# MEMO #23

**IMPLEMENTING SUCCESSFUL STRATEGIES:**
**The Need for Effective Homeland Security and Emergency Management**

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**T**he devastating historical impact of natural and technological disasters, as well as the challenges posed by climate change, terrorism, and pandemics, require a comprehensive plan for effectively and efficiently addressing vulnerability. Yet when doing so, the variety of criteria for success that extends beyond simple dollar-based cost effectiveness must be considered. Indeed, the broader and more complex societal impacts that include fairness, equity, and responsiveness must be addressed.

**The Goals of Effective Emergency Management and Homeland Security**

The scope of policy issues surrounding emergency management and homeland security in the United States (U.S.) remains inundated with a number of tri-sectoral challenges. Policymakers have attempted to reduce the impacts associated with hazards by anticipating the unexpected; however, it is easy to under analyze the complexities. Given the limited opportunities for disaster-related experience, "decision-making, mental models, and situational awareness research on [crises] have highlighted a further need for effective emergency management" (Paton and Jackson, 2002, 115).

The goals of effective emergency management and homeland security are to reduce, or avoid, the potential losses from hazards, assure prompt and appropriate assistance to victims of disaster, and achieve rapid and efficient recovery. The results will be largely determined by the ongoing process through which governments, businesses, nonprofits, and civil society plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred. Appropriate actions at all points in the cycle lead to greater preparedness, better warnings, reduced risk and vulnerability, and the possible prevention of future disasters. Effective emergency management and homeland security involves the shaping of public policies and plans that either modify the causes of disasters or mitigate their effects on people, property, and infrastructure (Wisner & Adams, 2002). To accomplish such measures, it is essential that emergency management and homeland security organizations implement plans that:

- Identify, assess and prioritize local and regional vulnerabilities to emergencies or disasters as well as the resources available to mitigate, respond to or recover from them;

- Promote collaborative initiatives between public, private and nonprofit organizations at the federal, state, regional and local levels to insure necessary actions are taken to prevent and/or

mitigate the effects of disasters; and that they are prepared to respond to and recover from such an incident when an emergency or disaster does occur;

- Provide for the utilization of all available public, private and nonprofit resources to protect against and respond to an emergency or threatening situation;

- Provide for the utilization and coordination of local, regional, state and federal programs to assist victims of disasters and prioritize addressing the needs of the elderly, disabled, poor and other groups that may be especially affected; and

- Provide for the utilization and coordination of state and federal programs for recovery from emergency or disaster situations with particular attention to the development of mitigation action programs.

**Recommended Actions**

The implementation of successful strategies for emergency management and homeland security will require a process that is adaptable to the landscape of changing threats and emerging ideas. For example, the threat presented from terrorism is shifting at a rapid pace. Terrorists can change their methods and targets swiftly, often resulting in displacing vulnerability to less protected sites. Or, as another example, the impacts of global climate change, while readily evident, are not fully understood and defensive strategies have become highly, even caustically, politicized. We therefore recommend that leaders focus on several important issue areas that recent data-driven scholarship and practitioner-grounded research have shown may result in positive outcomes in the areas of emergency management and homeland security.

1. **Renew the Emphasis on Mitigation**

   Mitigation is the "sustained action taken to reduce or eliminate risk to people and property from hazards and their effects" (Bullock et al., 2006, 267). Hurricane Katrina can be considered a bellwether for failure in effective mitigation planning. Infrastructure, flood and population vulnerabilities were especially critical for New Orleans, but these vulnerabilities are certainly not unique to that region (Jerolleman & Kiefer, 2013). It has been estimated that only 10 percent of earthquake- and flood-prone households in the U.S. have adopted mitigation strategies (Kunreuther, et al., 2012).

   Geographical discrepancies and social inequalities that still exist throughout the U.S. necessitate a different approach to mitigation. It is important to understand that:

   - It is of crucial importance to recognize that effective mitigation planning defines the scope of future actions of emergency managers;

   - Decisions made about mitigation will determine the safety of a region in the face of inevitable threats from natural and technological disasters;

- Reduction in vulnerability through robust mitigation planning will decrease the cost of disasters, create more resilient and more sustainable communities, and reduce the loss of lives and property; and

- Successful mitigation requires intense collaborative efforts to address the needs of a community or region. Successful and meaningful *collaboration*, in turn, requires long-term, pre-disaster *communication* and *coordination* – or the 3C's – where mutual understanding of shared needs builds trust and confidence in the participants. These collaborative efforts should span public, private and nonprofit sectors as well as extend through federal, state, regional and local organizations.

## 2. Provide More Extensive Training on the National Emergency Management System to Local Leaders

An understanding of the national emergency management system is critically important for local, regional and state officials. Many of the problems in the ineffective response to Hurricane Katrina can be traced to unfamiliarity with how the structure works and what capabilities and services the response system has to offer. This lack of understanding was evident again only a few years post-Hurricane Katrina during the slow response to the Deepwater Horizon Oil Spill. It was readily apparent that local officials failed to grasp how the system worked, slowing the federal response and crippling the chances for a rapid and effective recovery (Keefer's personal conversation with Admiral Thad Allen).

Emergency management, from mitigation through long-term recovery, should be recognized and supported by all elected officials as a critical government service. In order to do this, it is recommended that:

- Preparedness efforts and resources need to be sustained so long-term planning and implementation can be achieved;

- Elected officials should hold emergency management agencies accountable and those agencies should be able to demonstrate capability that has been developed through the investment of public funds;

- Elected officials need to understand their emergency authorities and responsibilities, and practice them in conjunction with emergency management officials before a disaster occurs. They should meet with their emergency management officials and establish solid collaborative relationships, request briefings on state and local preparedness efforts, learn about emergency plans and procedures and visit emergency operations centers and other critical facilities;

- Governments should be able to promptly and accurately inform the public about the seriousness of an event and provide assurance that leaders are fully informed and are directing the response with every available resource; and

- For public officials to be effective leaders during times of crisis, they must have a clear understanding of how government responds to emergencies and disasters, what resources are available, what types of assistance can be provided to citizens and how much time it may take to deliver that assistance.

3. **Promote an Understanding of Critical Infrastructure Interdependencies**

The trend toward greater infrastructure interdependency in the U.S. has accelerated in recent years and shows little sign of abating (Rinaldi et al., 2001). The importance of identifying, understanding, and analyzing these infrastructure interdependencies must be recognized for effective disaster response.

The truth is that few infrastructure systems currently maintain any substantial level of excess capacity or redundancy in their systems. In 1981, Choate and Walter published *America in ruins: The decaying infrastructure* in which they assert that the U.S. was seriously underinvesting in its infrastructure and that the infrastructure was wearing out faster than it was being replaced. Despite receiving widespread publicity in the 1980s, not much has changed in the intervening years. Plant (2005) also notes that even though physical infrastructure plays a critical role in today's society, it has fallen out of the national debate over priorities. The combination of normal disasters, such as Hurricane Katrina, and complex, interdependent, aging infrastructures does not bode well for the future. Substantial investment in infrastructure systems must once again become a national priority (Leavitt & Kiefer, 2006).

It is therefore extremely important that:

- Infrastructure managers find a means to balance the competing demands for efficiency and cost-effectiveness during normal operations with resiliency and sustainability of operations during and after disasters;

- Excess capacity or "slack" resources must not be seen as wasteful, but rather as prudent, if related to plans to meet unusual peak demands or the special needs that disasters inevitably bring; and

- System redundancy promote a more loosely coupled system that can more easily recover from disaster. Infrastructure and public utility managers need to convince customers that a small percentage of their utility payments or taxes should serve as an "insurance" payment targeted to providing some excess capacity or system redundancy in times of crisis.

**Conclusions**

Emergency management and homeland security are long-term as well as politically sensitive issues. Security threats are continually increasing. Today's world is more dangerous, complicated, and immediate than ever before. Given the tectonic shifts of globalization and the expansion of democratization, the nexus between security and sociocultural respect and liberty presents a variety of policy and administrative challenges (Neaves' conference interaction with General Michael Hayden). The changing scope of the threats and shifting vulnerability will challenge emergency management and

homeland security professionals, such as in the shift from the state-sponsored terrorism of the 1970s and 1980s to the domestic terrorism of the Symbionese Liberation Army and Timothy McVey, to the stateless terrorism of Al Qaeda and ISIS (Jerolleman & Kiefer, 2015). It is important to convince governments, the private sector and nonprofit agencies at local, regional, state and federal levels to be involved in collaborative efforts if damage from future disasters is to be prevented or reduced. Emergency management and homeland security efforts should also be demand-driven and culturally and environmentally sensitive to receive the maximum amount of community buy-in.

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