

Recommendations for an Effective National Mitigation Effort

"Building stronger partnerships, increased resilience, and disaster resistance for a safer nation."



Endorsing Organizations

- American Public Works Association
- American Society of Civil Engineers
- Association of Bermuda Insurers and Reinsurers
- Association of State Flood Plain Managers
- Central United States Earthquake Consortium
- Federal Emergency Management Agency
- Institute for Building Technology and Safety
- Institute for Business and Home Safety
- International Association of Emergency Managers
- International City/County Management Association
- International Code Council
- National Association of Counties
- National Emergency Management Association
- Reinsurance Association of America
- Western States Seismic Policy Council
- US Chamber of Commerce

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Introduction – Investing resources and capital to prevent or reduce harm before it occurs is a rational and logical course of action. But social, political, and economic realities tend to drive public choice away from investments that attempt to minimize or eliminate disasters’ impacts before they occur.

It’s tough to convince people to prepare for the worst when the sun is shining and the skies are blue. It is also hard for mitigation measures to compete for funding with the many urgent and immediate emergency funding needs facing federal, state, and local governments.

This psychological, social, and political reality should not deter efforts of governments, businesses, and individuals to encourage proactive and preventive measures that save lives, protect property, and preserve the economic base from the consequences of probable disasters. But our approaches to the challenges of implementing effective mitigation measures require innovative programs and specific policies along with the consideration of the successes of the past. A truly *National* Mitigation Strategy must be grounded on themes of partnership, total hazard awareness, and on requirements driven by local and community needs.

This White Paper offers strategic themes and elements of a national mitigation strategy, identifies some initial steps for the near term, and asserts that the concept of mitigation must be a part of any dialogue where the notion of protecting the communities of the United States and reducing the costs of disasters is discussed. This paper is not intended to suggest specific or programmatic actions. Its purpose is to set the desired strategic context from which will follow future policy and program recommendations.

Benefits of Mitigation - Mitigation represents a societal investment, not a cost. The benefits of this investment are clearly evidenced in several ways. Effective mitigation:

- Averts loss of life and injury to people.
- Reduces damage to public and private property.
- Lessens expenditure of resources and exposure to risk for first responders.
- Reduces costs of disaster response and recovery.
- Accelerates recovery of communities and businesses affected by disasters.
- Enhances community resiliency.

Mitigation can be considered as any sustainable action that prevents or minimizes injury or harm to people, prevents or minimizes damage to property, and ensures continuity of critical societal functions. Although the benefits of mitigation are clearly proven and

supported by research and experience¹, more effective communication and articulation of these values is necessary to convince policy makers and the public that mitigation efforts are worth the investment.

Strategic Themes – To advance the nation’s resistance, resilience, and protection from the hazards it faces, several themes must be recognized as the foundation for successful mitigation programs, initiatives, and strategies.

Broader Collaborative Partnerships – No single agency or level of government, sector of business, or individual community can achieve successful mitigation on its own. While a few professional disciplines identify hazard mitigation as a core mission area, the activities of these disciplines alone are not nearly enough to achieve effective investments and policies that protect against the hazards that lead to future disasters. Further, the traditional community of mitigation partners often does not include the leaders or citizens that will have the most influence on its success or failure. Local governments often have the lead responsibility for implementing mitigation strategies and differ both on the challenges and solutions for mitigation. Furthermore, in order to facilitate the most comprehensive dialogue, greater effort should be made to bring into the process those stakeholders with dissenting viewpoints. Future mitigation endeavors must build *non-traditional* partnerships: they must include those who disagree or are skeptical of the benefits, and they must rely on community leaders to buy into and then champion the efforts to effect good mitigation activities. These endeavors must allow local communities with sufficient capabilities to not become handicapped by overly bureaucratic processes, but rather to provide the appropriate level of assistance to communities with lesser capabilities. As broader partnerships evolve, roles and responsibilities of all participants must also be defined and shared, allowing for evolution over time. What can be offered by or expected from any entity today may change as the collaborative enterprise develops.

Total Hazard Awareness – Individuals, communities, and agencies will not invest in preventing hazardous consequences if they do not know *what* might impact them. Hazards identification and risk assessments need to be acknowledged, personalized, and internalized if there is to be any expectation of investment of effort to protect against them. There are two critical steps to this task. First, there needs to be an ability to identify hazards on a large geographical scale (e.g. hurricanes, earthquakes, etc), but even more importantly the hazards and the potential consequences must be known on specific locality, community, or unique individual levels. Second, the risks must be communicated effectively nationally, regionally, and individually. An intensive effort to identify risks globally *and uniquely*, combined with a robust endeavor to more effectively communicate the threats and hazards including a strong public awareness campaign, is the formula to promote and more effectively enact sound decisions in risk avoidance measures. The mitigation planning process, as required by the Robert T. Stafford Disaster Relief and Emergency Assistance Act, is a good tool for this purpose. An ironic aspect of

¹ FEMA publications, GAO reports, association white papers, state and local government websites, federal agency studies and research from a number of academic institutions clearly describe and demonstrate the qualitative and quantitative benefits of mitigation measures.

this issue is that most individuals and agencies already make significant mitigation investments without recognizing them as mitigation. For instance, purchasing insurance - property, health, or vehicle - and using seat belts while driving are personal risk management measures. The use of hurricane straps to secure roofs to homes or earthquake straps on water heaters are examples of more traditional disaster mitigation measures. Federal, state, and local leaders and the private sector may still decide against taking some mitigation measures, but at least those decisions would be made with a full awareness and knowledge of the costs versus the benefits.

Full Spectrum - Community-to-Federal Emphasis – Federal, state, local, and tribal efforts to encourage, mandate, and/or fund mitigation actions are important and necessary. But when local communities or individual agencies that actually implement preventive, protective, or resilient measures choose not to act or are not treated as full and complete partners, many actions of the federal and state entities turn out to be for naught. This “push” methodology by the federal and state governments needs to combine with or shift to a “pull” approach initiated by local communities. If the communities and individuals where mitigation acts are resourced and enacted created the demand side of the investment equation, then an environment of *satisfying* mitigation needs would be created rather than a top-down attitude of dictation and enforcement. The state-federal focus would shift from trying to convince locals to act, to a focus on organizing and resourcing to keep up with locally-driven requirements within the context of federal mitigation programs.

Necessary Elements of a National Mitigation Strategy – The above ideas should be the recurrent themes running through any future mitigation strategies, programs, and initiatives. Additionally, several unique elements and concepts need to be included in future national mitigation approaches.

Strive for Common or Symbiotic Objectives – Risk reduction actions are most effective when the multiple parties that must be involved either have the same outcomes in mind or when individual objectives overlap and are mutually supporting. Mitigation objectives for specific projects can differ among individuals, but if the same project supports multiple desired outcomes, success and achievement are increased. Opportunities where a mitigation action actually produces more important non-disaster related benefits should also be sought (e.g. mitigation-related land use decisions that *promote* economic opportunities or environmental benefits. The use of the natural environment to provide mitigation benefits can serve both ecological and human-protection benefits.)

Seek Out and Encourage Activities Where the Benefits are Intuitive – Some approaches to mitigation value process over product. In some cases, a proposed mitigation project or program has clear and obvious benefits. However, the clarity of the outcome of these “no brainers” can be lost and inadequately communicated due to a desire for excessive and unnecessary quantitative requirements. A new government and partner culture needs to be created to allow intuitively beneficial projects to be discovered, supported, and implemented without an overwhelming burden of bureaucratic process.

Embed Mitigation in Policy Development as Broadly as Possible – Guiding risk reduction policies and specific hazard mitigation measures enhance individual and agency resilience through redundancy, protection, and preparedness. These are not the sole domain of any single agency, discipline, or profession. Executives and policy makers in many domains could advance the reduction of risk in ways outside their traditional scope of responsibility. If the discussion of the mitigation of future loss was embedded in a wider variety of policy and public choice discussions, then decisions that inadvertently increase risk would either be avoided or, at least, acknowledged in an open and transparent dialogue. (For example, one opportunity would have been a requirement to include hazard mitigation measures, or at least their consideration, in the project guidance for the Infrastructure Investment Act of 2009.)

Demand Open Dialogue – Both mitigation advocates and those that oppose certain mitigation measures should debate the costs and benefits in forums as openly as possible. All that are affected by a mitigation decision should have a voice in its adoption, rejection, or modification. Technology provides us with many creative and different ways to reach people around the country and audiences outside the governmental perspective. Stakeholder input is needed to develop strong mitigation programs and to provide feedback on existing programs.

Educate and embrace Federal, State, and Local Officials – Elected and appointed officials must make tough decisions and weigh costs versus benefits every day. To make wise policy decisions where mitigation investments are concerned, they deserve to be educated about the threats, risks, benefits, costs, and advantages as fully as possible. Recognition must be made that each local government possesses a different level of capability to mitigate, as well as different problems to mitigate. Therefore, flexibility is needed to realize one size does not fit all.

Create a Body of Knowledge of Mitigation Tools, Resources, Practices, and Successes – Once a demand for mitigation is realized, communities, citizens, and other participants in the effort will be empowered to achieve success. A body of knowledge already exists in various places within the community of mitigation and in academic research communities. These collections are constantly growing as communities embark on mitigation efforts. But this knowledge base needs to be centralized, managed, grown, and accessible “for the masses” at all levels of government, and it must address unique, localized problems so that experience can accelerate performance. This is one component necessary for the creation of a national mitigation capacity. Another critical element is the advancement of education, research, analysis, and science in the mitigation realm. Policy makers at all levels of government need, and deserve, the hard evidence to support favorable mitigation policies. The mitigation community must find a way to effectively deliver this requirement.

Emphasize Incentive, Not Punitive Mitigation Policies – Hazard mitigation often is not a “naturally occurring” phenomenon. It can be encouraged and rewarded, or it can be mandated with punishment for the non-compliant. There may be rare cases where the latter is necessary, but the former suits the culture of our nation and our citizens. Policy

makers should consider funding programs designed to *reward* effective land use and building-design actions including building codes and ordinances.

Don't Get Stuck on Definitions – Describe “mitigation” as broadly as possible without losing the mitigation focus. While compliance with certain legislative and statutory limitations may be necessary, the *concept* of what mitigation is intended to achieve should not be limited by personal prejudices or governmental regulation. If an action helps safeguard an individual or family’s most important assets before a disaster strikes, then action should be taken. The pro and cons of different mitigation approaches and levels of protection should be discussed.

Measure, Capture, and Celebrate Success – Along with some enhanced ability to measure the effectiveness of mitigation, strategies to publicize and share those successes must also be developed. (California’s recent scenario-based public preparedness activities involved millions of citizens and resulted in many individual mitigation and preparedness efforts. This type of event should be memorialized and publicized for broader national audiences.) Exploring and designing ways to measure the long-term benefits of mitigation on non-mitigation values (e.g. tourism, environment, economy) would also enhance the attractiveness and justification for mitigation efforts.

Suggested Next Steps – While the above themes and elements are strategic in nature, specific actions could be taken to begin to realize and institutionalize them. With each step, an “enabling action” is suggested that could provide a more concrete initial activity to realize each objective.

1. *Form a National Mitigation Collaborative Alliance* - This entity would be a starting point to expand and discuss the above ideas as well as form a collaborative environment for future direction and strategy. Federal, state, local, and tribal government and private enterprise would be equal partners in such a collaborative body. While state, local, tribal and federal governments might act as the conveners of such a body, their role would be focused on facilitation and acting as catalysts for action. The representatives in this alliance should include the “traditional” mitigation community, but must also include membership and input from those who actually implement mitigation measures. Dissenting viewpoints should be encouraged for debate and consideration by the alliance. This body would also rely upon and provide a coordination point for the numerous councils, committees, and workgroups that have been relentlessly studying and advancing mitigation efforts for years.

Enabling Action: A workshop should be convened to draft and establish the objectives, structure, and governance of this alliance. Ideally, this collaborative effort will be the foundation of specific policy and strategy recommendations to begin implementation of the goals, steps, and themes of this paper.

2. *Invigorate “Grass Roots” Participation* - More effective and more accepted mitigation activity is best achieved when it is demanded by the people and communities it is intended to serve. The mitigation community must not only better connect with

individual citizens and local officials, it must empower them with the knowledge and options that are present in a mitigation strategy for their communities. Total awareness of the hazards that face a community must be readily available along with the options to mitigate those hazards. Leaders and influencers at the grass-roots level of the nation should be involved and empowered for mitigation decision-making, not just informed and consulted about state or federal decisions. The leaders of national mitigation efforts must innovate and implement a more effective way of engaging citizens, tribal governments, and communities. The desired outcome for this endeavor would be achieving “mitigation for the masses.”

Enabling Action: In concert with the establishment of the alliance, an investigation of the success and failure of mitigation actions needs to be conducted that focuses on the perspective of the implementing entities. The mitigation community needs to understand when and why mitigation is successful versus when and why it is not. From this understanding; more effective tools, encouragement, and outreach strategies can be contemplated and implemented.

3. *Build a National Mitigation Knowledge Repository* – While some libraries of tools, resources, and practices exist, there is no comprehensive collection of the full range of mitigation related topics and knowledge. Mitigation success stories, lessons learned, tools, applied research, empirical data, templates, academic research, hazard analysis, etc. should be brought together in an open forum available to all. Expanding the reach of mitigation to those not only interested, but also those impacted by hazards is the goal of the knowledge repository.

Enabling Action: A review and study of the existing resources related to mitigation activities needs to be conducted to first understand what currently exists and in what forms. From there, and in coordination with all partners, the desired end-state of a mitigation knowledge base needs to be determined, designed, and developed.

4. *Connect Mitigation to Other Programs* – The mitigation community should work along with all other programs and initiatives that affect public safety and have similar missions. Mitigation knowledge can inform, and be informed by, communities of interest across the scope of the safety and security spectrum. Prevention, preparedness, protection, response, recovery, resilience, continuity, and mitigation are all interconnected activities that best serve the public in an enterprise rather than individual, stove-piped approaches.

Enabling Action: The mitigation community should discuss and determine the identities of other programs and activities in which there is a desired interaction. The breadth and scope of each interaction may be unique and specific to each entity.

5. *Policy Emphasis Review* – Current and proposed policies and funding guidelines for mitigation efforts should be reviewed in respect to the “incentivize vs. dictate” balance. Mitigation will be more successful in the future if it becomes embraced as wise and beneficial public policy as opposed to a directive or punitive imposition of government.

Enabling Action: A comprehensive review of federal, state, and local mitigation policies, guidance, and directives should be conducted to determine the “best practices” that incentivize mitigation actions.

Conclusion – Mitigation is not an isolated or unique activity for any single level of government, private sector, or funding source. Mitigation is a pervasive activity that needs to include the broadest range of participants, making widely available the most current and accurate hazard identification information. Mitigation should be demand-driven from the communities where it makes the most difference. It is in the interest of decision makers at the higher levels of government to use their dollars to promote and incentivize a comprehensive and systematic approach for mitigation to be implemented at the local community level.