

Restoring Regional Economies in the Wake of Disaster

A Special Report from the
NADO Research Foundation on
the Role of Regional Development
Organizations in Post-Disaster
Economic Recovery



Fast-rising flood waters sweep over levees trusted to hold them back. Hurricanes, fires and ice storms move faster and spread farther than expected. Tornadoes strike with little warning. Terrorists attack with no warning at all.

Almost by definition, disasters create unrivaled havoc and misery for those unlucky enough to be involved.

Front cover image sources: American Red Cross (top), Patrick McKay (bottom)



In 2008, disasters swept across the United States with unprecedented ferocity. Nationwide, over \$50 billion in destruction was caused by 37 different catastrophes, including tornadoes, hurricanes, drought, wildfires and tropical storms.¹ Hurricane Ike alone accounted for \$24.9 billion in devastation, while damages from the Midwest floods were estimated to cost over \$15 billion.² Based on the stories that unfolded in the aftermath of these events, there is evidence to suggest that post-disaster economic recovery is an imperfect process. It is one that often requires a refined approach to public-private partnerships, improved access to funding and a more regional perspective.

The National Association of Development Organizations (NADO) Research Foundation, with support from the U.S. Economic Development Administration (EDA) and other partners, is focused on exploring methods that hasten post-disaster economic recovery and reduce the long-term financial burden of disasters on impacted communities, businesses and individuals.

An agency with job creation and economic improvement as its primary purpose, EDA identifies disaster recovery as a necessary element in achieving its broader goals. In 2009, EDA invested nearly \$30 million, as part of a

combined \$500 million disaster allocation, into 48 different regional development organizations around the country to bolster post-disaster economic recovery efforts through revolving loan fund (RLF) investments, technical assistance for businesses and local governments, workforce development and disaster coordination.

This report focuses on the role of regional development organizations*, including those designated as EDA economic development districts (EDDs), in the long-term post-disaster economic recovery process. Drawing from the parallel experiences of the East Central Iowa Council of Governments (ECICOG) after the 2008 Iowa floods, and the Houston-Galveston Area Council (HGAC) in the wake of Hurricane Ike, there appears to be considerable potential for regional development organizations to have a more formalized role in the realm of post-disaster economic recovery.

The qualitative research collected for this report has been gathered through in-person site visits and interviews with stakeholders of regional disaster recovery efforts in Iowa and Texas. Additional information has been attained through a series of peer learning forums held by the NADO Research Foundation. The purpose of these sessions was to better understand the regional nuances of post-disaster economic recovery, and to share common obstacles and opportunities with peers involved in the recovery process. Results of the peer learning forums have been included in this report. ■

* Regional Development Organizations: The term *regional development organizations* (RDOs) is used generically to describe the national network of multi-jurisdictional planning and development organizations that provide administrative, professional and technical assistance to local governments, businesses and private residents nationwide. These public entities are often known locally by names such as: councils of governments, area development districts, economic development districts, local development districts, planning and development commissions, regional planning commissions and regional councils.

The Anatomy of Disaster Recovery

In the immediate aftermath of a disaster, the Federal Emergency Management Agency (FEMA) is responsible for coordinating the initial response involving disaster relief and recovery efforts. Once a disaster-impacted area is secured insofar as public health and safety, the restoration process begins. Although there are limited long-term restoration and planning elements associated with FEMA's disaster recovery process,³ to date there is no federal agency focused solely on long-term post-disaster economic recovery.

The bulk of federal money available for long-term recovery is triggered by a Presidential Disaster Declaration and flows mainly through designated federal agencies,⁴ each operating under a separate set of funding guidelines including FEMA, EDA, U.S. Department of Housing and Urban Development (HUD), U.S. Small Business Administration (SBA) and U.S. Department of Agriculture (USDA). In some cases, federal relief funding is funneled through state government, while in others funding is awarded directly to various public and private entities equipped to facilitate recovery efforts. Because of their experience with federal grant processes and knowledge of intergovernmental and cross-jurisdictional issues, regional development organizations, including the 380 serving as EDA-funded EDDs, are often seen as potential allies in the wake of a disaster.

Barriers to Restoration

In June 2010, the NADO Research Foundation brought together representatives of 13

regional development organizations to discuss post-disaster economic recovery issues. Participants outlined what they considered to be the principal barriers to timely and efficient recovery:

Chronic preexisting economic problems:

Individuals stricken by serious illness often recover faster if they maintain a healthy lifestyle. Regions are no different in this respect. An economically diverse and healthy region has a better potential to rebound more quickly from a disaster, whereas a region with preexisting problems related to poverty, leadership and infrastructure are likely to see these issues compounded.

1

Destabilization of small businesses:

The loss of a business ripples through a community in multiple ways, including job losses, lost tax revenues for local government and lost revenue for local vendors. Time is money. The longer a business is unable to function, the greater the probability that it will fail.

2

Delays in rebuilding physical infrastructure:

"It took two weeks to get electricity," says one resident of Galveston following Hurricane Ike. "Six months to get phone service and a year to get internet service." It is hardly necessary to emphasize the importance of roads, bridges, school buildings, telecommunications and wastewater treatment plants to long-term economic recovery.

3

Lack of political consensus regarding recovery priorities:

After the initial sense of emergency is over, familiar problems emerge. Funding is often inadequate, spurring competition and disagreements over funding formulas. Other problems – not-in-my-backyard (or NIMBY) rebuilding issues, for example – also may hinder the decision-making process.

4

The volume of paperwork relating to fiscal accountability:

In order to mitigate fraud and misuse of tax dollars, federal relief funding for local government and businesses is often dependent upon an applicant's ability to produce financial records. Rigorous guidelines and extensive paperwork to prove eligibility can bottleneck the process and act as an unintended burden on those already saddled with the burden of recovery.

5

Other regulatory requirements unrelated to disaster recovery:

With the exception of FEMA, federal agencies that provide disaster relief funding, such as HUD, SBA, EDA and USDA, are generally not in the full-time business of disaster recovery. This leads to situations where applicants need to apply for "waivers" (or exemptions) to comply with eligibility requirements for grants and loan programs not designed with disasters in mind (as is the case with HUD Community Development Block Grants and SBA 7A loans). The result is often an elongated application process and extensive paperwork.

6

The interaction of local regulatory issues with federal rules:

Businesses are usually "grandfathered" from compliance with local ordinances passed after they have opened. If extensive post-disaster repairs like handicapped access ramps or sprinkler systems are needed, restoration only to "pre-disaster conditions" may not be a legally viable option. Business owners argue that agencies like SBA should be allowed to take these compliance costs into account in defining the size of allowable loans.

7



Above: downtown Cedar Rapids, Iowa directly following the June 2008 floods

Source: Iowa Public News

The Essentials of Rapid Recovery

Based on the identified barriers to recovery by regional development organizations that have dealt with recovery issues in their regions, the following recommendations were gleaned. Many address decisions during and immediately after a disaster – a period that, for better or for worse, critically affects later progress.

1) Develop a pre-disaster plan: The best offense is a strong defense. The chaos of a disaster lends itself to a frenzied recovery process. Developing a hierarchy of recovery with federal, state and local government prior to disaster can save valuable time afterward. Other important elements of pre-disaster planning include developing data redundancy, reviewing insurance policies and developing post-disaster communications strategies, continuity plans, memoranda of understanding (MOUs) with local government and vendor contingency contracts.

2) Collaborate early in the recovery process:

In the immediate aftermath of the 2008 Iowa floods, key stakeholders in Cedar Rapids (business owners, local officials, emergency services) met daily to triage important issues and make strategic decisions. Two years later, this has led to a collaborative long-term recovery process and a strengthened regional network.



Source: Iowa Memorial Union

3) Set expectations appropriately: However it may be defined, the recovery process will be measured in years, not months. Setting realistic expectations on recovery efforts will increase credibility and trust with stakeholders.

4) Make sure that political officials at federal, state and local levels know the core competencies of regional development organizations and offer assistance from the outset: With their cross-jurisdictional approach to solving regional issues, their ability to navigate federal programs and their broad network of local relationships, regional development organizations are well-equipped to support disaster recovery initiatives. Communicate these assets to regional partners early and often.

5) Expect roles and funding guidelines to change during the recovery process: "We call it building the plane while you're flying," says one planner. "Take-off isn't the problem." Identifying potential bottle-necks, contentious political issues and competing interests for limited funding can better prepare regional development organizations for unforeseen issues in the recovery process.

6) Develop a "rainy day fund": Setting aside funding at the state or regional level for immediate post-disaster grants and loans can be essential to the survival of local businesses. Access to capital without trudging through the federal application process, even for very small grants or loans, can mean the difference between success and failure.

June 2008 – Flooding Across Iowa

In June 2008, heavy rainfalls swelled rivers across much of Iowa. On June 13, the Cedar River crested at over 31 feet near the city of Cedar Rapids, the county seat of Linn County and Iowa's second-largest city (population 128,000). The crest was almost 12 feet higher than in the "Great Flood" of 1993, which caused extensive damage all across the Midwest.

As a result of the flood, 131 Cedar Rapids businesses have not re-opened and nearly 1,300 jobs have been permanently lost, with another 540 jobs lost temporarily.⁵ Many smaller communities also suffered. To the south of Cedar Rapids on the Iowa River, the City of Coralville (population 17,250) was flooded to a depth of eight feet in its business district. The two-week, flood-related closure of the intersection of Highway 6 and 1st Avenue in Coralville (the county's busiest intersection) limited access to downtown Iowa City

businesses, the University of Iowa, Veterans Affairs Medical Center, and the University of Iowa Hospitals and Clinics (UIHC). The flood affected 400 households (310 of them involving mandatory evacuations) and 200 businesses in Coralville. Costs to homeowners were estimated at \$4.5 million, while damages to city infrastructure were estimated at \$7 million, and about \$21 million to area businesses.



Source: Cedar River Garden Center

Picking up the the Pieces



Dan and Megan Diehm own and operate the Cedar River Garden Center, located in Palo, a Linn County town with fewer than a thousand residents. Before flood waters destroyed their inventory and their greenhouses, the Diehms employed about 25 people, counting seasonal and part-time help, making them one of Palo's largest employers. East Central Iowa Council of Governments, an EDA-funded Economic Development District, provided forgivable loan funding of nearly \$100,000 from Iowa's "Jump Start" disaster recovery program, including \$50,000 to defray interest expenses on a \$700,000 Small Business Administration (SBA) loan. Ten months after the flood the garden center re-opened.

Diehm says that his business probably would not have survived had his credit not been excellent, enabling him to begin rebuilding with short-term loans from his bank. The center's sales are now good, but the Diehms carry a burden that is new to them – an intimidating debt load.

From Response to Revitalization

Iowa Governor Chet Culver declared 88 Iowa counties as disaster areas in the days following the flood. Seven of Iowa's 18 Councils of Governments (COGs) were involved in the recovery process, including the East Central Iowa Council of Governments (ECICOG) which serves the six-county region surrounding Cedar Rapids and Iowa City. ECICOG alone was responsible for distributing \$4.9 million in state and federal HUD Community Development Block Grant (CDBG) assistance for home repairs to over 200 single-family and rental households, while leveraging an additional \$9.8 million in CDBG funds for infrastructure repairs.

"Our efforts to restore livelihoods and resuscitate the region's economic base are already beginning to show dividends," says Doug Elliott, ECICOG's executive director. "If you look at the breadth of the activity, it's pretty significant. We're administering grants and loans, offering technical assistance, and writing recovery plans. We've assisted with rental housing repairs and we've provided buy-out assistance. It's a broad spectrum of activity for an agency that staffed 13 people prior to the flood. We've since increased to 18 employees to accommodate the growing demand for our services."

ECICOG, an EDA-designated economic development district, was awarded a \$1.6 million EDA Revolving Loan Fund (RLF) grant, \$1.4 million of which has been loaned to twelve area businesses with the goal of producing more than

250 jobs within the next three to five years. EDA also awarded ECICOG \$300,000 to employ two disaster coordinators to provide disaster-related technical assistance and facilitate access to disaster recovery programs. EDA provided similar assistance to other EDDs with areas impacted by the 2008 disasters.

"Our efforts to restore livelihoods and resuscitate the region's economic base are already beginning to show dividends..."

- Doug Elliott, Executive Director,
East Central Iowa Council of Governments

Elliott contends that beyond EDA it is important for regional development organizations like ECICOG to maintain relationships across all federal agencies, and to leverage and integrate programs that support the core mission of regional economic development.

"From a recovery standpoint, it would be ideal to see federal programs developed exclusively for disaster-related events, rather than taking existing programs and applying them to disasters," says Elliott. "The capacity exists at the local level to respond to disasters, but it would require a more bottom-up approach along with corresponding support from our state and federal partners."



Retail and small manufacturing businesses lacking an excellent credit rating may fail after a disaster. “The first thing people say is, ‘Federal help is on the way,’” says Shannon Meyer, President and CEO, Cedar Rapids Area Chamber of Commerce. “But our businesses were waiting for FEMA aid that doesn’t exist.” She considers it unfortunate that FEMA will provide emergency help with housing and infrastructure but not businesses, whose prompt recovery is critical to job preservation. “One week will make the difference between staying open and having to close the doors,” Meyer says.

Soon after the 2008 flood, the Cedar Rapids Chamber used \$500,000 of its own money to leverage over \$6 million from private sources for an emergency fund. This money went for small grants and zero-interest forgivable loans to 335 small businesses. The dollar amounts involved were a drop in the bucket relative to total need, but these disaster recovery checks provided desperately needed bridge funding for small firms reeling from the flood’s severe impact.

September 2008 – Hurricane Ike Batters Texas

On September 13, 2008, Hurricane Ike made landfall on the Texas Gulf Coast near the city of Galveston, located on a long, narrow, coast-hugging island about 45 miles from Houston. Galveston, whose population was then about 58,000, is shielded from the fury of tropical storms by a 10-mile-long seawall built after what is still the nation’s deadliest disaster—a hurricane in 1900 that caused between 6,000 and 12,000 deaths.

Galveston is the county seat of Galveston County, which also includes the long, narrow Bolivar peninsula lying to the northeast of the island across three miles of open water. The 2000 Census reported only 3,850 permanent Bolivar residents, but the peninsula’s reputation for affordable ocean-front property led to the construction of many vacation homes.

“Six or seven months of the year,” says John Lee Jr., the natural resource coordinator for the Galveston County Engineer Department, “you can almost lie down in the middle of the highway. The rest of the time it’s pretty active.”

Hurricane Ike began as a Category 4 storm. By the time it hit Galveston, its wind velocity had subsided to Category 2. However, wind and tidal action combined to produce a storm surge measured at 22 feet, only a few feet lower than peak surges for Hurricane Katrina in 2005. On the city’s seaward side, the seawall blunted the direct force of the surge, but oily, dirty water, laced with industrial chemicals, flowed around the wall, ebbing back into the city from its landward side. It flooded the downtown business district, where the Galveston County courthouse, elevated well above street level, took in two feet of water. Water damaged about 70 percent of the city’s homes.



Source: National Oceanic and Atmospheric Administration (NOAA)

Hurricane Categories

Category	Wind (mph)	Pressure (inches)	Surge (feet)
1	74-95	> 28.94	4 - 5
2	96-110	28.50-28.93	6 - 8
3	111-130	27.91-28.49	9 - 12
4	131-155	27.17-27.90	13 - 18
5	> 155	< 27.16	> 18

Source: Chris Hebert - Saffir-Simpson Scale

Above: September 13, 2008 radar image of Hurricane Ike making landfall along the Texas Coast

The hurricane shut down the Port of Galveston, which handles both bulk cargo and cruise ships (more than a half million passengers per year). After the water levels subsided, Steven Cernak, the Port's director, recalls inspecting the ruined cruise terminal and hoping that he would not slip on the oily mud because "there were rattlesnakes and water moccasins all around." It forced the University of Texas Medical Branch (UTMB), which includes seven hospitals, to close down for several months. The storm seriously damaged refineries and petrochemical plants in the area. It wrecked the boats and equipment of shrimp fishermen and silted over oyster beds. And, of course, it brought tourism – a major element in the Galveston economy – to an immediate halt.

On the Bolivar peninsula, things were much worse. Much of the peninsula rises only a few

feet above sea level, and the surge washed almost everything in its path into Galveston Bay. It completely destroyed about 3,600 structures, amounting to 60 percent of the buildings on the peninsula. Only about two percent of all structures escaped serious damage.

"This whole area was just scoured," says Anne Willis, a real estate broker and president of the Bolivar Chamber of Commerce. "One subdivision had 167 homes. There were 17 left. Before the hurricane, I managed about 300 rental homes. I had five left after Ike hit." Ike's confirmed death toll in Texas reached 48, with many others listed as "missing." Earlier in its course, Ike had killed an almost equal number of people elsewhere in the United States and even more in Haiti.

Below: the devastating effects of Hurricane Ike on the Bolivar Peninsula and Galveston, Texas



Source: Chuck Wemple



Source: Chuck Wemple

Post-Ike – The Role of the COG

Governor Rick Perry moved rapidly to create a relief and recovery program dubbed “Texas Rebounds” and designated regional COGs to allocate available funds among local government entities.* The COG serving Galveston and Galveston County is the Houston-Galveston Area Council (HGAC), which represents a 13-county region with more than 5.7 million people.

Chuck Wemple, HGAC’s economic development program manager, says that the allocation decisions applied both to program areas such as housing and infrastructure, and to governmental entities. With a pressing need to distribute funding as quickly and equitably as possible, HGAC staff devised formulas based on damage data and released them for comment to HGAC board members and to local governments. Wemple adds, “With so many stakeholders vying for funding, the meetings were obviously intense and highly energized.” Wemple suggests several reasons for the process’s success:

- **HGAC’s capacity and experience helped.** “We had people and staff who were not heavily impacted by the storm,” Wemple says. “While a lot of our communities were literally digging out – trying to clear roads and get sewage plants back online – we were able to focus on some of those higher-level needs that we knew would be important as people moved at the federal and state levels to allocate disaster funds.”

- **Good data helped even more.** “One of our best advantages,” Wemple says, “was our robust databases on infrastructure and household information – where the streets are, where the sewer plants are, where the schools are. Within a matter of days after the storm we were able to take surge maps and quickly come up with basic numbers for decision-makers.”

- **A COG is not a government entity in its own right and hence not a direct competitor for funds.** Although HGAC does administer some CDBG housing programs, relatively little of the available disaster money was directly available to it as an agency.

- **HGAC respected local programmatic choices.** “We made it clear from the start,” Wemple explains, “that while HGAC might be responsible for allocating funds, we were not interested in obstructing cities and counties from identifying their own projects that were important to them. We didn’t keep our hand in any longer than we had to.”

- **Finally, and possibly most importantly, HGAC built on preexisting relationships.** This made it easier to collect data from over-worked local officials and helped mitigate potential conflict throughout the inherently controversial allocation process.

Many of those relationships were formed during a process that began in 2003. HGAC worked with local governments to develop a hazard mitigation plan designed to reduce loss of life or loss of property in future disasters, such as

* In Texas, 22 of 24 COGs also serve as EDA-designated Economic Development Districts.

hurricanes, floods or forest fires. Eighty-six local governments eventually passed resolutions to adopt the HGAC-facilitated plan – in large part because it was a precondition for eligibility of some types of FEMA funding. “If we hadn’t had those personal relationships,” Wemple says, “it would have been extremely difficult for us to be of much use after the [2008] hurricane.”

President of the Galveston Bay Foundation, Bob Stokes recognizes the long-standing relationship with HGAC. “We work with them all the time,” he says, “on water quality, environmental enforcement, and coastal resiliency. They do a good job of being a planning organization in an area that doesn’t like to do a lot of planning.”

Overcoming Obstacles and Preparing for the Future

As in post-flood Iowa, there is considerable frustration in the Galveston area with the red tape involved in the relief funding process. “The disaster recovery money that comes down after a storm,” Lee says, “takes too long to get here, and it comes out of the wrong federal agency.”

Sidney Bouse, president of the Bolivar Peninsula Development Coalition (PenDeCo), who has family ties on the Bolivar peninsula dating back to the 1800s, adds that “There was an enormous amount of goodwill and support,



Source: Galveston Police Department

“If we hadn’t had those personal relationships, it would have been extremely difficult for us to be of much use after the [2008] hurricane.”

- Chuck Wemple, Economic Development Program Manager, Houston-Galveston Area Council

but it took us getting organized to be able to receive that. We’re creating communication links that should have been built already. We’re working toward getting ready for the next storm.”

Everyone in the Galveston area knows that other hurricanes will pound the Texas Gulf Coast, so getting ready for the next one involves increased preparation. Wherever possible, critical facilities will be elevated, structures strengthened, and equipment like backup generators strategically installed. Beyond that, there is debate about what kinds of protection are most needed. The most dramatic suggestion is to lengthen the Galveston seawall

to create a barrier (dubbed the “Ike Dyke”) long enough to protect Galveston from the backwash of a storm of Ike’s magnitude.

It is unclear how high and how long the seawall would have to be to offer reasonable levels of protection – even against a storm of Ike’s magnitude. Hanadi Rifai, a civil engineering professor at the University of Houston, has worked with a University of Texas group to develop a model to estimate the tidal surge effects if Ike had made landfall differently. She says that a landfall just 30 or 40 miles south of Galveston would have resulted in a surge six feet higher, and hence caused even more damage to the city’s downtown area. She adds that no dyke can protect against the wind damage caused by a Category 3 or Category 4 hurricane.

Rifai emphasizes that value-laden questions are considerably harder to answer than technical ones. A long and massive seawall would itself constitute a major environmental impact. What kind of land use should be permitted behind it? Would it be more prudent from an economic and ecological perspective to leave large stretches of shoreline open? “Seashores are special places,” she says, “and you want to maintain that character, not just build a wall and then build up everything behind the wall. People point to Europe where dykes have been built, but in Europe you have

very strict land-use practices associated with those areas.”

Rifai adds that she has worked for years with the HGAC staff, whose members facilitate community discussion on difficult questions. “They try to include everybody in the meetings,” she says. “Everybody’s listened to, and we respond to requests for comments. They’re able to bring people together and have them agree on how to proceed; a task they handle with aplomb.”

“We talk about ‘sustainability’ and ‘resiliency,’” Chuck Wemple says, “and we all have different visions about what those terms mean. But when we talk about ‘vulnerability,’ I think people’s ears perk up a bit.”

Wemple expects HGAC to continue to be actively involved in hazard mitigation planning. In general, he would like to see the term “economic vulnerability” introduced into more discussions. Vulnerability can manifest itself in many different ways – a natural disaster, a widespread economic downturn or the loss of a major employer. After Ike, for example, tourism-oriented governments that had relied almost totally on sales taxes found themselves with

almost no revenue for extended periods, and no way to make it up quickly.

“We talk about ‘sustainability’ and ‘resiliency,’” Wemple says, “and we all have different visions about what those terms mean. But when we talk about ‘vulnerability,’ I think people’s ears perk up a bit.”

While the specific type of natural or man-made disasters may be different across the nation, many of the pre- and post-disaster economic development decisions, questions and hurdles will be similar. Most importantly, we need to learn to improve the recovery process both with 2008 areas and those in the future. ■



Source: Chuck Wemple

Links and Resources

These online resources are for organizations seeking more information on disaster planning and long-term disaster recovery.

Link: Federal Disaster Recovery Working Group
www.disasterrecoveryworkinggroup.gov/index.html

Summary: In September, 2009, the President asked the Secretaries of Housing and Urban Development (HUD) and the Department of Homeland Security (DHS) to co-chair a working group on disaster recovery. The group included the secretaries and administrators of more than 20 departments, agencies and offices. The “Resources” menu tab lists more than 60 links.

Link: DRAFT – National Disaster Recovery Framework
www.disasterrecoveryworkinggroup.gov/ndrf.pdf

Summary: Published February 5, 2010, this is a draft of the National Disaster Recovery Framework.

Link: Restore the Gulf – Recovery Plans
www.restorethegulf.gov/response/recovery-plan

Summary: As a result of the 2010 BP Deepwater Horizon Oil Spill in the Gulf of Mexico, Secretary of the Navy Ray Mabus spearheaded the development of online resources to help communities battle the effects of the disaster. This link provides various check-lists, planning documents and disaster preparedness measures that apply to all disaster-prone communities.

Link: Federal Emergency Management Agency
www.fema.gov/index.shtm

Summary: The FEMA Website contains a wealth of resources including material keyed to specific disaster risks – for example, “Dam Failure.”

Link: An Improved Federal Response to Post-Disaster Economic Recovery
www.iedconline.org/Downloads/IEDC_Improved_Federal_Response.pdf

Summary: Contains the conclusions of a 27-person workshop convened in December 2009 by the International Economic Development Council (IEDC), the US Chamber of Commerce Business Civic Leadership Center (BCLC) and NADO.

Useful sites related to the 2008 Iowa floods and Hurricane Ike:

Rebuild Iowa Office (RIO), the state agency charged with facilitating recovery efforts:

www.rio.iowa.gov/index.html

Corridor Recovery, a consortium of organizations in and near Cedar Rapids:

www.corridorrecovery.org

East Central Iowa Council of Governments (ECICOG) recovery site:

www.ecicog.org/recovery

Case Study: "Regional Economic Impacts of the 2008 Cedar Rapids Flood," May 17, 2010, by Dennis Robinson, Ph.D., School for Public Policy, George Mason University:

www.knowyourregion.org/wp-content/uploads/2010/12/CRFlood.pdf

Houston-Galveston Area Council (HGAC) Ike-related recovery: www.h-gac.com/community/community/ike/default.aspx

Participants of the 2010 Galveston Disaster Recovery Peer Learning Forum

- Fred Baldwin, Freelance Writer (PA)
- Mike Bellamente, Senior Program Manager, NADO Research Foundation (DC)
- M.J. Broomfield, Executive Director, Southwest Iowa Planning Council
- Chauncy Buchheit, Executive Director, Southeast Missouri RP & EDC
- Doug Elliott, Executive Director, East Central Iowa COG
- Jessica Falk, Project Officer, EDA - Austin Regional Office (TX)
- Nicolas Johnson, Economic Development Coordinator, Texas Association of Regional Councils
- Stan McGee, Chief Administrative Officer, Acadiana Regional Development District (LA)
- Ernie Moore, Executive Director, Eastern Oklahoma Development District
- Alison Raymond, Business Disaster Recovery Coordinator, South Central EDD (NE)
- Jill Saegesser, Executive Director, River Hills EDD & RPC (IN)
- Terrie Salinas, Director of Economic Development, Lower Rio Grande Development Council (TX)
- Dave Stowers, Disaster Planning Coordinator, Southwest Arkansas PDD
- Chuck Wemple, Economic Development Program Manager, Houston-Galveston Area Council (TX)

Acknowledgements

This report was researched and written by freelance writer Fred Baldwin, with guidance from NADO Executive Director Matthew Chase, Deputy Executive Director Laurie Thompson and Senior Program Manager Mike Bellamente. We thank all the individuals who provided information and photographs and those who consented to be interviewed. Special thanks are extended to Christine Butterfield (Cedar Rapids) Dan and Megan Diehm (Cedar River Garden Center), Doug Elliott (ECICOG), Linda Langston (Linn County), John Lee Jr. (Galveston County), Shannon Myers (Cedar Rapids Chamber of Commerce), Hanadi Rifai (University of Houston), Bob Stokes (Galveston Bay Foundation), Anne Willis (Bolivar Chamber of Commerce), Chuck Wemple (HGAC), Steve Cernak (Port of Galveston) and all who contributed their time and expertise to this report.

Download an electronic copy of this report at www.nado.org. This material is based upon work supported by the U.S. Economic Development Administration under Agreement No. #08-79-04379.

Any opinions, findings and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of EDA or the NADO Research Foundation.

About the NADO Research Foundation

Founded in 1988, the NADO Research Foundation is the nonprofit research affiliate of the National Association of Development Organizations (NADO). The NADO Research Foundation identifies, studies and promotes regional solutions, partnerships and strategies to strengthen the economic competitiveness and quality of place across America's regions. The Research Foundation shares best practices and offers professional development training, analyzes the impact of federal policies and programs on regional development organizations, and examines the latest developments and trends in small metropolitan and rural America. Most importantly, the Research Foundation is helping bridge the communications gap among practitioners, researchers and policy makers.

Visit www.nado.org to learn more about NADO and the NADO Research Foundation.

References

- ¹ NOAA Satellite and Information Services: www.ncdc.noaa.gov/oa/reports/billionz.html
- ² Berg, Robbie: Tropical Cyclone Report, National Hurricane Center, Jan 2009: www.nhc.noaa.gov/pdf/TCR-AL092008_Ike_3May10.pdf and www.ncdc.noaa.gov/oa/reports/billionz.html
- ³ FEMA ESF #14 Planning Process: www.fema.gov/rebuild/ltr/plan_resource.shtm
- ⁴ FEMA Presidential Disaster Declaration: www.fema.gov/government/grant/pa/pr_declaration.shtm
- ⁵ Robinson, Dennis; "Regional Economic Impacts of the 2008 Cedar Rapids Floods," www.knowyourregion.org/wp-content/uploads/2010/12/CRFlood.pdf

NADO | NADO RESEARCH FOUNDATION

400 NORTH CAPITOL STREET, NW | SUITE 390 | WASHINGTON, DC 20001

NADO.ORG | INFO@NADO.ORG | 202.624.7806 TEL

Promoting regional solutions, partnerships and strategies to strengthen the economic competitiveness and quality of place across America's regions.

