

## *Improving Post-Disaster Recovery: Initial Thoughts for a New Administration*

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Post-disaster recovery is a long-term process of re-creating human settlements. In some ways, it is no different than urban planning in normal times: a multifaceted public-private process that seeks to improve social, economic, environmental, and engineering systems within a complex political, legal, bureaucratic, and financial context. But recovery is, in fact, quite different from normal urban planning, because it takes place under severe time constraints, deals with simultaneous rebuilding of multiple systems, involves stakeholders who have been traumatized (including many officials), and triggers funding sources not normally available. As a result, it offers some intriguing opportunities for positive change.

### **Lessons from Research**

Research from past disasters—in the U.S. and around the world—offers numerous lessons. Some of the most important are as follows:

- *Recovery is a finance process.* When a region is devastated, above all it needs money to pay for the labor and materials to rebuild it.
  - Recovery is a search for sources of financing.
  - Outside resources are vital: Government, NGOs, Victims’ savings, Insurers, Investors
- *Recovery demands more than governmental bureaucracies can provide.*
  - New, flexible, nimble nongovernmental and community-based organizations always emerge, to fill the gaps. Such organizations are the keys to successful recovery.
- *Government’s role is to provide money, information, and technical assistance*
  - Support all the many actors in doing what they are good at.
  - “Send lots of money and technical help and stay out of the way.”

As a result, we offer the following general principles of recovery management:

1. Create (or adapt existing) institutions to:
  - Identify and manage financing.
  - Collect, maintain, distribute information
    - Damage assessment
    - Costs
    - Physical progress
    - Actions of all the entities
    - Communication systems
  - If local capacity is overwhelmed, higher levels of government (or outside assistance) need to help create or strengthen such institutions.

2. Remove as many restrictions as possible.
  - Organizations should be nimble.
  - Staff should be rewarded for innovation, creativity, and “thinking on their feet.”
  - Use existing programs as a starting point, but don’t be trapped in them.
3. Organizations need to share information, “expand their computing ability,” brainstorm collectively.
  - Information is a vital, though scarce, commodity. To the extent that entities know about damage, financing, and each other’s actions, recovery can proceed more effectively.
  - Information management includes needs for:
    - Central data clearinghouse.
    - Mechanism for regular communication among agencies and NGOs.
    - Providing honest information. Respect the public. Rumor management. In chaotic post-disaster situations, negative rumors spread quickly.
4. Planning and building must occur at the same time.
  - Planning is vital, in order to ensure efficiency, equity, and public safety. But speed is important as well, to preserve social and economic networks.
  - But if planning takes too long, it will be ineffective, because rebuilding begins on its own.
  - Solution: do both, at the same time. For example, while individual agencies focus on speed, create a communication body so they can coordinate in real time. And remember that every entity will have its own plan. The goal is to coordinate them.
  - Previously existing plans can help to improve both the speed and quality of post-disaster decisions.
5. Housing recovery requires extensive public involvement.
  - Involves rebuilding, redesigning or relocating people’s homes.
  - Participation is vital! Those who participate in housing reconstruction are more likely to be satisfied with their homes, live in their new homes, not migrate elsewhere, and not protest or cause political discomfort for officials.
  - If relocation is needed, research shows that people will not move unless they are involved in the decision to move.
6. Considerations of equity must be built into recovery processes from the start.
  - Those who are better integrated into economic and social networks will recover faster.
  - Those with the fewest resources get less attention from aid organizations, and get it later in time.

## **Guiding Principles for a New Administration**

Given the above general principles, and given the lessons learned most recently following Hurricane Katrina and other disasters, we offer the following guiding principles for reinventing post-disaster recovery:

### Rapid commitment of funds.

The Administration and Congress need to move quickly to demonstrate a commitment to funding, particularly after large-scale disasters. This was a critical step following the 1994 Northridge Earthquake, 1997 Grand Forks flood, and the 9/11 destruction of Lower Manhattan, as it has been for many nations following huge disasters. Lack of rapid commitment was the single biggest failing of the Bush Administration and the Congress in their reaction to Hurricane Katrina in Louisiana. The lack of committed funding led to local uncertainty, political discord, and lack of a systematic and intelligent reconstruction process.

### Pay first, audit later.

Disaster areas need money quickly. The current, Stafford Act-based system relies too heavily on reimbursements, in which disaster-affected cities must first apply for funds to repair or rebuild, then incur the costs, and later receive reimbursement from FEMA. This system needs to change. It is quite possible to make reasonable estimates of damages, disburse the funds, and then require detailed accounting and auditing afterward. In contrast, the large, post-disaster CDBG grants made to Los Angeles, Grand Forks, Louisiana and Mississippi have “pushed” block grant funding to state and local agencies and employed a range of application approaches – ranging from comprehensive citywide work programs to individual project applications.

### Minimize strings attached to federal funding.

CDBG funds have the reputation for having fewer conditions required of local and state agencies than does FEMA funding, but CDBG funds still have far too many requirements. To this day, some Gulf Coast agencies, including the city of New Orleans, are still working on the paperwork to enable them to spend CDBG funds from Hurricane Katrina.

### Provide funding for planning and information systems.

The wise use of federal funds following disasters requires data, information management, communication systems, and substantial stakeholder involvement. It is in the interests of the federal government to provide direct financial and technical support to such efforts, unlike the Bush Administration. This requires the cooperation of FEMA and HUD to interpret the eligibility guidelines for Public Assistance and CDBG.

### Emphasize communication and coordination between agencies.

The “emergency operations center” is a common tool of local emergency management, enabling all relevant agencies to communicate and share resources in the hours and days following a disaster. Long-term recovery requires analogous organizations to coordinate agency actions at all levels. For large-scale disasters this would include cabinet-level

coordination, as well as coordination of federal agency staff at the regional, state, and local levels. During the late 1990's, the Clinton Administration created several inter-agency task forces to coordinate federal agency actions following the 1997 Grand Forks flood and 1998 flooding in Alabama and hurricanes in the Carolinas. Federal agencies also need to encourage and collaborate with parallel organizations of state, regional, and local governments. Such coordination existed following the 1994 Northridge earthquake (between Los Angeles Housing Department and HUD) and 1997 Grand Forks flood (between Grand Forks and HUD), but has been much less evident following Hurricane Katrina.

In general, the Bush Administration emphasized a hierarchical, response-based model of emergency management, which we don't believe has been the most effective approach in a 21<sup>st</sup> Century world. Emergency management follows a cycle, from the disaster event to response, recovery, mitigation, and preparedness for the next event. The current administration has emphasized short-term response. Most disaster researchers agree that emergency management is most effective when viewed through the lens of the long-term cycle, and that long-term commitment to mitigation and recovery is the best way to build resilient communities and to build the local capacity to respond to disaster events. This preferred approach is fundamentally at odds with the focus on catastrophe preparedness and response now institutionalized by the Department of Homeland Security. We suggest that the new administration consider ways in which to increase the independence of FEMA, bolster its legislated role as federal coordinator for preparedness, response, recovery and mitigation – the full disaster cycle, and give it more direct access to the White House.

## **Federal Policies**

How might these principles translate into actual federal policies or legislation? Some examples follow.

CDBG funds are, in principle, the most suitable of the current suite of federal post-disaster assistance programs to be the workhorse of state and local long-term recovery. FEMA public assistance funding provides direct assistance to public agencies to replace damaged public facilities and infrastructure. But the most important role of federal funding is to stimulate private reconstruction, by providing targeted investments. A good example of this was the use of CDBG funding in Los Angeles, following the 1994 Northridge earthquake, to help to rebuild apartment buildings that were clustered in blighted “ghost towns”—arguably, this one policy significantly led to the successful rebuilding of Los Angeles and a reversal of the economic downturn that the city had been in before the earthquake.

HUD should endeavor to reduce restrictions that slow the use of CDBG funds following disasters. This may require changes in regulations, or it may simply require changes in administrative philosophy. One example is the requirement for NEPA review of each application of CDBG funding. Although admirable in intent, such requirements dramatically slow down recovery, add costs to recovery, and have no obvious environmental benefit.

HUD funds have also been used to fill the gaps in the FEMA funding, and this should continue. For example, they can be used to provide matching funds or to provide immediate cash for vitally needed repairs. Local governments have then been able to reimburse its CDBG budget with FEMA Public Assistance funds once they are received.

HUD funds should be used to directly support local planning and information systems. HUD and Congressional staff should verify whether this is allowed under current regulations, and change them if needed. It is only logical that HUD should support efforts that ensure the efficient use of HUD reconstruction funding.

Long-term community planning after a disaster should involve a long-term commitment, support for comprehensive planning, data support, and substantial stakeholder involvement. Its goal should be to try to achieve a rebuilt community that is as sustainable as possible, has transparent decision-making institutions, and is resilient to the next natural event that may strike it. FEMA, under Emergency Support Function 14 (ESF-14) has begun to provide some planning assistance to local entities, primarily by means of federal-contract staff support in identifying relevant federal programs. This is helpful, but has mistakenly been called “long-term community planning.” We suggest that HUD coordinate with FEMA to take over a genuine “long-term community planning” function, while still allowing FEMA to continue with its ESF-14 program. For example, HUD provided for a team of technical assistance contractors to work for the city of Grand Forks for more than 6 months after the 1997 floods. The contractors included land use planning, economics, housing, and recovery management specialists. The team helped the city develop a comprehensive 6-month recovery action plan that had operational elements for flood hazard mitigation (including a buyout program for flood-destroyed properties), infrastructure rehabilitation, business recovery, and housing recovery. The team also helped the city hire and staff its recovery programs, including long-term recovery planning, public information and recovery communications, business and housing recovery, and disaster information management systems managers and specialists. This commitment was instrumental to the city’s recovery and far beyond the level of planning assistance currently offered by FEMA under ESF-14.

HUD should consider expanding the range of tools encouraged after disasters. HUD has an opportunity to be a better player in the game by bringing the entire planning toolkit to the process. For example, voluntary buyout is one of the most common approaches offered after flood events (This is usually funded under the National Flood Insurance Program and the Hazard Mitigation Grant Program, but some areas, such as the Gulf Coast, have also used CDBG). We suggest other possibilities that may more effectively provide for equitable relief and sustainable reconstruction after disasters, such as transfer of development rights, land banking, or land readjustment. All of these involve more creative thinking about property rights and compensation. For example, why not offer a 20% bonus to a property owner as an incentive to encourage them to move to higher ground? In the long run, such bonuses would save federal funds. But we are not sure whether such a mechanism would be allowed under current HUD regulations. Given climate change and sea level rise, such tools will be increasingly needed. Some towns lost after Hurricanes Gustav and Ike can’t be put back where they were, and so we need ways to provide for relocation equitably, efficiently, and effectively. It is critical that HUD’s regulations be reviewed and modernized as necessary in order to accomplish 21<sup>st</sup> century tasks.

HUD should also take advantage of current knowledge of 21<sup>st</sup> century principles of governance and public administration. Transparent, decentralized methods are much more effective than hierarchical bureaucratic programs, especially in administratively chaotic post-disaster environments. For example, Indonesia learned some valuable lessons from the 2004 tsunami catastrophe that it was able to apply successfully to a 2006 earthquake that destroyed 175,000 homes. They discovered that the most successful rebuilding program was one that involved having local facilitators working with groups of 20-30 households. We believe that such a system, if allowed under CDBG guidelines, would have greatly improved the infamously poor administration of Louisiana's CDBG-funded, Road Home program, which cost the taxpayers \$775 million for the management contractor alone. Local facilitators—a system also used by the City of Kobe following its 1995 earthquake—could act as a two-way conduit of information, providing valued technical advice and counsel to local residents, while also identifying implementation problems and quickly communicating them to program administrators. Such a program was proposed in the Unified New Orleans Plan and received support from citizens participating in both the neighborhood-level and citywide planning forums; but neither the city, state, nor federal agencies implemented the idea.

Assistance to small businesses and to low-income residents is one of the other ways in which more flexibility would be welcome. Currently, it takes considerable time for assistance to be provided to small businesses. And low-income residents often are last in line to get assistance, because they lack the resources and political connections that middle-class homeowners have. But both of these groups are least capable of surviving for several months with financial help. We therefore suggest that HUD and SBA seek ways to facilitate more rapid and proactive assistance to those who need it most, and who are least likely to know how to ask for it.

It is becoming widely accepted among disaster policy researchers and professionals that the Stafford Act, which governs FEMA's response to disasters, needs to be revised, primarily because it is poorly suited for catastrophic disasters. The most commonly cited problems are as follows:

- The public assistance program needs to be revised from a reimbursement system to a cash advance/granting system, followed by accounting and auditing.
- Local governments need to be able to immediately access substantial loan funds so that they can continue to pay personnel in the days and weeks following the disaster, when trained city staff are most needed.
- Currently, the public assistance program has a perverse disincentive against improving facilities over their pre-disaster condition. It allows jurisdictions to build differently—such as stronger, or in a more logical or safer location—but penalizes them by as much as 40% of the pre-disaster value. It makes more sense to us to offer incentives for betterment.
- Prompt completion by FEMA (or preferably HUD) of the Disaster Recovery Strategy required as part of the Post-Katrina reforms to the Stafford Act.
- Establishment of the legal framework for states and local governments to form recovery authorities in advance of disasters, similar to the Louisiana Recovery Authority established after Hurricane Katrina.

Finally, the new administration should fund the full implementation of the Disaster Mitigation Act of 2000 (DMA 2000) into local and state planning and recovery management, as originally envisioned by the Act's authors. DMA 2000 has triggered a national local hazard mitigation capacity building initiative on an unprecedented scale. As of July 2008, 17,000 of the total 88,000 cities, counties, special districts and tribal organizations in the U.S. have FEMA-approved local hazard mitigation plans. The DMA 2000 Pre-Disaster Mitigation Program provides grants for both hazard mitigation plans and projects in advance of disasters to minimize losses and recovery costs, and threatens to withhold post-disaster Hazard Mitigation Grant funds in communities without FEMA-approved mitigation plans. Research has shown that FEMA mitigation projects from 1993-2003 averaged a 4:1 benefit-to-cost ratio in disaster loss avoidance. Both the Hazard Mitigation Grant Program and Pre-Disaster Mitigation Program represent important steps toward reducing future disaster losses, yet their effectiveness is minimized by very low funding levels.

Also, as was witnessed following Hurricane Katrina, the ESF-14 Long-Term Recovery and FEMA-related local hazard mitigation plan activities were not well coordinated and neither have been well-integrated into local and state general planning. Both DMA 2000 and the Stafford Act requirements for state and local hazard mitigation planning should be amended to encourage pre-event recovery planning and better linkages with local and state general plans. A good example is Florida, which is now requiring cities and counties to prepare pre-event recovery plans which are also linked to hazard mitigation and general plans.