



INSTITUTE FOR
**Sustainable
Communities**

FINAL REPORT

Sustainable Development and Long-Term Disaster Recovery:

A convening of experts to inform and support the deliberations of the
Long-Term Disaster Recovery Working Group

January 12, 2010

Sponsored by the Rockefeller Foundation

Introduction

ISC convened a group of 20 leading national and international experts in Washington DC on January 12, 2010 to discuss the integration of sustainability and resilience into federal long-term disaster recovery efforts. The meeting was organized with the support of the Rockefeller Foundation and in cooperation with the U.S. Department of Housing and Urban Development, the host of the meeting and the Department of Homeland Security. The purpose of the day-long forum was to share insights and recommendations to inform the deliberations of HUD and the Interagency Long-Term Disaster Recovery Working Group as they prepare a report to the President proposing improvements to federal disaster response programs and policies. The panelists shared their perspectives in a series of panel discussions and case study presentations focused on four topic areas: empowering communities, adapting to climate change, progressive rebuilding and economic recovery. There was strong and enthusiastic support for making sustainability and resilience explicit priorities in federal emergency management and disaster recovery efforts. The panelists shared specific recommendations and challenges related to the four topic areas, which are summarized in this report. Several cross-cutting themes also emerged around how the federal government could more effectively support and empower communities:

Provide greater support to communities for pre-disaster and resilience planning

The federal government should better support disaster preparedness and resilience planning at the local level. Communities would benefit from stronger incentives, better tools, and access to training and technical assistance. A greater federal investment in pre-disaster planning, including risk assessment, hazard mitigation, and recovery planning, could reduce the impacts of disasters and subsequent rebuilding costs, helping communities make smarter decisions and ultimately reducing their reliance on the federal government.

Provide better access to models, information and best practices

Related to the need for better pre-event planning is the need for better information, best practices, case study analyses, data and measurement tools, and effective models for disaster planning and sustainable recovery. Best practices should be drawn from both US and international experience. The federal government could support the sharing of information through convenings and advisory panels that bring together leaders from key sectors, including the research and scientific communities, local officials, government agencies, the business community and nonprofits. Such convenings should include opportunities like those provided by the Mayor's Institute for City Design for local officials to interact with experienced practitioners and experts in order to promote strong leadership at the local level.

Clarify roles and responsibilities and improve communication and coordination at the local level and among local, state and federal government

Clarifying the roles and responsibilities of different agencies and levels of government would help improve coordination, planning and disaster response, while also helping communities better assess their own needs and resources. Locally, all the key parties in communities, including government, business, media, hospitals, nonprofits, and residents need to engage in

building partnerships, local coalitions and mechanisms for coordination and cooperation well before disaster strikes.

Panel 1. Empowering Communities

A resilient community is one that is able to limit the impact of disaster, and respond to and recover from shocks. Resilience requires local action on mitigation, preparedness and planning before a disaster occurs. Like sustainability, resilience has economic, environmental and social dimensions. Self-reliance is a critical element of both. As the federal government has had increasing involvement in natural disasters and emergency management over the last fifty years, the result has been greater dependence on and a sense of entitlement to federal disaster assistance at the community level. The federal government can empower communities to undertake the kind of planning that would make them more self-reliant—and more resilient—with incentives, training, and resources to help them assess their risk and engage and coordinate with all stakeholders to build the leadership, coalitions, social capital, and collective will needed to facilitate faster and better recovery from disaster. This support would be provided most effectively as part of a broad federal disaster recovery plan that makes resilience a national priority, encourages an explicit focus on hazard mitigation in community planning and recovery processes, and provides a common set of resiliency planning tools and templates for communities. The benefits of moving toward a greater focus on resilience at the national and local levels include reduced cost and time for recovery; saving of lives, property and environmental assets; reduced community disruption and fewer business losses after a disaster; and ultimately improved quality of life.

Challenges:

- There is a lack of emphasis and virtually no federal funding for pre-event planning and capacity building. Local commitment and understanding of the issues and challenges are low. Local governments are overwhelmed and don't have the resources, incentives, knowledge or technical skills to engage in a community-wide resiliency planning process.
- There is no commonly accepted framework for communities to assess and improve their resilience.
- The capacity levels of federal, state, and local entities are not known, nor are their efforts coordinated and integrated in pre-disaster planning and in post-disaster response.
- After a disaster, the focus of the federal government is on immediate response and rebuilding, not on assisting communities with sustainable long-term recovery.
- Land use planners and principles are noticeably absent in pre- and post-disaster planning.
- The emphasis on the speed, rather than quality, of recovery impedes the ability to integrate hazard mitigation measures into rebuilding processes.

Recommendations:

- Devote more resources to long-term pre-disaster planning and coordination. Foster pre-planning by using a set of incentives and penalties. Compile examples of economic incentives (public and private) for pre-disaster planning that reward community resilience.
- Create a common framework that communities can use to measure their resilience and translate objectives into action. Provide communities with a template that can help them institutionalize processes and build community support around a common vision.
- Update emergency response programs to incorporate a stronger focus on long-term recovery.
- Integrate citizens into emergency management planning. Engage vulnerable and disadvantaged groups in helping to define risk, which will help create broader community awareness and support for hazard mitigation efforts. Incorporate lessons from a FEMA-funded Emergency Preparedness Demonstration Project conducted by MDC.
- Recovery should be solidly based in hazard mitigation, allowing communities to capitalize on opportunities that disasters present to rebuild better and minimize the impact of future disasters.
- Support community building efforts to strengthen social capital, creating strong communities of people who care about and take care of each other. Support locally based partnerships that create more resilient, confident, collaborative communities.
- Significantly increase FEMA ESF 14 staffing, funding and training.
- Improve the integration of land use planning in disaster planning and response, and train local planners to consider hazard mitigation in their work.
- Examine earlier programs for models and clues to success, such as Project Impact, Model Cities, 701 planning grants, FEMA Hazard Mitigation planning, and the FEMA interagency mitigation agreements of the 1980s.

Panel 2. Climate Adaptation

It is widely recognized that climate change is a ‘game changer’ that will require much greater attention to disaster risk reduction and preparedness. Panelists addressed how the federal government, along with researchers, the disaster response community and other stakeholders, can help create better prepared and more resilient communities in the face of the anticipated impacts of climate change: bigger storms, larger parts of cities and communities affected, more frequent extreme events, as well as slowly changing conditions (e.g., increasing salinization of water) that will have significant long-term consequences.

New York City has a four-step risk-based approach to make the city more resilient to the impacts of climate change. Working with some forty public- and private sector partners, New York identified and prioritized the risks of climate change to critical infrastructure, and developed adaptation and mitigation strategies. The city also

developed a citywide strategic plan that includes improved public outreach, emergency preparedness and pilot projects to work with vulnerable neighborhoods on site-specific projects. Partnerships with the scientific community were particularly effective in helping the city obtain easily understood climate information that was specific to New York.

Obstacles

- Communities lack the tools and expertise needed for effective adaptation planning. They rely on outdated FEMA flood maps, and lack the ability to interpret available climate data and its associated risks and impacts. There are no baseline indicators to measure increased resiliency.
- Most state and local climate action plans are focused on mitigation and not on adaptation.
- Climate and disaster issues are addressed by multiple federal agencies, which have varied constituencies, resulting in a lack of comprehensive hazard planning.
- Climate change is a dynamic phenomenon, which requires that policies and programs created to address adaptation be flexible enough to account for new information and changing climate forecasts.
- “Home rule,” which gives local communities full authority to make planning decisions, can pose obstacles to federal intervention in hazard mitigation in some localities.

Recommendations

- Identify policies and regulatory processes that impede disaster resilience. Adopt flexible policies that account for new climate data, including regularly updated building codes and regulations. Consider issues of equity and needs of vulnerable communities in the policymaking process.
- Empower cities to play a role in climate adaptation: Provide risk based adaptation and response funding, leadership training for local planners and leaders, and flexibility to develop creative solutions.
- Update FEMA flood maps based on current information about sea-level rise. Ensure that other mapping tools account for climate change impacts, particularly on socially/physically vulnerable populations.
- Move forward with a national effort, such as the creation of a National Climate Service, which would be a centralized source of climate information. Help communities to interpret data to understand the risks they face, and generate local knowledge and champions for climate change adaptation.
- Use the National Earthquake Hazard Reduction Program as a model for addressing resiliency and sustainability and preparing for extreme events. NEHRP regularly convenes stakeholders in a coordinated, multi-disciplinary effort to update risk reduction knowledge, tools and practices.

- Move long-term recovery out of FEMA and into HUD, allowing FEMA to focus on short-term response.
- Support regional planning and coordination because climate impacts are regional in nature.
- Integrate climate adaptation and mitigation. Focus on planning that accounts for hazards of all types. Understand how climate change may affect mitigation efforts (e.g., ensure that new renewable energy systems can withstand climate impacts). Convene national adaptation summits that bring together the climate and disaster communities, including the international perspective.
- Train emergency managers in climate change adaptation planning.
- Provide better information on eco-system based adaptation and its costs as an alternative (or complement) to physical infrastructure like sea walls and levees.

Panel 3. Progressive Rebuilding

Progressive rebuilding recognizes that recovery is not about going back to normal – but building back better and reducing vulnerabilities in the process. Many think of disasters as providing a ‘clean slate’. In fact, there are major obstacles to making significant land use and other changes in a community after a disaster. It is hard to alter the location of existing infrastructure. Existing culture, political views and biases of a community also remain. Local officials face pressure from people who have lost everything and want more than anything a quick return to normal, with the speed of the recovery effort often used as the measure of its success. Pursuing the path to a ‘new normal’ that brings together environmental sustainability, resilience, and issues of social equity requires difficult choices and creates new governance and planning challenges. A progressive approach requires looking beyond recovery to revitalization, being attuned to local culture and values, and emphasizing long-term comprehensive planning, preparation and livability.

Greensburg, Kansas, a conservative rural community that was devastated by a massive tornado in 2007, chose to rebuild the town completely green. Leadership by the Mayor and a local nonprofit was central to the success of this effort. The rebuilding effort did not focus on the environmental benefits of green buildings, but rather on the goals of creating a more resilient, more efficient community. As part of its green recovery, the town will construct a new green building educational center that is expected to serve as an economic engine for the town. Many partners, including the federal government, were instrumental in the process. Some federal agency staff, however, failed to understand the local culture’s strong values around self-sufficiency and as a result clashed with community members.

Challenges:

- Natural hazards and their frequency and effects are not well understood among smart growth practitioners and land use planners. The involvement of these communities in pre-disaster planning is currently very limited.

- Hazard mitigation and pre- and post- disaster recovery planning is often led by emergency managers, who are focused on the administration of post-disaster grant programs, not land use and design.
- There is little focus on governance issues and the role of civil society in hazards discussions. Short-sighted political leadership and weak social capital in socially isolated and marginalized communities are among the obstacles to progressive, long-range community planning processes.
- Many cities have antiquated building and zoning codes.
- It is hard to get traction to do pre-planning for recovery. There is a lack of coordination and consistency in how agencies approach recovery issues.
- Property rights and takings issues represent a challenge in managing the development of coastal communities.
- Inserting disaster resilience into current programs and policies does not have wide spread support.

Recommendations:

- Give communities tools and information to embrace new ideas and innovation in the recovery process. Provide incentives such as an innovation fund, tools to improve community decision-making, peer mentoring and support, and information on alternative models and their costs. Provide communications tools to make it easier for dispersed communities to connect and come together after a disaster.
- Hold communities accountable – link pre-event preparedness with post disaster aid. Don't reward 'bad decisions' (e.g. building in flood zones).
- Make resident advancement for low-income communities a priority in the recovery process.
- Strengthen planning for hazard mitigation and disaster recovery.
 - Develop recovery planning and hazard mitigation guidelines. Train local, state and federal planners to provide pre- and post- disaster planning assistance.
 - Use available social and economic data to facilitate local scenario planning to plan for sustainability, adaptation and disaster recovery.
 - Don't do 'smart growth in dumb places'. Look at how we build in the context of natural eco-systems that are also coveted places to live (e.g., barrier islands). Update existing zoning and building codes.
 - Mandate integrated, comprehensive local planning that takes into account mobility and its economic, ecological, and social and cultural impacts. Map areas of vulnerability and consider how neighborhoods are connected to regional systems.
- Use existing programs and policies to promote resilience. Factor risk reduction into a national response framework and analyze programs and policies for their ability to increase

or decrease vulnerability to natural hazards (e.g., scoring Community Development Block Grant applications for resilience impacts.)

- Consider the importance of leadership and governance. Provide leadership training for Mayors and other local officials and formal forums for civic engagement. Lower barriers to enable nonprofit and volunteer organizations to better assist recovery efforts.
- Train disaster responders and community leaders in providing emotional aid to help deal with trauma. Create a ‘buddy system’ to help connect communities to other communities that have gone through a similar experience.

Panel 4. Economic Recovery

Private investment is crucial to long-term recovery and resilience. Small business represents the backbone of local economies, and the return of business after a disaster is often a signal of progress toward recovery and a return of normalcy. The private sector plays a key role in helping communities recover as well – restoring jobs and livelihoods, providing necessary services and linkages to outside resources, and assisting employees with repairing or rebuilding homes. When resources aren’t mobilized quickly the risk is that businesses, particularly small and local businesses, will fail, resulting in a loss of jobs and tax revenue. Larger businesses suffer when the operations of their smaller suppliers are disrupted. The federal government plays an important role in supporting economic recovery, but the government’s response has been inconsistent from one disaster to the next. It is a challenge to prioritize recovery and rebuilding investments after a disaster to achieve the right balance between building back quickly and building back better. From a private sector perspective, the first priority of government should be to restore critical infrastructure and services so business and residents can return to normal quickly. Ensuring that housing is quickly available after a disaster also helps businesses maintain a reliable customer and employee base.

Challenges:

- Insufficient advance disaster planning and inadequate plans for economic recovery after disasters.
- No federal entity has the responsibility of leading economic recovery post-disaster.
- Funding and technical assistance to aid economic recovery, especially for small businesses, is inadequate.

Recommendations:

- Federal leadership is needed in post disaster economic recovery. Establish a \$100 million fund for post-disaster economic recovery and charge a single federal agency with administering the monies.
- Support small businesses with technical assistance and examples of best practices in recovering effectively from disasters.

- Support capacity building and assessment of damage to the local/regional economy after a disaster.
- Provide greater flexibility in the use of federal funds for economic recovery; establish a single trigger point for waiving some federal regulations after disaster.
- Support the quick processing of permitting and inspections with grants to local governments to increase planning and building department personnel for a period after a disaster.
- Update Community Development Block Grant provisions, particularly the 'urgent need' criteria, so that block grant funds can be used to provide assistance to businesses and to support long-term economic recovery.
- Make funds available quickly for permanent affordable housing after disasters to ensure that businesses have both clientele and employees and to address the housing needs of vulnerable populations. Site and build housing in safe locations and to higher standards.
- Ensure communities have strong local economic development offices engaged with the business community and the workforce. These offices would acquire the necessary knowledge to support economic recovery, build good working relationships with the private sector and local nonprofits, and would be able to better understand any special needs of local businesses and industry sectors.
- Understand the composition of local economy, so that when federal recovery and investment decisions are made, there is a way to prioritize investments. Get major industries back up quickly, but also look for opportunities to encourage business the diversification of local economic base. Create an innovation fund for communities to invest in new industries and pursue new economic opportunities after disaster.
- Ensure that local and regional integrated plans, databases and models for recovery and revitalization are in place before disaster.
- Pre-disaster planning should take place with wide participation from the community, including business and nonprofits and bipartisan political support so that redevelopment occurs in safer locations and using higher standards that make new businesses and housing more resilient. Enact necessary changes in construction and building codes.
- Larger businesses have continuity plans and insurance to protect themselves in disasters, but they need critical services, infrastructure, and employees.

List of Expert Panelists

Dena Belzer, President, Strategic Economics

Prof. Hilda Blanco, Director, Center for Sustainable Cities, University of Southern California

Dr. Susan Cutter, Hazards and Vulnerability Research Institute, University of South Carolina

Warren Edwards, Director, Community and Regional Resilience Institute

Jeff Finkle, CecD, President/CEO, International Economic Development Council

Adam Freed, Deputy Director, Mayor's Office of Long-Term Planning & Sustainability, City of New York

Michael Gallis, Michael Gallis & Associates

Prof. Bruce Glavovic, Associate Director, Massey-GNS Science Joint Centre for Disaster Research

Lieut. Gen. (ret.) John F. Goodman, Director, Center for Excellence in Disaster Management & Humanitarian Assistance

Toni L. Griffin, Toni L. Griffin Consulting; Adjunct Associate Professor, Harvard University Graduate School of Design

Dr. Klaus Jacob, Special Research Scientist at the Lamont–Doherty Earth Observatory of Columbia University

Gerald McSwiggan, Special Projects and Disaster Assistance and Recovery Program, Business Civic Leadership Center, US Chamber of Commerce

Ann Patton, Tulsa Partners, Inc.

Cheryl Rosenblum, Director of Strategic Development, CNA

Dr. Cynthia Rosenzweig, NASA Goddard Institute for Space Studies

Claire Rubin, Claire B. Rubin & Associates

Pamela Rubinoff, Coastal Resources Center, University of Rhode Island

Dr. Cristina Rumbaitis del Rio, Associate Director, The Rockefeller Foundation

Prof. Gavin Smith, Executive Director, Center for the Study of Natural Hazards and Disasters, University of North Carolina

Daniel Wallach, Executive Director, Greensburg GreenTown