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Achieving Successful Long-Term Recovery and Safety from a Catastrophe: The Federal Role

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Achieving Successful Long-Term Recovery and Safety from a Catastrophe: The Federal Role



University of New Orleans

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University of New Orleans Center for Hazards Assessment, Response and Technology

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In addition, we would like to thank Senator Mary Landrieu, chair of the Senate Disaster Recovery Subcommittee of the Committee on Homeland Security and Governmental Affairs for her and her committee senior aide, Ben Billings, support on this project. They made it possible for our findings to be shared widely and to make a contribution to the Stafford Act reform deliberations that are underway as we complete this study.

Finally, we acknowledge the contribution of the “subjects” of our research who patiently submitted to interviews in which they had to relive their Katrina experiences with painful detail. And they also had to locate data from these experiences. Whether the person was a homeowner, a non-profit organization director, a community or public organization manager responsible for some element of recovery—such as General Downer of the Louisiana Army National Guard (who participated in the public presentation of these findings on Capitol Hill on April 20, 2010), their contribution is invaluable. We could not have done the project without them and at their expense.

Introduction

Our task, reflected in this report, was to assess the government's role in achieving long-term, safe recovery of the Gulf coast communities from the catastrophic disaster of Hurricanes Katrina and Rita in the early fall of 2005. The focus is on its catastrophic nature and the ability of our society to deal with such. This report offers our analysis with a focus on the federal government, per the national policy interests of the Ford Foundation. A companion book from the research is under preparation; it will consider the same question with the state and local government focus added to the federal response.

Given this first assignment, one would expect that we would carefully consider how much of a role the federal government should play. However, we were surprised by how strong each of the subgroups of researchers concluded it should be, independent of the conclusions of the others. Our surprise was due to the fact that each one of us believes in and is committed to supporting the important role of local, engaged citizens and the governments who represent them in achieving disaster resiliency and safe recovery when disasters do occur. Capacity should be built at the local and state level. We concur with FEMA Director Fugate who stated in a June 2010 speech: "FEMA is only one part of the nation's emergency management team. It's at the state, tribal and local level that some of the most important work in preparedness and response happens."

In the recovery from Hurricane Katrina so many problems occurred, opportunities were missed, and suffering enhanced many times fold because of the lack of an organized, systematic response that we think we have no choice but to recommend the achievement of a more comprehensive strategic **federal** framework joining together all government levels in order for there to be hope of achieving successful catastrophic recovery. Each sub study group – Public Assistance, Individual Assistance, and Mitigation -- came to the same conclusion independently: A stronger federal role is needed for recovery from a catastrophe because catastrophes are different from 'regular' disasters -- they happen too infrequently for any state and its local governments to have regular experiences with them and thus to be able to develop an appropriate well-developed response; and catastrophes create havoc that incapacitates state/local organizational response and recovery that is in place in advance of the event.

You will not see in these recommendations broad encouragement to "send more money" although some of our practitioner advisors remind us that in some of the potential impacts of our recommendations, we have. Our recommendations are for the federal system to make more of a commitment to have the necessary organizational goals and implementation practices including a well-prepared staff (from whatever source they come) to support the state and local response. In order for any state in the country and the residents who are in the catastrophe "footprint" to make it through the experience

and to recover well and more safely, the federal government cannot absolve itself from an important collaborative role and be “keeper of the knowledge” of how to implement a recovery from catastrophe.

Additionally, the recovery from future catastrophes in the United States must be accomplished in a more compassionate manner: namely in a more rapid, more efficient and a more successful way. That is compassion in our terms. The spirit of the Stafford Act and the federal system is for the recovery to be managed by the lowest level of government possible. In the case of a catastrophe, we argue that the federal government cannot wait to see how much the state and local governments are able to do and then to fill in what is remaining. The delay is much too harmful and so lacks the spirit and reality of compassion. Assume there will be a need for significant federal involvement, prepare for it and put the implementation into effect immediately when such an event occurs. Preparation for the worst case can be scaled down. We unanimously believe, and our position is supported by the work of others, that the reverse, scaling up, is extremely difficult to achieve. The federal government cannot be distant from the recovery; it must take an active, effective supportive role in every phase, beyond what occurred in Katrina.

As these introductory comments are being refined to meet a June 30, 2010 Ford Foundation deadline for the final report, we are eight weeks into the BP Deepwater Horizon oil leak catastrophe. Unfortunately, all evidence from the media and our own observations of what is transpiring indicate that we would come to the same conclusion if we were evaluating the federal response to BP leak: The federal response is stunningly inadequate. Similarly, we can only assume that the long-term recovery will follow the same unfortunate path as did that of the Katrina/Rita event. Given that both catastrophes have occurred over the very same Gulf coast footprint in which most of the research team dwell, we anticipate five years from now we will be compelled to revisit our conclusions during a second case analysis similar to this one.

The remaining recommendations of this report are wide ranging. We present them grouped in three themes per the Stafford Act organization: Public Assistance, Human Recovery (Individual Assistance) and Mitigation. Prior to these sections you will read sections discussing: issues about catastrophic annexes and triggers, the policy framework in which we couched our research and our research methods. Separate companion documents expand the three themes – Public Assistance (PA), Individual Assistance (IA), and Mitigation. We also refer you to a fourth companion report done in conjunction with this study which considers the contribution that the Systems Engineering Approach can make towards broad reform. We need the reform; unfortunately right now only closed aspects of production seem to be able to take full advantage of the systems approach. We offer the report to you to consider how the logic of it might be useful. Finally, you will notice differences in the organization of the sub reports from the format of the sections of this report. We refined the draft of this primary document after the response to our work during our presentation on Capitol Hill in April, 2010.

Catastrophic Annex or Triggers or “Major” Disasters?

Hurricanes Katrina and Rita introduced us to a new level of disaster within the United States, one which observers are now labeling a “catastrophe.” Given that the focus of this research is the long-term recovery from a catastrophe, we would like to offer some thoughts about the use of the term and its linkage to different policy and implementation options when a major disaster occurs. **The Post Katrina Emergency Management Reform Act (PKEMRA) defines catastrophes in terms of “extraordinary levels of casualties or damage or disruption severely affecting the population (including mass evacuations), infrastructure, environment, economy, national morale, or government functions in an area.”**

Such disasters are different from lesser incidents, not only because of the scope of damage and the amount of aid required, but also because the need for swift, decisive, and successful action extends well beyond the initial response into the recovery phase, including long-term recovery. We have observed that recognition of those needs – swift, decisive, successful action -- was absent from a true appreciation of an appropriate response to the catastrophe surrounding Hurricanes Katrina/Rita. The reason is not only that a great many people are suffering but that delay may jeopardize recovery, itself. Bureaucratic norms with an emphasis on procedural conformity, as are dictated for less severe disasters, do not serve us well after a catastrophe. We do need special rules to speed the flow of assistance. One national official who testified during the May 12, 2010 hearings held by the Ad Hoc Subcommittee on Disaster Recovery, Sheila Crowley, President of the National Low Income Housing Coalition, advocated for a clearer definition of a catastrophic disaster that will “direct the President to intervene swiftly and comprehensively in such a case.” She continued: “States vary considerably in their capacityto respond to [catastrophic] emergencies. . . .” (pp. 1-2).

To address the challenge of catastrophes, many authorities have called for a fundamentally different approach to them, a catastrophic annex that would change the rules for federal assistance (Blakely 2007, Merritt 2007, McCarthy 2009, Moss 2009, Rainwater 2009). We agree, in part, but the biggest changes have to come before a catastrophic incident – in the way we prepare for all disasters because we cannot know how big the next one will be. Essentially, we must build capacity for catastrophes and then use it as needed depending upon the level of disaster. This is the concept of a scalable response. It is always possible to scale up quickly beyond the capacity that has already been built. The emphasis must be on preparation, and the target for preparation must now be a disaster of the Katrina/Rita magnitude.

Because recovery programs are intergovernmental, preparation must be intergovernmental, but roles will vary depending upon the type of preparation. Planning must take place at the community level – with varying degrees of support from other levels of

government. On the other hand, the federal government has to lead in preparation to manage recovery programs after a disaster. State and local governments may be overwhelmed and unable to act effectively. In addition it is not cost-effective to maintain adequate capacity, especially in human resources, in each state and community. Catastrophes are rare events, and most jurisdictions will never experience one. The federal government gains experience from all disasters in the country and can move assets where they are most needed. Thus, for example, FEMA needs a surge force capable of assisting applicants with a large number of project worksheets all at the same time.

Here we return to the issue of a catastrophic annex. We do not favor a complete new set of procedures that will disrupt administration and may leave unanticipated gaps. We fear that an annex will appear to be a panacea and divert attention from the preparation that is needed. Rather, we will propose in our discussions of individual programs selective measures to push funds proactively into affected areas and hasten decision making.

We also recommend that Congress define more precisely how a catastrophic declaration can be triggered. The PKEMRA definition is vague, leaving a great deal of discretion to the Administration and leading to pressures for overuse and inconsistencies over time. There should be one or more triggers or thresholds based on observations, such as fifty percent damage and an extended evacuation of fifty percent over a broad area. The difference between a trigger and a threshold is that the former would automatically produce a declaration whereas the later would simply open the possibility of a declaration, still allowing considerable discretion. A single trigger or threshold would apply to all programs while multiple triggers could be program-specific. Designing an appropriate trigger would be a challenge because no one can foresee the variety of events that might warrant catastrophic designation. For this reason a threshold might strike a better balance between the desire for clear rules and the need for judgment.

Policy Framework

As is true with most policy arenas, the federal government's approach to disasters has emerged from a largely disjointed series of decisions. It is only in response to major events, such as Hurricanes Katrina and Rita that we take time to identify the pieces as part of a whole and ask how they fit together. While the rest of this report deals with more specific programs, this section focuses on the broader framework within which they operate and, as a result, makes broader recommendations.

The relationship among three elements is critical: policy/program, capacity, and task. Implementation depends on how well the design of the policy/program and the capacity of the implementing organization(s) fit the task at hand. Katrina/Rita was a catastrophe that created tasks of response and recovery beyond the capacity of existing organizations. To enhance performance we have to improve policy/program design and build capacity, but we also have to recognize that future tasks of response and recovery will be affected by existing policies. The damage from Katrina was a function of, not only of the size of the storm, but also policies that encouraged risk taking, discouraged mitigation, and, thereby, increased exponentially the subsequent task of recovery. In planning for future recovery we have to consider the interaction of all three elements.

1. Preparation for Catastrophes. The nation was not prepared for a catastrophe like Katrina/Rita. As noted elsewhere in this report, catastrophes are different from normal disasters. Not only is the scope much broader, but the needs for response and recovery are much more urgent. We must design policies and build capacity for catastrophes. Fortunately, catastrophes are rare and most jurisdictions will never experience one. For this reason, preparation for a catastrophe is cost-effective only at the federal level.

Recommendations:

1a. The federal government should base its disaster preparation on the likelihood of a catastrophe.

1b. Preparation should follow the principle of scalable capacity, already enunciated in the National Response Framework, so that we have capacity for a catastrophe but can commit lesser amounts in lesser disasters.

2. Risk Recognition. We have paid insufficient attention to multiple types of risk. Our primary focus has been on terrorism, more specifically the prevention of terrorism, to the relative neglect of natural disasters and industrial accidents, as Hurricane Katrina and the BP oil spill illustrate.

Recommendation:

2a. To the greatest extent possible, emergency management activities should be promoted under an all-hazards framework that recognizes regional variations in risks and hazards. This risk profile will include terrorism, but we must understand that the risk of catastrophic terrorism is variable just as the risk of a catastrophic natural disaster is variable.

3. **Risk Reduction.** Risk reduction has not been a cross-cutting policy goal. Many federal policies designed to promote development goals have also promoted risk taking without consideration of hazard implications. In order to decrease national exposure to risks we must insure that risk assessment is included in development decisions.

Recommendations:

3a. Any legislation related to economic stimulus, infrastructure, land use, housing, commercial development, and similar policies should include an assessment of the nature and extent of risks created or promoted by the legislation.

3b. Environmental Impact Statements should be required to include discussion of the relationship between projects, hazard mitigation, and the natural environment.

4. **Attention to the Full Disaster Cycle.** When the federal government has focused on natural disasters, the emphasis has been on relief with less attention to the disaster cycle: preparation, mitigation, response, and recovery. Relief is politically popular, but neglect of the full cycle is short-sighted.

Recommendation:

4a. The nation should give at least as much attention (not money) to preparedness, mitigation, and recovery as it does to the provision of disaster relief. Doing so would save money in the long run by reducing relief and recovery expenditures, thereby helping to meet the president's resilience goals.

5. **Fragmented Responsibility.** Responsibility for and oversight of federal disaster programs is fragmented and confusing, both in terms of management and congressional oversight. There are 86 congressional committees with oversight over DHS. There are at least 107 disaster relief programs under the Catalog of Federal Domestic Assistance (CFDA), of which over 50 are listed as "DHS" programs, even though they should probably be listed under FEMA to comply with the plain intent of the PKEMRA, which granted greater autonomy to FEMA.

Recommendations:

5a. Clarify responsibilities and accountability for programs. Streamlined and comprehensive oversight will improve coordination, while increased FEMA autonomy will yield better performance in disasters, as recognized by Congress in the PKEMRA.

5b. Mandate that all disaster preparation, response and recovery actions be integrated across all agencies and governmental levels from the perspective of victims.

6. Emphasis on Cost Containment. A history of the Stafford Act and its implementation reveals a strong emphasis on cost containment. Such an emphasis is counter-productive for recovery and for long-term cost reduction, especially following a catastrophe.

Recommendations:

6a. Balance financial accountability with compassion: State that relief is a moral imperative as long as governments create or exacerbate risks.

6b. Recognize the cost of delayed recovery in terms of human suffering and economic loss.

6c. Appreciate the long-term cost saving of adequate funding of robust mitigation measures following a catastrophe.

7. Learning from Disasters. Congress and the Executive Branch continue to make the same mistakes after disasters. "Lessons learned" documents are often little more than lessons "observed," or are congratulatory documents that emphasize what went well while not applying rigorous analysis to elements where performance can be improved.

Recommendation:

7a. All disasters should be studied by a post-disaster investigation team under FEMA or DHS. Models of such processes include the Earthquake Engineering Research Institute's (EERI) "Learning from Earthquakes" program funded by the NSF under the National Earthquake Hazards Reduction Program (NEHRP), the NTSB's investigations of major aviation and other transport accidents, and NIST's investigation of the collapse of the World Trade Center towers on September 11, 2001.

Notes on Methods

The research design for this report uses multiple methods with both primary and secondary data. The first part of the design was to review the existing research on disasters in general and Hurricane Katrina specifically. For example, the research on the PA program began with a review of relevant testimonies, reports, articles, and books (104 in all) to identify problems as perceived by participants representing three different perspectives: federal administrators, applicants, and third parties (e.g., academic researchers). This exercise yielded 236 problem statements, which fell into broad categories of flaws in program design and procedures, inadequate organizational capacity and preparation, and the magnitude of Katrina/Rita. The human recovery team analyzed nearly 175 research articles and reports to develop major areas of inquiry. As part of the mitigation research, considerable effort was made to identify those planning processes and the plans that emerged from them (15 different types of documents were reviewed) that should have included strong mitigation components to determine if the effect of Katrina was a maturation of mitigation commitment. The locales and levels of governmental units considered in the mitigation study varied according to topic. For some, the different responsible state offices' responses were examined, for others the local parishes (principally Orleans and Jefferson). Regional analyses were done for the New Orleans Metropolitan area, the Southeast Louisiana area and for comparative purposes, the Atchafalaya Watershed. Major themes were identified through the literature for all subsections. Further, a three-day meeting was held with the advisory team where the initial themes were further discussed and refined.

In the second phase of this project, each subsection team conducted interviews, focus groups and participant observations with local leaders in each area. Interviews were conducted with public officials including those at FEMA and HUD headquarters, those who represented the federal recovery office and were in the region, those who currently represent the Louisiana state emergency preparedness office and officials who represent parish governments within the New Orleans metropolitan areas. Citizens of the storms were interviewed to determine the challenges they faced as well as leaders of organizations who advocated for them were also interviewed (nearly forty interviews in all).

Observations were made of public meetings and committee meetings of recovery organizations focused on human recovery and mitigation (forty-five in all). In addition, case studies from Picayune, MS, and Jackson Barracks outside of New Orleans showed how two relatively well-prepared applicants dealt with the multitude of problems that beset them.

Analysis of both the secondary and primary data, using pattern matching techniques, led to the major recommendations in this report. Additionally, key informants on disasters were also asked to review the initial findings. At the end of this phase this interim report was written. In a third and final phase, recommendations were presented to select informants to ensure validity of findings.

Recommendations for Public Assistance

Robert Montjoy, Monica Farris, and Joel Devalcourt

We must also look at ways to speed up the infusion of eligible public assistance funding to communities, which can be financially devastated and thus unable to commence critical infrastructure repair projects without up-front funding.... I firmly believe that we can make our public assistance program less process-oriented and more outcome-driven. Craig Fugate (2009, 10)

The need for speed in the delivery of public assistance following a Katrina-like catastrophe is even greater than after a “normal disaster.” Not only are many people displaced, but the facilities required to sustain economic and social life are devastated over a wide area. Delay can be deadly to a region. Yet, assistance must not be haphazard. To be capable of delivering prompt assistance in an orderly fashion the federal government should build capacity at all levels, support preparation, promote action, and improve cost estimation procedures and the PW review and approval process.

1. Build capacity for major disasters. Human resources were simply inadequate to manage the load after Katrina/Rita: there were too few people with too little training and experience and too little time on the job before rotations. The results included delays and inconsistent interpretations of regulations. DHS-OIG attributed most of the problems following that catastrophe to human resource issues.

Recommendations:

1a: *FEMA must fully implement the mandate from PKEMRA for a Strategic Human Capital Plan (SHCP). Without such a plan it is impossible to evaluate the adequacy of existing preparations because the goals and assumptions regarding human resource needs are not explicit.*

1b: *Congress must provide the necessary support to ensure that FEMA’s human resource capacity is adequate for catastrophic disasters. The principal support will be in the form of funding once the plans for staffing and training are completed, but policy changes may be necessary to assist in the recruitment and maintenance of the Surge Capacity Force as outlined in GAO-09-59R.*

1c: *All levels of government should make training and mission readiness assessment for the PA program truly intergovernmental. PKEMRA’s mandate for increased human resource capacity focuses only on the needs of FEMA. Yet it is difficult to imagine how FEMA can plan its own human capital without taking into account the capacities at other levels. Shared training is one means of gaining such knowledge. Further, inclusion of likely applicants and sub-applicants, as well as contractors, in training will not only reduce confusion and disagreement after a disaster, but can also improve the training, itself, by introducing different perspectives and questions. Such a goal implies more than*

allowing selective representatives in classes: it requires proactive programs to encourage shared training at all levels.

1d: *FEMA should investigate the possibility of housing part of its DAE reserve force in state Emergency Management offices.* One PA specialist in each state could serve several functions, including: 1. being available for call-up as FEMA representatives on an as-needed in a major disaster (like military reservists or members of the Urban Search and Rescue Program) and 2. providing training and preparation assessment for local governments.

1e: *FEMA should explore the possibility of creating a national certification program for private companies that assist in disaster management.* It is not cost-effective for communities to maintain sufficient staff to handle the large numbers of PA applications necessary after a catastrophe. Disaster management firms can be of great assistance to communities, but communities must first contract with these firms, about which they usually know very little, for services with which they not familiar, and in time frames that provide little opportunity for due diligence. National certification would help communities to screen firms and would give firms a performance incentive to maintain certification. Standard contracts would also help communities avoid mistakes and reduce negotiation time.

2. **Support preparation.** An important lesson from Katrina is that the recovery phase of disaster management requires thorough pre-disaster preparation, much as the response phase does. Most of that preparation must take place at the community level. FEMA cannot force communities to prepare, but it can encourage and assist them.

Recommendations:

2a: *Provide information and technical assistance in community preparation.* Lessons learned from Katrina and other disasters should help communities prepare for disasters. At a minimum, a report on useful preparatory actions would give communities a checklist to consider. Examples relevant to the PA program include: pre-disaster documentation, advance contracting, assessment of potential debris and identification of appropriate disposal sites, evaluation of ordinances regarding access to private property, adoption of uniform building codes and standards, and strategic planning that could guide rebuilding decisions.

2b: *Create a program to rate community preparation.* Such a program could be patterned after the Community Rating System (CRS) for the National Flood Insurance Program.

2c: *Incentivize participation in the rating system by grants and/or the commitment of a higher federal share after a disaster.* One option would be the awarding of extra points for relevant competitive grants programs. Another would be the commitment of a higher federal share (e.g. an additional 5 percentage points) for the PA program after a disaster.

2d: *Conduct studies to assess the requirements, advantages, and disadvantages of establishing a federal insurance program and requiring participation in it as part of the PA program.* In principle, insurance has many advantages over a grant program. Potential

beneficiaries help to pay the costs. Differential rates can be used to reward preparation and mitigation. Insurance contracts can also require periodic assessment of property values. There are, of course, many problems in making a sound program for disasters, as the experience of the NFIP demonstrates. It should be possible, however, to design a program that places the federal government at no greater liability than it has now under the PA program.

3. **Promote action.** After Katrina/Rita, FEMA struggled with rules that did not fit situations and procedures that required multiple levels of approval. The gain in procedural conformity and possible savings in the prevention of fraud, waste, and abuse must be weighed against the enormous cost in human suffering and reduced economic output caused by delayed recovery.

Recommendations:

3a: *Design a trigger or threshold for the declaration of a catastrophe.* The PKEMRA definition of a catastrophe is vague, leaving a great deal of discretion to the Administration and leading to pressures for overuse and inconsistencies over time. There should be one or more triggers or thresholds based on observations, such as fifty percent damage and fifty percent evacuation over a broad area. The difference between a trigger and a threshold is that the former would automatically produce a declaration whereas the later would simply open the possibility of a declaration, still allowing some, reduced discretion.

3b: *Use forward funding and a forgivable loan program to make federal aid more readily accessibility.* PA is a reimbursement program that requires a non-federal match. Both features restrict the ability of devastated communities to start projects. A 100 percent federal share upon the declaration of a catastrophe would solve the match problem, but not the need for advance funding. Further, a 100 percent federal share removes incentives for applicants to exercise restraint. A loan that can be used as match and later forgiven under certain conditions allows quick starts for approved projects and later review as more information becomes available. The Community Disaster Loan (CDL) program is a promising vehicle, but it would have to be revised to serve this broader purpose. We suggest the following actions for catastrophes: advance 50 percent of the cost estimate for approved projects; do not delay grants for insurance settlements but recover insurance payments after the fact; remove the cap on CDL loans; and allow the use of CDL funds as non-federal match.

3c: *Push decision making down the hierarchy by raising the cap on small projects to reduce the levels of review.* While it may be appropriate to raise the cap for all disasters, there is certainly justification for a higher cap in catastrophes. The greater scope of damage means that large numbers of cases can clog the review system. Catastrophic circumstances should shift the balance between speed of action and prevention of errors toward the former.

3d: *Enable and require the federal government to take responsibility for its decisions in the PA program.* De-obligation of funds can leave states and communities holding the

bag on projects that have already been started. The Government Accountability Office (GAO) and the Department of Homeland Security's Office of Inspector General (DHS-OIG) noted this problem. It should be accepted that in a crisis, as in battle, there will be errors, or simply different conclusions about appropriate actions. The remedy should not be to punish the victims. There should be clear rules about who can make commitments for FEMA and how they can do so, but commitments once made should not be reversed except in cases of fraud.

3e: Record and report performance measures based on outcomes and customer satisfaction. DHS-OIG found that FEMA was tracking only two of the four performance measures it had adopted, measuring the obligation of funds but leaving out closure rates and customer satisfaction. Implementation of a new database should solve this problem.

4. Improve cost estimation procedures. Initial estimates are very important because they are the basis for agreement, or disagreement, on PWs and they set caps for alternative and improved projects.

Recommendations:

4a: Regularly evaluate cost estimation procedures. FEMA has used an expert panel to improve cost estimation procedures, but there appears to be no regularly produced data comparing initial estimates with final costs. There should still be plenty of cases to use in assessing the accuracy of initial estimates under a variety of conditions. The argument that a catastrophe significantly affects market conditions could be tested using data from Katrina/Rita, for example.

4b: Change training and reporting procedures to reduce the use of "o" or unrealistically low estimates in PWs. After Katrina/Rita there were numerous reports of PWs being initiated with unrealistically low estimates just to get them started. As a result, many projects went through multiple versions, as the GAO noted. This practice can lead to delays as applicants appeal decisions, especially when the estimate sets a cap for future work, and add to the workload of already overburdened staff at all levels.

4c: Encourage pre-disaster documentation of conditions by publishing examples and standards. Distinguishing disaster-related damage, which is eligible for assistance, from pre-disaster condition, which is not, as one of the major challenges that FEMA faced. This problem could be reduced with better pre-disaster documentation. FEMA could encourage pre-disaster documentation and reduce post-disaster disagreement by setting and publishing standards indicating what it would accept.

5. Improve the PW review and approval process. After Katrina/Rita there were complaints of lost documents, inability to track PWs, inconsistency of decisions, insufficient information on denials, and lack of an independent appeals process. Much of the problem can be related to insufficient numbers of trained personnel, a problem we addressed above. But other changes could help as well.

Recommendations:

5a: *Implement a tracking system for PWs.* The EMMIE system that is coming on line would appear to meet this need.

5b: *Require FEMA to give reasons for denials in writing and tell applicants of any documentation needed.* This would seem to be a basic requirement of transparency.

5c: *Create an independent appeal process for large projects.* The experience with the appeals process created for Katrina/Rita demonstrated the value of an independent review.

Recommendations for Human Recovery

Case Management, Mental Health and the Role of Non-Profits

Pamela Jenkins, Branda Nowell and Michelle Gremillion

Since August 2005, individuals and families in the Gulf Coast area face enormous challenges to recovery. After a catastrophe, individuals and families have to build back nearly every facet of their lives. The multi-dimensionality of their recovery involves a myriad of resources: housing, health care, employment, schools, and day care¹. In this section, we discuss recommendations for the management of the human recovery. Specifically, we outline recommendations for providing services for ongoing mental health issues, case management after a catastrophe, and the role of non profits (both national and international) in recovery. Providing individual assistance is so difficult that we undertook to explain only part of this recovery, realizing that there are other aspects that need analysis. We begin with one of the most serious and unaddressed problems of recovery, the mental health and well-being of individuals and families.

RESOURCES FOR MENTAL HEALTH AFTER A DISASTER

The psychological impacts of disaster include a broad range of symptoms ranging from simple reactions to serious post traumatic stress disorder. “The longer-term adverse health effects of the disaster can be expected to be substantial and require follow-up assessments to determine the need for mental health care services” (Weisler, Barbee, and Townsend, 2006, p. 586). While much of the literature is based on disasters; the data is emerging slowly about the long-term effects of the recovery from catastrophe. It is important to note that in a catastrophe, those supports (for example, family, neighborhood, and faith based organizations) that would provide informal help are greatly diminished.

1. Identify resources for mental health in all stages of a catastrophe. The issues in funding for long term mental health care is problematic, because it is not clear what the long term effects of recovery are in a community, especially a community with an already at risk population. For example, The Stafford Act mandates that funding for SAMHSA mental health treatment only be used for crisis management, not for continuing treatment. “It has become clear in the wake of Katrina and Rita that the Stafford Act fails to fully address an event of catastrophic magnitude, inadequately providing for mental health services for displaced victims” (Boyle, 2007, p. 8).

¹ Housing remains central to recovery. While this section of this report does not include specific recommendations about housing, the need for housing and the issues of rebuilding are intertwined with the all of recovery issues.

Recommendations:

1a. *Amend the Stafford Act to allow states the financial flexibility to allocate funds for continuing treatment of individuals beyond immediate crisis management after disasters.*

1b. *Create emergency provisions in Medicaid that provide flexibility to simplify the rules and extend Medicaid coverage with federal financing in a crisis situations.*

2. Define an effective mental health system. Before Hurricane Katrina, the mental health system still needed more support. “In Louisiana, the pre-hurricane mental health infrastructure was overcommitted and inadequate to meet the needs of all those with serious mental illness. The hurricanes only exacerbated existing problems both by destroying infrastructure, reducing the mental health workforce and creating a new population of people in desperate need of mental health services” (Boyle, 2007, p. 7). After Katrina, the mental health system had to be rebuilt with fewer people and few systems. Moreover, the reaction to Hurricane Katrina and the recovery created long term stress that goes beyond the normal stress of a disaster. Vulnerable populations, especially families with children, faced a myriad of social stressors.

Recommendations:

2a. *Create provisions within the Stafford Act for catastrophic disasters that allow for longer term outpatient treatment of conditions clearly related to the exposure and recovery issues associated with the catastrophic event.*

2b. *Changes should include both written procedures and personnel.* “Written mental health response plans may help to ensure knowledge transfer from one event to another and from one person to another. Plans should include a designated disaster mental health coordinator with a clear job description, explicit mechanisms to build capacity by developing collaborative relationships with key agencies, and communication venues” (Elrod, Hamblen, and Norris, 2006, p. 168). Establish a curriculum that progresses through the process of a disaster mental health response. It would be helpful to develop online courses that augment traditional mental health training. During the event, states should be provided with a list of trainers that are matched to their event and audience. (Elrod, Hamblen, and Norris 2006)

3. Link Mental Health Recovery into other Recovery and Social Service Efforts. Many of the mental health services before Katrina were not coordinated well within the community. During recovery, mental health services need to be linked into more of the fabric of the wider social service network. Mental Health providers recognized that the sheer size and scope of disasters demand collaboration between responding and supporting agencies.

Recommendations:

3a. *Facilitate network development and referral protocols among mental health agencies and other social service agencies before the event.*

3b: *Collaboration must be implemented before the event. Initiating collaborative relationships during a disaster was too late, too time consuming, and generally non-productive due to the pressure of each agency trying to follow their own protocols.*

3c. *Mental health providers need to share data on clients so that patients can be tracked across agencies to ensure continuity of care, public safety, and to prevent a disconnection from the other needed post disaster services.* A database should be created to manage this task.

CASE MANAGEMENT

Prior to the response to Hurricane Katrina, very little of the case management was documented or significantly funded (Phillips, 2009). The following recommendations highlight the role of the federal government in managing lives after a catastrophe. The federal response is improving, but case management remains a critical issue for long-term recovery.

1. **Connect With People Who Need Help.** Information about evacuees and *their* situation (location, health, housing, transportation) was difficult to obtain. Further, a lack of coordination among case management providers resulted in some victims not receiving case management and others receiving services from multiple agencies.

Recommendations:

1a. *Essential practices for coordination are defined by collaborating strategies and policies, procedures, and other methods for communicating and working across multiple agencies.*

1b. *The process of requesting and receiving program/client data from federal partners must be planned for in advance.* As some case data now exists (through multiple sources), it might be possible to maintain those networks built during Katrina. In the future, data management should have necessary resources. In the chaos of a catastrophic event, it was very difficult to find evacuees or to know which program they qualified for. The outreach across the country, but especially in flood-ravaged areas, was not consistent. Case management agencies stated that they faced challenges in obtaining timely and accurate information from FEMA. FEMA said requests for information did not meet their requirements.

2. **Navigating Without a Map.** Initial confusion *about* funding and purpose of case management programs delayed local case management development. Local agencies had

difficulty knowing the parameters of the case management system to collaborate on the process. The confusion about which clients qualified for what program and how to obtain that information was staggering.

Recommendations:

2a. *Best practices for case management and other strategies should be in place and readily available as a contingency.* The federal government could identify case management agencies in advance and include them in emergency response planning.

2b. *FEMA should facilitate the creation of a central clearinghouse for information on assistance programs and services both locally and federally.* The service delivery challenges may have prevented some from receiving consistent help because of lack of understanding of multiple agencies' roles and responsibilities. Service providers lacked a central repository of information that would help them guide clients through the confusing array of assistance programs and services available both locally and federally.

3. Getting People the Help They Need through Bureaucratic Constraints. Case managers faced challenges in meeting client needs due to federal funding rules on direct assistance. Program eligibility requirements were also a barrier to providing disaster case management. Some funds were restricted to victims of a specific hurricane. Other guidelines restricted case management services to residents of FEMA housing only.

Recommendations:

3a. *Access to material resources is essential to post-disaster recovery.* Case management programs should have discretionary funds for low-cost unmet recovery needs and allow local decisions on the use of these funds. Case management agencies saw the need for direct financial assistance for items such as home repairs, clothing, or furniture as essential to helping clients, yet such assistance was not always available. Some programs were not allowed to make direct assistance payments, yet without direct service funds, short term needs become long-term issues.

3b. *Eligibility requirements should continue to be reviewed.* This is an ongoing discussion of who should receive case management and the ability to meet the diverse needs of the population.

4. Closing the Door before Closing the Deal. The federal government supported Disaster Case Management, but delays, breaks in funding and time limits hindered assistance. Throughout the response and recovery, there was variability in application, implementation and outreach to diverse populations.

Recommendation:

4a. *Consistent ongoing case protocols should be developed and provide adequate program periods.* Some cases were closed not because clients' needs had been met, but because the program was ending.

5. **Working in a Context of Overwhelming Need with Limited Capacity.** Numerous sources noted the high staff turnover among case managers. This workforce problem creates great instability as clients didn't know the name of their current manager. Large caseloads were barriers to meeting client needs.

Recommendation:

5a. *Best practices for case management and other strategies should be in place continuously as part of sustainability for human recovery in vulnerable areas.* The federal government could identify case management agencies in advance and include them in emergency response planning. Effective case management requires service providers with adequate and stable staffing to create consistency and ensure clients receive adequate attention. It also requires agencies that have the capacity to serve as a bridge horizontally as well as vertically, connecting to both state and federal systems as well as with local level service providers in order to identify and connect people to the help they need.

NON-PROFITS, FOUNDATIONS AND 'HELP'

Non-governmental organizations (NGOs) were a critical part of New Orleans prior to the flooding, serving as a source of community and neighborhood strength and employment. International, national, and local NGO's were an integral part of the response and ongoing recovery.

1. **Government Remains Ambivalent about the Integration of NGOs in a Coordinated Response To Disasters.** Broad scale integration of local, national and international NGOs as part of a coordinated governmental response to catastrophic disasters requires administrative architecture and capacity that does not currently exist at the Federal and State levels. While there is a formalized structure in local and national VOADs, much of the government integration of NGOs in disaster response and long term recovery of the Gulf region is *ad hoc* without adequate planning before the storm. This has exacerbated gaps in coordination and *ultimately* service provision. Growing expectations for nonprofits and NGOS' to assist and even play a leadership role in disaster response must be balanced against their own shortcomings and complexities.

Recommendations:

1a. *Further clarify the role of NGOs as part of a coordinated governmental response to catastrophic disasters in the Stafford Act.*

1b. *Identify roles that appreciate and reflect the inherent strengths and limitations of NGOs and are accompanied by provisions for integrated planning and capacity building to ensure these roles can be fully executed.* Because catastrophic disasters which overwhelm the resources and capacity of local, state, and federal government are infrequent, the capacity for broad scale inclusion of others such as local, national and international NGOs has not been adequately developed. Relief agencies both national and international continue to fragment services. NGO roles have not been formalized or integrated into local and state planning and recovery efforts.

2. Creating Knowledge About Catastrophes for Non-Profits and Foundations.

Foundations and national non-profits have the ability to draw national and international attention to the catastrophe, but many of these groups do not have the knowledge about disasters, especially recovery that will allow them to utilize best practices in their funding and their services. Recovery from catastrophe has a different trajectory than recovery from disasters. Rebuilding a community after a catastrophic disaster requires unique expertise that many NGOs and local government agencies likely lack. A great deal of funding was designated for immediate relief, but funds for recovery are not so available.

Recommendations:

2a. *The tension between responses during normal time periods and in a disaster is critical.* Because vulnerable areas are waiting for the next storm, government programs, national non-profits and foundations should work with local agencies to provide a set of programs that bridge the gap between times during a disaster and those more common time frames without a disaster.

2b. *Provide technical assistance in needs assessment and integrated planning to assist with social, cultural, and structural reconstruction.* Create forums for issues of social justice in the reconstruction process to be addressed.

3. Giving In a Catastrophe. With so many different types of groups involved in providing assistance, funders and organizations were often ‘stepping over each other.’ Further, as funders struggled to find ‘whom to fund’, the knowledge that funders relied on often came from a few sources.

Recommendation:

3a. *Identify organizations that are positioned to serve as bridging/coordinating entities between national and international NGOs, state and local NGOs to aid in linking local needs to state and national resources.* Foundations need to have multiple links on the ground in vulnerable areas before a major disaster. Too often, the funders found

themselves “in a hurry” to do something and funding was channeled through their existing – and often sparse – networks of local NGOs. Because these service delivery networks had structural holes, assistance was not adequately distributed.

4. Doing Advocacy in a Catastrophe. Advocacy is a *critical* element for the individuals and families to negotiate their recovery. Many of the non-profits and foundations could not find mechanisms to provide resources for advocacy on behalf of individuals and families.

Recommendations:

4a. *Recognize the importance of advocacy organizations in representing the voices of vulnerable populations and support their inclusion in relief and recovery planning and decision making forums.*

4b. *Identify and support organizations that have existing expertise and legitimacy as advocates of vulnerable populations.* The depth of the need for advocacy was not realized after Hurricane Katrina; there were many different definitions. Advocacy, however, was needed for many to receive the most basic of services including housing, food, and health services.

Recommendations for Hazard Mitigation

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Sadly, catastrophes offer an incredible opportunity for communities to rebuild in a manner that reduces their vulnerability to similar future events and to put into place development and building requirements that will continue to guide such building into the future. This is the case because often so much of the community's/region's physical infrastructure is destroyed in a catastrophe. Not always, but usually, that massive destruction defines a catastrophe. Opportunities abound to rebuild more safely and to put into place more stringent building codes and land use plans that will support these goals and a broad commitment to prevent such events from ever occurring again. Combine the opportunity with the attention getter it is for the survivors and the society and you should have a winner for mitigation. Unfortunately, as you have already seen with the preceding assessment of Public Assistance and Individual Assistance, the outcome of coastal storm mitigation efforts after hurricanes Katrina/Rita left so much to be desired. In fact, with all of the problems with PA and IA, Mitigation implementation may in fact have had the worse failings of the three. Incredible opportunity missed. The recommendations that follow argue first for a much, much stronger commitment to hazard mitigation than was in place for these catastrophic storms. The recommendations also focus on

1. **Achieve robust mitigation commitment and implementation.** A well-off culture (that believes it can “absorb” disaster impact) dismisses safety as no one's responsibility. States, local communities and individuals can readily avoid doing anything real about risk and also not succeed when they really want to mitigate. Make it more attractive, feasible, and required.

Recommendations:

1a. *Promote and support non-structural mitigation including storm water management in a way similar to the growing “green” (resilience) industry that saw so clearly and took full advantage of the rebuilding opportunities in the Katrina/Rita recovery. Modernize the thinking and reinforce the multiple benefits approach to capture interest. “Reinvent” mitigation.*

1b. *Mitigation should be required and incentivized by making federal mitigation programs flexible enough to handle the actual local risk profile and to capture local interest in achieving the risk reduction. Federal requirements and resourcing should make sense to the locals in terms of local risk reduction involvement, not be impediments for local “control” of the visioning and goal setting.*

1c. *Add a Mitigation Support Function to the Natural Disaster Recovery Framework in order to take full advantage of the mitigation prospects post a catastrophe and to promote image of Mitigation which is not an adequately recognized, valued concept like Emergency Management, despite the current push for disaster resiliency.*

2. Refine mitigation requirements to achieve more mitigation. Some mitigation requirements in place at the time have been found to be impediments to mitigation. While they were created for important reasons such as control of federal costs, the unanticipated outcome reduced mitigation in this post catastrophe case.

Recommendations:

2a. *Eliminate all local match requirements for mitigation after a catastrophe (HMGP and PA). When mitigation is possible in as widespread a way as it is after a catastrophe, it is not the time to be “testing” the locals’ commitment to mitigation through a match or to save money at the front end. And, with the communities public coffers drained and without income, the requirement will stymie mitigation. The opportunity for cost saving in response and recovery to future events is just too great.*

2b. *In a catastrophe, deem the mitigation of already listed/already approved at-risk Repetitive Loss properties and approved projects in a community’s Mitigation Plan “cost effective,” needing no additional calculations. The effort to do the post-catastrophe required analysis delays and reduces permanently the achievement of mitigation.*

3. Resource mitigation effort effectively. Delays and lack of focus on a broad view of mitigation outcomes rather than the “weeds” of each funding program, both permanently reduce achievement of mitigation. There is a rhythm of recovery that requires mitigation to be considered when the rebuilding is occurring and not as an afterthought. It must be efficiently implemented and with a firm grasp of the desired broad outcomes.

Recommendations:

3a. *In catastrophes, mandate federal responsibility for mitigation requiring FEMA to coordinate with the state to quickly have FEMA work directly with local communities on disaster-based mitigation programs similar to the commitment that currently exists (and recommendations to enhance it) to assist communities after a catastrophe in damage assessment, another key action for risk mitigation. Provide additional support to communities with compounded economic vulnerabilities and synchronize state and federal approval.*

3b. *Reinstate Interagency Hazard Mitigation Team (IHMT) with balanced membership from federal, state and local or require states and counties/communities to establish their own for a catastrophe. Have it continue over the duration of the catastrophe recovery conducting regular assessments of performance of all levels of government involved, measure achievements and require adjustments to the mitigation efforts while the recovery is ongoing.*

3c. *After trigger of a catastrophe or multiple disaster declarations, require (and FEMA fund) in such designated counties and large communities a permanent Hazard Mitigation Office, with strong coordination function, just as an Emergency Management Office is now required by DHS. Require reporting of mitigation progress. Use these offices as a pilot for requiring such offices in all counties and large communities nationwide. This Hazard Mitigation Office is not merely a locus for administering federal mitigation funds; rather it is the core of conceiving and implementing vulnerability reduction activities.*

3d. *Require communities to develop pre-disaster post-disaster redevelopment plans as mitigation plans are currently required and make it an eligible activity for federal funding.*

4. Fix the recovery burden placed on homeowners who are novices to major home repair and government red tape. Homeowners received funding to repair/build their second floor before they received their mitigation funds, i.e. funding for their first floor. Deaths, mental health breakdowns, loss of family finances and unbelievable pressures of family separation all occurred while family coordinators of the repair lived in FEMA trailers, worked fulltime and managed the contracting concurrently as other family members were scattered in dispersed temporary housing awaiting the repair (and mitigation) of their homes. With this burden, inexperienced homeowners were asked to negotiate, and re-negotiate repeatedly an ever-changing maze of procedures and requirements, in the hopes that some of it would eventually be meaningful and would produce a recovery outcome with mitigation. A better fictional account of such chaos and victim harm could not have been written.

Recommendations:

4a. *In collaboration with state officials experienced in catastrophes and/or multiple disasters, FEMA officials develop best practices for creation of a state homeowner recovery program for a catastrophe. The impacted state, especially if it is a smaller state, is a victim of the catastrophe and is unable to create a successful massive response post event. The plan must be created at a template in advance.*

4b. *Conduct a study to consider using SBA to calculate benefits and distribute recovery funds (from all federal sources for recovery and mitigation) for homeowners in catastrophic disasters in lieu of creating new state-level process.*

4c. *Recognize the incredible trauma of the funding application/repair/rebuilding process for homeowners in a catastrophe and support them much more adequately to implement the application process and the repair/rebuilding steps. Nothing can prepare a homeowner victim for the experience. Fully acknowledge that and deliver in a usable manner with well-trained professional assistance information about the process with adaptive management of the information and staff knowledge to fit the situation as it modifies. **This recommendation is not trivial.***

5. Widen mitigation scope of classes of structures. FEMA's aggressive mitigation advocacy and implementation is focused heavily on owner-occupied homes while a community is comprised of a range of structures, all important for its functioning.

Recommendations:

5a. *Formulate equally aggressive mitigation advocacy for public buildings, commercial apartments, commercial buildings, public housing and buildings occupied by social services such as day care, schools, medical clinics and domestic violence shelters.*

5b. *Require full enforcement of Executive Order (11988) for 1/500 year protection of critical structures and work to achieve this requirement for other public/commercial and commercial housing structures. All federal agencies that can play a role in achieving **comprehensive community structure risk reduction** should engage, especially HUD funding of Public Housing and Section 8.*

5c. *Revamp Public Assistance implementation to incentivize and guarantee implementation of mitigation provisions after catastrophes.*

6. Realize importance and act on issue of scale of residential structures protected. As currently implemented HMGP narrowly emphasizes reducing the future risk of the pre-storm owners of the homes in the flooded area and almost all of the focus is on one structure at a time.

Recommendations:

6a. *In a catastrophe allow all homes which attain a positive benefit/cost ratio in flooded areas to qualify for federal elevation funding, not just those that continue to be owned by the pre-storm owners.*

6b. *To achieve broader scale of risk reduction (not just one owner-occupied house at a time) FEMA should formalize encouragement of use of combination of eligible HMGP and CDBG mitigation measures for risk reduction benefits in conjunction with home elevation. It was begun post-Katrina/Rita but not in the earlier, more timely (greater opportunity) phase.*

7. Significantly improve and support quality risk information and communication. Scarcity of adequate access to risk data by public and local public officials reduces their ability to make informed decisions about risk.

Recommendations:

7a. *Provide local communities with better information about their local risk profiles including areas affected by dam and levee failures. The public's right to know about environmental risk should extend to free and open access to environmental data and risk modeling software. There should be transparency about the calculation process for BFEs.*

Conclusions

Across the globe, nation states increasingly face the challenges brought about by cascading disasters. In the first decade of the 21st century, the United States dealt with the terrorist acts of 9/11; Hurricanes Katrina and Rita, the British Petroleum oil spill, and numerous floods and wildfires. Response to catastrophes needs to become the norm for governments' role rather than the out of the ordinary experience. We cannot emphasize enough the need to build capacity at a federal level for the worst case scenario. It is not cost effective for the states to do this on their own, but rather requires concerted intergovernmental planning. As we illustrated, there are parts of this process in place; but a need for more systematic planning beginning with the federal government is imperative.

An integral part of the capacity to respond is to build on the considerable knowledge amassed from the major disasters of this decade alone. In our project, we reviewed hundreds of reports and analysis of the response. A critical set of strategies would be to put together all the knowledge in a single repository. Moreover, these reports need to be accessible to all types of researchers and practitioners. At the same time, there is a tremendous amount of institutional knowledge that may be lost. All the relief and response workers from insurance companies to federal government employees have now had at least five years experience in the field (some have had a great deal more). These people have invaluable knowledge that, for the most part, is not captured systematically. In other words, a system needs to be created transfer knowledge from one disaster to another.

At the same time, relationships among key actors need to be built prior to a catastrophe at all levels. What we learned from focus groups and individuals from all aspects of the catastrophe was the importance of prior knowledge of people in key positions. These relationships are critical both in the immediate response and especially, as part of the long-term recovery. Research in this area could focus on how to build permanent mechanisms to ensure collaboration, especially given the rotation system which moves staff of all levels into and out of the disaster zone over the long-term recovery

As important as knowledge and people are to a successful recovery, the assumptions behind the process are valuable as well. This theme emerged in our own work, especially in the area of mitigation. From our review, the apparent lack of a timely commitment to mitigation reduced mitigation outcomes dramatically; precise actions to accomplish risk reduction should be part of future planning. An actual commitment to mitigation would translate into proactive ways to deal with risk at all levels. Further, this commitment to mitigation would be part of a larger effort to focus on outcomes rather than procedure. From our accounts, the focus on procedure in this catastrophe resulted in a fractured response, slowing down the recovery.

Continuing research questions should focus on understanding how to build capacity by examining the already existing knowledge about catastrophes and linking to best practice in each area. Responding to catastrophes involves complex sets of actions, but if there is agreement on goals; then, successful response and recovery are possible. However, as we have already seen with the BP spill, little has changed within the five years since these terrible events.

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