Director as early as possible in the planning process for guidance on the scope and level of environmental information required to be submitted in support of their application;

(ii) Conduct any studies which are deemed necessary and appropriate by FEMA to determine the impact of the proposed action on the human environment;

(iii) Consult with appropriate Federal, regional, State, and local agencies and other potentially interested parties during preliminary planning stages to ensure that all environmental factors are identified;

(iv) Submit applications for all Federal, regional, State, and local approvals as early as possible in the planning process;

(v) Notify the Regional Director as early as possible of all other Federal, regional, State, local, and Indian tribe actions required for project completion so that FEMA may coordinate all Federal environmental reviews; and

(vi) Notify the Regional Director of all known parties potentially affected by or interested in the proposed action.

[45 FR 41142, June 18, 1980, as amended at 47 FR 13149, Mar. 29, 1982]

Critical Facilities

Question 1: For planning purposes, what should be considered a critical facility?

Answer: Every jurisdiction is unique. The list of assets that are most important to protect, as well as the criticality of any given facility, can vary widely from community to community. Thus, there is no universal definition of a critical facility, nor is one associated with the DMA 2000 planning requirements as promulgated in the Interim Final Rule. For planning purposes, a jurisdiction should determine criticality based on the relative importance of its various assets for the delivery of vital services, the protection of special populations, and other important functions.

A good place to start is Step Three of FEMA's Mitigation Planning How-To Guide, Understanding Your Risks: Identifying Hazards and Estimating

Losses (FEMA 386-2). Based on a hazard-by-hazard identification of facilities that may be at risk, the Guide's emphasis on determining priorities for inventory data collection will help planners identify assets that are most critical to the jurisdiction. The companion publication *Integrating Manmade Hazards into Mitigation Planning* (FEMA 386-7) builds on the guidance in *Understanding Your Risks*, detailing how the asset inventory can be tailored to focus on high-risk facilities such as critical infrastructures and key assets (see definitions below). A third potential point of departure is the inventory information available with FEMA's HAZUS-MH loss estimation software. HAZUS-MH databases include information on essential facilities such as hospitals, police and fire stations, emergency operations centers, shelters, and schools; transportation systems; utility lifelines; high potential loss facilities such as potable water, wastewater, oil, natural gas, electric power, and communication systems; and hazardous material facilities.

Numerous other sources provide additional guidance on identifying facilities that may be critical. First, FEMA's Public Assistance Guide (FEMA 322) states that "A critical facility is a structure that, if flooded, would present an immediate threat to life, public health, and safety. Critical facilities include hospitals, facilities that produce toxic materials, and emergency operations centers." The related regulation at 44 CFR § 206.226, *Restoration of damaged facilities* (text / PDF), states that "Eligible private nonprofit facilities may receive funding under the following conditions, The facility provides critical services, which include power, water (including water provided by an irrigation organization or facility in accordance with § 206.221(e)(3)), sewer services, wastewater treatment, communications, emergency medical care, fire department services, emergency rescue, and nursing homes"

The definition can be construed more or less broadly as appropriate to the jurisdiction's planning approach. FEMA's State and Local Guide (SLG) 101: *Guide for All-Hazard Emergency Operations Planning* does not define critical facilities but provides the following examples:

Emergency service facilities and equipment (fire stations; police stations; custodial facilities, such as jails and juvenile detention centers, hospitals, and other health care facilities; rescue squads; public works facilities, etc.).

- Communications networks (telephones, emergency service radio systems, repeater sites and base stations, television and radio stations, etc.).
- Water supply system/facilities, to include waste water treatment.
- Utilities (power plants, substations, power lines, etc.)

- Transportation networks (roads, bridges, airports, rail terminals, maritime ports).
- Homes, businesses, public facilities, etc.

While asserting the criticality of individual homes and businesses may require some explanation, the other assets mentioned are of a type that would be acceptable as part of most any critical facilities inventory. This argument is supported in FEMA's What is a Benefit? Guidance On Benefit-Cost Analysis Of Hazard Mitigation Projects. What is a Benefit? includes police, fire and medical buildings, Emergency Operations Centers, and emergency shelters in the category of critical facilities. However, the document also mentions utilities such as electric power, potable water, and wastewater, as well as roads and bridges, as distinct from ordinary buildings, stating that "Ordinary buildings include residential and commercial buildings, and public buildings used for non-critical functions, such as schools and administrative buildings."

Continuity of operations (COOP) planning provides yet another perspective on criticality. FEMA's Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings (FEMA 426) defines critical assets as "those assets essential to the minimum operations of the organization, and to ensure the health and safety of the general public", while the Homeland Security Act of 2002, Section 2(9) (6 U.S.C. 101(9) defines key resources as "publicly or privately controlled resources essential to the minimal operations of the economy and government."

Finally, national-level homeland security policy provides guidance on the kinds of assets that may be considered critical. First, critical infrastructures are defined in 42 U.S.C. 5195c(e), the Critical Infrastructures Protection Act of 2001, as "systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters." According to the National Strategy for the Physical Protection of Critical Infrastructures and Key Assets, critical infrastructure sectors comprise agriculture & food; water; public health; emergency services; defense industrial base; telecommunications; energy; transportation; banking & finance; chemicals & hazardous materials; and postal & shipping. While some of these, such as the defense industrial base, are more national in scope, most of them are first and foremost State, local, and private-sector activities.

In addition to critical infrastructures, the National Strategy referenced above uses the term key assets. These are described as "individual targets whose destruction could cause large-scale injury, death, or destruction of property, and/or profoundly damage our national prestige, and

confidence." Furthermore, "such assets and activities alone may not be vital to the continuity of critical services on a national scale, but an attack on any one of them could produce, in the worst case, significant loss of life and/or public health and safety consequences." While this term is generally used in the context of identifying potential venues for sabotage or terrorist attack, the definition may be helpful in categorizing assets for all-hazard planning purposes.

Question 2: What level of detail is needed in the plan's identification of critical facilities?

Answer: The plan should provide enough information regarding critical facilities to enable the jurisdiction to identify and prioritize appropriate mitigation actions. However, some information may be deemed as highly sensitive and should not be made available to the public. Such information that the jurisdiction considers sensitive should be treated as an addendum to the mitigation plan so that it is still a part of the plan, but access can be controlled. For more information on protecting sensitive information see How-To #7 Integrating Human-Caused Hazards into Mitigation Planning. (FEMA 386-7).

Prioritizing Projects (Benefit Cost Analyses)

Question 1: What level of detail should be provided in mitigation plans with respect to Benefit/Cost calculations for projects?

Answer: According to DMA interim final regulations, (44 CFR §201.6(c)(3)(iii)), local mitigation plans must contain a strategy (or action plan) whereby "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."

This is not intended to require a full-blown cost-benefit calculation for inclusion within the plan document. However, one key aspect of the many considerations in deciding what type of mitigation action(s) to pursue is an economic assessment of the particular action. This (and the other considerations) should be debated and discussed as part of the planning team's and or larger community's decision-making process. A possible result of these local discussions could be the decision to complete a formal cost/benefit evaluation of the various mitigation approaches that are technically appropriate for the situation. However, this is not required to be included in the plan. As long as the economic considerations are summarized in the plan document as part of the community's analysis of the "comprehensive range of specific mitigation actions of projects being considered..." (44 CFR §201.6(c)(3)(ii)), that would be sufficient.

Once funding is being sought for the particular mitigation action, the detailed benefit/cost calculation would be required, as described under the various grant program regulations.

Privacy of Property Addresses

Question 1: Are potential acquisition project property addresses required to be noted in the plan?

Answer: No. A list of potential properties or areas that are being considered for acquisition should be prepared in advance, as part of the mitigation strategy but the specifics regarding property addresses should remain at the project level.

Schools and Private Non-Profit (PNP) Institutions

Question 1: What Planning requirements must be met by an academic institution interested in applying for mitigation project grants?

Answer: A college or university must be an active participant in a FEMA approved State/Tribal or local plan OR have an approved plan of their own that meets the requirements of 44 CFR Part 201 to be eligible for mitigation project grants. If an institution is participating in a plan, the plan must specifically identify those land areas that pertain to the institution, their specific hazards, including an analysis of those risks and any aspects that are unique to the institution relative to the community the institution resides in. When hazards and risks are identified, at least one specific mitigation action must be developed to reduce the impact of future disasters on the institution. The institution must also take ownership of their responsibilities set out in the plan they are participating in by formally adopting or resolving to adhere to and implement the actions identified. This can be accomplished through a resolution or letter from the institution President, Board of Directors or recognized governing body.

If a college or university was not a participant in a State/Tribal or local plan then they must develop a plan of their own that meets the requirements of 44 CFR Part 201.6 to be eligible for all mitigation project grants.

All colleges and universities are eligible to apply for a planning grant through the Pre-Disaster Mitigation Grant program.

Participation in a planning effort means all of the following:

- Have an active role in the development of a plan (through meeting attendance, data input, plan review, etc.)
- An assessment of the specific area describing any unique differences from the jurisdiction as a whole.
- At least one specific action item developed for the Mitigation Strategy that will reduce the impact of future disasters on that entity. This action may be the same for the entire area included in the plan, unless unique circumstances suggest a different action would be more appropriate.
- Formal adoption or agreement by the entity to adhere to and implement the plan requirements.

Question 2: What planning strategy should a university system consider when thinking about adopting a multi-campus approach?

Answer: There are a number of different approaches that colleges and universities can use to satisfy the planning requirements. In a large and complex state university system, for example, there may be several component universities, each with multiple campuses, extension offices, and other sites; given that the various universities may be subject to different risk issues, each individual university may be best served by developing a stand-alone, single-jurisdiction plan. 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 and coordinate 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 plans, not State 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 state university system.

Question 3: What should be the role of private nonprofit organizations in the development, review, and approval of local mitigation plans?

Answer: Private nonprofit organizations, especially those that may be eligible applicants for mitigation projects, should participate in the development of the local mitigation plan. If they have fully participated in the development and review of the local plan, it is not necessary for them

to approve/adopt the plan, as long as it is adopted by the local jurisdiction. Note: the issues related to private nonprofits that cover a wide geographic area, such as rural electric cooperatives or levee districts, will be addressed in a separate FAQ.

Question 4: Must private nonprofit organizations (PNPs) have a FEMA-approved multi-hazard mitigation plan in order to receive HMGP project funds?

Answer: No. PNP applicants for HMGP project grants do not need to have an approved multi-hazard mitigation plan in order to receive HMGP project funds. However, in order for a PNP project application to be approved, the following conditions must be met:

1. The jurisdiction in which the project is located must have an approved plan, and
2. The project must be consistent with the plan's goals and objectives.

(Note that, for FEMA's PDM program, PNPs are not eligible sub-applicants, but an eligible local government could apply for a grant on their behalf.)

Question 5: Must school districts (or independent school districts, or other special districts defined as local governments at 44 CFR 201.2) have a FEMA-approved plan in order to receive HMGP project funds? (Note: Independent school districts are independent of the local government where they are located.)

Answer: Yes. These districts, because they are defined as local governments, are required to have an approved plan - or demonstrate their participation as a separate government entity in another local government's approved mitigation plan - in order to receive project grants under HMGP or PDM. They would have to meet all FEMA local plan requirements. School districts do not fall under the definition of private nonprofit organizations [44 CFR 206.2(a)(19)].

Review of Mitigation Plans

Question 1: What is the policy to prevent a conflict of interest when a contractor has the potential to be involved in the preparation of a mitigation plan and that same company is used to assist FEMA in plan reviews?

Answer: If the contractor has been involved at all in the preparation of a plan, or any portion of the plan, they will not be able to participate in the plan review. This does not apply to general data collection that may be generated as part of post-disaster recovery activities.

Question 2: Will a local plan be approved if it does not address the “shoulds” sections of the local planning requirements?

Answer: Yes, since these sections are recommended but not required under 44 C.F.R. 201.6. It should be noted that the information described in the “shoulds” can significantly strengthen and improve the risk assessment as well as assumptions made in the plan (including the mitigation strategy). Nonetheless, a plan that does not address these components can be approved if it meets all the mandatory requirements. FEMA strongly encourages that plans without a fully developed risk assessment make this a priority for the 5-year update, since a more complete risk assessment will provide a stronger foundation for the mitigation plan and program. This will aid not only the jurisdiction, but the State as it incorporates local risk assessments into its mitigation plan.

Multi-jurisdictional Plans

Question 1: The planning criteria outlined in 44 CFR Part 201 discuss the development of countywide or multi-jurisdictional plans (which must be adopted by all jurisdictions included), since many issues are better resolved by evaluating hazards in a more comprehensive fashion. If a jurisdiction within the boundaries of a multi-jurisdictional planning area does not participate in the planning process and/or does not formally adopt the plan, what are the implications to the other participating jurisdictions within that multi-jurisdictional plan?

Answer: When a multi-jurisdictional plan is prepared, any participating entity/jurisdiction must adopt the plan if they wish to be eligible for future project grant funding from FEMA. If they do not want to sign off on the plan, that will not prevent any of the other jurisdictions from approving the plan and being eligible for project grants. For instance, if there was a countywide plan, and town A did not adopt the plan, but the county and other towns/cities did adopt it, the only one adversely affected would be town A. We expect, however, that the multi-jurisdictional plan would address any issues that crossed over jurisdictional lines to as great a degree as possible.

Question 2: Must all participating jurisdictions in a multi-jurisdictional plan meet all the local planning requirements, just as if they were participating in a single jurisdictional plan?

Answer: Yes. Although economy-of-scale efforts are apparent and encouraged with multi-jurisdictional plans, FEMA requires that all participating jurisdictions meet the requirements for mitigation planning identified in 44 C.F.R. 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 (at least one action 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).

Question 3: How can a local jurisdiction join in on an already approved multi-jurisdictional plan?

Answer: In the case of a new jurisdiction wishing to join a multi-jurisdictional plan that has already received FEMA approval, the new jurisdiction is strongly encouraged to develop its own single jurisdictional plan. This is because the new jurisdiction must complete all the planning criteria found in 44 CFR Part 201.6 (c) (1-4), including an open planning process. By attempting to join an existing plan, changes made to this previously approved plan would constitute significant changes and would require all existing participants involved to re-adopt the plan and re-submit it to FEMA for evaluation and approval. This would be time-consuming and may be impractical for those jurisdictions that have already received this approval.

The new jurisdiction is encouraged to contact the multi-jurisdictional planning team to seek agreement on joining the plan during its update. As accepted by the multi-jurisdictional planning team, the new jurisdiction can establish a similar plan format consistent with the approved multi-jurisdictional plan and have access to information and data pertinent to its planning effort. In five years (or whenever the other jurisdictions wish to re-adopt the plan) the new plan can be merged into the multi-jurisdictional plan. All jurisdictions must continue to meet the requirements of 201.6 (c) 1-4.

National Flood Insurance Program (NFIP) Participation

Question 1: If a jurisdiction identifies flooding as a hazard in its mitigation plan, but does not participate in the NFIP, can FEMA still approve the plan?

Answer: Yes. NFIP participation is not currently a requirement for approval of multi-hazard mitigation plans. Therefore, FEMA cannot disapprove a plan solely because the local government is not participating in the NFIP. However, local plan regulations at 44 CFR 201.6(c)(3)(ii) require the mitigation strategy to identify and analyze “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.” If a plan identifies flooding as a significant hazard and the plan’s mitigation strategy does not adequately address this hazard (particularly with respect to new and existing structures and infrastructure), FEMA may disapprove the plan for failure to satisfy this requirement.