

CONTROLLING OUR OWN DESTINY

Proactive Steps for Resilient Communities

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CONTENTS

- 02 The Changing Nature of Disaster Management,
By Stephen Jordan, Business Civic Leadership Center

Chapter 1: Strategies for Long-Term Recovery and Development

- 08 Regional Frameworks for Resiliency and Effective Response,
By Michael Gallis, Michael Gallis and Associates
- 10 What States Need to Know about Disaster Management,
By Daniel J. Alesch, Ph.D., University of Wisconsin–Green Bay
- 12 Preparation: Just What the Disaster Ordered,
By George E. Ruebenson Ph.D., Allstate Insurance Company
- 14 The Role of Economic Development in Disaster Recovery,
By Phil Paradice, U.S. Department of Commerce
- 16 Sustainable Development in Coastal Communities, By Margaret A. Davidson,
National Oceanic and Atmospheric Administration Coastal Services Center
- 18 FEMA, Long-Term Recovery, and Private Sector Engagement,
By Matt Campbell, Federal Emergency Management Agency
- 20 Communication and Disaster Management,
By Mary Wong, Office Depot Foundation
- 22 Preparing for Disaster before It Strikes, By Kathy Pickus, Abbott
- 24 Accenture and Aidmatrix Foundation: Helping Communities Face Disasters,
By Anne Bronson and Shana Jourdan, Accenture Foundation
- 26 What to Do When Storms Hit Hard, Shelley Moore Christiansen, ExxonMobil
and By Richard Cunningham

Chapter 2: Systems and Functions in Action

- 32 Keeping You Safe and Warned,
By Ed Rappaport, National Hurricane Center
- 34 GIS Technology Gives Communities a Head Start,
By Pug Guttridge, Cherokee Information Services, and Simon Thompson, ESRI
- 36 A Communication and Coordination System: 888-MY-BIZ-HELP,
By Ines Pearce, Business Civic Leadership Center
- 38 SBA Resources and Partnerships,
By Admiral Steven Smith, U.S. Small Business Administration
- 40 Jobs4Recovery: Building a New Future for Distressed Communities,
By Ann Cramer, IBM Corporation



- 42 Proactive Business Coordination during Gustav and Ike, By Ramesh Kolluru, Ph.D., NIMSAT Institute
- 44 Ready to Help, By Ken Sternad, UPS Foundation
- 46 Solutions to Handle Back-to-Back Disasters, By Leslie VanSant, Global Emergency Group

Chapter 3: Disasters in Specific Geographies

- 50 Greensburg, Kansas: Two Years Later, By Chuck Banks, U.S. Department of Agriculture
- 52 Cedar Rapids: A Flood Disaster, By Mickie Valente, Valente Strategic Advisers, LLC and John Zakian, Greater New Orleans, Inc.
- 54 Chamber Leads Cedar Rapids Recovery, By Shannon Meyer, Cedar Rapids Area Chamber of Commerce
- 56 Being There, By Art Roberts, Texas Association of Business
- 58 Confronting Health Challenges in Disasters, By Stuart Myers, Project HOPE
- 60 The Road to Recovery in China, By David Meltzer, American Red Cross
- 62 Aceh: Sustainable Development after Disasters, By Erin Mote, CHF International
- 64 Controlling Our Own Destiny: A New Approach to Disaster Management, By Gerald McSwiggan, Business Civic Leadership Center



By Stephen Jordan

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The Changing Nature of Disaster Management

The year 2008 was marked by a number of extreme events, both foreign and domestic. The Sichuan earthquake in China; the Cedar Rapids, Iowa, flood; and Hurricanes Gustav and Ike headlined a traumatic year. In recent years, severe natural disasters have become an annual occurrence.

Though we hope to avoid future concurrent disasters, recent experience proves that waiting passively to react to disasters is costly, inefficient, and ultimately untenable in an era of scarce resources. As a nation, we have to become more proactive to prepare for disasters individually and to strengthen the resilience of our communities.

We should pursue three core objectives: (1) safety enhancement and risk reduction, (2) environmental sustainability, and (3) economic competitiveness.

Hurricane Katrina left a traumatic scar on the nation's psyche, just as the earthquakes in Pakistan and China and the tsunami in Indonesia affected those countries. Safety and risk-reduction advocates appreciate how zoning, building codes, enhanced infrastructure, and redundant transportation and communication systems can save lives and reduce the harm of extreme events. Just one look at the crowded interstates leaving Houston or New Orleans should be enough to convince anyone of the importance of better infrastructure for safety purposes. Safety enhancements also reduce long-term capital costs and insurance premiums, and reassure people about the long-term viability of a geographic area. Community planners and local and regional leaders should give greater consideration to the impact of these issues on public safety during a disaster.

Increasingly, business leaders also have been investing in environmental sustainability. For example, America's Wetlands is funded by several major energy companies because they appreciate that strengthening the Gulf Coast's natural defenses will help to mitigate their future costs.



Local chamber leaders have told us that potential investors ask them about sustainability in gauging the viability of an area for investment. Environmental sustainability complements safety enhancement and risk reduction because increased environmental stewardship can build up natural defenses against major disaster events.

Companies in Florida and the Gulf Coast are very interested in how the interaction of weather effects with the Florida Everglades, the Louisiana wetlands, and coastal barrier islands affects their plant, property, and equipment investments and the built environment of their communities.

Emphasizing safety and risk reduction and implementing environmental sustainability strategies make communities more attractive to investment and new jobs. It signals to local citizens and outside investors that disaster-prone regions are thoughtfully and proactively managing their risks.

Many business managers and chamber leaders are highlighting their active risk-management policies as a selling point for potential investors and customers. Just as Volvo made a virtue out of its safety commitment 50 years ago when front seat belts were optional, risk mitigation is becoming a selling point for some communities.

These same policies and investments help to minimize costs after disasters, as well. They can make a world of difference when it comes to preparing for and recovering from disasters.

But if our communities want to be prepared to respond effectively to unforeseen events, they must consider a new conceptual framework:

Past Thinking

- Enterprise mitigation
- Local focus
- Preparedness
- Disaster recovery
- Environment undermines markets

New Thinking

- Community mitigation
- Regional focus
- Resilience
- Sustainable community
- Environment enables markets

As Michael Gallis, a contributor to this report, says, communities are made up of systems that are inextricably linked together. In a disaster, if one of those systems (such as health care) breaks down, it adversely affects the whole community—even systems that were properly prepared.

INTRODUCTION



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For this reason, companies are changing the way they allocate resources in response to disasters. They are still responding to the emergency phase, but they are also focusing on how to restore service after the disaster, thereby minimizing the duration and reducing the impact of the event. Companies also realize that the impacts of such disasters spread across entire regions, not just in the community where the catastrophe happened. Disasters set in motion a whole string of secondary impacts on cities where evacuees go, on supply chains, energy costs, capital markets, and so on.

As a nation, we are not systematic about ensuring that our regions are sustainable and resilient to disasters. Yet our cities are socially and economically interdependent. If Miami experiences a major hurricane, Ft. Lauderdale is affected even if it does not actually experience damage. If the damage is severe enough, ripple effects can travel throughout the country as residents flee, important trading partnerships break down, and other critical long-term changes take place. Cities and states that think they are immune to disasters that happen on the coast may not appreciate the interconnectedness of our economic system.



“Emphasizing safety and risk reduction and implementing environmental sustainability strategies make communities more attractive to investment and new jobs.”

But some public and private partners are becoming much more proactive. For instance, southern California cut in half the number of casualties from the 2007 wildfires, even though the fires were twice the size of those in 2003. Fortunately, community leaders in the upper Midwest, subject to floods, and in the Gulf Coast and Florida, subject to hurricanes, are moving in this direction.

The benefits of being proactive are many. This approach reassures local residents. It attracts new investors who appreciate the enhanced safety and sustainability of the region’s infrastructure, and it should benefit taxpayers, who have already spent more than \$250 billion over the past decade in response to disasters.

We are still a long way away from a consensus about the best strategies for disaster assistance and recovery, but a new way of thinking is taking shape—one that is more holistic, systemic, and integrated. This report provides

a snapshot of where we are in this process. As Office Depot Foundation President Mary Wong, chair of the Business Civic Leadership Center’s Disaster Assistance and Recovery working group, recently said, “If we are going to make mistakes, we want to at least learn from what we’ve done so far, and make different ones than we’ve made in the past.”

Almost every company we have worked with this year has displayed this same sense of humility and determination to improve the disaster assistance and recovery process. We are making some progress, but we have to become even more strategic and focused on preparedness, resilience, sustainability, and competitiveness in the future.





Chapter 1: Strategies for Long-Term Recovery and Development

Most people who experience disasters wish that they had been better prepared before the disaster struck. Realizing this fact, many practitioners in the disaster response and recovery field have begun implementing preparedness campaigns, drills, and exercises.

However, even with all of the emphasis on preparedness, communities experiencing disasters still face long roads to recovery, marred with major problems. This is because even if individuals or organizations are prepared, this does not mean that whole communities are prepared and, consequently, that whole communities will recover. Does it matter that your business is back up and running within 24 hours if you do not have anyone to whom to sell your products or if your kids are home because school is closed so you can't go to work?

This chapter focuses on strategies for long-term recovery. Of course, it is preferable not to have to recover at all, so a major emphasis of the chapter is on how communities can become more proactive to lessen disaster impact and shorten the recovery period.



By Michael Gallis

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Regional Frameworks for Resiliency and Effective Response

Developing a more effective framework to manage and direct the recovery process in the aftermath of natural disasters is no longer a choice but an imperative, as natural disasters, once infrequent and unusual events, are now taking place with increasing frequency.

Hurricanes, floods, drought, and fires are growing in size and strength, striking with greater impact, causing more damage and loss of life, and leaving a path of devastation in their wake.

The recovery process, traditionally focused on restoration, must begin to address long-term resilience and competitiveness if the regions in the path of these natural disasters are to secure their long-term future.

The Traditional Framework for Recovery

Traditionally, recovery efforts have operated within a short-term framework defined by political geographies (cities, counties, and states) and focused on getting devastated regions back up and running by restoring them to their former condition.

This approach has resulted in tactical, not strategic, activities to alleviate the immediate suffering. While it has succeeded in the immediate time frame, it has not led to long-term improvements in the region's competitiveness or to resilience to future disasters. In some of the regions where disasters have struck several times over several years, the image of the area has suffered, affecting its ability to attract economic activity and retain its workforce.

Growth and Change in Disaster-Prone Areas

Many disaster-prone urbanized areas grew organically and were never designed with resilience to withstand the impact of disasters in mind. In urbanized areas in vulnerable locations such as the Gulf Coast, upper



Mississippi Valley, or southern California/Southwest deserts, the population and economy continue to grow, sprawling across multiple counties, encompassing numerous cities, and in some instances crossing state lines. When disasters strike, they damage the real estate, transportation, infrastructure, educational, medical, and economic systems across a wider geography than encompassed by any city, county, or state.

As a result, a recovery framework that is focused on directing funds through the fractured pattern of political geography cannot effectively address the issues of damage or long-term resilience in the multiple systems that cross those political boundary lines and form the foundation for the future of the community.

A New Comprehensive Framework

Creating a new, more comprehensive and integrated framework will require two important changes. The first is to move from a framework based on political units to one of cross-boundary systems, and the second is to integrate short-term recovery efforts with long-term strategic planning.

Organizing recovery activities in a systems format that includes transportation, infrastructure, economy, medicine, education/research, urbanization/housing/commerce, public safety, culture/history, sports/tourism, and the environment would result in two important benefits.

First, a more accurate and focused assessment of damage and cost could be completed in a shorter time, as a systems format would provide a more structured method of recording damage. Second, this format would provide a better structure within which to engage leadership involved in each system to participate in formulating plans for a speedier and more effective recovery. Using a systems format would also create a platform

for integrating short-term recovery efforts with long-term planning. Engaging leadership within each system would allow them to assess the impacts and make recommendations to analyze more quickly how recovery funds would best be applied to restoring what was damaged or rebuilding in new patterns to increase long-term competitiveness and resilience, thereby integrating the recovery process with long-term strategic activities.

The Need to Think and Plan Ahead

While creating a new framework for recovery and long-term strategic planning would be of significant value, planning ahead is the most important part of the process. Strengthening the levees in New Orleans before Katrina would have saved billions of dollars and hundreds of lives.

It is now clear that natural disasters are occurring with increasing frequency and strength. Creating a systems framework prior to a natural disaster could create an enormous strategic advantage in responding to disasters.

If regional leadership were already engaged, if information were already organized and structured, and if discussions on alternative regional futures that would increase competitiveness and resilience had already been completed, the framework for recovery and future development would be in hand when disaster struck. Rather than wallowing in red tape and confusion, regions would be quickly and effectively on the path to a new and stronger future.

While such a proactive approach would save time and money, the most significant benefit would be that recovery funds could be applied in such a way that they result in creating more competitive and resilient regions that are more attractive to people and business, not less.



By Daniel J. Alesch,
Ph.D.

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What States Need to Know about Disaster Management

Disasters have terrible consequences for communities. Injuries, deaths, and damage to both the natural and the built environment are the most visible consequences, but the struggle for community recovery is also a challenging, expensive, and time-consuming consequence of a disaster. And, unfortunately, not all communities recover, even decades after the event.

State governments have a critical role in community disaster recovery. They establish the context within which communities are built and work with one another. The state's role begins with reducing the consequences of extreme events by helping to ensure that communities reduce their exposure and vulnerability, becoming more resilient and sustainable. The role continues with helping to ensure rapid, effective, coordinated responses to emergencies. Finally, the state has a critical role in helping

communities recover from the adverse consequences of extreme events.

Some states have been more proactive than others in adopting policies and developing programs to implement their role in disaster prevention and recovery. Following the devastation wreaked by Hurricanes Katrina and Rita, the U.S. Chamber's Business Civic Leadership Center (BCLC) was asked what some states do well to recover from disasters, especially since other states seem to sputter in their recoveries.

With the support of Allstate, BCLC launched a project to find out. The result is a description of how extreme events lead to community disasters and a list of 10 critical policies that BCLC proposes states need to adopt to become more disaster resilient and to recover quickly after disasters.



The top-10 list of policies that emerged is based on more than 15 years of research and analysis by an external study team. The team has been studying the long-term consequences of extreme events on communities as well as business and community recovery in more than two dozen cities across the United States.

The team returned to those communities time and again throughout the years to try to understand individual, business, and community recovery in each of them and then to compare the community experiences with one another.

The proposed policies are organized into three clusters: policies to protect against initial adverse consequences, policies to create and maintain effective emergency response systems, and policies to adopt now to facilitate postdisaster recovery.

Policy Cluster 1. Protect against the Initial Consequences of Extreme Events

1. Reduce the exposure of persons and property to extreme events.
2. Reduce the vulnerability of the natural and built environment to extreme events.
3. Build disaster resistance and resiliency into communities.

Policy Cluster 2. Create Effective Emergency Response Systems

4. Create and maintain effective, capable emergency response systems in state and local governments and ensure coordination.
5. Establish systems to protect people in harm's way.

Policy Cluster 3. Facilitate Postdisaster Community Recovery

6. Ensure the availability of adequate capital for rebuilding and recovery.
7. Develop disaster recovery plans in concert with local governments and the private sector.
8. Provide for the continuity of local government operations following a disaster.
9. Repair or replace infrastructure rapidly and accelerate programmed projects in the affected areas.
10. Work with local government and the private sector to facilitate economic recovery.

Each of the policies is elaborated on in the report titled "A Critical Role: Top Ten Policies That States Need to Recover from Disasters," available on BCLC's Web site (www.uschamber.com/bclc/programs/disaster).

The project is the first step in BCLC's plan to help ensure that states have the policies and programs in place to help prevent and recover from disasters. The second step is to learn the extent to which the individual states have adopted and implemented these policies and practices.

This "score card for the states" will enable states to learn from each other about policies that enhance their ability to withstand future disasters, so that businesses and communities are better prepared for long-term economic recovery. Residents and business managers will be able to use the information to mitigate costs associated with disasters and to know what postdisaster services and activities will be available in their communities.



By George E. Ruebenson,
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Preparation: Just What the Disaster Ordered

Whether we see it on television or in our own communities, we are frequently reminded of the devastating power of natural disasters. While mega-catastrophes such as Hurricane Katrina stand out most in recent memory, people and property in every part of the United States are vulnerable to some kind of natural catastrophe.

While immensely destructive, natural catastrophes can also prove the value of local communities, states, the federal government, and the private sector working together to overcome extraordinary circumstances.

It is in this spirit that Allstate joins the U.S. Chamber of Commerce's BCLC in discussing a topic of great importance to us all: finding the best ways to help protect people from natural disasters.

Our mission as an insurance company is to help protect our policyholders from life's uncertainties. But private insurers are obviously not the only answer: A comprehensive, coordinated, and proactive disaster preparedness effort among local, state, and national leaders is critical to providing Americans with greater security and relief from catastrophes.

We continue to support BCLC's research on how states can improve recovery from disasters, which led to the release of "A Critical Role." Our belief in the necessity of broader catastrophe plans is also reflected in our active support of ProtectingAmerica.org, a broad-based coalition that advocates for a stronger partnership among local, state, and federal governments and the private sector to better prepare and protect Americans from natural disasters.



We believe the best way to prepare is to enact lasting reforms that contain five major elements. Our communities will be stronger and better prepared with a catastrophe preparedness program that will:

- Improve damage prevention and mitigation programs through stronger building codes and land use policies;
- Enhance the relief, response, and recovery process through greater resources for first responders;
- Expand catastrophe-related consumer education programs;
- Establish more rigorous recovery oversight and mandate continuous improvement; and
- Protect consumers' financial well-being by establishing catastrophe funds at the state and national levels.

These are the primary components of the Homeowners Defense Act of 2009, a measure recently introduced in Congress that would adopt a long-term strategy for disaster planning. This approach would abandon the

often chaotic scramble to recover from the devastating aftermath of catastrophes by giving state and local governments more tools to protect citizens before, during, and after catastrophic events.

Today more than ever it is critical to renew our commitment to safeguard local communities by funding additional capacity for emergency management, law enforcement, and firefighting services. Citizens also have a responsibility to learn how to protect themselves and their property when a disaster occurs. Further, we need a national catastrophe backstop to complement the insurance protection provided to customers of private insurers. Such a backstop would protect the private market from collapse and help ensure that resources are available to rebuild after a major catastrophe.

Americans' exposure to catastrophes is ever-increasing, and the time to act is now. A stronger public-private partnership will more effectively protect people, communities, and our national economy by hastening recovery and reducing the human and financial toll of major catastrophes.

That's Allstate's stand, and we're pleased to work with BCLC to help America be better protected.



By Phil Paradice

Phil Paradice is the director of the Atlanta Regional Office of the Economic Development Administration at the U.S. Department of Commerce.

The Role of Economic Development in Disaster Recovery

The federal agency I serve, the Economic Development Administration (EDA), is the only one whose sole mission is economic development. Since its inception, EDA has held to the principle that sound economic development has its foundation in a comprehensive economic development strategy. Further, strategies are best developed by public and private sector leaders who represent the key economic interests in the region.

A forward-thinking, long-term economic development strategy should be as relevant before a disaster as afterward. EDA supports development of these plans through its nationwide partner network of almost 400 designated Economic Development Districts, and with other eligible recipients when sudden and severe economic dislocations occur.

Successful economic development requires collaboration and orchestration of a multitude of sectors: workforce development, infrastructure, education, transportation, public health and safety, institutions of higher education, and housing, to name just a few.

Both public and private sector leadership must be committed to a common mission that is both understood and supported. And the plan must incorporate the threat of a disaster. In this way, a region's vision, goals and objectives, action plan, and performance measurements can be implemented in a way that anticipates well in advance the potential for disasters and their associated economic dislocations so steps can be taken to mitigate economic loss.

Disasters, whether natural or man-made, result in dislocations impacting the health, safety, and economic well-being of the public. Following a disaster, the most critical, first-response focus must be the health, safety, and well-being



of the public. As these critical needs are successfully addressed, then time, energy, and resources can be fully dedicated to rebuilding and long-term economic recovery.

With the right economic development strategy in place, economic recovery can be, in effect, a continuation of a strategy already in place, while also advancing the region's economic competitiveness.

The same can be said for events such as the economic downturn the nation and world currently face. A long-term strategy can serve as a road map to recovery, with many components already mobilized for success.

The action plan could include workforce development that builds a competitive and marketable workforce, institutions of higher education whose research and technology transfer capabilities focus on innovations, local governments that direct scarce resources toward balancing quality-of-life and business growth, and an overarching support network for emerging businesses

that create higher-wage, higher-skill jobs and have the potential to be competitive in the global marketplace.

The economic development component of disaster recovery may well be at its best when least seen as being in crisis following a disaster. Strategies that incorporate economic diversification, expanding and enhancing innovation clusters, supporting new business growth, and mitigating disaster impacts on existing businesses are critical. These principles make the region stronger and safer economically and, in the event of a disaster or economic loss, set the course for rapid deployment of resources not only to recover but to advance competitiveness.

The goal of forward-thinking economic development is to engage both the public and private sectors to structure a regional economy built on marketplace realities, economic diversification, and regional innovation clusters. The public sector must be as cognizant of marketplace trends as the private sector and gravitate to a policy of supporting the private sector's capacity to compete and innovate in the ever-changing global marketplace.

Planning for disasters and taking action to mitigate their economic impact is a critical component of economic development and recovery from a disaster. Success requires a comprehensive approach, collaboration between and among diverse groups, and agreement on the region's long-term economic goals.

Disasters, as tragic and disruptive as they can be, can also present opportunity once the profound shock of loss is past. The message here is that economic development is a team sport in which everyone has a specific job to do but with a common mission: to win in an ever-changing global economy.



By Margaret A. Davidson

Margaret Davidson is director of the National Oceanic and Atmospheric Administration Coastal Services Center.

Sustainable Development in Coastal Communities

Natural disasters such as hurricanes, typhoons, and nor'easters have the potential to impact almost the entire U.S. coastline, as can other coastal hazards such as tsunamis, floods, earthquakes, and landslides. Indeed, nearly 70% of repetitive flood losses in the United States are in coastal counties.

When you consider that more than 50% of the nation's population lives on the coast, and nearly 60% of the nation's gross national product comes from coastal counties, it is clear coastal disasters affect our national economic well-being.

Sustaining the productivity of our coasts—the golden goose of our national economy—is a national issue.

Hurricanes Katrina, Rita, and Wilma—as well as impacts from climate change such as sea level rise—have spurred coastal communities, organizations, and governments to begin taking action to plan for and adapt to impacts of future disasters.

Creating resilient communities goes beyond just preparing for disasters. Resilient communities are able to adapt and maintain an acceptable level of functioning and structure in the face of adversity in all areas—socially, culturally, environmentally, and, most important, economically.

Creating resilient coastal communities requires all levels of government and society to work together to learn from the past and each other to reduce risks, to plan and prepare for a better future, and to be ready to respond and rebound if the worst does happen.

Both small and large businesses are vital partners in strategic economic planning. Businesses that are built with safer standards, in safer locations,



and with emergency plans for everything from locating employees to financing are able to return to operations more quickly after a disaster.

Getting a business open after a disaster, however, is somewhat dependent on getting the community up and running. In order for employees to get to work, roads need to be passable, gas needs to be available, and schools and banks need to be open.

Businesses' ability to rebound after a disaster contributes to economic stability, not just for local communities and states, but ultimately for our nation.

A healthy environment also contributes to a healthy economy, as well as resilient communities. Our nation's coastal resources are critical sources of food, medicine, and energy. They provide recreational opportunities that improve residents' quality of life. Natural features such as wetlands serve as buffers for flood impacts and filter impurities from water. These critical environmental contributions must be taken into account when planning for resilient communities and economies.

Taking the potential impacts from natural disasters or climate change into consideration when planning future

projects or upgrading infrastructure, and spending a little extra money today, could save significant amounts of money later.

Investments that help us reduce our losses from disasters, such as coastal flooding, drought, or wildfires, will also help reduce losses from the larger-scale impacts of climate change—a most excellent return on investment in risk-wise strategies today.

The leadership of the U.S. Chamber of Commerce BCLC is going a long way to advance integrated planning that will lead to more resilient coastal communities.

The National Oceanic and Atmospheric Administration's (NOAA) Coastal Services Center is also committed to collaboration with partners such as the BCLC to define key community resilience factors, identify critical linkages across all sectors, and enable community-based adaptive management techniques.

Collaborative partnerships are key to creating more sustainable coastal communities. The Coastal Services Center and NOAA are working hard to help provide the needed tools, data, information, and partnerships to prepare for, predict, and respond to future disasters.



By Matt Campbell

Matt Campbell is the national coordinator for Emergency Support Function #14, Long-Term Community Recovery, at the Federal Emergency Management Agency.

FEMA, Long-Term Recovery, and Private Sector Engagement

The nation's approach to providing disaster recovery assistance continues to move forward with fervent strides. As lessons learned push complex disaster recovery issues into the spotlight, the value of strong partnerships between governments at all levels, nongovernmental organizations, and the private sector is evident.

In his service as Florida's director of emergency management, the Federal Emergency Management Agency's (FEMA) new administrator, Craig Fugate, was instrumental in developing the state's Post Disaster Redevelopment Planning program, which serves as a model for recovery planning. In it, the business community is integral in shaping and, in many cases, leading disaster recovery.

Administrator Fugate began sharing his vision of recovery planning on his first day at FEMA. He met with senior leaders of more than two dozen U.S. trade associations at FEMA headquarters in Washington, D.C., on June 3, to prepare for the 2009 hurricane season. There he shared the measure he uses for successful long-term community recovery: "reestablishing the community's tax base within five years of the disaster."

He echoed that message the following day when he briefed members of the U.S. Senate's Subcommittee on Disaster Recovery about FEMA's preparedness for the 2009 hurricane season.

"The tax base is the single best measure of the economic health of the community," he explained. "It's not biased and you can read the balance sheet and see what's going on. It tells us how many homes we have, if businesses are getting permits, if people are buying cars; it tells me that we can provide services such as schools."



Administrator Fugate said that impacted communities that seek federal recovery funds such as Community Development Block Grant dollars and job training dollars would benefit from applying those funds strategically. For example, communities could plan job training programs in industries that promise economic sustenance and growth.

Fugate also believes that communities benefit from taking an integrated view of recovery. “If the community has not recovered to provide schools, housing, a safe environment, then your workforce may move,” he said.

One of the mechanisms the federal government employs when extraordinary disasters require a coordinated federal response to address long-term impacts, such as on housing, agriculture, businesses, and employment, is Emergency Support Function (ESF) #14, Long-Term Community Recovery.

ESF #14 is a partnership of 18 federal agencies and organizations and is led by FEMA’s Long-Term Community Recovery Branch within its Disaster Assistance Directorate.

This past year was busy and productive in the ESF #14 arena. Throughout the year, the office deployed teams of specialists to disasters in 26 communities across 11 states. On a few of the larger incidents, FEMA’s Long-Term Community Recovery Office worked with FEMA’s Office of External Affairs’ new Private Sector Division to further engage the private sector.

After Hurricane Ike devastated Texas coastal communities during the second week of September 2008, ESF #15 External Affairs’ Private Sector team publicized ESF #14’s community recovery meetings in its weekly e-mail



newsletters, sent to more than 2,000 private sector organizations in the impacted region. The two offices worked together to convene a private sector working group composed of Texas coastal chambers of commerce, major employers, trade associations, and academic institutions to discuss challenges and identify what employers needed to get back to normal operations.

The recovery from Ike further illustrates how ESF #14 partners with a community. The city of Galveston formed a 330-person Galveston Community Recovery Committee (GCRC) to develop a plan with the support of City Hall and FEMA’s ESF #14 team.

Because many residents were still displaced, the committee and ESF #14 held 10 community open houses aimed at gathering input on the city’s future. Over several months, the committee developed 40 projects seen as key components of the city’s recovery in a plan that was submitted to the city council and accepted on April 9, 2009.

Moving forward, FEMA is actively expanding and training teams of reservists to help achieve the agency’s objectives for long-term community recovery and private sector recovery in U.S. communities impacted by disasters. For information, see www.fema.gov/career or www.fema.gov/about/dae.shtm.



By Mary Wong

Mary Wong is president of the
Office Depot Foundation.

Communication and Disaster Management

In the introduction to their 2008 book, *Disaster Communications in a Changing Media World*, authors George Haddow and Kim Haddow characterized communication as “core to the success of disaster mitigation, preparedness, response, and recovery.”

Their position could not have been stated more emphatically: “The ability to disseminate accurate information to the general public, elected officials, community leaders and the media reduces risk, saves lives and property, and speeds recovery.”

At the same time, they acknowledge, “the government’s historical role as gatekeeper is now an anachronism, [while] traditional media’s role as the sole conduit of reliable and officially sanctioned information has been eclipsed by the increasing use and influence of new media.”

As all of us who have anything to do with communicating are keenly aware, the times, they are a-changin’. Concepts that were not even imagined a few years ago are now in the forefront of our collective consciousness. Twitter, Facebook, and other social media innovations are drawing us further and faster into a world where the process of communicating never rests.

While many of the tools are new, the fundamental purposes of communication in times of crisis remain the same: to help people prepare to the greatest extent possible, respond to the immediate aftermath of a disaster, and then take the first steps down the road to recovery.

One reason that the Office Depot Foundation has been so supportive of the U.S. Chamber of Commerce BCLC’s Business Disaster Assistance and Recovery program is that BCLC “gets it.” Everyone involved in this venture is committed to facilitating stronger and more effective communication and coordination among



BCLC & The Office Depot Foundation are offering:
The National Disaster Help Desk for Business
1-888-MY-BIZ-HELP

all the stakeholders that come into play along the disaster continuum. BCLC understands that you cannot wait to begin communicating until after the power goes out!

We have personally witnessed the critical role that communication plays through our sponsorship of BCLC's National Disaster Help Desk for Business (**1-888-MY-BIZ-HELP**). Piloted in 2007 and rolled out in 2008, the Help Desk provides on-the-ground coordination of information among businesses, local chambers of commerce, civil society organizations, government responders, and disaster recovery specialists.

According to Ines Pearce, chief executive of Pearce Global Partners and a consultant to BCLC, "The National Disaster Help Desk for Business provides a critical resource in disaster-stricken communities. When businesses or people are so overwhelmed and not sure where to go next, we can help direct them to local, state or national resources they likely know nothing about due to disconnected information, or because they have been without power and unable to receive details. We provide national guidance on local events by information-sharing so donors can hear which organizations are servicing businesses and long-term recovery."

She adds, "Through the Help Desk, I have seen how communities working together cooperatively during, after,

and especially before a disaster can shorten their recovery time to restore critical services and open business doors to support the local economy."

During the Help Desk's first full year of operation in 2008, nearly 1,500 calls for assistance were received and answered. In a year that included two major hurricanes on the Gulf Coast, a persistent tropical storm in Florida, severe flooding in the Midwest, and a catastrophic earthquake and typhoon overseas, the initiation of the Help Desk could not have been timelier.

At the Office Depot Foundation, we are pleased to play a role in supporting this endeavor, which is consistent with one of our key strategic priorities: enhancing disaster relief and recovery. We believe that the Help Desk offers an outstanding example of how diverse stakeholders can coordinate their efforts and expertise to accomplish vitally important goals.

It is our hope that this endeavor will inspire others in the public and private sectors to seek even more ways to utilize the ever-growing range of communications channels before, during, and after disasters.

To learn more about the National Disaster Help Desk for Business, please visit www.uschamber.com/bclc/programs/disaster/888mybizhelp.



By Kathy Pickus

Kathy Pickus is divisional vice president, global citizenship policy, at Abbott.

Preparing for Disaster before It Strikes

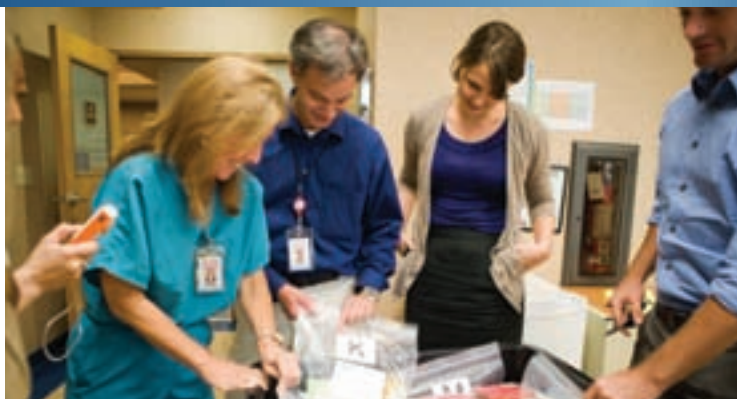
When Americans see images of people suffering from the ravages of natural disasters, they rise to the occasion, whether the victims live in Texas, Louisiana, or China. And when a crisis hits, the needs of the victims are immediate.

But if it is impossible to deliver the needed supplies, no amount of compassion or generosity matters. The time it takes to match the needs of those affected with the contributions of those willing to help can be costly. Transportation and shipping challenges, which can be nearly insurmountable following the mess caused by nature's wrath, only create further delay.

The stakes are high. When it comes to medical products, there is little room for error. Supplies need to match the need and be precisely suitable (language, instructions, expiration dates, strength levels, dosages, heat stability) and in the appropriate quantities for the relief effort to be effective.

That is why it is time to tackle this in a different way. Abbott and our relief partners believe the time to prepare for a disaster is before it strikes. By working in advance to connect donors with organizations able to deliver relief to those in need, countless lives can be saved. This approach, known as "pre-positioning," has already proved effective in providing relief to victims of Hurricanes Ike and Gustav, the California wildfires, the earthquake in Peru, and the cyclone that hit Myanmar. It can serve as a model for minimizing suffering from disasters throughout the world.

During a crisis, roads can be blocked or damaged, and clinics can run short of medical supplies or be overwhelmed by a stampede of people who need help. Being ready for disaster ahead of time can minimize tragedy and suffering, because responders can concentrate on helping people rather than spending energy and time identifying those able to contribute or solving nightmarish



logistical problems. Time can be as precious as the medicine and healthcare supplies themselves. A matter of weeks, days, or even hours can mean the difference between life and death.

Especially now, in the midst of another hurricane season, it is imperative that all who play a role in rescue efforts—the corporate community, government, and relief organizations—continue to embrace smarter, more effective strategies that better prepare us for the worst, even as we hope for the best. We believe that Hurricanes Gustav and Ike have shown that pre-positioning is a successful example of one of those innovative strategies.

Abbott and Direct Relief International (DRI) have worked together to expand our pre-positioning of supplies closer to those who need them—helping to stockpile supplies first in relief organization warehouses, then in free clinics, and now for local relief partners in high-risk regions of the world.

As a result, critical healthcare supplies such as medicine, nutrition products, and glucose meters for diabetes have gone from being as far as weeks away to being available in as little as a few hours. In the past three years, Abbott has contributed more than \$4 million worth of pre-positioned supplies in North America and the Caribbean, mostly in cooperation with DRI and its partners.

The need to prepare for natural calamity is scarcely limited to the United States. Abbott, DRI, and Food for the Poor have expanded pre-positioning efforts to regions of the Caribbean considered to be at high risk of destructive storms. DRI has also created strong partnerships with community clinics throughout the world to address structural gaps in health care exposed during Katrina and other disasters.

In recent years, the world has witnessed what seems to be an uncanny number of natural disasters. Hurricane season in North America is in its fourth month. While it is impossible to prevent suffering, we have the know-how to help minimize it. The pre-positioning strategy being implemented along the coasts can be expanded here at home and replicated around the world with the support of more companies. It is an approach that can save untold lives, not to mention money that can be invested in addressing other urgent needs.

It is impossible to precisely predict the timing and scope of disasters, but we know that more will strike. It is in the calm times before the storms, through the work of pre-positioning, that a better strategy today can translate into more effective action to save lives tomorrow.

For companies willing to pre-position their donations, the time to act is now—before the next disaster strikes.



By Anne Bronson and
Shana Jourdan

Anne Bronson (pictured)
is director of Corporate
Citizenship for Accenture in the
U.S. and Executive Director of
the U.S. Accenture Foundation.

Shana Jourdan is a
Manager within Accenture's
Consulting Practice.

Accenture and Aidmatrix Foundation: Helping Communities Face Disasters

Accenture is recognized as one of the top 100 corporate citizens by CRO Magazine for its commitment to communities, including support of global humanitarian relief. One of the ways Accenture achieves its positive impact is through strategic relationships with nonprofit organizations, such as the Aidmatrix Foundation.

The Aidmatrix Foundation provides supply chain management and Internet-based technologies to help relief agencies get the right aid to the right place at the right time. Intrigued by their shared goal of creating high-performance solutions and their proactive approach in the realm of humanitarian aid, Accenture started working with Aidmatrix throughout the United States eight years ago.

Since then, this relationship has expanded across geographies. Accenture's support, coupled with Aidmatrix's supply chain technology solutions, has enabled relief agencies to help 65 million people and mobilize more than \$10 billion in aid.

Over the life of the relationship, Accenture and the Accenture Foundations have provided more than \$2.5 million in grants, as well as significant pro bono and employee volunteer time, to support the development of the Aidmatrix Network, which now operates in a dozen countries across three continents.

The Aidmatrix supply chain solution was first used to help bring food and medical assistance to those most in need on a day-to-day basis, partnering with organizations such as Feeding America and the National Association of Free Clinics.



When Hurricanes Katrina and Rita devastated some parts of the United States, the network was put to the test. Aidmatrix took over inventory management and coordinated aid delivery of supplies from 15 warehouses used by multiple relief agencies. Within a few days, it helped provide assistance to more than 300,000 people. These results validated the efforts of Aidmatrix and provided evidence of the value of Accenture’s strategic relationship with the organization.

In addition to supporting Aidmatrix’s international work, Accenture and the Accenture Foundations have donated funding, pro bono resources, and additional subject matter experience to assist Aidmatrix in implementing the FEMA National Donations Management Network initiative.

As disaster victims rely on FEMA, nonprofit agencies use the Aidmatrix Network to ensure that specific needs—clothing, food, and cash—are matched against donated items and delivered to people at the right time. The results are that relief organizations and government

agencies in the United States can process millions of pounds of relief supplies more efficiently with less waste. In addition, they can match volunteers with opportunities and, in doing so, improve the lives of countless people throughout the country.

The overall goal is threefold: to be as proactive and prepared for disasters as possible, to be able to react quickly after disasters to support emergency relief efforts, and to support longer-term reconstruction initiatives.

Accenture and Aidmatrix share a passion for helping people and believe technology is essential to prepare for and recover from disasters. As a result of this collaborative effort, communities and individuals are better able to recover after a disaster occurs, and have the tools to facilitate both long-term recovery and future disaster preparedness.

Together we are helping to bring high performance to both humanitarian aid efforts and the broader nonprofit sector.

What to Do When Storms Hit Hard

Soon after Hurricane Gustav made a surprise inland assault on Baton Rouge, Louisiana, last September, Tom Moeller, ExxonMobil director of refining, Americas, arrived in the city to survey the storm damage that had shut down operations at the company's second-largest U.S. refinery.

En route from the airport, he observed long lines of anxious motorists at the few service stations that had the fuel, electrical power, and staffing to remain open for business.

"Scenes like that illustrate the role our industry plays in supporting the everyday infrastructure of society," says Moeller. "It's why we needed to get back up and running quickly."

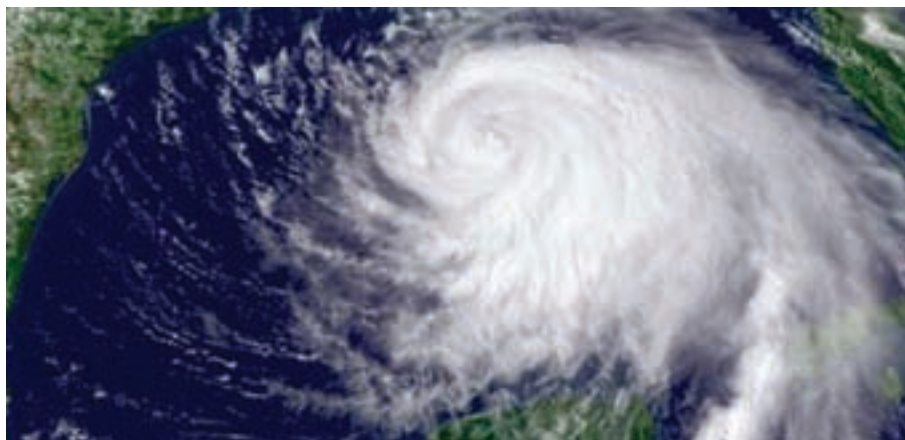
As storms approach, ExxonMobil's goal is to keep operations in the region going wherever they safely can. Where business is interrupted, company teams work quickly to restore product supply—or develop alternate, interim solutions. And they do it on a foundation of rigorous planning and preparation that has repeatedly kept ExxonMobil a step ahead of the industry in times of crisis.

Lessons Learned

Taking lessons learned from such storms as Gustav and Ike in 2008 and Katrina and Rita in 2005, the company's hurricane response teams routinely conduct training and other emergency-response scenarios.

They fine-tune day-to-day storm-watch action plans and update employee tracking data to make sure workers are safe if they have to evacuate. Team members conduct simulation drills with internal and external partners, and plan where extra fuel might come from. And they provide information, guidance, and support to industry associations, states, counties, and municipalities regarding fuel-specification and other waivers that are considered when a storm is on its way.

By Shelley Moore Christiansen
and Richard Cunningham
Richard Cunningham and Shelley
Moore Christiansen are writers for
ExxonMobil's publication, *The Lamp*.



“Our ability to supply fuel to a particular marketplace where and when it’s needed improves dramatically if we can temporarily shift from delivering, for example, 12 formulations to delivering five or six,” says Erskine Frison, products optimization manager, Americas.

“One of the core strengths that sets ExxonMobil apart from other companies during critical periods is the way we’re organized,” says Greg Cunningham, U.S. supply operations manager. “We work with many groups within our company—production, transportation, refining, supply, marketing—on a daily basis within our integrated business team process. During a hurricane, we just take that process and accelerate it.”

Hurricane Watch

ExxonMobil operates four Gulf Coast-area refineries—in Baytown and Beaumont, Texas, and in Baton Rouge and Chalmette, Louisiana—accounting for nearly a quarter of the region’s industry-wide refining capacity of about 8 million barrels of crude oil a day.

When a major hurricane is still seven days away from landfall, it is far too soon to predict which, if any, ExxonMobil refineries may be affected. Nevertheless,

preemptive inspections and preparations occur to ensure that facilities are well prepared for severe weather conditions.

As the landfall clock winds down, the hurricane’s path may still be uncertain. “But once it hits, you can’t hide,” says Moeller. So, with about four days to go, the coastal refineries (Baytown, Beaumont, and Chalmette) either shut down or shift into what is called “safe park,” a reduced output state that helps conserve crude oil and other key supplies that may soon be interrupted by the storm.

Whereas refineries close to the coast are more exposed to the effects of severe weather, Baton Rouge, a hundred miles inland, is more protected and more likely to maintain operations. After a storm, Baton Rouge’s continued output can become vital to the industry as a whole, providing emergency supplies to downstream pipelines and terminals to keep fuel moving to regions far away from impacted areas.

Helping Communities and Businesses

“For hurricanes, we expand our philosophy of keeping our own system adequately supplied to one of helping the overall industry get back to normal,” says Cunningham.

STRATEGIES FOR LONG-TERM RECOVERY AND DEVELOPMENT



Read Our Blog

www.bclcblog.com

ExxonMobil refineries also help their surrounding communities during power outages, providing electricity from their cogeneration plants for use by area households and businesses.

The company's supply organization identifies and buys additional volumes of fuel before it is clear that the company needs them to make up for the shortfalls that sometimes occur. These supplies may come from locations several days away, such as New York. They may even be cargoes at sea: During Hurricanes Gustav and Ike, the company diverted 14 waterborne cargoes from other geographic markets, including Europe and Asia, to fill gaps in supply while the Texas and Louisiana refineries were coming back up.

"From the downstream perspective, our biggest challenge is to keep fuel moving, not only to customers in the hurricane zones but to all the others who depend on refined products from the Gulf Coast," says Mark DiZio, manager of global products supply and trading.

"People in places like North Carolina sometimes wonder, 'If the hurricane struck Texas, why are we without gasoline?'" adds John Palaszczuk, manager



of U.S. product trading. “The answer is often related to the length and complexity of the supply chain, variations in product specifications, and industry infrastructure.”

Minimizing those disruptions on a local, regional, or national level is a top priority for ExxonMobil and its affiliates. For example, the company’s marine affiliates play a vital role in maintaining the critical flow of energy by safely and efficiently moving or redirecting important cargoes to affected markets to help restore the flow of crude oil, feedstocks, refined products, and chemicals.



“For hurricanes, we expand our philosophy of keeping our own system adequately supplied to one of helping the overall industry get back to normal.”

ExxonMobil Pipeline Company (EMPCo) also plays a critical infrastructure role to minimize the impact of hurricanes on deliveries of crude and refined products. Securing and coordinating the placement of portable generators at key pipeline and terminal facilities is but one example of EMPCo’s efforts to restore power and resume operations quickly, safely, and flawlessly.

Focused Response to Hurricane Fury

Although hurricane landfall, severity, and impact are unpredictable, the ExxonMobil response is second to none. The focus is on taking care of our people, facilities, customers, and communities where we operate.

“We plan, prepare, and have strong processes in place across the downstream to deal with hurricanes,” notes Denny Houston, who leads the downstream hurricane response organization. “We quickly and fully utilize our flexibility, experience, and global collaboration to manage the response.”



Chapter 2: Systems and Functions in Action

Did you know that a Web site exists that helps facilitate recovery in disaster locations by increasing knowledge about the job opportunities in those areas?

Did you know that the state of Louisiana has an established business-government coordination system?

Did you know that there is a phone number that local businesses can call to receive individual disaster recovery assistance?

Finally, did you know about the Small Business Administration's role in long-term disaster recovery, how geographic information system technology can give our communities a head start, or exactly what the National Hurricane Center does to protect our nation?

This chapter describes these various systems that help protect us and our communities from disasters. Systems like these were not designed in the midst of disaster responses, but have emerged as proactive steps to protect communities that experience disasters.

If this list of services seems incomplete, that is because it is. Many localities and states have their own preparedness systems or are developing new capabilities. However, there are still some significant gaps in disaster resilience and recovery systems, and more needs to be done.

The following stories showcase building blocks for the future.



By Ed Rappaport

Ed Rappaport is the deputy director of the National Hurricane Center.

Keeping You Safe and Warned

Most people know the National Hurricane Center (NHC) for the hurricane forecasts and warnings its 11-member Hurricane Specialist Unit issues during the summer and fall hurricane season.

NHC often takes center stage when a hurricane threatens the nation, providing nearly continuous live television and radio briefings on its storm analyses and predictions. NHC delivers its products and services through other media too. Its Web sites (www.nhc.noaa.gov and www.hurricanes.gov) provide a full spectrum of graphics and text products, with upwards of 2 billion hits a day.

These real-time communications, and NHC's intensive outreach and education efforts to improve public hurricane preparedness, maximize the utility of NHC's information and give great visibility to the Center's hurricane program.

Less well known in some circles, but just as vital, is NHC's Tropical Analysis and Forecast Branch (TAFB). TAFB's staff of 18 scientists actually generates the majority of NHC's products, focusing on maritime users spanning an enormous area—roughly 14 million square miles of ocean.

This area of responsibility stretches westward from near the Atlantic coast of Africa almost to Hawaii in the eastern North Pacific Ocean. The northern boundary runs along 30° to 31°N latitude—or a line passing near or a little south of Bermuda, Jacksonville, New Orleans, Houston, and San Diego. The southern boundary is the equator in the Atlantic area and about 18.5°S latitude in the eastern South Pacific Ocean.

TAFB uses a variety of observational data—including images from NOAA satellites—and computer model simulations to develop its suite of more than 100 daily marine and tropical weather notices. These products provide year-round critical wind, wave, rain, and other information to mariners and international meteorological services. The forecasts extend out to as much as five days into the future.



Chances are you have benefited, perhaps without knowing, from TAFB's work, especially if you have ever been out for a relaxing day of boating off the Texas coast, on a transatlantic cruise out of Florida, deep-sea fishing off of Baja California, snorkeling in the Caribbean, or awaiting delivery from a cargo ship arriving at a southern U.S. port.

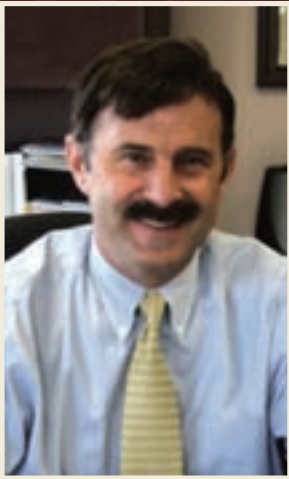
The wide variety of TAFB product users, located at sometimes remote ocean sites, requires TAFB to use such special communications methods as radiofacsimile, Navigation Telex Radio (known as NAVTEX), International Mobile Satellite Organization SafetyNET, and sideband radio voice broadcasts. These supplement more conventional means (for example, TAFB information is also available on the Web, at the sites noted above).

TAFB also has customers within NHC. The Hurricane Specialists rely heavily on TAFB's satellite experts' estimates of the location and strength of tropical cyclones and their precursors. TAFB staff also play a key role, again

mainly behind the scenes, in augmenting the Hurricane Specialist Unit during U.S. hurricane landfall threats by analyzing data, providing briefings, and helping prepare NHC's hurricane advisories.

TAFB employs the newest in science and technology to improve its forecast accuracy and product types, formats, and communication protocols. Currently, TAFB is developing and testing the capability to offer gridded versions of its forecast information.

Such products will provide more easily and clearly the quantitative details required by the mariner, and will do so for their specified location and route. Through such forecast and developmental efforts, TAFB intends to remain our nation's source for operational weather and ocean information designed to maximize safety and efficiency over the tropical and subtropical waters of our part of the world. TAFB does that well, mostly outside the limelight.



By Pug Guttridge and
Simon Thompson

Pug Guttridge (pictured)
is president of Cherokee
Information Services, and
Simon Thompson is director of
commercial business industry
at ESRI.

GIS Technology Gives Communities a Head Start

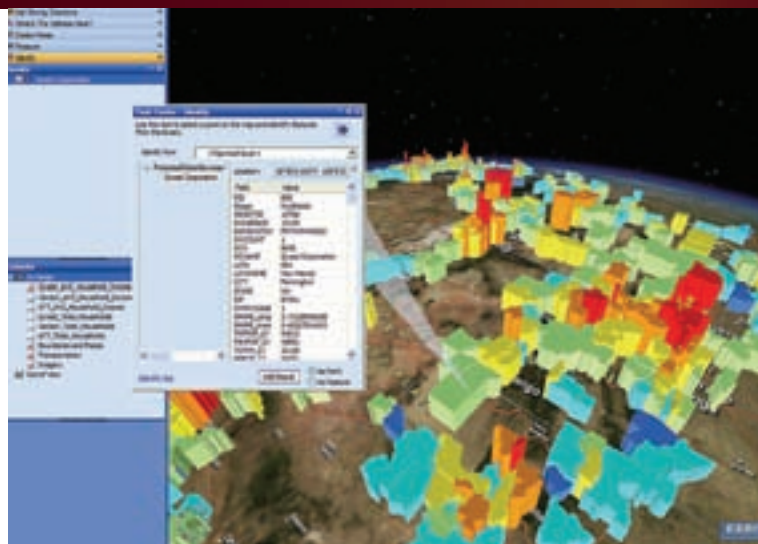
Disasters happen. While we don't like to think about them, we have to plan for them.

A disaster response plan not only minimizes the loss of life and property but also enables communities and individuals to achieve a degree of normalcy much more quickly after a devastating event. Communities, businesses, and agencies that have successfully pulled themselves up after a disaster find that their recovery started in the planning process.

Geographic information system (GIS) technology is a powerful data management tool that strings together unconnected data sources for quicker analysis, organization, and sharing of information. This power is being used in today's business enterprise to manage operations and for business continuity planning. While you may not be familiar with GIS, you are familiar with its main form of communication—a map.

Whether we are navigating to destinations or choosing restaurants to visit, maps are necessary for decision-making in our everyday lives. The same holds true for businesses that use GIS. For example,

- Apex Office Supply, a small business in Vinton, Iowa, uses GIS to effectively deliver products even during inclement weather such as severe snowstorms. If roads are closed for a day, instead of rerouting all deliveries laboriously by hand, Apex uses GIS to easily reroute and include these deliveries with the next day's scheduled shipments. Using GIS allows the company to meet its customers' expectations, even when faced with unforeseen circumstances.
- Southern Company, a superregional energy company and one of the largest producers of electricity in the United States, relies on GIS across



its enterprise for analysis, visualization, and decision support. This reliance allowed the company to respond quickly to Hurricane Katrina, which wiped out all the power to Mississippi Power Company's 195,000 customers in homes and businesses in 23 counties. In only 12 days, Southern Company restored service to all customers whose homes and businesses were not destroyed.

GIS allows staff members to evaluate information in relation to potential disruptions in ways that are not possible with text or tabular representations of the same data. Not only does GIS provide a graphic user interface that enables the user to quickly navigate through geospatial data, including complex three-dimensional datasets, it also enables organizations to visualize and maintain overall situational awareness during normal operations and emergencies.

GIS makes many activities possible by allowing users to see where everything is located. These activities include damage assessment and repair, employee and family notification, evacuations, facilities mapping, selection of alternative sites, supply chain assessment, action planning, and command system operations.

Having a complete view of information by combining building plans, street maps, mapping of real-time weather, and employee and asset information improves decision-making in the response phase. The ability of GIS to model what-if scenarios can also help improve the recovery phase by identifying challenges and analyzing alternatives during the transition from response to recovery.

Preparing for and recovering from a disaster requires coordination and collaboration among many entities: government agencies, elected officials, privately held businesses, the community, and others.

Collecting information, analyzing vulnerabilities, developing mitigation strategies, and managing risk preparedness can be daunting. GIS has proven its value during emergencies, enabling users to share information and improve incident response decision-making. The same benefit can be gained by using GIS before a crisis to identify high-risk areas and evaluate damage mitigation and recovery plans.

Communities, businesses, and organizations can rebound from unforeseen events with planning and the use of GIS.



By Ines Pearce

Ines Pearce is chief executive of Pearce Global Partners and senior consultant and Help Desk manager at the Business Civic Leadership Center.

A Communication and Coordination System: 888-MY-BIZ-HELP

It has been proven time and time again that when a community has planned for a disaster, practiced the response, and organized to mitigate adverse consequences, the community impact is ultimately much less. An added tool in the community arsenal is the U.S. Chamber's BCLC National Disaster Help Desk for Businesses (**1-888-MY-BIZ-HELP**), thanks to generous funding from the Office Depot Foundation.

Throughout the year, the Help Desk monitors potential disaster events across the United States to track those that may require coordination between BCLC, federal agencies, local chambers of commerce, the business community, and nonprofits. As events unfold, the Help Desk can add staff as needed and respond quickly to calls from the public.

During "peacetime," the Help Desk focuses on one disaster-prone community per month to build a database of contacts that can be called on during a disaster. Disasters leave little time to make the calls necessary for comprehensive coordination. So, it is important to have a database of local stakeholders who will be disaster response and recovery leaders in their communities. It is also important to have alternative methods to connect, because local organizations may have evacuated before the event or may not have power after it.

If there is warning, the Help Desk will reach out to potentially impacted chambers, governments, and emergency management offices at the state and local levels as well as nonprofits. By establishing contact ahead of time, we can get updated information such as evacuation plans and also begin early discussions on needs and information sharing.



Before Hurricane Gustav in 2008, we were getting reports from evacuated chambers regarding when they planned to return and, later on, what they needed. The Help Desk was then able to share information from some of the hardest-hit areas, such as Houma, Louisiana, and redirect resources such as food and supplies that would have been sent elsewhere.

The Help Desk approaches every disaster and every community differently, but it is important for us to determine what is needed and fill that gap as well as possible. The role of the Help Desk is to support, not supplant, existing systems, so if communications are broken, the Help Desk can be a conduit through which information is funneled to reach needed resources.

The Help Desk's outreach works directly with local impacted chambers, businesses, governments, and nonprofits, gathering status information and learning what is needed. In turn, we share that information with resources at the local, state, and national levels. By connecting directly to communities, the Help Desk can gather information on which organizations are assisting businesses with recovery or establishing recovery funds. We can share that information with BCLC's national partners, who can contribute directly to local recovery.

Incoming Help Desk requests come in many forms, ranging from homeowners who lost their homes and need everything, local businesses looking for federal assistance, a food bank without power needing to feed 200 families, a chamber president in need of moral support, national businesses looking to contribute to local organizations, contractors looking to work/volunteer, and people lost in information overload, to many others.

Today, in fact, the Help Desk might receive a call from a family planning to vacation in Galveston, Texas, wanting to know how the recovery is progressing and whether restaurants and businesses are open. We would put them in touch with economic development and other resources with details of community events and activities. This is just one example of a service the Help Desk provides to assist communities who have survived a disaster and still need recovery support.

In 2008, the Help Desk was actively involved in the Myanmar cyclone, China's earthquake, Iowa flooding, Tropical Storm Fay, Hurricane Gustav, Hurricane Ike, and many smaller events. In each instance, the most valuable role of the Help Desk was information sharing and coordination. By connecting two entities that would not otherwise know each other, we can facilitate attention where it is most needed and lessen the burden on the local community.

We cannot keep hurricanes, earthquakes, tornados, or floods from occurring, but we can connect people and organizations with resources to hasten recovery. Through the Help Desk, we can work together more efficiently through shared networks to help communities recover and make them more disaster resilient in the process.



By Admiral Steven Smith
Steven G. Smith, Rear Admiral, U.S. Navy (Ret.), is chief of the Executive Office of Disaster Strategic Planning and Operations at the U.S. Small Business Administration.

SBA Resources and Partnerships

The Small Business Administration (SBA) plays a central role in long-term disaster recovery as the nation's disaster bank. Through its Disaster Assistance Loan programs, SBA annually approves more than \$1 billion in aid to homeowners, renters, and businesses of all sizes.

The assistance that SBA provides to those impacted by disaster is but one piece of overall long-term recovery from a disaster. Long-term disaster recovery is measured in years and requires leadership and close coordination between federal, state, and local governments—and, just as important, partnership with the private sector. Government assistance alone will not make disaster-damaged communities whole again.

When a qualifying disaster hits, SBA provides low-interest loans for recovery assistance. Home loans of up to \$200,000 and business loans of up to \$2 million are available. SBA property loans address uninsured property losses. SBA also provides business operating capital in the form of economic injury disaster loans to businesses that have sustained cash flow disruptions through the impact of a disaster.

The disaster assistance loan program is one SBA program that is not limited to small businesses; in fact, about 80% of SBA disaster lending is to homeowners.

SBA disaster loans are direct loans of government money at very low interest rates. The availability of these loans is not influenced by credit markets or the willingness of commercial banks to lend. However, SBA assistance is in the form of loans, and the borrowers must have the ability to repay. While SBA endeavors to help as many as possible, not all disaster victims and impacted businesses will qualify.



SBA encourages small-business owners to take advantage of the counseling services SBA offers with our resource partners, the Small Business Development Centers, and SCORE. Counseling on business disaster preparedness can ensure resilience and quicker recovery. After a disaster, a smart, well-constructed and reevaluated business plan can make the difference between business success and failure. Business conditions and opportunities may have materially changed. Our experienced counselors have been through disasters before. They are smart, experienced, knowledgeable, and ready to help.

Recovery is a bigger challenge than can be met by loans and advice alone. Even with the maximum possible benefit from well-delivered government programs, there are going to be unmet needs. Sustained recovery must involve partnership with the private sector—not simply the invaluable donations that many businesses make but also investment in the redevelopment of the community.

Needed in recovering disaster areas are both capital investments to develop new small and large businesses, and commitments from outside companies to do business and bring resources.

In the future, the public and private sectors could partner to determine how to meet business and community

needs for the redevelopment of an area impacted by disaster, whether natural or economic. Leadership must be local, but supporting partnerships need not be. What is needed is public-private cooperation to foster innovation incubators and the investment of seed money in promising enterprises. This partnership would be a business profit-making undertaking wherein the best ideas and companies get funded. Investors and government would share risk and both would get a return on their investment.

Disaster recovery is economic development with accelerated focus and intent. There is no end date for disaster recovery, and at some point it becomes indistinguishable from continued economic development. Through public-private partnerships that create frameworks for investment and incubation, recovering regions can grow their own economic future.

To best ensure preparedness, resilience, and speedy recovery from disaster, advance strategic planning is needed. Every disaster is different and every community is different. However, basic recovery needs are pretty constant. To best ensure recovery from disaster, public-private partnerships should be developed and coordinated with government programs so they are ready to go when they are most needed: at the onset of recovery.



By Ann Cramer

Ann Cramer is director of corporate citizenship and corporate affairs at IBM Corporation.

Jobs4Recovery: Building a New Future for Distressed Communities

Hear the word hurricane and what comes to mind are images of fierce winds ripping roofs off buildings, palm trees swaying and dipping toward the pavement, and displaced victims wading through water-clogged streets looking for a dry spot to rest and find shelter. This was the Gulf Coast four years ago.

But after the winds subsided and the waters receded, people needed to go back to work. Simply put, they needed jobs. Providing gainful employment to residents impacted by a disaster plays a critical role in helping communities rebuild and recover.

After Hurricane Katrina ravaged New Orleans and the Gulf Coast in August 2005, questions arose about how technology might be used to aid victims of the disaster. Up to that point, humanitarian relief and technology were two terms not often used in the same sentence.

But this started to change back then, and the connection has only accelerated. The world is becoming flatter, more interconnected, and, in a word, smarter. Facilitating disaster relief by using the capabilities our new, smarter planet offers seemed like a logical next step to IBM and the U.S. Chamber of Commerce BCLC.

Soon after Katrina, we realized the importance to families and communities of getting people back to work as quickly as possible. So the high-tech firm and U.S. Chamber affiliate collaborated to create a practical solution aimed at expediting the job-seeking process.



The result was Jobs4Recovery, a powerful, free, real-world application designed to connect business owners in need of skilled workers with displaced residents seeking job opportunities, all across the Gulf Coast of the United States.

When it launched, workers, volunteers, and employers could search employment information on the Jobs4Recovery Web site that was aggregated from more than 1,000 job boards. All this information was collected and managed by the Direct Employers Association and represented data from dozens of local chambers of commerce, nonprofits, and related job resources.

Google Maps was also implemented on the site, allowing job seekers to identify the geographic location of employment opportunities, which is helpful when calculating commute times.

After Hurricane Katrina, well over 1 million people were displaced. One key challenge facing the Jobs4Recovery program was the migration of local residents away from the impacted areas. Many were living with friends or family in Tennessee, Georgia, Texas, or even farther away.

But because technology is making the planet smarter and more interconnected, anyone with access to the Internet could easily take advantage of Jobs4Recovery. Even if people had moved hundreds or even thousands of miles away, they could still investigate job opportunities back in their hometown or elsewhere across the region.

Although it was initially created to assist victims of the hurricanes that ravaged the southern coast of the United States in the summer of 2005, the program has proven so successful that it has been expanded across the country. Because of the current global financial situation and the



number of communities facing disaster recovery, the number of people looking for work has skyrocketed.

Today, with a fresh new look and new capabilities, cities from Phoenix to Buffalo are actively using the system to connect job seekers with jobs. Quick links allow searches of specific communities that are particularly distressed economically, as well as those that are engaged in recovery from recent disasters.

In its expanded role, Jobs4Recovery now helps workers struggling to find jobs, whether they are victims of a disaster or impacted by the current economic downturn. The program remains dedicated to helping communities quickly return to “business as usual,” with a strategic goal of speeding economic recovery and community rebuilding over the long term.

When people can put bread on the table, the recovery rate of their community accelerates. IBM and BCLC have clearly demonstrated the power of the technology-nonprofit connection to help people rebuild their lives all across the country. When people impacted by disasters get back to their normal lives, the future looks brighter for everyone.



By Ramesh Kolluru,
Ph.D.

Ramesh Kolluru is the
executive director of the
NIMSAT Institute.

Proactive Business Coordination during Gustav and Ike

The problem with “lessons learned” is that they are often forgotten!

Fortunately for Louisiana, one lesson learned during hurricanes Katrina and Rita that was remembered and acted upon during the summer of 2008 is the recognition of the private sector as a full partner in the management of the disaster life cycle. And what a difference it made!

For hurricanes Gustav and Ike, Governor Bobby Jindal set the tone for the state’s response by urging the private sector to be prepared and encouraging public sector officials to engage business and industry in their preparedness and response efforts.

In this article, I chronicle my involvement as the director of the National Incident Management Systems and Advanced Technologies (NIMSAT) Institute with three state agency leaders who understood the value of private sector engagement and epitomized this in their actions.

Mark Cooper, director of the Governor’s Office of Homeland Security and Emergency Preparedness (GOHSEP), led Louisiana’s response with great effectiveness, and leveraged his previous experience developing public-private partnerships as the deputy chief of the Los Angeles County Fire Department.

He invited the NIMSAT Institute to support his efforts to develop relationships with the private sector and nonprofits in preparing for Gustav. The Institute was



embedded within a team led by Tim Barfield, director of the Louisiana Workforce Commission, and an accomplished former executive with the Shaw Group, a Fortune 500 company in Louisiana. It was obvious that both Mark and Tim “got it.”

To develop partnerships, the NIMSAT Institute staff liaised with partners including the FEMA Private Sector Office, U.S. Chamber of Commerce, Business Executives for National Security, and a variety of private sector and nonprofit stakeholders.

Working out of the state Emergency Operations Center (EOC) over a 24-day period spanning Hurricanes Gustav and Ike, the Institute engaged national-scale private sector partners that donated more than \$24 million worth of critically needed products and services. In addition, the Institute facilitated the exchange of information to corporate partners concerning evacuations, reentry, executive declarations regarding fuel restrictions (e.g., summer fuel versus regular), credentialing, and so on. This information-sharing function was extremely rewarding and valuable to all involved.

Stephen Moret, secretary of Louisiana Economic Development (LED), was tasked by the governor to lead the economic impact analysis of Hurricanes Gustav and Ike. LED and its partners launched a campaign to contact more than 1,000 top economic-driver businesses across Louisiana to gather information to assess economic impact and identify critical business needs.

The NIMSAT Institute was involved in this effort, leading the impact assessment on critical infrastructures and key resources (CIKR), as more than 85% of the CIKR is in private sector hands.



The Institute worked with the Department of Homeland Security Office of Infrastructure Protection, GOHSEP, the Civil Air Patrol, Louisiana Oil and Gas Association, and the Louisiana Chemical Association to contact more than 75 companies that operated such facilities. The Institute estimated the direct economic impact of the storms to Louisiana’s CIKR at \$7.6 billion to \$8.3 billion. Governor Jindal used these data and analyses in estimating the overall economic impact of the hurricanes and in seeking federal assistance.

The development of sustained public-private partnerships and a commitment to establish a business EOC led by the NIMSAT Institute opened a new chapter in how Louisiana is gearing up to manage disasters.

The NIMSAT Institute is proud to partner with the State of Louisiana as it develops government-industry partnerships for a resilient America. These partnerships for homeland security and emergency management will serve as the building blocks on which a resilient Louisiana, Gulf of Mexico, and America will be built.



By Ken Sternad

Ken Sternad is president of the UPS Foundation.

Ready to Help

UPS employees and their family members contributed more than 1 million hours of volunteer service in 2008, and through a new skilled-volunteerism initiative are using their unique logistics skills to save lives.

Through a program called Logistics Emergency Teams (LETs), UPS now has a group of trained responders in each international region. The team members have expertise in warehouse and transportation logistics specific to disaster response that can be tapped when it is needed most.

Working Together

Facilitated by the World Economic Forum, LETs is a collaboration of logistics companies, including UPS, TNT, and Agility Logistics, to support the United Nations Logistics Cluster to effect a more efficient humanitarian response in the aftermath of a major catastrophe and subsequent rebuilding efforts.

Indonesia, an area vulnerable to a variety of natural disasters because of its geography, served as the pilot site for the LETs initiative in 2007. There, representatives from each company came together to address local logistics needs. During a monthlong deployment, the participants assessed road, port, and airport conditions and taught aid workers best practices for warehouse safety and how to package goods to minimize damages.

Based on the successful pilot, a formal partnership was announced in January 2008 at the World Economic Forum Meeting in Davos, Switzerland uniting three competing logistics companies and humanitarian organizations in a proactive approach to disaster response.



Safety First

UPS established a steering committee to identify predeployment needs, such as equipment needs, occupational health preparations (e.g., inoculations), travel, and insurance and financial considerations. The committee communicated the assignment requirements to each UPS international region and requested a pool of UPS transportation/logistics professionals who were willing to volunteer to be LETs designated responders with the ability to respond to regional disasters for three to six weeks when activated by the U.N. Logistics Cluster.

Empowering Others

The companies collaborated on the development of a LETs training curriculum, providing an overview of the international relief system, safety, security in the field, and preparation for deployment. UPS hosted training sessions for Europe, Asia, and the Americas region responders, including 17 UPS logisticians and their counterparts from TNT and Agility Logistics, who will deploy as a team in the first 72 hours following a large-scale natural disaster event in their region. Representatives from the World Food Programme, along with medical professionals and U.N.

project leaders with disaster field experience, provided lessons learned from past deployments.

The program has a commitment of support from the UPS Foundation in the event of future disaster response efforts. The LETs initiative is committed to training local staff to enable them to effectively respond to humanitarian crises. A critical part of this initiative is to develop local expertise, which helps the LETs team deliver the critical element of sustainability.

Not a Minute Too Soon

In October 2008, two UPS LETs responders—Abilio (Bill) Torres and John Vera—deployed to Haiti, a nation devastated by hurricanes, to apply their LETs training and logistics expertise to speed emergency food shipments to isolated beneficiaries throughout the flood-ravaged country.

“Right then,” said Vera, “it became apparent that we were part of our own company’s commitment to social responsibility on a global scale—and it filled us with a sense of purpose.”

In addition, through in-kind transportation services, UPS delivered a shipment of water purification powder to provide clean drinking water for 5 million people in Haiti. “We saw firsthand that a mission we had just completed would improve the lives of the people in Cote de Fer with the availability of potable water,” John adds. “It doesn’t matter what company brand you are wearing on your shirt. Bill and I are only two employees of UPS, but our assistance here is making a difference. It’s been a humbling experience.”



By Leslie VanSant

Leslie VanSant is a partner with the Global Emergency Group.

Solutions to Handle Back-to-Back Disasters

Disasters serve as milestones in our personal and community histories. Hurricane Gladys took down the trees beside my grandmother's house and many others in our small town of Southborough, Massachusetts. While the devastation was not headline news across the country, as Hurricanes Andrew or Katrina later would be, the impact of Gladys remains in the collective Southborough memory.

With the effects from disasters growing ever more complex and far-reaching, there is the potential for the memories to be something like, "Hurricane Katrina raised the price of seafood, and consequently our local fish market in Peoria, Illinois, closed." As disasters happen with greater frequency, their ability to affect communities miles away from the "impact zone" grows. The need for preparedness and response planning that incorporates recovery becomes ever more critical.

The purpose of a workshop held by the U.S. Chamber of Commerce BCLC in June 2009 was to raise awareness of transitioning from response to recovery, as well as the

critical role of disaster preparedness. Participants discussed issues and solutions under the umbrella of five key themes: (1) cleanup and restoration of services, (2) logistics and supply chain, (3) communication and public messaging, (4) access to capital and small business recovery, and (5) strategy, planning, and assessment.

Pervasive in each discussion was the global economic recession and how it could potentially impact the next big disaster when need is acute.

The workshop featured a tabletop simulation of three near-simultaneous disasters: seasonal Midwest flooding, a heavy flood-inducing Category 2 hurricane on the U.S.-Mexico border, and a 7.1 earthquake in southern California. The locations of the hurricane and earthquake (ports of Los Angeles and Long Beach) were chosen for their potential spiderweb impact via loss of commerce and disruption to the regional and national supply chain.

For example, as a result of the scenario earthquake, the oil and



gas industry in southern California would be shut down for a minimum of four months to repair the pipelines and refineries, disrupting the local, regional, and national commerce and supply chain. The ports, responsible for 40% of U.S. imports and 80% of container traffic, would be closed or operational at limited capacity, impacting communities and consumers across the country and world. The hurricane had a long-reaching impact on the next year's citrus crop, potentially raising prices for consumers.

During the breakout sessions, critical gaps were exposed in planning, communication, livelihoods and cash flow, public health services, and supply chain impact. BCLC Disaster Assistance and Recovery Working Group Cochairs Mary Wong of the Office Depot Foundation and Ken Sternad of the UPS Foundation challenged participants to come up with action items capable of producing real change in response and recovery.

The group came up with the following action items:

1. Develop standards for immediate emergency response and transition into recovery work, similar to the internationally accepted SPHERE operational standards.
2. Secure an independent entity to evaluate the assistance at the last three major, medium, and small disasters in an effort to map out probable industry-wide response services for future emergencies, identify existing gaps, and compile lessons learned.
3. Take steps for more efficient assessments and planning to define needs more clearly. These needs must have greater visibility to attract new resources and develop the supply chain faster.

4. Engage and build new networks—human, information technology, commercial, and other—to help “rewire” the disaster supply chain.
5. Create a new working group with BCLC and the supply chain industry to consider all risks and establish community alternatives to regional solutions.
6. Disaster recovery centers (DRCs) should be less intimidating. At the beginning of a disaster, a virtual DRC could be created in addition to a simple flow chart indicating what services are available and any thresholds or prerequisites.
7. BCLC should engage the National Ad Council and the National Association of Broadcasters to make public service announcements describing the recovery process and roles in the community.
8. Capital must be tied to long-term recovery, and regulatory processes to capital access should be accelerated.
9. SBA loans and grants should be restructured to make them more attractive to businesses and address the 60- to 90-day cash bubble that hinders the recovery of most small businesses.
10. Comprehensive predisaster frameworks need to be created that will facilitate gathering of information from the physical networks, social demographics, and the participants in a response effort.
11. Recovery plans must be sustainable and incorporate objectives into the immediate operational reality beginning on day one to facilitate a higher level of technical assistance.

A lead person or organization needs to be identified from the very outset of an emergency to design integrated recovery efforts and coordinate all resources for recovery (material, human, financial) to maximize potential.



Chapter 3: Disasters in Specific Geographies

No matter how proactive we are, disasters continue to happen—and with a frequency that has the potential to affect us all.

In 2008, the world faced a number of devastating disasters that affected millions of people. From Cyclone Nargis in Myanmar and the Sichuan earthquake in central China, to flooding in Iowa and hurricanes on the U.S. Gulf Coast, we weathered many storms in 2008.

This chapter focuses on lessons learned from these events. If we do not learn from the successful strategies for dealing with these devastating events, we will be far less equipped to handle what Mother Nature throws at us in the future.



By Chuck Banks

Chuck Banks was the Kansas state director for the U.S. Department of Agriculture during the Greensburg tornado.

Greensburg, Kansas: Two Years Later

Relief and recovery after a disaster are achieved with varying levels of success, depending on whether the losses are to businesses, homes, or public assets. On May 4, 2007, an EF-5 tornado (now ranked by the National Weather Service as the most powerful tornado system ever recorded) almost completely destroyed the town of Greensburg, Kansas, and showed us far more than how devastating a disaster can be to an area.

The Greensburg disaster proved that comprehensive, sustainable, long-term recovery can succeed, even in an economically depressed area where resources are limited.

Prior to the 2007 disaster, the rural community was already in the midst of a decades-long economic decline. With the tornado essentially destroying the town, including most of the businesses and homes along with all of the public buildings, the result could have very easily been the end of the community.

Yet, the first and most important step toward recovery was a groundswell of local support and determination to rebuild, followed by committed community leadership that insisted the town would not be blown away forever; the community would rebuild. In fact, a few days following the disaster, with the assistance of state and federal officials, numerous local leaders were already assessing what was lost and what might be needed for the area to recover.

The second vital part of the successful recovery formula was an early agreement between FEMA and U.S. Department of Agriculture (USDA) Rural Development, a federal agency responsible for delivering community and economic development



financing for rural America. The early partnership to help coordinate the region's recovery has continued throughout the multiyear recovery process.

The third part of the successful recovery formula was the decision by USDA to expand its normal programming to help support the region's recovery by providing additional technical and financial assistance to all sectors of the community. Further, in close partnership with local leaders and its numerous federal and state partners, USDA worked with its many contacts across Kansas and the nation to help secure even more financial and technical assistance. The agency worked around the clock to create multisector partnerships to leverage all resources available to maximize recovery potential.

The fourth part of Greensburg's sustainable long-term recovery effort was the outpouring of external resources to help fill in resource gaps. While insurance proceeds and typical federal assistance (from FEMA and the Small Business Administration) were very helpful, these funds did not cover the full value of the losses, nor did they truly address a variety of additional needs required to help ensure the community's recovery.

In the case of Greensburg, an incredible level of support has come from the private, nonprofit, faith-based, and academic sectors to help fill many of these recovery financing gaps.

Recovery from a major disaster takes place in different ways and on different schedules, but the continued physical presence of key resource partners in Greensburg provided vital technical assistance during the first year following the event. This was another key factor in laying a foundation to support the community's sustainable "green" recovery phase, which continues today.

This ongoing level of technical assistance, combined with continued multisector cooperation, represents the fifth part of the ongoing recovery formula: rebuilding infrastructure, affordable green housing, the business sector, and public services. Community leaders have publicly stated that this external technical assistance has been one of the major reasons for the community's success, establishing the "Greensburg Recovery Model" as the example that should be replicated in future disasters in economically challenging environments.

Clearly, Greensburg will continue to face challenges, whether from natural disasters or economic issues. Yet, the people involved in the process are the true foundation of success in the community. Sustainable success can be achieved only with actively engaged people who support agreed-upon goals, and with qualified professionals who are empowered to execute effective recovery programs.

With its hundreds of dedicated and qualified individuals who worked tirelessly to help make this recovery successful, Greensburg is a clear example of what can be accomplished in future disaster recoveries across the nation.

Cedar Rapids: A Flood Disaster

By Mickie Valente and
John Zakian

Mickie Valente is President of
Valente Strategic Advisers, LLC, and
John Zakian is senior vice president of
strategy at Greater New Orleans, Inc.

June 2008 will be forever etched in the minds of Midwesterners. Record floods inundated dozens of river cities, leaving behind billions of dollars of damage and years of rebuilding ahead.

No city was more impacted by the rising water than Cedar Rapids, Iowa. With flood-water that reached a record 31 feet above flood level and covered 10 square miles, recovery is estimated to cost \$5 billion and is expected to take as many as 15 years to accomplish.

We were two of a five-person team of experts assembled by the U.S. Chamber of Commerce's BCLC and the International Economic Development Council to assist the business and elected leadership of Cedar Rapids in their efforts to assess the scope of the damage, identify the gaps in needed resources, and determine specific action items to promote more effective recovery and rebuilding.

When the team visited Cedar Rapids on July 8 and 9, 2008, we found a city dealing with flood damage that had covered much of the downtown and surrounding low-income neighborhoods, impacting 18,623 of its 126,000 residents. An estimated 7,198 parcels of land were

impacted, including 1,049 commercial and 84 industrial parcels, or a total of 800 businesses, representing one-sixth of the local economy. Most of the flooded houses remained uninhabitable, much of the downtown office space stood empty, and eight downtown cultural facilities were struggling with how to start recovery.

However, most of the area's largest employers did not suffer severe physical facility damage. This was important for a community that depends heavily on agricultural-related manufacturing for jobs, tax revenue, and philanthropic support and investment. The core economic development framework also remained intact, largely thanks to a strong network of business organizations engaged with the Cedar Rapids Area Chamber of Commerce and Priority One, an affiliated regional economic development organization.

After we interviewed dozens of elected officials and business, economic development, community, and cultural affairs leaders, the strengths, weaknesses, threats, and opportunities unique to Cedar Rapids emerged.

It was quickly apparent that no government body or other single organization



could manage the complex flood recovery initiatives that would need to be launched. This topic was a common thread through our discussion with local leadership. The diverse stakeholders came together to form the Recovery and Reinvestment Coordinating Team, which included the chamber of commerce, nonprofit human service groups, arts and cultural interests, the Downtown Business District, and others, which made significant contributions to the city's ongoing recovery.

The community exuded a self-reliant attitude that is not always seen following the shock of a natural disaster. This self-help mind-set was demonstrated throughout the economy as businesses closed by the flood continued to pay employees, banks worked with business owners to avoid foreclosures, and the largest employers stepped up to mentor those struggling to reopen.

Acting as third-party advisers, we were able to offer an unbiased view of how the local economic strategy that existed before the event provided opportunities to make more effective postdisaster redevelopment decisions and to better leverage disaster assistance funds to promote job retention and new job creation.

For instance, shortly before the flood, Cedar Rapids was on the verge of executing a downtown revitalization master plan anchored through a business improvement district. Several major employers also were considering expansion, and there was renewed interest in supporting and nurturing cultural institutions in the city. Though adjustments in goals and timelines were warranted after the flood, the pre-event strategic thinking helped accelerate the city's postflood redevelopment projects.

However, we also witnessed many challenges commonly found in communities recovering from a disaster. We recommended that the leaders take a number of steps, including the following:

- Act on parallel tracks to address immediate flood recovery and long-term redevelopment;
- Identify and develop what were previously nonexistent or weak working relationships with state and federal agencies in order to facilitate maximum financial and technical assistance;
- Develop consistent messaging across the public and private sectors and create a branding campaign that would promote the community without building unattainable expectations;
- Integrate the private sector into every stage of disaster planning, response, recovery, and redevelopment; and
- Organize private resources to leverage government resources, particularly to facilitate business recovery and economic redevelopment.

Lessons are not learned unless similar experiences yield different, more desirable results. To that end, disaster-impacted communities must incorporate lessons from their traumatic experiences into building a new consciousness for future planning. These communities can develop a multifaceted postdisaster redevelopment plan while they are under blue skies.

Such plans, like those currently being developed in coastal communities in Florida, Louisiana, Mississippi, and elsewhere, build on the predictable aftermath of disaster as played out in communities such as Cedar Rapids. Such plans must address a host of critical issues, from rebuilding affordable housing for the workforce to prioritizing the rebuilding critical infrastructure, reestablishing a sense of community, and revitalizing the economy.

In short, the time to think about disasters, to plan for post-disaster, and to determine the roles of public and private organizations in disaster recovery is not after a disaster. It's right now.



By Shannon Meyer

Shannon Meyer is the president and CEO of the Cedar Rapids Area Chamber of Commerce.

Chamber Leads Cedar Rapids Recovery

Last year, the city of Cedar Rapids, Iowa, faced one of the worst national disasters in U.S. history*; the community, its residents, and the business landscape were forever changed. On Friday, June 13, 2008, the Cedar River crested, extending well beyond the 500-year floodplain to cover more than 10 square miles. The water overtook neighborhoods no one ever dreamed would flood and flowed through nearly every downtown business.

During a typical year, the Cedar Rapids Area Chamber of Commerce plays a critical role in economic development, working to positively impact the economic vitality and enhance the quality of life in the region while supporting the growth and prosperity of member businesses.

In the moments prior to and after the flood, the chamber took the helm in leading countless initiatives, and it continues to maintain the charge for economic rebuilding efforts. The chamber's decisive action and passion for revitalizing the region have resulted in thousands of hours of work toward disaster recovery, including key initiatives such as the Job and Small Business Recovery Fund (JSBRF), the business JumpStart program, and Adopt-A-Business.

Getting back to business after the flood of 2008 has weighed heavily on the business community. Business owners invest a tremendous amount of time, money, and resources to make their ventures successful, and in June 2008, more than 700 of them watched this investment wash away in the murky waters of the Cedar River. Despite challenging funding obstacles and an economic downturn, businesses of all sizes and scope are working hard to help rebuild stronger than before—and the chamber is there to help.

While the floodwaters were still raging through the city, the chamber worked with the National Guard to mobilize Operation Skywalk. Small business owners

*Cedar Rapids, Iowa, suffered the fourth largest disaster in U.S. history in terms of public infrastructure.



obtained access through the skywalk system to recover vital equipment for daily operations. Shortly after the floodwaters receded, the chamber partnered with the Greater Cedar Rapids Community Foundation to announce the JSBRF. The fund not only allowed philanthropists the opportunity to assist, but also resulted in direct, critical financial support for flood-impacted businesses.

Beginning with a \$500,000 gift from the chamber, the fund has raised more than \$6 million. Ralph Russell, past chairman of the chamber, states, “Donations to this fund provided grants and zero-percent interest forgivable loans to small businesses that needed it most immediately following the flood.” As a result of this innovative program, the chamber has been able to award 335 businesses disaster recovery checks totaling \$6,053,500.

The success of the JSBRF led the city to request that the chamber serve as the administrator for state and federal financial aid through the business JumpStart program. To date, business JumpStart has helped 700 businesses with \$21 million in funding. But the true story of progressive

disaster recovery is the chamber’s role as fierce advocate for businesses to receive their fair share of disaster funding and for more efficient, flexible funding guidelines.

The chamber Adopt-A-Business program matched 65 flood-damaged businesses with partners in the recovery and rebuilding efforts. The chamber served as the business adoption agency, soliciting adopting businesses and pairing them with businesses needing assistance with mentoring, financial support, sweat equity, equipment, office supplies, and so on. “This simple gesture not only gave these businesses some much-needed help; it gave them a real emotional boost,” says Al Ruffalo, chairman of RuffaloCODY in Cedar Rapids.

The chamber remains committed to establishing creative and innovative solutions for businesses in the midst of disaster recovery. “While the Cedar Rapids community will be rebuilding for years to come, it is organizations like the chamber that give a voice for positive change, provide hope and most of all action in the rebuilding efforts,” states Gary Ficken, president of Bimm Ridder.



By Art Roberts

Art Roberts is senior vice president for chamber relations at the Texas Association of Business.

Being There

Perhaps the single most important factor in assisting communities that have been struck by disastrous events is the simple act of “being there”—at the side of local businesses and industries that are overwhelmed by unforeseen events.

I was quite surprised in the fall of 2008 when our friends on the Gulf Coast were victims to the vagaries of devastating weather events that wiped out so many businesses and homes in their region. However, the surprise came not from the hurricane that ravaged the land, but from the quick response from the U.S. Chamber’s BCLC.

After 39 years in the chamber profession, I was simply unaware of the organization that proved so helpful to local chambers of commerce and other entities in dealing with the unexpected events they faced.

At our organization, the state chamber of commerce in Texas, we immediately started with the obvious: providing space and technology to Gulf Coast chambers that were staying in Austin during the storm, using our computer systems to contact their members. We then assisted them in recovering, appealing to local chambers throughout the state for money, equipment, and assistance to their brothers and sisters along the coast.

Then we learned what we should be doing. The U.S. Chamber’s BCLC team came to us, getting us a seat at the table where the feds (FEMA, SBA, and all major disaster assistance agencies) were working continuously on providing assistance. Our role quickly became obvious: Use our state network to reach local chambers on the coast and, through them, work with city and county leaders in the process of rebuilding and repair.



Then came the most important lesson that BCLC taught: It is vital not to simply “replace” what was there, but rather to look beyond the rebuilding process to try to determine, throughout the region, what long-range strategic solutions and infrastructure replacements could be put in place to make the devastated community better than what had been lost.

The responsibility of every impacted community is not simply “rebuilding” but rather “constructing”—constructing a better place and replacing inefficient infrastructure with structures that will respond to anticipated growth and demand needs. Decisions to return the appearance of a community should first follow studious research on “What should we be?” rather than “How do we get back like we were?”

This idea is not as unique as we might imagine. In reading about the most disastrous hurricane ever to hit American shores, the Galveston, Texas, storm of 1900, I was overwhelmed by two factors: (1) the severity of the storm and (2) the acknowledgment, even then, that simply rebuilding was not the answer. The entire city was raised higher, and the new seawall, at a height of 17 feet, was built along the city’s beaches. This was a huge factor 108 years later in saving Galveston from even more devastation.

The work of the BCLC is, as I have seen firsthand, a constructive solution-driven effort that needs to occur when disaster strikes. It becomes incumbent, however, on us to follow through with what we have learned from it.



By Stuart Myers

Stuart Myers is senior vice president for Project HOPE. He leads HOPE's Global Health, Special Projects, and Gifts-in-Kind programs.

Confronting Health Challenges in Disasters

Founded in 1958, Project HOPE is dedicated to providing lasting solutions to health problems for people around the world, with the mission of helping people to help themselves. In the past decade, Project HOPE has provided humanitarian assistance to people in need from war-related crises, localized earthquakes, flooding, and large-scale disasters such as the Southeast Asia tsunami and Hurricane Katrina.

We have learned that the best way to maximize our humanitarian crisis response and help as many people as possible is to adopt a three-tier effort: immediate response, midterm assistance, and long-term recovery.

Our response effort was put to the test once again on May 12, 2008, when China's Sichuan Province was devastated by a massive earthquake that killed tens of thousands of people and crumpled buildings, schools, and medical facilities. With the help of our generous donors and committed volunteers, and in collaboration with local partners and the Chinese government, Project HOPE responded immediately to the healthcare needs of the people in Sichuan Province and continues to deliver sustainable aid to this day in the form of health education and care.

Immediate Humanitarian Assistance

Project HOPE has had staff and programs in place in China for 26 years and is one of only a few non-Chinese foundations registered by the Ministry of Civil Affairs to work in the country. Project HOPE-trained medical professionals in China were immediately dispatched to the earthquake zone to help survivors. We also began working at home with our supportive corporate and pharmaceutical partners to quickly gather requested medicines and medical supplies.



Medium-Term Medical Assistance

Over the ensuing days and weeks, Project HOPE's staff in China continued to work closely with in-country corporate offices, the Ministry of Health, the Sichuan Bureau of Health, and local hospitals in the quake region to determine the medical needs and deliver more than \$1 million worth of medicines and supplies. These medicines and supplies helped address priority health needs in the earthquake-impacted areas.

Long-Term Recovery

While the landscape was still experiencing aftershocks, local officials and hospital administrators were already communicating the urgent need for more rehabilitation services. In addition to the more than 69,000 deaths caused by the earthquake, 370,000 people were injured. More than 70,000 of those injured, including many children, require long-term rehabilitative care to heal properly. Yet only 420 rehabilitation physicians and therapists were available to provide these medical services in Sichuan Province.

In July 2008, Project HOPE sent an assessment team to the area to further determine the rehabilitative needs of the earthquake victims. Project HOPE worked with the Ministry of Health in China and our corporate partners to help develop a comprehensive rehabilitation program to improve services and train rehabilitative professionals at the local and national levels to ensure that those recovering from the earthquake, especially children, will receive the specialized care they need.

This program is creating, for the first time in China, national standards and a national curriculum for training rehabilitation professionals. The project has been designed not only to meet the urgent rehabilitation needs of earthquake-affected people in Sichuan Province, but also to build the capacity of rehabilitation services in China at both the local and national levels. Through partnering with the Ministry of Health, Project HOPE will help develop and pilot national standardized rehabilitation training materials, rehabilitation service guidelines, and a rehabilitation certification mechanism, to serve more people in the future, both earthquake victims and people with chronic diseases who need rehabilitation services.

This approach has proven effective over the long run in other parts of the world. Following an earthquake in Turkey in August 1999, Project HOPE helped establish a rehabilitation center in Izmit and trained rehabilitation professionals. The center continues to serve local communities. In Indonesia, health indicators are improving in the provinces where Project HOPE has worked to reestablish health centers and train healthcare professionals following the tsunami. And closer to home, a donated mobile dental clinic equipped with funds provided by Project HOPE partners helped restore temporary dental services to Gulf Coast residents following Hurricane Katrina. This mobile dental clinic also helped expand dental capacity to outlying and isolated populations of the region and provides readiness in the event of another debilitating Gulf storm.

By applying a three-tier response effort, Project HOPE and our partners can provide for the immediate needs of those in crisis as well as help improve and build health capacity for years to come.



By David Meltzer

David Meltzer is senior vice president for international services at the American Red Cross.

The Road to Recovery in China

A year after the 8.0-magnitude earthquake killed more than 69,000 people (with another 18,000 still listed as missing) and destroyed an estimated 5 million houses in southwest China, the Red Cross has shifted from providing short-term emergency shelter and relief items to supporting construction of permanent, earthquake-resistant homes and helping people work through their emotional trauma.

After visiting the epicenter of the Sichuan earthquake a few short weeks following the disaster, I told people back home, “The scenario was extraordinarily tragic. The destruction was so extensive it looked like a war zone.”

Just one year later, after returning to the area, I said, “The pace of recovery is remarkable, with tens of thousands of houses already built or under construction with the support of the Red Cross.”

The Chinese government has established an owner-driven housing program that empowers families to rebuild homes that meet their needs. The Red Cross is supporting this program with financial assistance to homeowners, as a supplement to government and other reconstruction support. Most homeowners will use the payments to hire local contractors to construct their houses.

“The Red Cross payment only covers a portion of a family’s reconstruction costs, so it’s really to supplement the family’s own resources and the resources that they’re getting from the government, which includes cash payments as well as a low-interest bank loan,” says Sheila Thornton, an American Red Cross delegate who is serving as head of programs in Chengdu, China, for the International Federation of Red Cross and Red Crescent Societies.



The other component of the Red Cross program is community education. The Red Cross is providing training to homeowners on earthquake-resistant techniques, explaining the government guidelines and how to meet them to ensure that the houses achieve certain standards.

“Ensuring better earthquake-resistant construction methods is a priority for everyone during this recovery phase, in order to help reduce the consequences of a future earthquake,” says Ramsey Rayyis, the American Red Cross senior field representative in China.

In addition to assisting with housing reconstruction, the Red Cross is working closely with the government to restore clean water and sanitation systems for some of the affected

communities, providing help with livelihoods for victims to reestablish a sustainable income for their families, providing disaster management and preparedness training to limit risks in future disasters, and giving psychological support for the longer-term recovery of those affected.

Although houses are being rebuilt quickly, helping children heal emotionally takes more time. The Red Cross is working at the village level using psychosocial support programs to train health professionals, teachers, and schools so they can assist children and communities affected by the disaster. These programs also use tools such as art, role-playing, music, and storytelling to assist teachers and social workers in helping children in up to 30 schools.

“It’s critical to recognize that it’s not just the physical structure of the home, the food, clothing, and the shelter; it’s the mental well-being of these individuals,” says Rayyis.

The American Red Cross committed \$55 million, of which \$16.2 million was directed toward immediate relief activities. The remainder (\$38.8 million) is committed to recovery and disaster preparedness programs to help families recover and rebuild their homes and communities.

The Red Cross is currently rebuilding 329 schools, 1,175 health clinics, and 97 rural community activity centers, along with 70,000 homes. More than 15,000 houses have been completed and 16,000 more are currently under construction. Four schools and 408 hospitals and clinics have also been completed, with much more to be done to recover from this devastating catastrophe.



By Erin Mote

Erin Mote is manager of resource development at CHF International.

Aceh: Sustainable Development after Disasters

Over the past decade, in the wake of disasters, the private sector has unleashed an unprecedented amount of philanthropic support for the communities and the people affected.

Immediate pledges and cash contributions are incredibly important and allow organizations such as CHF International, Oxfam, and the Red Cross to rapidly enter an area and provide immediate relief. However, after the headlines change and the pictures fade, corporations can continue to give to targeted, leveraged investments that support relief—through cash contributions, product support, and technical assistance.

If businesses take this courageous, measured, and informed approach to disaster relief giving, the private sector can become a leading driver in spurring the rapid start-up of economic development, thus shortening the relief-to-development time horizon. There is no better example of the possibility of corporations being a catalyst for sustainable development than CHF International's partnership efforts following December 2004, when a powerful earthquake struck in the Indian Ocean, off the coast of the Indonesian province of Aceh.

Of the 12 nations hit by the resulting tsunami, Indonesia was the most severely affected: 130,000 people confirmed dead, 37,000 missing, and half a million displaced. Following the flood of water, a deluge of international relief resources and personnel descended on an Aceh overwhelmed by donations but lacking key metrics and models to design programs to build a bridge between public donor efforts and private sector support.



CHF International used a different model—one that focused on creating leverage from a wide variety of corporate and public donors to not only meet basic human needs but also build a foundation for an attitude shift from relief and cash-granting to sustainable development and self-reliance for communities.

One example of this approach is the Kick Start Aceh program, funded by Dow Chemical, which supported small-business owners from communities that received housing funding through the United States Agency for International Development (USAID). By working with a group of people whose basic shelter needs had been addressed by a public donor, CHF aimed to complement this funding by quickly rebuilding local business capacity to ensure sustainable economic development.

The Kick Start Aceh program offered business skills training for small businesses and women in which participants were required to pay for their own training—something that had not been required since the tsunami. Paying for training—even a nominal amount—encourages buy-in and commitment from participants that free training does not. It makes participants responsible for their own development and encourages genuine entrepreneurship

and sustainable business propositions. Kick Start Aceh worked with entrepreneurs to restart the engine of sustainable economic growth in local communities.

To continue to drive growth and development, CHF leveraged another corporate contribution alongside its public donor projects to ensure the future training and education of the new generation of young Indonesians. In partnership with the Chevron Global Fund, USAID, and other public donors, CHF constructed a world-class polytechnic facility to train future engineers, business accountants, and information technology specialists—professionals who fulfill local industry requirements and are critical to Indonesia's continued recovery.

What makes Chevron's investment remarkable is that it took the unusual step of resisting the temptation to write a blank check for a stand-alone program in the immediate wake of the disaster, and instead took a deliberately planned approach through partnership with a public donor.

This choice to partner has had an exponentially more profound impact. Chevron's investment focused on aligning its community engagement practice with its core business strategy, thus ensuring the long-term sustainability not only of the facility but the livelihoods of those educated there.

While writing the proverbial blank check can be useful for immediate needs, Chevron, Dow, and CHF International showed a keen eye for understanding that sustainable development requires investment from both the donor and beneficiary that is aligned with business needs. If the funding is not aligned in this way, then even the best intentions will be washed away as the flood of funding recedes.



By Gerald McSwiggan

Gerald McSwiggan is the manager of special projects for the Business Civic Leadership Center at the U.S. Chamber of Commerce.

Controlling Our Own Destiny: A New Approach to Disaster Management

Destiny. This is not a word that is often used by disaster assistance and recovery practitioners. But when devastating disasters strike without warning and take lives, destroy property and livelihoods, and disrupt the fabric of community life, destiny is a word that often comes to mind for those caught in the middle.

When we are not the ones being personally affected, it is very tempting to think about disasters academically. But when disasters become personal, suddenly we wonder if there was anything we could have done to protect ourselves better.

Is it our destiny to be at the complete mercy of nature's power? Or have we gotten to that place in human achievement where we can withstand the extreme forces that confront us?

Last year, we issued a report titled "On the Brink: Re-engineering the Nation's Disaster Response Processes." In it, we catalogued cutting-edge thinking about the next generation of disaster response and recovery. We highlighted the glaring overemphasis on immediate response over long-term recovery. It is not that saving lives is unimportant; it's that restoring livelihoods is also a crucial part of the process.

This year's report has been about moving from being reactive to disasters to being proactive. If our communities are to be prepared to recover from extreme events, our focus needs to change to a regional approach of proactively building resilience into communities and using disasters that occur as a jumping-off point for smart redevelopment to achieve 21st-century competitiveness.



Resilience

Individual preparedness is good, but it is not enough. Imagine that you performed all the mitigation measures possible on your house. You prepared for the worst possible disaster that you could face. Now imagine that this disaster happened and your house survived, but many of the other houses, schools, and hospitals in your neighborhood were severely damaged and many people moved away. In fact, the company that employs you was so badly damaged that it had to close down for six months.

Even though you are glad that you prepared, wouldn't you prefer the whole community to be as resilient as you?

As Stephen Jordan and Michael Gallis have mentioned in this report, communities are made up of systems that are inextricably linked together. In a disaster, if one of those systems (such as the healthcare system) breaks down, it adversely affects the whole community—even those who properly prepared.

Companies in BCLC's Disaster Assistance and Recovery working group are focused on how whole communities can become resilient. This can happen only by bringing the community's key decision-makers together to look systematically at the different parts of the community to determine the spots weak in resilience. It also happens by working with the natural defenses of the particular community, as opposed to simply trying to maintain resilience on one's own.

By proactively determining weak spots early, communities will be better prepared to recover when the disaster actually happens.

Smarter Development

What does long-term recovery really mean? BCLC's recent publication, "A Critical Role: Top Ten Policies that States Need to Recover from Disasters," notes that "community recovery is a complicated process because, even though everyone speaks as though we have a common understanding of what it means, there is, in fact, no standard definition."

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I heard it said recently that the true definition of recovery is “reestablishing a tax base that is equal to or greater than before the disaster.” Is that what it means to recover?

If communities were truly resilient to disasters, recovery would be a relatively simple process. In reality, recovery is very complicated and often has no established goal to work toward. At BCLC, we believe that recovery should not be simply returning the community to the status quo (What if the community was in trouble before the disaster?); rather, recovery should be a way to redevelop better and smarter. It should be a catalyst for thinking about the long-term future of the community and ensuring that it is competitive for the 21st-century marketplace.



By focusing solely on the short-term projects that bring back what existed before, communities are not taking advantage of a unique opportunity to take a step back and think, “How would we redesign this community if we had to do it all over again?” This opportunity for smarter development cannot be missed.

Regional Approach

We need to systematically protect entire regions, not just individual cities, from disasters. A city that experiences devastation from a disaster may be politically independent, but it is economically tied to other cities throughout a broader region. If a disaster happens, cities in the region that are not physically affected might still be economically impacted because of trade linkages with damaged areas. If the damage is severe enough, and the city interconnected enough, the economic effects from the disaster can be felt throughout the entire country.

As a result, entire regions need to be made resilient to extreme events. Cities on the Gulf Coast, for example, are economically connected, so focusing on disaster resilience in New Orleans alone is not enough. The systems that need to be strengthened extend throughout the coast and should be looked on as a single unit rather than individual political jurisdictions. In basketball terms, this is moving from a man-to-man defense to a zone defense.

Cities and states that think they are immune to disasters that happen on the coast do not realize the interconnectedness of our economic system. By focusing on regions as opposed to individual cities, we are taking the economic impact of disasters into consideration and planning accordingly.

Destiny is not a word that is often used in disaster assistance parlance, but by making the changes outlined above, all of us can begin to control our own destiny and move from being a nation that is reactive to disasters to one that is proactive.



ACRONYMS IN THIS REPORT

BCLC	Business Civic Leadership Center
CIKR	Critical Infrastructure and Key Resources
CRO	Corporate Responsibility Officer
DRC	Disaster Recovery Center
DRI	Direct Relief International
EDA	Economic Development Administration
EF	Enhanced Fujita (Earthquake Scale)
EMPCo	ExxonMobil Pipeline Company
EOC	Emergency Operations Center
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
GCRC	Galveston Community Recovery Committee
GIS	Geographic Information System
GOHSEP	Governor's Office of Homeland Security and Emergency Preparedness (Louisiana)
JSBRF	Job and Small Business Recovery Fund
LED	Louisiana Economic Development
LETs	Logistics Emergency Teams
NAVTEX	Navigation Telex Radio
NHC	National Hurricane Center
NIMSAT	National Incident Management Systems and Advanced Technologies
NOAA	National Oceanic and Atmospheric Administration
SBA	U.S. Small Business Administration
TAFB	Tropical Analysis and Forecast Branch of the National Hurricane Center
USAID	U.S. Agency for International Development
USDA	U.S. Department of Agriculture

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