Department of Homeland Security Office of Inspector General

Survey of Hazard Mitigation Planning



OIG-12-109

Washington, DC 20528 / www.oig.dhs.gov

August 9, 2012

MEMORANDUM FOR:

David L. Miller

Associate Administrator, Federal Insurance and Mitigation

Administration

Federal Emergency Management Agency

FROM:

D. Michael Beard

Assistant Inspector General

Office of Emergency Management Oversight

SUBJECT:

Survey of Hazard Mitigation Planning

Attached for your action is our final report, *Survey of Hazard Mitigation Planning*. We incorporated the formal comments from the Federal Emergency Management Agency in the final report.

The report contains two recommendations aimed at improving the Hazard Mitigation Planning program. Your office concurred with both of the recommendations. As prescribed by the Department of Homeland Security Directive 077-1, Follow-Up and Resolutions for the Office of Inspector General Report Recommendations, within 90 days of the date of this memorandum, please provide our office with a written response that includes your (1) agreement or disagreement, (2) corrective action plan, and (3) target completion date for each recommendation. Also, please include responsible parties and any other supporting documentation necessary to inform us about the current status of the recommendation. Until your response is received and evaluated, the recommendations will be considered open and unresolved.

Consistent with our responsibility under the *Inspector General Act*, we are providing copies of our report to appropriate congressional committees with oversight and appropriation responsibility over the Department of Homeland Security. We will post the report on our website for public dissemination.

Please call me with any questions, or your staff may contact John Kelly, Acting Deputy Assistant Inspector General, Office of Emergency Management Oversight, at (202) 254-4100.

Attachment

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Abbreviations	
DHS CFR FEMA FMA HMGP OIG PDM	Department of Homeland Security Code of Federal Regulations Federal Emergency Management Agency Flood Mitigation Assistance Hazard Mitigation Grant Program Office of Inspector General Pre-disaster Mitigation

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Executive Summary

The Federal Emergency Management Agency (FEMA) has made progress in the hazard mitigation planning program since the passage of the *Disaster Mitigation Act of 2000*, as amended. The program is designed to encourage State, tribal, and local jurisdictions to (1) identify the natural hazards that affect them and (2) implement projects that will reduce losses from disasters, including development of land use and building code regulations. A State mitigation plan is required as a condition for receiving certain types of nonemergency disaster assistance, including funding for mitigation projects.

The program is voluntary, but all 50 States plus the District of Columbia and several territories have participated since its inception, and more than 26,000 jurisdictions have developed mitigation plans. Communities that participate account for about 70 percent of the Nation's population. Despite the program's relative success, some communities have been reluctant to participate, particularly those in less populated areas that have not experienced recent disasters. FEMA is developing a system to monitor State, tribal, and local participation and to track planned or implemented mitigation projects.

FEMA receives high marks from mitigation grantees who rely on the agency for program guidance, technical assistance, and training that is made available to State, tribal, and local communities, as well as their contractors. A common concern among State grantees was the "too-frequent" plan renewal process.

We conducted this survey to evaluate the program's efficiency and effectiveness, and to determine whether a more comprehensive audit was needed. Although we determined that further audit work on FEMA's hazard mitigation planning program is not warranted at this time, FEMA needs to implement a better system to track participants' progress, and continue ongoing efforts to address States' concerns regarding plan reporting requirements. We are making two recommendations to assist FEMA in its management and oversight function. In the future, we will follow up on FEMA's progress as the program continues to develop.

Background

Hazard mitigation is defined as any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. It is intended to break the cycle of disaster damage, reconstruction, and repeated damage. Mitigation activities may be implemented before, during, or after an incident. However, it has been demonstrated that hazard mitigation is most effective when based on an inclusive, long-term plan that is developed before a disaster occurs. Two recent cost-benefit analyses found that every \$1 spent on mitigation saved society \$3 to \$4.1

Mitigation planning is a voluntary process through which communities assess risks and identify actions to reduce vulnerability through hazard mitigation. The jurisdictional plans prepared by State, tribal, and local governments demonstrate their commitment and serve as a guide for decision makers as they commit resources for mitigation projects that reduce or eliminate long-term risk to people and property from hazards.

In keeping with the intent of Congress, the mitigation planning program is designed to encourage jurisdictions to (1) identify the natural hazards that affect them and (2) implement projects in order to reduce losses from disasters, including development of land use and building code regulations. States must have an approved mitigation plan as a condition of receiving certain nonemergency assistance and mitigation grants. FEMA promotes planning, provides assistance and guidance, and reviews and approves plans.

Section 322 of the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (42 U.S.C. 5121 et seq.), as amended by the *Disaster Mitigation Act of 2000* (P.L. 106-390), provides for States, tribes, and local governments to undertake a risk-based approach to reducing the exposure to loss by natural hazards through mitigation planning. Implementing rules were codified in Title 44, Part 201 of the Code of Federal Regulations (CFR).

Following the issuance of the CFR regulations, the first round of State and local mitigation plans were approved in 2004. Since the program began, FEMA has reviewed, critiqued, and approved more than 5,000 mitigation plans, and overseen more than \$5.2 billion in hazard mitigation grants.

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¹ Congress of the United States, Congressional Budget Office, *Potential Cost Savings from the Pre-Disaster Mitigation Program* (Washington, DC, 2007); and National Institute of Building Sciences, The Multihazard Mitigation Council, *Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities* (Washington, DC, 2005).

This survey concentrated on the following three hazard mitigation grant programs that include a planning function.

Mitigation Planning Grants

- Hazard Mitigation Grant Program (HMGP): Provides grants to State, tribal, and local governments, and certain nonprofits, to implement mitigation measures after a major disaster declaration. The Disaster Mitigation Act of 2000, as amended, authorizes up to 7 percent of available HMGP funds for planning purposes. Of the more than \$1.3 billion awarded under HMGP from 2007 through 2011, \$48.9 million was awarded for mitigation planning. These funds accounted for the largest segment of mitigation planning grants out of all of the hazard mitigation assistance programs.
- Pre-disaster Mitigation (PDM) Grant: Provides funding to States, territories, tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects *prior* to a disaster event. PDM grants exceeded \$270 million over the past 5 years, of which \$52.2 million was for mitigation plans.
- Flood Mitigation Assistance (FMA): Provides funds to help States and communities implement measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insured under the National Flood Insurance Program. FMA provides annual grant funds for flood mitigation planning, and exceeded \$120 million over the past 5 years, of which \$2.75 million was for mitigation plans.

FEMA provides grants to States, which in turn provide subgrants to local governments and communities. The State selects and prioritizes subgrant applications and submits them to FEMA for funding consideration. Figure 1 shows the total amounts spent for the grant programs from 2007 through 2011.

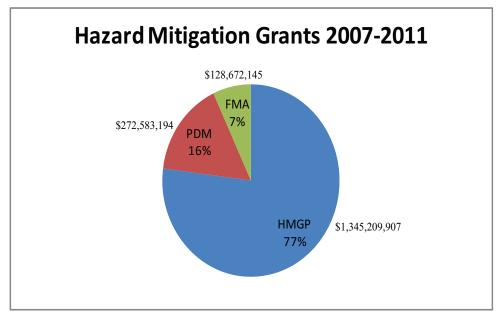


Figure 1. Mitigation Funding by Grant

Source: Department of Homeland Security (DHS) Office of Inspector General (OIG), based on FEMA data.

Plan Elements

CFR Part 201, Title 44 is specific on the elements that must be included in plans submitted by States, tribes, and local jurisdictions. Elements for a standard State mitigation plan include a risk assessment that identifies hazards and risks, including information on previous occurrences, and the probability of future hazard events in the jurisdictional area. Plans contain a mitigation strategy that provides a blueprint for reducing losses and includes (1) a description of proposed projects to reduce future losses and (2) a benefit-cost analysis to demonstrate the cost-effectiveness of the projects; and an evaluation of pertinent laws and regulations, as well as development in hazard-prone areas. Plans also include a description of the planning process and a schedule for monitoring, evaluating, and updating the plan.

A State may submit an enhanced mitigation plan that, in addition to the above-cited elements, demonstrates integration with other State and/or regional planning initiatives, such as economic and land development and emergency management. States with an enhanced plan are eligible for increased mitigation funds, but must demonstrate the capability to implement and assess mitigation projects and achieve mitigation goals. Furthermore, States with an enhanced plan must display a commitment to supporting local jurisdictions by providing workshops and training.

Mitigation Projects

A mitigation project is a specific undertaking by a community to reduce or eliminate long-term risk to people and property from hazards. Eligible projects must provide a long-term solution to a problem—for example, elevating 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 are listed under Project Implementation.

Mitigation Funding

Mitigation grants are separated into three cost categories:

- Project costs used to implement the approved mitigation projects.
- Planning costs used to fund the cost of plan preparation.
- Management costs used to offset recipient's administrative costs.

Figure 2 shows the total amounts spent for mitigation funding from 2007 through 2011.

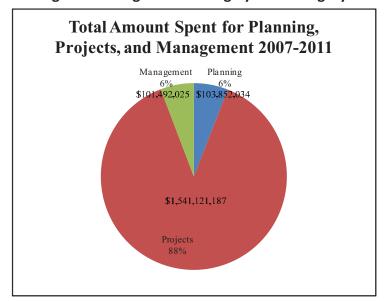


Figure 2. Mitigation Funding by Cost Category

Source: DHS OIG, based on FEMA data.

Results of Review

Plan Participation

Although hazard mitigation planning is voluntary, participation in the program has been relatively widespread. Presently all 50 States, the District of Columbia, and five of the seven U.S. Island Territories have approved plans. More than 19,000 jurisdictions are currently represented by plans, covering approximately 70 percent of the Nation's population. State plans are scheduled to be renewed and resubmitted every 3 years, local plans every 5 years. All plans must be approved by FEMA.

Notwithstanding the widespread program participation, some local jurisdictions do not participate. According to the State hazard mitigation officers we interviewed, common reasons for jurisdictions not participating are (1) lack of resources, (2) lack of a perceived threat in areas that have not had a declared disaster recently, and (3) an aversion to government programs.

The current economic environment has strained local jurisdictions' budgets and shrunk staffing levels to the point that program participation is a hardship, even with the Federal Government contributing 75 percent of the cost. In locations that are not prone to flooding, frequent earthquakes, or hurricanes, and that do not have a history of recent disasters, local jurisdictions often decline participation, especially if their resources are constrained. A number of jurisdictions, typically in rural, sparsely populated areas, display a tradition of self-sufficiency and an aversion to participation in voluntary government programs.

Plan Review Process

FEMA must complete its review and approval of a plan within 45 days of the time the FEMA Regional Office receives the plan. The State or governing body of the jurisdiction must formally adopt the plan before submitting it to FEMA. However, FEMA encourages States and local jurisdictions to submit a final draft of the plan for review before adoption so that FEMA can determine if the plan is "approvable pending adoption" or identify deficiencies that need to be addressed before the plan is formally adopted. States are also encouraged to review plans following a disaster to determine if revisions are necessary.

The CFR requires localities to update plans once every 5 years, and States to update their plans once every 3 years. This time difference in submitting plans was the most common issue we heard from the State mitigation officers. They consider the "too-frequent" 3-year update cycle to be burdensome, unnecessary, and impractical for the States.

We were told that usually there are not enough changes in a 3-year period to warrant a new plan. State officials report that they are wasting time and money, especially because many of them perform annual plan maintenance updates that would minimize the frequency of a new plan. They would prefer a 5-year reporting cycle for State plans, particularly since the local plans are linked to the State plan and it would make sense to have both on the same reporting cycle.

During a recent DHS regulatory review, FEMA proposed a rule change that would lengthen the States' mitigation plan reporting cycle to 5 years. We commend FEMA on its responsiveness to State and local concerns and suggest that it continue promoting the proposed rule change.

Project Implementation

A mitigation project is a specific undertaking to reduce or eliminate long-term risk to people and property from hazards. Eligible projects must provide a long-term solution to a problem; for example, elevating a structure to reduce the likelihood of flooding could be eligible, whereas buying sandbags and pumps to fight the flood would not be eligible. 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. The following are examples of eligible projects:

- Property acquisition and structure demolition
- Property acquisition and structure relocation
- Structure elevation
- Flood reduction projects
- Soil stabilization
- Wildfire mitigation
- Safe-room construction
- Infrastructure retrofit
- Retrofitting of existing buildings and facilities
- Floodproofing of structures

Figures 3 through 5 illustrate mitigation projects.

Figure 3. A home in a flood-prone area has been elevated.



Source: FEMA Photo Library.

Figure 4. "Hurricane clips" help anchor roofs to prevent detachment due to severe wind.



Source: FEMA Photo Library.

Figure 5. Structures have been acquired and removed from this flooded former residential area.



Source: FEMA Photo Library.

Potential projects are identified in the local mitigation plans, selected by the State, and forwarded to FEMA for an eligibility review. At minimum, approved projects must conform to the State plan, address an identified problem, meet environmental requirements, and be cost-effective.

At the time of our fieldwork, FEMA did not track mitigation projects, but was developing a tool to track mitigation actions identified and implemented by grant recipients. The tool is expected to be in use sometime in 2012. We encourage FEMA to continue with its plans to implement a mitigation project tracking tool.

Conclusion

We conducted this survey to evaluate FEMA's hazard mitigation planning program's efficiency and effectiveness, and to determine whether a more comprehensive audit was needed. Based on our survey, we determined that further audit work is not warranted at this time. Nonetheless, FEMA needs to implement a better system to track participants' progress, and continue ongoing efforts to address States' concerns regarding plan reporting requirements.

Recommendations

We recommend that the Associate Administrator, Federal Insurance and Mitigation Administration:

Recommendation #1:

Continue ongoing efforts to accomplish a rule change for mitigation plan reporting schedule.

Recommendation #2:

Proceed with current plans to develop a tool to track identified and implemented mitigation actions.

Management Comments and OIG Analysis

We received written comments on the draft report from FEMA's Federal Insurance and Mitigation Administration. FEMA agreed with both recommendations. A copy of the comments is in appendix B.

We analyzed FEMA's comments and agree with the actions FEMA is taking. With regard to Recommendation 1, FEMA is taking the necessary preliminary steps to engage in rulemaking to change the frequency of plan updates for State mitigation plans. This will result in fewer financial and time burdens on the states and will allow for linked State and local plans to be on the same reporting cycle. We will determine the status of this recommendation once we receive the detailed corrective action plan in FEMA's 90-day letter.

With regard to Recommendation 2, FEMA has developed and is testing an Interim Action Measure Collection Tool for use by FEMA staff to begin to track areas where identified mitigation actions have been initiated. The tool was deployed in early 2012 to FEMA Regions to begin collecting data. This will allow FEMA to track participants' progress. We will determine the status of this recommendation once we receive the detailed corrective action plan in FEMA's 90-day letter.

Appendix A Objectives, Scope, and Methodology

The Department of Homeland Security (DHS) Office of Inspector General (OIG) was established by the *Homeland Security Act of 2002* (Public Law 107-296) by amendment to the *Inspector General Act of 1978*. This is one of a series of audit, inspection, and special reports prepared as part of our oversight responsibilities to promote economy, efficiency, and effectiveness within the Department.

The objectives of our survey were to (1) evaluate the hazard mitigation planning program's efficiency and effectiveness and (2) determine whether a more comprehensive audit was warranted. We reviewed agency documents and compared program statistics for fiscal years 2007 through 2011.

Audit fieldwork was conducted in the Washington, DC, and Philadelphia, PA, areas, where we interviewed FEMA officials from the Federal Insurance and Mitigation Administration; at headquarters; and at Region III. We also conducted telephone interviews with regional FEMA officials and State hazard mitigation officers.

We conducted this performance audit between October 2011 and January 2012 pursuant to the *Inspector General Act of 1978*, as amended, and according to generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based upon our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based upon our audit objectives.

Appendix B Management Comments to the Draft Report

U.S. Department of Homeland Security Washington, DC 20528



MAY 3 1 2012

MEMORANDUM FOR:

D. Michael Beard

Assistant Inspector General

Office of Emergency Management Oversight

FROM:

David J. Kaufman

Director

Office of Policy and Program Analysis

SUBJECT:

FEMA's Response to OIG Draft Report, Survey of Hazard Mitigation Planning OIG Project No. 11-010-EMO-FEMA

The Federal Emergency Management Agency (FEMA) appreciates the opportunity to review and respond to the Department of Homeland Security (DHS) Office of Inspector General (OIG) Draft Report, Survey of Hazard Mitigation Planning. The report focused on the strengths and weaknesses of the Federal Emergency Management Agency's Hazard Mitigation Planning program. The objectives of the survey were to (1) evaluate the hazard mitigation planning program's efficiency and effectiveness and (2) determine whether a more comprehensive audit was warranted. Based on the survey, the draft Report indicated further audit work on the program is not warranted at this time.

Overall Comments

FEMA appreciates the DHS IG's review of FEMA's Hazard Mitigation Planning program and offers the following clarifications in the draft Report.

- Page 1, 2nd paragraph: "The program is voluntary, but all 50 States have
 participated since its inception, and the tribal and local community participation
 accounts for approximately 70% of the Nation's population." Tribal and local
 community participation *currently* accounts for approximately 70% of the
 Nation's population. Since 2000, more than 26,000 jurisdictions have developed
 plans, covering approximately 90% of the Nation's population.
- Page 3, bullets 1-3: The first bullet on HMGP suggests the total amount of funding (\$1.3 billion) was available for planning grants. However, the total amounts identified (\$1.3 billion for HMGP, \$270 million for PDM and \$120 million for FMA) were available for both mitigation projects and plans, and should not be interpreted as the amounts allocated for planning grants alone.

Page 6, 1st paragraph: "More than 19,000 jurisdictions are represented by plans, covering approximately 70% of the Nation's population." To be clear, more than 19,000 jurisdictions are *currently* represented by *FEMA-approved* plans, covering approximately 70% of the Nation's population. Since 2000, more than 26,000 jurisdictions have developed plans, covering approximately 90% of the Nation's population.

Response to Recommendations

<u>Recommendation #1:</u> Continue ongoing efforts to accomplish a rule change for mitigation plan reporting schedule.

FEMA Response: FEMA agrees with this recommendation. This issue is a top priority for FIMA and we are taking the necessary preliminary steps for FEMA to engage in rulemaking to change the frequency of plan updates for State Mitigation Plans.

<u>Recommendation #2:</u> Proceed with current plans to develop a tool to track identified and implemented mitigation actions.

FEMA Response: FEMA agrees with this recommendation. FEMA has developed and is testing an Interim Action Measure Collection Tool for use by FEMA staff to begin to track areas where identified mitigation actions have been initiated. The tool was deployed in early 2012 to FEMA Regions to begin collecting data.

Once again, thank you for the opportunity to comment on the findings and recommendations of the *OIG Draft Report on Survey of Hazard Mitigation Planning* prior to its publication. We look forward to working with you on expeditious closure of the recommendations. Please feel free to provide any comments/concerns to our Audit Liaison, Ms. Gina Norton, 202-646-4287.

Appendix C Major Contributors to This Report

Kaye McTighe, Director Paul McPhail, Supervisory Program Analyst Stuart Josephs, Acting Audit Manager Kimberly Letnaunchyn, Program Analyst John Meenan, Program Analyst

Appendix D Report Distribution

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