



# Case Study Appendix



## Case Study 1: Joplin, MO: Setting Economic Development Priorities Before and After a Disaster

Late Sunday afternoon on May 22, 2011, an EF-5 tornado tore a path roughly one mile wide through the southern part of Joplin, MO. One of the most devastating tornados in U.S. history, the twister killed 161 people, demolished 7,000 buildings (25 percent of the town), and leveled 530 places of employment, including WalMart, Home Depot and St. John's Hospital. Despite the devastation, 420 of those 530 businesses have reopened.

There is much to learn from the preparedness and quick response of Joplin's citizens and businesses to work towards recovery. Rob O'Brian, president of the Joplin Area Chamber of Commerce, cited three key factors in his community's approach to addressing disaster.

### Three Key Factors

#### **Have a disaster preparedness plan for your organization and business community.**

While cities and counties devise emergency response plans designed to save lives and property, the business community needs its own economic recovery plan. "First, you have to be functional yourself," O'Brian said. "While there are many good templates out there, every community needs to tailor their own plan according to their own needs and their own potential disaster threats." Because of its proactive disaster preparation, the chamber was ready to assist just a few business days after the tornado.

Know how to effectively communicate with internal staff and external members: When phone and Internet connections go down, a backup communication method is needed. The chamber's plan designated emergency meeting locations and used SMS text messaging to communicate with its employees. It also had on file the cell phone numbers of key local business owners in case of an emergency.

Ensure that data is securely backed up in an offsite location: As part of its preparation plan, the chamber backed up its data in real time at a secure server over 80 miles away. This backup location will depend on the type of disaster to which your community is vulnerable – for example, communities that get hurricanes may need to establish a backup server in a different state or part of the country. This enables an organization to focus on more important recovery initiatives than retrieving basic business data.

- Have a 501(c)(3) vehicle in place (able to accept donations and grants) before an event: Financial donations are only useful if your organization is prepared to accept them. Established over 20 years ago as a 501(c)(3) nonprofit, the chamber's Joplin Chamber Foundation was able to receive \$800,000 in private donations to redistribute as short-term, low-interest working capital loans, which businesses needed after the disaster.

#### **Conduct immediate outreach to the business community, with direct services.**

With businesses in crisis, the Joplin Area Chamber of Commerce (JACC) needed to reach out to its members in those critical first few weeks after the disaster. The tornado had disrupted most technology-based



communications, pushing the chamber to reach out face-to-face. O’Brian believes that the grassroots efforts to reach out to business owners played a key role in the success of bringing back businesses. “The personal touch was very important,” he noted.

Move quickly in a direct, personal way to understand business needs: Within a week of the tornado, the chamber staff walked the streets to reach business owners and discuss their plans to rebuild and recover. They were able to do this because other chambers in the region sent their staff to man the offices of the JACC. By circling the destroyed area day in and day out, staff made contact with all 530 employers within three weeks. While many business owners were too shell-shocked to share their plans to stay and rebuild, they appreciated the personal outreach and most stayed in close contact with the chamber. Knowing that they were not alone, that someone cared, and that someone was in charge with a recovery plan made employers more willing to rebuild.

Quickly establish a one-stop shop for business recovery needs: The chamber immediately set up a business recovery center at its offices, where the Small Business Technology Development Center office and a business incubator already were located. They invited representatives from relevant groups – such as the SBA and IRS, which have disaster assistance programs for businesses – to set up there as well. The center was able to offer technical business advice, as well as assistance in applying for low-interest loans.

Set up and appropriately staff an information hotline: Rumors and misinformation can sabotage recovery efforts, particularly when a community can’t rely on usual media channels to dispel false information. The chamber dedicated several staff members to answering calls from businesses about utility restoration, cleanup, business services, rebuilding efforts, and other practical matters. Disseminating consistent and accurate information in the weeks after a disaster can make a difference in whether businesses choose to return and rebuild.

### **Quickly establish a strategic planning process for economic recovery and engage all business stakeholders.**

Every community needs an economic recovery plan that addresses the new realities of the disaster’s aftermath. While it’s important to plan quickly, no plan is effective without buy-in from its constituents. The Joplin Business Recovery and Expansion Initiative (JBREI) Advisory Board was established two months after the tornado to lead business recovery efforts, serving as the economic development leadership of the broader Joplin Area Citizens Advisory Recovery Team (CART), a citizens group charged with overall community recovery efforts.

The JBREI Advisory Board partnered with consulting firm Market Street Services to establish the building blocks for short-term business recovery. Thanks to the chamber’s personal business outreach, they effectively engaged many of the business owners in focus groups as part of the planning process, gaining a better understanding of business owners’ needs and expectations. For example, with the elimination of a supply chain or the exit of a



major buyer, the direction and character of a post-disaster economy can change quickly. Knowing where businesses stand and being prepared with the right information allows them to adapt to new market realities.

### Action Plan

Based on this feedback, an action plan for economic development was created to guide JBREI and JACC efforts. It included the following key actions:

- Conduct a business survey using trained volunteers to capture information in a central database. Information then can be dispersed to appropriate internal and external audiences.
- Develop a formal, sustainable business assistance program to provide long-term help beyond the typical 12- to 18-month mark. This included assistance in business and marketing planning, mentoring, loan/grant eligibility and other chamber services.
- Boost entrepreneurship and small business support efforts to assist those who need information on local and regional market opportunities, including how to meet retail and other rebuilding needs.
- Increase access to capital/funding for businesses by strengthening the Joplin Business Recovery Fund, which channels donated dollars to low-interest loans. This effort also included monitoring where state and federal financial programs were falling short, in order to fill in the gaps.
- Develop a marketing effort to attract new businesses to the region as a way of telling customers “We’re here, and we’re open!” This includes leveraging Joplin’s name recognition with national media, developing targeted inbound marketing trips and communicating more with Joplin’s existing employers to help develop positive messages about Joplin’s business environment.
- Focus on continued policy and advocacy efforts to ensure that Joplin continues to receive state and federal resources to facilitate the community’s economic recovery.

Joplin has already implemented a number of these efforts and is in process with others. The community also is beginning another planning process focused on long-term economic recovery for the larger economic region (seven counties across three states).

### Summary

What can other communities learn from Joplin’s experience? The Joplin chamber was set up for quicker recovery because it had prepared for an economic disruption to the community, and immediately after the tornado, it quickly distributed vital information and services to the business community. Even now, Joplin leaders continue to take proactive steps to mitigate the impact of an even larger disaster and facilitate a more rapid road to recovery.



## Case Study 2: Building Capacity for Economic Recovery and Preparedness in Polk County, Florida

### Community Profile

Polk County is located in central Florida between Tampa and Orlando. The county's population was over 602,000 in 2010, almost doubling over the last 30 years. Of the county's seventeen municipalities, Lakeland is the largest population center and Bartow is the county seat.

The county's three largest industries have historically been phosphate mining, agriculture, and tourism. While phosphate has been actively mined since 1881, the industry has faced a 66 percent decrease in employment in the last decade, mostly due to weak demand. Agriculture is the second largest industry in the county with over 35,400 jobs and \$7.7 billion in annual sales. The county also leads the state in citrus production.

Tourism has been a driving force in the economy due in part to the proximity of Disney World in Orlando and the fact that the county serves as a preferred venue for recreational and competitive sports. Since 2008, economic developers have been pursuing the following targeted industry clusters to diversify the local economy: logistics/supply chain; life sciences; agribusiness; and high-tech companies.

### Disaster Impacts

In 2004, three hurricanes swept through Florida over the course of three months, each hitting Polk County with significant force. Local officials were surprised by the severity of the damage due to the county's inland position. It was the first time Polk County had sustained any damage from a hurricane since Hurricane Donna in 1960. While the county received the second highest amount of disaster aid in the state from the Federal Emergency Management Agency (FEMA) at slightly more than \$71 million, over \$1.2 billion in damages was inflicted throughout the county.

#### Hurricane Charley

Hurricane Charley made landfall in Polk as a Category 2 hurricane on August 13, 2004 with winds in excess of 110 mph, spawning two tornadoes. Central Florida was impacted with storm precipitation as high as six to eight inches. Charley primarily impacted the eastern portion of the county, resulting in the destruction of 22,900 homes and businesses and 71 commercial buildings.<sup>91</sup>

#### Hurricane Frances

Hurricane Frances entered the county as a Category 1 hurricane on September 6, 2004, causing damage to 10,456 homes and businesses and nine commercial buildings.<sup>92</sup>

<sup>91</sup> Chambliss, J. (2004, September 24). Charley Damaged More Than Frances. *The Ledger*. S. A1, A12.

<sup>92</sup> Ibid.



## Hurricane Jeanne

Hurricane Jeanne struck the county as a Category 2 hurricane on September 26<sup>th</sup>, just three weeks after Frances. While it was difficult to differentiate between damage caused by each of the hurricanes, the city of Lakeland reported five times as many structures damaged by Jeanne as by the other two storms combined. The citrus industry reported the worst damage after Jeanne due to wind speeds of up to 100 mph.

## Immediate Response Efforts with Business Community Involvement

Central Florida Development Council (CFDC), a public-private partnership for economic development, was able to provide valuable resources in the response period immediately following each hurricane. The organization's seat on the county's emergency management team helped to facilitate critical communication with FEMA and local government.

CFDC became a concierge center to help relief workers find places to stay, providing a list of vacant buildings and relationships with local developers and hotel operators to FEMA. The list was updated daily to assist FEMA workers, first responders, and other volunteers in finding needed rooms. These placement efforts became a valuable service as many of the hotels in Polk were filled with visitors seeking refuge after evacuating from the coast. In addition, CFDC helped FEMA find a location for a disaster recovery center at the local mall.

Immediately following each disaster, CFDC also played a stopgap role in assessing business needs. FEMA and county government conducted assessments for both residences and businesses, but failed to write down business names and information. CFDC staff and their volunteers went back to these individual businesses to assess damage to their properties. The organization also recruited volunteers for response assistance through outreach to the local business community. Many family-owned businesses responded to the call for help.

## Establishing an Economic Recovery Team to Drive Recovery

Despite extensive damage throughout the area, CFDC quickly mobilized an Economic Recovery Team (ERT) immediately after the first hurricane. CFDC reached out to the 13 chambers of commerce within the county's 17 municipalities and included them on the recovery team. The team also consisted of CFDC's economic development, tourism, and Small Business Development Center (SBDC) staff. While it was a challenge to contact some of the smaller chambers, CFDC realized the need for their participation and successfully recruited them to the team.

Meetings were set up within the week following each hurricane to discuss available services and programs for impacted businesses and to identify additional programs and services to meet local needs. The ERT was responsible for communicating with businesses about response and recovery efforts, conducting disaster assessments, and staffing business recovery centers where business owners learned about assistance services. Both CFDC and the chambers reported to their network of members what was communicated at the meetings. As recovery efforts moved forward, CFDC engaged local bank representatives to join the recovery team as they started to distribute business recovery loans.



### **Surveying and Outreach as Part of a Team Effort**

CFDC's unique relationship with the local chambers allowed each municipality to conduct business impact surveys in their respective jurisdictions and report to the CFDC on ground-level impacts and damages to local businesses. The Lake Wales Chamber of Commerce created the survey, which was then distributed to the remaining chambers by CFDC's network.

Survey questions included information needed by the ERT on property and equipment damage, space needs, and what additional assistance was necessary to help businesses return to normal operations.

All CFDC employees immediately became business retention staff for weeks following each hurricane and spent time conducting business outreach. Chamber employees also went door-to-door to meet with local businesses. They were trained in how to follow up on the survey responses and to refer business owners to needed services and agencies. As another effective business retention measure, CFDC kept a list of vacant commercial and industrial space available throughout the county and leveraged the chambers' networks to connect local businesses with these vacant spaces. Businesses were also educated in available assistance, such as financing and technical services available at the business recovery center. Through this outreach, CFDC was able to collect valuable economic damage data on local businesses and better understand their recovery needs. This information was then disseminated to local, state, and federal officials.

### **Establishing a Business Recovery Center as a One-stop Shop for Service**

Polk County realized that it needed to establish a one-stop shop for business assistance services to retain businesses and prevent business closures or relocations. As the storms impacted mostly the eastern section of the county, the ERT decided to locate the center in that area. The business recovery center was set up in the Eagle Ridge Mall, in a separate storefront from FEMA's disaster recovery center, with assistance from the Lake Wales Chamber of Commerce and the mall. Small Business Administration (SBA) loan officers and the SBDC were co-located at the center as well.

Businesses were referred to local, state, and federal agencies and programs for services. Business counselors immediately referred local businesses to the Florida Small Business Emergency Bridge Loan (FSBEBL) program, which provides an expedient source of working capital to small businesses impacted by a disaster. This is a short-term, interest-free loan program set up by the state with the intention of 'bridging the gap' until the business can secure more long-term sources of capital for recovery, such as insurance claims, commercial loans, and federal programs like the SBA's Disaster Loan program. Business owners with severe property damage were also given information from the list of vacant properties to select temporary locations until their facilities were restored.

### **Improving Communication is Key to Recovery**

Effective communication is an essential component of recovery. While the Polk Emergency Management office released a daily news flier in English and Spanish on general topics in community recovery, CFDC and the 13



chambers provided a critical source of needed information for the business community. CFDC updated the homepage of its website daily to provide news bulletins on recovery information needed by local businesses. This included a list of vacant space for temporary needs, a list of licensed contractors within the region, and business recovery resources such as capital and technical assistance programs.

### **Investing in Communication**

CFDC also relied on the local media to communicate the locations of economic recovery meetings and services available to local businesses, buying several full-page newspaper ads in the local newspaper for advertisement purposes. While the ads cost the organization approximately \$15,000, CFDC saw this as an investment needed to communicate to its key constituents over a wide geographic area – particularly for businesses that were still without power and Internet access.

### **Distributing Lists of Licensed Contractors**

Unfortunately, unlicensed contractors commonly attempt to prey on victims in disaster-impacted communities in order to profit from the community's misfortune and the high demand for contracting services. Proactive communities ensure that they have a system of licensing contractors and educating the public on those contractors, as well as a system of enforcement for those who break the law.

In Polk County, CFDC distributed a list of licensed contractors to its network of businesses and chambers after each disaster. Often, these lists were distributed in paper format due to power outages in many parts of the county. Promoting these lists of licensed contractors helped reduce the amount of fraudulent work in Polk County.

### **Providing Emergency Financing to Local Businesses**

As previously discussed, Polk County utilized the Florida Emergency Bridge Loans (FSBEBL) program to assist local businesses with immediate working capital needs. Bridge loans were underwritten by Florida First Capital Finance Corporation. The local small business development center (SBDC), which served to provide technical assistance to local business owners and entrepreneurs, is housed within the CFDC; CFDC staff served as part of the committee reviewing loan applications.

Bridge loans were between \$1,000 and \$25,000 per business. Businesses were required to be in operation for a minimum of one year and have between two and 99 employees. Loans were interest free for 90 or 180 days and were processed within 3 to 5 days of receiving the application. Meeting a few times a week after each hurricane, a committee of five members reviewed all of the applications. The committee members included three local bankers, one community representative from CFDC, and one representative from Enterprise Florida, Inc. or the Governor's Office of Tourism, Trade and Economic Development. CFDC was located within a bank building, which made it convenient to meet multiple times a week.



Two thirds of the applications were approved by the committee. Those that were declined did not have the necessary documentation. For an application to be approved, the committee needed to review reports from the insurance company and pictures of the building. The committee also needed to know the money would be used for rebuilding costs and equipment replacement.

Banks also put together packages for long-term customers in addition to the bridge loans. The banks benefited from Community Reinvestment Act (CRA) credits and publicity.

### Recognizing ‘Hurricane Heroes’ While Supporting Tourism Promotion

CFDC developed the concept of ‘hurricane heroes’ as a strategy not only to jumpstart Polk County’s tourism industry but also to thank the companies that helped throughout the recovery process. CFDC’s executive director personally delivered plaques to companies that sent workers to assist in recovery efforts.

While visiting the companies, CFDC asked the CEOs to use their internal communication networks to announce a discount program for employees that had volunteered. Discounts at hotels, restaurants, and attractions throughout Polk County were made available to these volunteers and a coupon book was distributed to promote the program. Many of the employees did take advantage of the discounts, resulting in one of Polk County’s best tourist seasons.

### Strong Business Engagement in Disaster Planning for Redevelopment

Following the 2004 / 2005 hurricane season, the state of Florida recognized the need for communities to engage in a comprehensive planning effort to discuss post-disaster redevelopment issues in a pre-disaster environment. A focus group of local, state, and federal government and university officials convened in 2007 to create guidelines for such a planning effort. The focus group developed a pilot program for post-disaster redevelopment planning. The five pilot communities included Polk County as well as Panama City, Hillsborough County, Nassau County, and Manatee County.

These pilot projects were funded by grants from FEMA’s Hazard Mitigation Grant program, the National Oceanic and Atmospheric Administration’s (NOAA) Florida Coastal Management Program, and the Florida Department of Environmental Protection (DEP). Each planning process would be organized along the following six discipline workgroups:

- Economic Redevelopment
- Housing, Building and Historic Preservation
- Infrastructure
- Health and Human Services
- Land Use and Environmental Issues
- Government Operations

While a transportation planner from Polk County’s planning department served as the project coordinator, the county also hired consulting firm Calvin, Giordano and Associates, Inc. to facilitate the planning process. To



overcome challenges in engaging community stakeholders, the county pursued a comprehensive outreach program, including an invitation letter from the county administrator, to educate and build support among community members.

County and city government representatives, chambers of commerce, and CFDC participated in the planning workgroup focused on economic redevelopment. Each working group had a chairperson on the executive committee. The group members participated in six large-scale meetings and in smaller one-on-one coordination meetings and conference calls. At each large-scale meeting, an opening plenary session provided a brief overview of the project and was followed by two-hour meetings in working groups. A series of questions was provided to each group to drive discussions. At the end, the participants came together to present highlights from each of the working groups' meetings.

Overall, the plan developed a set of goals for post-disaster redevelopment. Within each goal, a set of tasks was created. The tasks led to an action plan, The Post-Disaster Redevelopment Plan, which included those responsible, a time frame, and resources needed for completing the action.

The plan was broad-based. As tasks were completed, Polk County could create ordinances to expedite permitting and other processes needed to respond to a disaster. The Polk County Board of County Commissioners adopted the plan and voted to support future implementation; however, no budget commitments were made. One municipality voted to endorse the plan. A few of the participants still meet on a regular basis to finish parts of the plan that were not completed within the original eighteen-month timeline.

The redevelopment planning process assessed the capabilities of each participant's agency or organization and incorporated that information into a plan for responding to the next disaster. As a result of the process, more agencies now communicate with one another to recommend actions for ensuring greater preparedness. Since this was the first time a plan of this nature was created in Polk County, a learning curve contributed to some delays. In the future, such delays would need to be considered when creating support for the planning process and deadlines for the plan.

Once the working groups were created, it was important to continually engage them in the process. There were a number of turnovers, layoffs, agency mergers, and government reorganizations during the planning process, but by regularly engaging the working groups as new representatives joined the process, new members were easily able to participate.

From the pilot projects, a tool kit was created for Florida communities to use in disaster planning. The tool kit includes a handbook and training videos, which can be downloaded at <http://www.floridajobs.org/community-planning-and-development/programs/technical-assistance/community-resiliency/post-disaster-redevelopment-planning/toolkit>.



## Looking Forward: Better Prepared for the Future

### Developing an Emergency Support Function Team With Economic Development Involvement

After Hurricane Charley, Polk County's emergency response team (ERT) transformed into an official Emergency Support Function (ESF 18) as part of Florida's state-level ESF 18 system. The ESF model, originally developed by FEMA, enables government agencies to better coordinate their disaster response and recovery efforts in multiple areas.

The ESF 18 group specifically deals with recovery efforts related to business and industry. The creation of the ESF 18 team at the local level allows Polk County's economic recovery team greater access to federal and state emergency funding like planning and mitigation grants. Polk County Office of Economic Development (OED) has used these funds to work on the Post-Disaster Redevelopment Plan discussed in the "Proactive Disaster Planning" section.

### Creating a Business Continuity Guide for Small Businesses

After the 2004 hurricane season, CFDC researched what other communities and counties were recommending to their businesses regarding disaster preparedness and created a disaster preparation and business continuity guide for local businesses to help them prepare for future disasters. Included in the guide are:

- Emergency hotlinks
- Insurance coverage worksheets
- Tips on what to do before and after a storm
- Check lists to ensure the business is prepared
- Forms to complete in preparation
- GIS-mapped flood zones
- A list of approved contractors

The guide is placed on the CFDC's website for immediate access by local businesses.

### Identifying Future Business Recovery Centers

Polk County has had discussions with vacant property owners in preparation for future hurricanes. In case of an emergency, the county has arranged for the use of space at the Lakeland Airside Center and in the city of Bartow. The Airside Center next to the Lakeland Linder Airport can provide access to supply lines during a natural disaster. Linder Airport was used as a staging area in 2004.

The CFDC also regularly maintains a list of vacant facilities to be used for additional business recovery centers. Prior to a disaster, the CFDC makes sure they have a hard copy of this list on hand to be used in the event of a power outage caused by the storm. This ensures that they have quick access to this list and can start using it before the lights come back on.



### Keeping Communication Lines Open

The hurricanes knocked out the electricity in many areas, making communication with local businesses and partners in the recovery efforts a challenge. Following the 2004 hurricane season, local economic development leaders recommended a back-up website location in a data center or a remote location (possibly out of state).

As mentioned previously, the CFDC spent over \$15,000 on advertisements in the local newspaper to inform businesses where they could get post-disaster relief services. The CFDC has worked out a deal with the local newspaper in advance so that in the case of a disaster, the newspaper will provide advertisement space at a reduced cost or a special news column in order to inform businesses of relief services.

### Summary

After 44 years without a hurricane, Hurricanes Charley, Frances, and Jeanne took Polk County by surprise and left a destructive force, which had significant impacts on the community, including local businesses. Still, local economic development organizations and chambers of commerce quickly mobilized to jumpstart Polk County's local economy and facilitate recovery. By creating the emergency response team (ERT) and focusing on the immediate needs of local businesses, the CFDC and its partners were able to provide necessary immediate treatment and set local businesses up to receive more long-term assistance.

The co-location of SBA, SBDC, and CFDC staff at the local business recovery center provided a central location where business owners could obtain the information and assistance they needed for recovery purposes. State funding mechanisms such as the Florida Small Business Emergency Bridge Loan program provided critical short-term financing to help local businesses stay open and bridge the gap to longer-term financing. Newspaper ads enabled the EDOs and chambers to more widely distribute critical information on relief and recovery efforts to local businesses.

Finally, Polk County used these storms as an opportunity to improve its disaster planning efforts so that the business community – and the community at large – would be better prepared for future incidents. Because Polk County and the CFDC recognized the importance of immediate response efforts, constant communication, and prioritizing critical recovery initiatives, the county was able to successfully recover from the three devastating hurricanes, which could have otherwise had severe long-term impacts on the local economy.



## Case Study 3: Addressing the Full Spectrum of Economic Recovery in Cedar Rapids after the 2008 Flood

### Community Profile

The city of Cedar Rapids is located along the Cedar River in eastern Iowa, approximately 120 miles east of Des Moines. The second largest city in the state, Cedar Rapids has seen steady population growth over the last 50 years. Just prior to the 2008 flood, the city's population was estimated to be 124,515<sup>93</sup> and reached an all-time high of 126,498 in 2010 – a 1.6 percent increase.<sup>94</sup>

The railroad, built through Cedar Rapids in the mid 19<sup>th</sup> century, helped fuel the city's growth by attracting major industrial manufacturers. Cedar Rapids was home to one of the largest meatpacking plants and one of the largest cereal mills in the world in the late 19<sup>th</sup> century – Sinclair Company and Quaker Oats, respectively. Today, Cedar Rapids has become a major hub for food processing, bioprocessing, and electronic equipment and design. Major companies located in Cedar Rapids include Rockwell Collins, Whirlpool, Quaker Food, General Mills, Cargill, and Heinz. Cedar Rapids is also the largest processor of corn and ethanol in the country, processing about 1.2 million bushels of corn a day.<sup>95</sup> Cedar Rapids has historically boasted a “higher percentage of exported products, per capita, than anywhere else in the United States.”<sup>96</sup>

Cedar Rapids' largest sector of employment is in manufacturing and the city maintains a low unemployment rate of 4 percent across all sectors. The median household income was \$51,186 and only 12% of the population was below the national poverty level in 2010.<sup>97</sup> Cedar Rapids fares better than the nation in unemployment, median household income, and population below poverty, representing a dramatic improvement from 2008, when the city was below the national average in both median income and poverty.<sup>98</sup>

### Disaster Impacts

On June 13, 2008, the Cedar River crested to a historic height of 31.2 feet, flooding businesses, homes, and city buildings in Cedar Rapids.<sup>99</sup> The river rose quickly, taking only three days to increase from the flood stage level (12 ft.) to its crest (31.2 ft.). The river's rapid rise of 11 feet in the 24 hours before the crest “caught the community off guard.”<sup>100</sup> Citizens living in the flood impact zone had mere hours of notice to evacuate.<sup>101</sup>

<sup>93</sup> US Census Bureau (n.d.) *American Community Survey Three-Year Estimates 2005-2007: Cedar Rapids City, Iowa*. Retrieved on August 3, 2012 at <http://www.socialexplorer.com.ezproxy.lib.utexas.edu/pub/reportdata/home.aspx>

<sup>94</sup> US Census Bureau(n.d.). *American Community Survey 1-Year Estimates Demographic and Housing Estimates 2010: Cedar Rapids City, IA*.

<sup>95</sup> Merta, A. (June 21, 2012,). Phone interview by author, Washington DC.

<sup>96</sup> Cedar Rapids Area Convention & Visitors Bureau. *Cedar Rapids History* (webpage last modified 2011) Retrieved from: <http://www.cedar-rapids.com/about/history/>

<sup>97</sup> US Census Bureau (n.d.). *American Community Survey 1-Year Estimates 2010: Selected Economic Characteristics: Cedar Rapids, IA*.

<sup>98</sup> US Census Bureau(n.d.). *American Community Survey 1-Year Estimates 2008: US Selected Economic Characteristics*.

<sup>99</sup> City of Cedar Rapids, Iowa. *Flood Recovery Process* (webpage last modified 2012). Retrieved from <http://www.cedar-rapids.org/city-news/flood-recovery-progress/Pages/default.aspx>.

<sup>100</sup> Cedar Rapids Area Chamber of Commerce (2012, January). *First Business Case Management Program for a Natural Disaster: Cedar Rapids, IA – June 2008 Flood*. Cedar Rapids, IA

<sup>101</sup> Merta, phone interview.



Although Cedar Rapids had experienced severe flooding in the past, the city had never seen a flood of this magnitude before. Due to the river's high water level, nearly 14 percent of the city was affected.<sup>102</sup> The flooding caused more than \$6 billion worth of damages to houses, buildings, and infrastructure. The fiscal impact of the flood ranks it as the 5<sup>th</sup> largest disaster in the United States,<sup>103</sup> leaving "more than 700 businesses with estimated flood recovery [needs of] as much as \$1.5 billion."<sup>104</sup> Across Cedar Rapids, 602 businesses reported losses in the sum of \$210 million.<sup>105,106</sup> Of these businesses, 96 incurred losses of over \$500,000 and 49 reported losses of over \$1 million.<sup>107</sup> Initial assessments verified that 754 businesses or landlords had water in their buildings, and 186 businesses were unable to access their offices. Finally, 33 businesses outside the floodplain were also adversely affected for reasons ranging from market decline to suppliers who were hampered by the flood.<sup>108</sup>

Many businesses carried only basic business insurance, which does not protect against floods.<sup>109</sup> Due to physical damages and loss of customers, businesses' revenues, on average, fell by 10 percent in Cedar Rapids. As a result, 173 businesses were forced to close their doors and more than 2,500 workers lost their jobs.<sup>110</sup>

### Communicating to Create a Unified and Informed Response

In the wake of the disaster, traditional communication networks were out of service. The recovery efforts of numerous organizations and government agencies created the need for strong communication flow to minimize overlapping efforts and maximize the spread of information.

### Addressing Broken Communications

Most damaging to the recovery effort was the fact that the flood had knocked out the existing lines of communication, from phone lines to the Internet. The amount of cell phone traffic overloaded the towers. Whether it be getting emergency crews into buildings or getting the word out to workers about coming into work, communication is a critical aspect of recovery. Mass media was an effective tool for evacuations, but in the recovery process it could not keep up with all the different programs and projects running simultaneously, from business recovery to clean ups to nonprofit recovery work. Different groups were tackling the same tasks and not efficiently spreading their resources.

### Providing Avenues for Collaboration between Various Parties

In the face of this disaster, representatives from different programs and government organizations quickly established the Emergency Operation Center (EOC). Representatives from the city, state, and federal government and local and regional nonprofits utilized this center by dividing up tasks and collaborating to solve

<sup>102</sup> Neumann, D. (June 25, 2012). Phone interview by author, Washington DC.

<sup>103</sup> Cedar Rapids Chamber, *First Business*.

<sup>104</sup> City of Cedar Rapids, *Flood Recovery Process*.

<sup>105</sup> The Chamber's report excludes larger employers such as Quaker, Cargill, etc.

<sup>106</sup> The average loss is \$349,000 when excluding larger employers.

<sup>107</sup> Cedar Rapids Chamber, *First Business*.

<sup>108</sup> *Ibid.*

<sup>109</sup> Ficken, G. (June 29, 2012). Phone interview by author, Washington DC.

<sup>110</sup> Cedar Rapids Chamber, *First Business*.



important problems. The chamber of commerce was invited to have a seat at the EOC in order to facilitate better communication between the public and private sector. Priority One, a regional economic development organization serving Cedar Rapids and the Iowa City Technology Corridor, could communicate information it learned directly from its business clients to the EOC and vice versa through this representative.<sup>111</sup> This real time information flow alerted the EOC to emergencies and critical situations in the field.<sup>112</sup>

In the days after the flood, the city manager recognized the need to establish alternate means of communication and brought together key community leaders, creating the Recovery and Reinvestment Coordinating Team (RRCT) one week after the flood crested. Realizing that the problems caused by the flood could not be solved by just one group, the team consisted of a variety of members: the chamber, local nonprofits, arts and cultural groups, schools, organized labor, landlords, the Downtown District, local government, and neighborhoods.

The RRCT met daily in the first eight weeks engaging businesses and neighborhoods, and gathering input on recovery actions. The RRCT worked with Iowa Jobs (I-Jobs) to obtain grants and worked on the allocation of CDBG funding. Furthermore, the RRCT worked with the Corps of Engineers on flood mitigation efforts. Most importantly, however, was the RRCT members' ability to periodically compare notes on what was learned and what was still going on. This communication allowed for a more codified response by the Cedar Rapids community, acting together to resolve issues caused by the flood.

Collaboration was not limited to local government and nonprofit organizations. Just five days after the flood, over 500 business owners met at a local union hall to determine ways to help one another. Originally, they sought to form a clearinghouse for equipment sharing, allowing businesses to access the tools and office space needed to assist in their own recovery. However, leaders of this group realized that it was going to take more than equipment to revive many of the impacted businesses. This group quickly transformed into the Cedar Rapids Small Business Recovery Group (CRSBRG), creating a unified voice for small businesses and communicating business interests to the local, state, and federal government.

### Reaching Out to Local Businesses

Priority One and the Cedar Rapids Chamber of Commerce effectively maintained communication with businesses in a time of crisis. Immediately following the flood, Priority One and the chamber built upon its database of local businesses' contact information, adding cell phone numbers to ensure communication even when phone lines were down. Texting and contacting clients in the early morning and late at night ensured businesses could be reached despite damaged or overloaded cell towers. Priority One used the information it obtained to figure out the real time needs of its clients and to pass along information to the fire department or the EOC. Priority One maintained its calls to client businesses for a few weeks following the flood.<sup>113</sup>

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<sup>111</sup> Priority One and the chamber worked in the same building and their close relations helped in the recovery process of Cedar Rapids. Today, both organizations have been unified under a single umbrella organization along with the Downtown district.

<sup>112</sup> Merta, phone interview.

<sup>113</sup> Merta, phone interview.



The City of Cedar Rapids sought to engage the business community in their recovery plan. In the few months after the flooding, the city held three open houses to identify problems, to develop options to address these problems, and to create solutions. A critical component of this was to involve the businesses in the city's redevelopment strategy, since businesses had been greatly impacted and their successful recovery impacted the community's recovery. These efforts led the city to redevelop residential and commercial area, while also deciding to keep certain areas from redevelopment for future flood protection.<sup>114</sup>

### **Dispersing Information to Businesses through the Web**

The RRCT also worked to ensure a healthy flow of information to the public. In collaboration with the Chamber, United Way, local IT companies, and other organizations, RRCT built a website with up-to-date information on flood relief and other recovery efforts. The site, [www.corridorrecovery.org](http://www.corridorrecovery.org), was up two days after the flood and collected information from on-the-ground-sources, the state, and FEMA. It also provided a venue to coordinate volunteer efforts. The website was extremely beneficial to many organizations that were unsure about how to approach the recovery process.<sup>115</sup>

### **Contacting Other Communities**

In the wake of the flood, the City's first response was to contact other communities. The City understood the importance of information that could be gained from cities that had similar experiences, from Napa Valley to Grand Forks. These efforts helped develop a framework for how to go about recovery, from developing business recovery programs to creating an "interdisciplinary and cross-functional approach" to problem solving.<sup>116</sup>

### **Supporting Local Business Recovery through Capital Assistance**

After the flood, Cedar Rapids businesses needed working capital to pay rent, compensate employees, buy supplies, and finance other operations in order to keep their businesses open. To fill this void, Cedar Rapids businesses received grants and other assistance programs funded by nonprofit organizations, and the city, state, and federal government. To date, more than \$68 million has flowed into Cedar Rapids to assist in business recovery efforts.<sup>117</sup>

### **Helping Businesses to Keep Doors Open through Financial and Technical Assistance**

Funding to assist businesses sprang up from both the local and state level almost immediately. By the 1st of July, the Chamber established the Job and Small Business Recovery Fund, contributing \$500,000 from its own fund. The chamber was able to leverage different private businesses and donors through matching donations. The City and Priority One also helped pool resources for emergency assistance.

<sup>114</sup> Butterfield, C. & Pratt, J. (August 3, 2012). Phone interview by author, Washington DC.

<sup>115</sup> Neumann, phone interview.

<sup>116</sup> Butterfield and Pratt, phone interview.

<sup>117</sup> The Cedar Rapids Area Chamber of Commerce. *Recovery* (last modified 2012). Retrieved from: <http://www.cedarrapids.org/Content/Community-Development/Progress/Flood-Protection-Recovery.aspx>



The chamber distributed a total of \$6 million to small businesses to help them “meet payroll [and] pay for clean-up, and other disaster expenses.”<sup>118</sup> In total, 411 businesses accessed these \$25,000 zero-interest forgivable loans through an application process run by the Chamber.<sup>119</sup> Without access to this emergency funding, many businesses would have had to close their doors. This funding stream later ran into problems with federal funding because it was seen as duplication of benefits.<sup>120</sup> The chamber, city, and Business Case Management team worked with federal programs to ensure that businesses could access the federal funding.<sup>121</sup>

### Strong, Central Voice for Business Advocacy

Businesses understood the immediate need for capital and used a bottom-up approach to secure a funding source. With the backing of the City, the CRSBRG lobbied the state and federal government, securing an \$85 million relief package for flooded businesses. The CRSBRG provided a strong, central voice to advocate for local businesses. This funding helped business survive the worst of the flood, giving them money to pay for the cleanup and equipment or inventory necessary to resume operations.

The group also created new programs to help Cedar Rapids businesses with such expenses as reimbursements on machinery and inventory, and loan-interest and flood insurance.<sup>122</sup> By 2009, the CRSBRG helped generate enough support to pass a five-year one percent local option sales and services tax (LOST) with an estimated revenue of \$78 million.<sup>123</sup> As of February 2012, the City had “invested \$42.2 million into 16 acquisition, rehabilitation, and flood recovery programs.”<sup>124</sup> This money was a huge relief to businesses struggling in the wake of the flooding.

### Matching Businesses Resources

Another initiative aimed at keeping businesses’ doors open was mounted by the chamber. With the help of Priority One, the Chamber established the “Adopt-a-Business” program. This effort “matched non-flooded businesses and their resources with flooded businesses,” providing valuable resources such as “temporary facilities, business coaching, and financial assistance; clean up labor, [and] construction materials.”<sup>125</sup> This program distributed resources in a way that allowed businesses to become operational more quickly.<sup>126</sup> Rather than giving businesses funding or forcing them to take out loans to pay for new equipment, the Chamber created a market for unaffected businesses to provide resources they were not utilizing. This program was also helped by the strong sense of community that emerged following the flood.

<sup>118</sup> Cedar Rapids Chamber, *First Business*.

<sup>119</sup> Full, S. (2012, June 22 and 28). Phone interview by author, Washington DC; NADO Research Foundation (December 2010). Restoring Regional Economics in the Wake of Disaster. Retrieved from: <http://restoreyoureconomy.org/wp-content/uploads/2011/06/Restoring-Regional-Economies.pdf>.

<sup>120</sup> Duplication of benefits refers to the Stafford Act, which protects the government against fraudulent business. To obtain federal assistance, businesses must not be receiving any funding that could also be used for the same purpose.

<sup>121</sup> Cedar Rapids Chamber, *First Business*.

<sup>122</sup> Ficken, phone interview.

<sup>123</sup> The City of Cedar Rapids. *Local Option Sales & Service Tax (LOST) Information* (last modified 2012). Retrieved from: <http://www.iowa.gov/tax/educate/78601.html>

<sup>124</sup> Cedar Rapids Chamber, *First Business*; City of Cedar Rapids, *LOST*.

<sup>125</sup> Cedar Rapids Chamber, *First Business*.

<sup>126</sup> Neumann, phone interview.



## Assisting Local Businesses through a Case Management Approach

The national average survival rate for businesses three years after a disaster hovers around 45 percent.<sup>127</sup> Cedar Rapids' business survival rate was almost double the national average, with 82 percent of businesses still in existence.<sup>128</sup> Cedar Rapids defied these odds through the many community-led initiatives to support local business. The most critical component in business retention came from a novel effort to use a case management approach for business recovery.

### Moving Away from Traditional Methods to Better Understand Local Business Needs

After the flood in mid-June, Cedar Rapids' U.S. Small Business Association (SBA) office set up a Business Recovery Center (BRC). The BRC established a centralized location to which affected businesses could go for disaster relief and other resources. However, going to the BRC required ample time on the part of business owners. The CRSBRG pushed the city to attempt a case management system to make recovery more efficient and less time consuming for businesses. Eighteen months after the flood, the chamber implemented the Business Long Term Recovery Initiative, which featured the business case management approach and was paid for with administrative dollars in CDBG as well as local funds.<sup>129</sup>

The Business Case Management initiative was the first of its kind in the U.S. The chamber led the effort of assembling case managers from a pool of local applicants. All the case managers had "experience in small business ownership [and] general management skills, and were seasoned professionals within the Cedar Rapids business community."<sup>130</sup> Instead of setting up in one centralized location like a BRC, case managers visited with each of the nearly 1,200 affected businesses one-on-one.

Direct advising was the key to the case management program. Using an adapted FDA assessment tool, the case management team identified businesses' needs, from marketing to legal and financial areas.<sup>131</sup> These visits could last from 15 minutes to two hours depending on the degree of impact a business suffered. Along with the assessment, the team compiled field data on total losses, debt loads, and other financial data helpful in obtaining grant funding. The chamber used this database of information to assemble diverse, pro bono teams from businesses in the community to address the needs of the affected businesses.

In addition to these teams, the Business Long Term Recovery Initiative also provided businesses with mentors, usually members of the local SBA SCORE chapter. A few chamber members joined SCORE to act as mentors; case managers were also used depending on their particular field of expertise. These mentors provided businesses with useful guidance particular to their needs.<sup>132</sup>

<sup>127</sup> Cedar Rapids Chamber, *First Business*.

<sup>128</sup> *Ibid.*

<sup>129</sup> Full, *phone interview*, June 28.

<sup>130</sup> Cedar Rapids Chamber, *First Business*.

<sup>131</sup> Full, *phone interview*, June 22.

<sup>132</sup> Scott Swenson, *phone interview by author*, June 26, 2012.



After assessing the needs of a business, the case managers helped navigate funding sources and dealt with paperwork for applying to state and federal programs.<sup>133</sup> The case management team also helped develop programs for affected businesses like reimbursement programs on inventory and interest. In addition to these services, the Business Long Term Recovery Initiative provided workshops on skills and information relevant to the business community.<sup>134</sup> Case managers also participated in lobbying the state and federal government for disaster assistance.

The Business Case Management program, which concluded in December 2011, was a highly successful approach that adapted to the needs of the flood-affected community. Rather than finding a “one size fits all” solution for Cedar Rapids, the Business Long Term Recovery Initiative identified what individual businesses needed most and helped fulfill those needs. Case managers were locals who had been affected by the flood as well and thus were able to employ a network of trust. The case management system provided a highly effective resource network, helping businesses receive the funding, marketing, or financial assistance they needed.<sup>135</sup>

### Redeveloping a City after a Disaster

After the initial emergency responses and flood recovery efforts were underway, the focus turned to the redevelopment of downtown. Downtown Cedar Rapids, which is located along either side of the Cedar River, was heavily impacted by the flood: 50 of the 54 blocks of downtown were flooded, affecting 923 businesses.<sup>136</sup> The Downtown District ran a number of business retention and revitalization projects because Cedar Rapids recognized the downtown area was a catalyst for economic development in the city.

### Creating Critical Access for Businesses to their Facilities

Though many downtown businesses on upper floors did not suffer water damage, they were inaccessible until the waters receded and clean up began. Each hour that these businesses remained inaccessible resulted in greater economic losses, not just for the businesses themselves, but also for Cedar Rapids’ local economy. Within a few days, the Downtown District and chamber devised a business equipment rescue operation.

Coordinating efforts with the fire department, police department, National Guard, and businesses, the operation made use of the skywalk system that connected many downtown businesses on the upper levels. Businesses were able to retrieve servers, computers, client contact information, and other information vital to operations. Though the operation was not without its risks – including a lack of electricity, potential gas leaks, and compromised structural integrity of the skywalk system – it allowed many businesses to get back to work within days of the flood, improving the chances of their survival.

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<sup>133</sup> Full, phone interview, June 22.

<sup>134</sup> Cedar Rapids Chamber, *First Business*.

<sup>135</sup> Butterfield and Pratt, phone interview.

<sup>136</sup> Neumann, phone interview



### Reaching Out to the Community to Provide Support

Without businesses, the city was losing part of its tax base and citizens did not have jobs, so the Downtown District focused its efforts on retaining affected businesses. It developed a number of programs to create a sense of support for the business community, engaging citizens and businesses to stimulate the local economy.

The Downtown District made business retention its priority in the flood stricken city. It collected statistics in an effort to figure out which businesses closed, reopened, or relocated. The Downtown District ran a year-long “Welcome Back” initiative, “designed to [bring] businesses back [into the] downtown community.” The campaign set up periodic lunches in the downtown park and gave banners to businesses to advertise their doors were open again. This initiative was instrumental in getting businesses to come back, creating a sense of camaraderie among returning businesses as well as with their clientele.<sup>137</sup> The Downtown District also ran a “Buy Local” campaign. Urging people to buy locally made a huge impact on recovering organizations trying to revive their businesses in the midst of declining customer bases caused by the flood and the nationwide recession.<sup>138</sup>

### Developing Capacity for Economic Recovery and Redevelopment

Another nonprofit organization arose out the 2008 flood – the Economic Planning and Redevelopment Corporation (EPRC). This group was a privately funded organization, focusing exclusively on helping businesses retain grant funding. Headed by the president of the Downtown District, Doug Neumann, the organization secured \$50 million from the U.S. Economic Development Administration (EDA) and worked with I-Jobs to secure state disaster funding. Much of Cedar Rapids’ success rests in the community response through grassroots movements like the CRSBRG and the EPRC.

### Advocating for Federal Assistance

When the disaster hit, there were “astronomical” costs of getting businesses back up and running.<sup>139</sup> Despite the heavy burden on businesses, the federal focus remained on housing. Elected officials and federal programs worried about getting people back in their homes. This focus meant there was no overarching government agency to deal with disaster recovery for businesses.<sup>140</sup>

Many business and community leaders found that working with the federal bureaucracy could be extremely difficult and even disheartening. It took over a year to receive FEMA financial support for businesses and many of the officials in charge of funding had never run a business.<sup>141</sup> The FEMA funding scenarios were difficult to understand and more importantly, they seemed highly inconsistent, frustrating business owners’ attempts at funding their recovery.<sup>142</sup> The auditing process that businesses were required to go through to get federal

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<sup>137</sup> Neumann, phone interview

<sup>138</sup> Ibid.

<sup>139</sup> Merta, phone interview.

<sup>140</sup> Full, phone interview, June 28.

<sup>141</sup> Ibid.

<sup>142</sup> Neumann, phone interview.



assistance was similarly difficult. For one grant, HUD revised its program seven times, requiring new documentation from businesses each time. By the end, businesses were getting frustrated with the process and gave up on the funding altogether, even though they needed it.<sup>143</sup>

Another major problem with federal funding dealt with the duplication of benefits. The Stafford Act establishes that federal post-disaster assistance for reimbursements can only be used as a last option to “prevent assistance from various sources funding the same item of loss.”<sup>144</sup> This law increased the period of time that it took federal funding to reach affected businesses. Many of the funding programs established immediately after the flood by the city and chamber were scrutinized for duplication of benefits issues, initially prohibiting businesses from getting much needed federal assistance.

Due to these problems, Cedar Rapids focused its advocacy efforts at the state level, where the focus was placed on getting proportionate money for the damages incurred.<sup>145</sup> Members of the Business Case Management team lobbied the Iowa Department of Economic Development (IDED) and met with officials in Washington, D.C. to capture funding and find a solution to the duplication of benefits problem.<sup>146</sup> Priority One also helped in securing funding by convincing the IDED to create a disaster recovery component. Cedar Rapids received \$4 million to give to flooded businesses in forgivable loans.<sup>147</sup>

Cedar Rapids ran into duplication of benefits issues while dealing with the state as well, lengthening the time it took for businesses to receive funding. Disaster assistance money simply sat the state level for an extended period of time because the state would have been held accountable if fraudulent practices were undertaken.<sup>148</sup>

## Summary

The recovery efforts in Cedar Rapids helped the city far outperform the dismal 45 percent three-year national business survival rate. This success was due to the concerted efforts of a unified business community and local government support. Cedar Rapids came together as a city to respond to the immediate needs of its business community, not waiting for state or federal assistance to arrive. Local and regional organizations, from the chamber of commerce to Priority One, provided necessary assistance to the businesses in Cedar Rapids.

Where funding or information gaps were recognized, grassroots movements started by the businesses themselves stepped up to fill those voids. The programs and initiatives Cedar Rapids devised helped keep businesses open as well as retain businesses in the city. One of the most unique and successful aspects of the recovery was the dynamic case management approach to business recovery that provided direct mentoring to identify the individual needs of businesses, helping businesses outperform recovery odds.

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<sup>143</sup> Full, phone interview, June 22.

<sup>144</sup> Cedar Rapids Chamber, First Business.

<sup>145</sup> Full, phone interview, June 22.

<sup>146</sup> Swenson, phone interview.

<sup>147</sup> Merta, phone interview.

<sup>148</sup> Full, phone interview, June 22.



## Case Study 4: Building Back a More Resilient Community in Greensburg, Kansas

### Community Profile

About forty-five miles east of Dodge City, Greensburg is one of a handful of small agricultural towns in Southwest Kansas situated along the Great Plains. It is the largest town in Kiowa County and serves as the county seat. Greensburg's population peaked in the 1960s at around 2,000 people, but since declined to a pre-tornado population of 1,400. Residents in the county have depended on agricultural opportunities with cattle and wheat serving as the main economic drivers, along with some 'Mom and Pop' retail establishments. Greensburg has historically attracted a significant visitor population<sup>149</sup> owing to the presence of the world's largest hand-dug well and its cattle ranch culture. Like many small, agricultural communities, Greensburg's economy has struggled in the face of industrialized agriculture and an aging population for the last three decades.

### Disaster Impacts

At about 10:00 PM on Friday, May 4, 2007, an EF-5 tornado<sup>150</sup> roughly one-and-three-quarter miles wide struck Greensburg, destroying approximately 95 percent of the town. This damage included the obliteration of 110 businesses and severe damage to an additional 24. Tragically, 13 lives were lost as a direct result of the storm. Power and telecommunications infrastructure and the town's water tower were destroyed, and sewage and road systems were damaged. US Highway 54 — the main highway through Greensburg — had to be rerouted around the town, resulting in a month-long 85-mile detour.

In the aftermath, Greensburg faced a host of recovery challenges, including chronically under-insured properties, limited temporary shelters for residents and businesses, business interruptions of surrounding agriculture operations, and mental health issues for community members. Insurance plans collectively paid out \$153 million while the Federal Emergency Management Agency (FEMA) contributed \$69 million to recovery efforts. (According to NOAA, there was \$250 million in total damage caused by the tornado) figures. Despite these challenges, an estimated 879 citizens voiced support for returning to and rebuilding Greensburg. The 2010 U.S. Census indicates that Greensburg's total population was 777, approximately 55 percent of pre-tornado figures.

### Responding Immediately to the Destruction

#### Local Government Responds to Secure External Funding and Resources

City officials worked with state and federal officials to develop a supplemental funding request for federal assistance the weekend following the disaster. Concerned that federal funding — even for life-threatening

<sup>149</sup> An estimated 40,000 tourists from around the world visited Greensburg in 2006 according to "A Strategic Tourism Plan" for Greensburg and Kiowa County by Heberling Associates.

<sup>150</sup> E-5 refers to hurricanes at the top of the Fujita Scale, with winds of 261 mph (420 km/h) or more.



disasters — might not arrive quickly enough or in sufficient amounts to address all recovery costs, city officials used this proactive meeting to put a request for federal funding before the US Congress as early as possible.

### **Convening Businesses to Obtain Commitment to Stay and Rebuild**

Just days after the tornado, two local business owners— Mike Estes and Scott Brown— gathered others from the local business community to host a meeting, as many businesses were rumored to be considering leaving Greensburg. Estes commented, “We just wanted to get everyone together to see what everyone was thinking. With no businesses, there are no jobs, no places to get groceries, there’s really nothing.” Without the critical mass of services these businesses provided, the town would not be able to survive.

Roughly 150 people representing 70 local businesses attended the gathering. After some discussion about the disaster and its effect on the community, a remarkable 66 out of 70 businesses represented at the meeting indicated they were willing to stay.

### **Convening the Community to Make Sustainability Commitment**

A week after the disaster, the community convened a town meeting with local and federal government officials to discuss recovery efforts. Eight hundred people attended, resolving to build back to be more resilient, to which then-Governor Kathleen Sebelius commented: “It sounds like you guys are going to build back green.” From this seminal moment, the idea of rebuilding as a sustainable community accelerated with members of the community rallying around the idea of becoming the “Greenest Little Town in America.”

## **Recovery Challenges: High Costs, Low Capital, and Rebuilding Pressure**

### **Restoring Critical Services**

Immediately following the disaster, the town was without all its primary critical infrastructure services including water, electricity, telecommunications and shelter for citizens and businesses. The streets of Greensburg were covered in debris, and restoration of critical infrastructure and utility services would take time. Town residents and businesses found temporary shelter within the region, but this created a concern that these temporary transplants would permanently stay in their new locations. Greensburg purchased several trailers to house important local businesses, while the local grocery and insurance companies set up their own tents. FEMA coordinated with local authorities and utilities to restore phone and power to Greensburg — a process that consumed seven full months following the disaster. Utilities were prioritized in places that were being built back first, with electricity being restored to the whole town by the eighth month. Other recovery challenges included:

- **Higher Rebuilding Costs** – Insurance claims only covered the cost of rebuilding existing structures — not the improved, more resilient buildings that would ultimately follow.
- **Lack of Capital** – Prior to the tornado, many small businesses in Greensburg were under-insured, and desperately needed any available capital simply to sustain business operations or fund rebuilding efforts. Other local small businesses expressed concern about the affordability of rental space in the new, improved facilities being constructed.



- **Pressures to Rebuild Quickly** – When funds from insurance claims began to materialize, there was an initial, instinctive temptation to rebuild quickly rather than wait for the new building requirements of the ‘sustainable vision’ to be developed.
- **Education Needs** – All of Greensburg’s K-12 schools were destroyed by the tornado. Because schools serve as glue for communities and because families prioritize their children’s education needs when committing to a permanent location, the Kiowa County Superintendent provided incentives for residents to return to Greensburg by opening up classes in temporary venues just three months after the disaster.
- **Mental Health** – As is common following a disaster of such magnitude, residents and business owners had to confront post-traumatic stress. Many had a desire to quickly resume to ‘normalcy’ and faced a strong temptation to consider a new life elsewhere.

## Sustainable Planning with Strong Economic Development Strategies

### Long-Term Community Recovery Plan

Prepared through FEMA’s Long-Term Recovery Program, a twelve-week planning process began three months after the disaster to develop a Long-Term Community Recovery Plan (LTCRP). This process involved a variety of stakeholders — citizens, civic groups, business owners, and government officials at the local, state, and federal level. A total of four community meetings were held with attendance averaging about 400 people.

Released in August 2007, the LTCRP documented the defining vision of Greensburg as environmentally friendly and sustainable.<sup>151</sup> To attain this vision, the plan recommended a number of projects:

- Establish a Sustainable Development Resource Office
- Build public facilities back to LEED Platinum standard
- Create a “Greensburg Green” local building code
- Identify alternative energy options
- Establish a Business Development Assistance Program
- Build a Business Incubator
- Develop a Big Well Tourism Center
- Prepare a Comprehensive Sustainable Plan

The positive impacts associated with rebuilding Greensburg in a sustainable manner included reductions in long-term financial expenses, and the creation of a unique identity that serves as a tourism draw. By blending past tourist attractions into a new sustainable living model, Greensburg hoped to attract an increasing number of tourists that would stay longer and pump more dollars into the local economy.

The LTRP also outlined vital action steps for developing a comprehensive economic development plan. Its recommendations included a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis, an assessment of community assets, an evaluation of business sectors and leakage, strategies to benefit current small businesses, and an assessment of the need for both a tourism director and an economic development director.

<sup>151</sup> Kansas Office of Governor and FEMA Region VII (2007, August). *Long-Term Community Recovery Plan: Greensburg + Kiowa County Kansas*, Page 4.



### **Developing a Sustainable Comprehensive Plan**

After the LTCRP process ended in August 2007, the planning team began a longer process to develop a more comprehensive plan with stronger focus on future economic development strategies. After six months, and with assistance from private and government consultants, the process culminated in a plan titled the “Greensburg Sustainable Comprehensive Plan” (GSCP), also known as the Sustainable Master Plan.

The GSCP planning team was committed to community support and engagement, and as disagreements arose, thorough evaluation was conducted to ensure the proper decisions were made. Phase 1 of the GSCP was adopted on January 22, 2008 and consisted of broad goals intended to guide future rebuilding efforts, infrastructure evaluation, land use mapping, and preliminary housing policies. Phase 2 was adopted on May 19<sup>th</sup>, 2008 and updated Phase 1 with more refined information. It also expanded the GSCP’s focus areas to include economic development, cultural resources, and energy planning.

Greensburg identified a great opportunity to build upon the media attention focused on the town’s commitment to sustainability. By building upon green tourism efforts, Greensburg could develop this into a larger industry that could draw much-needed dollars to the local economy. The GHCP also recommended leveraging the town’s LEED-certified buildings as part of an effort to attract “green collar” entrepreneurs for its local business incubator. Additional plans to further develop Greensburg’s economy include building an industrial park, upgrading its airport, and assisting local businesses in creating small-scale commercial operations.

### **Assisting Local Businesses with Financial and Technical Assistance Services**

#### **Establishing a Business Recovery Center**

Immediately after the disaster, then-Governor Kathleen Sebelius established a Disaster Recovery Center in a school gymnasium in nearby Haviland. A distinct Business Recovery Center was also housed there to provide support services to local businesses, including assistance with loan applications and consultation for business and marketing plans. A variety of speakers were invited to offer advisory services to businesses, including representatives from the U.S. Department of Agriculture (USDA), private sector contractors, and architects. The Business Recovery Center also helped establish contact with local businesses, initially by word-of-mouth, then later via a coordinated phone campaign.

After two months, the local business community took over many of these services through a newly formed Business Redevelopment Committee. About 18 months after the disaster, these services continued through the Kansas Small Business Development Center (KSBDC) at the new Business Incubator, along with a new Revolving Loan Fund (funded by USDA RA) at the Kiowa County Development Corporation.

#### **Financial Support from Local Banks**

Local banks were up and running the week after the disaster, thanks in part to a pre-existing disaster plan developed by the American Banking Association. The banks offered residents affordable loans with as low as



2.5% interest. They also administered small, working capital loans that were guaranteed to businesses by SBA and USDA.

## Communication

Before telecommunications could be restored, Greensburg relied on several methods of communication within the community:

- **Community Meetings** –Community meetings led by local government officials started a week after the tornado and continued weekly under a large tent with typical attendance in the 400-500 person range.
- **Weekly News Bulletin** – A county office printed a weekly “Yellow Sheet” with a list of community resources, including a list of businesses that were either operating or planning to re-open, available financial services, and a list of upcoming community meetings. The flier was distributed and posted in convenient locations throughout the town.
- **Texting/SMS Service** – Established by a local resident, residents and business owners were encouraged to sign-up for this texting service after the disaster so they could frequently receive community recovery updates, particularly regarding community meeting information.
- **Phone Campaign to Identify Businesses that Would Remain** – This effort identified which businesses would remain in Greensburg, connected them with existing resources and encouraged them to re-establish themselves in the community.

Greensburg officials and community leaders communicated externally to outside groups through these methods:

## Advocacy and Education through State and Federal Government Channels

- Senator Roberts happened to be in the area when the tornado struck and was in contact with President Bush even before the Governor’s emergency declaration request was sent out—this proactive approach sped up the process.
- Leadership of town government officials - constant and aggressive communication from city officials like Mayor Bob Dixon and City Administrator Steve Hewitt helped Greensburg maintain local control of the recovery process and get funding for specific projects like the Business Incubator.
- Business leaders also lobbied local and federal officials to direct funding where it was needed, such as rebuilding the John Deere Dealership, one of the town’s largest employers.

## Fielding Media Calls & Quickly Responding to Information Requests

On the morning after the tornado, Steve Hewitt walked up to a CNN van and gave an impromptu interview, telling the country, “We’re going to rebuild.”

Greensburg projected a unified message: “We got together as community leaders to make sure we were all on the same page. Then, any time someone was willing to listen, we had a unified message,” says Hewitt. Featured through countless news outlets, the leaders of Greensburg told their story to anyone who would listen.



Culminating in a reality television show, the publicity brought huge corporate sponsorship for the projects, like Frito Lay's donation to help build the SunChips® Business Incubator.

Taking the message abroad: Local officials and business leaders traveled to attend sustainability conferences and participated in webinars, telling Greensburg's story and often garnering donations of sustainable products like dual flush toilets.

## Capacity Building for Recovery

### Effectively Using NEG Grant for Economic Recovery

An initial National Emergency Grant (NEG) through the Department of Labor helped Greensburg retain some of their workforce by paying for cleanup jobs and allowed the hiring of some additional government staff.

An extension of the NEG passed through the Kansas Department of Commerce funded the creation of a new county economic development office, Kiowa County Development Corporation (KCDC), and a two-year executive director position to lead the organization beginning in January 2008. This office was created to strengthen Kiowa County's existing economic development delivery system through small business assistance, business attraction, and the eco-industrial park management.

### Establishing a Business Incubator

Originally identified as a goal in the Long-Term Sustainability Plan, the project was targeted because of its potential for high recovery value. Recommendations for launching the incubator included developing criteria for small business inclusion, engaging design professionals developing small business technical assistance with Kansas Small Business Development Center, and hiring a staff person to provide project and program support.

Built and owned by the city, the project is designed to help entrepreneurs by offering a workspace with modest rent. The incubator concept comes with an understanding that the entrepreneur is expected to eventually leave. The facility is at capacity, having attracted 10 lifestyle entrepreneurs. At least two businesses have graduated from the incubator and begun operating independently: a coffee shop and a glass-making gift store.

The incubator is funded through multiple sources. Steve Hewitt testified before Congress and was successful in his request for USDA Rural Development funds to help build the incubator to LEED Platinum standards. Hewitt also brought his case to several corporations, eventually securing additional funding from Frito Lay. Finally, actor Leonardo DiCaprio, whose production company oversaw a reality show about Greensburg, personally covered the remaining expenses.

Building to the high LEED standards posed a new challenge for local contractors. While the demands were costly and time consuming, the construction of the LEED Platinum building provided valuable skills that workers carried over to many other construction projects in the town.



### **Building Capacity for Business Recovery**

The committee mentioned above was chaired by the Estes brothers and Scott Brown, and used Brown's Auction House as an office. Operating entirely on donations from local businesses of time, money and labor, the BRC connected local businesses with each other and to government agencies and funding.

They eventually formed a 501(c) 3 called Kiowa United. The corporation collected local donations—but never any government funding—to construct the Kiowa United Building 18 months after the disaster. The building was constructed quickly and inexpensively, but still ascribed to green building standards. It offers affordable rent to businesses, some of which graduated from the business incubator. As of 2012, Kiowa is at capacity, housing 13 local lifestyle businesses.

The BRC is now known as the Greensburg Chamber of Commerce, which continues to work closely with KCDC. The Chamber provides inexpensive marketing services to its members and acts as a liaison between the business community and local government.

### **Business Incentives**

"It was seen that though Big Boxes can handle disasters alright, Mom and Pops needed help to get started again. And honestly, mom and pops are the backbone of our economy. Otherwise, the town would fail. Though stimulus has become a dirty word in many circles, this is exactly what was needed. Not blind dollars, but personal local control over the stimulus. Federal resources were helpful and plentiful, but it was the local control that made things happen. The federal government is not in the local recovery business."

"Any incentives you offer are risky, but in a situation like this, you really have little choice but to take some chances," says Steve Hewitt, former City Manager for Greensburg. One incentive offered was a 90% tax abatement on any new construction, residential or commercial. The incentive decreases over 10 years until returning to full payment. The State of Kansas also helped by offering a 10% rebate on the total cost of construction for any building in the disaster area.

"Some were concerned about how we could afford to run our government. But really, if nobody would build, we wouldn't have any revenue anyways. It was a risk we had to take," says Hewitt. Funding from various government sources helped to fund local government operations until revenue was able sustain services. But getting that funding wasn't easy. "There was always money available for hiring people to pick up debris. But when we would ask for some funding to help cover the cost of a secretary or an economic development professional, they would say no." Eventually, with help from state and federal representatives, funding was released.

Within three years, revenues were sufficient to cover expenses. Part of this is because of the increase in property values, which have doubled since the tornado.



## Implementing the Green Vision

### Green Building Standards and Regulations

Following the recommendation of the Sustainable Master Plan and with technical assistance from the National Renewable Energy Laboratory (NREL, a branch of the federal Department of Energy) Greensburg developed a set of green building standards. Despite a public vote to move ahead with a green model, many continued to challenge city officials when they saw the price tag of proposed projects—an added 3-7% to building cost over traditional construction. It would be 18 months before new construction began on Main Street.

The pressure to rebuild quickly was high, and with NREL's help, the City made clear economic arguments that eventually won over the business community and most citizens:

- Lot placement, positioning, and the design of windows to use passive energy is critical, and requires no fancy technology.
- New green buildings are expected to save as much as 40% on energy bills, leading to long-term savings
- The city offered a 90%, 10-year tax abatement on new buildings

In addition to its building practices, Greensburg purchases renewable energy credits from privately operated windmills near the city. "The city is 100% powered on renewable energy," says Mayor Dixon, "with many buildings such as the hospital and school having their own windmills." Further, the city adopted an ordinance requiring all city buildings to be built to LEED standards. As a result, Greensburg has the most LEED certified buildings per capita in the world.

## Long-Term Economic Strategies: Eco-Park and Tourism Revitalization

### A Vision for a 'Green' Industrial Park

Seeing a need to diversify Greensburg's economy, local government and economic development officials secured city funding to build an Eco-Industrial Park. The project was controversial, as many citizens and some government officials balked at the high start-up costs with no guarantee for success. The park was built on the underutilized site of Greensburg's former municipal airport, which was ideal due to its easy access to US-54.

Because of the Eco Park's long-term economic potential, the GSCP recommended conducting feasibility studies for a future airport location and expansion. In August of 2010, KDOT awarded Greensburg \$76,000 to complete a feasibility study considering an upgrade of the airport to handle industrial capacity. In May 2011, the Kansas Airport Improvement Program awarded Greensburg \$380,000 to replace the Greensburg Airport. Greensburg must provide \$42,223 to complete the project.

The Eco Park is managed by Kiowa County Development Corporation (KCDC), which offers a variety of incentives designed to attract new business:

- 10-yr., 100% property tax abatement (for manufacturers)
- Street development to site
- Free site studies and plan reviews



- Waiver of building permit costs
- Assistance with low-interest loans, state incentive programs and qualification for tax credit programs
- Workforce development programs through the Kansas State Department of Commerce.

Capitalizing on relationships made during the recovery process, KCDC has secured a new tenant and two prospects:

- German green-building company, HIB, which will build its first North American manufacturing and training facility at the park
- A Biomass testing facility
- A solar energy company.

### Big Well and Eco-Tourism

The Big Well is the largest hand dug well in the world, and has been Greensburg's main tourist attraction since it was built in 1887. Located near the Big Well is a 1,000-pound pallasite meteorite that was found near Greensburg. The two attractions were located in the same facility until the tornado struck in 2007.

The Big Well was identified as one of the focal points to regaining tourism in Greensburg both in the LTCR Plan and the Economic Development portion of the Master Sustainable Plan. As a connection with the past and a draw to Main Street near local shops, the Big Well tourism museum is one of the highlights in the city's economic development plan.

The city plans to build a new \$3 million facility funded by FEMA, USDA, donations, and a citywide half cent sales tax. The facility is planned to help attract tourists to the city and help local businesses. Using a grant of \$400,000 to pay for the original design study, a proposal was created by architecture firm BNIM. The building is finished and had its grand opening in May 2012, the fifth anniversary of the tornado.

Additionally, as suggested in the Master Sustainable Plan, Greensburg is leveraging its fame and identity as a "living sustainable laboratory" to draw eco-tourists. Greensburg GreenTown's "Chain of Eco-Homes" project has held design competitions and solicited eco-product donations to build a series of model green homes that will also operate as bed-and-breakfasts.

### Summary

With a new green manufacturer set to open in the Eco Park and a revitalized tourism industry showing positive signs due to the imminent opening of the new Big Well Museum and chain of Eco Homes, Greensburg is on its way to diversifying its economy. The city's burgeoning green initiatives, and quality amenities associated with them, are drawing new residents. While it will take many years to fully assess Greensburg's recovery, local residents and officials are bullish. They say their biggest problem now is keeping up with demand for *more* retail space and housing!



Greensburg's recovery efforts, now five years in the making, focused on resiliency by building back stronger and more sustainable and by working to diversify and grow the local economy and reverse the trend of population loss endemic to small agricultural towns. The resolve of local residents, business owners, and public officials, coupled with assistance from multiple funding sources, demonstrate that in the wake of disaster can lay new opportunity. Thanks to creative visioning and calculated risk-taking on the part of its citizens, the winds of change now appear to be blowing in Greensburg's economic favor.

## Case Study 5: Restoring Tourism Assets in Charleston, South Carolina after Hurricane Hugo (1989)

### Community Profile

Located on the eastern coast of South Carolina, Charleston has a rich history that stretches back to colonial times. It is well-known for its charm, Southern tradition, and abundant historical landmarks and attracts nearly four million visitors each year. Charleston is the second most populous city in South Carolina, with almost 125,000 living in the city and 659,000 in the metropolitan statistical area. Tourism is the Charleston area's top industry and accounts for \$2.8 billion in annual economic impact and \$1 billion in industry employment.

### Disaster Impacts

In September 1989, Hurricane Hugo swept up the east coast from the Caribbean. As it hit the Carolinas, the eye of the storm was directed at Charleston Harbor, where the storm did extensive damage both to Charleston and its neighboring suburbs. Although the most devastated areas were outside Charleston, the wind and water impacted low-lying areas within the city such as the historic downtown area. Approximately three-quarters of the 3,500 buildings within the historic district were damaged with about 20 to 25 historically significant buildings experiencing severe damage. In total, about 50,000 people were still homeless after a week, and many more were left without electricity, water, and food, which took a month to fully restore. Hugo caused a total of \$2.8 billion in damage in the city of Charleston alone.

While hotels were operating at capacity the first four months because of the cleanup work, these "visitors" failed to provide critical revenue for the community, such as visiting historic sites and tourist attractions, high-end restaurants, and retail shops. However, due to rigorous recovery efforts, the following tourism season was launched successfully. Charleston carried out its annual tour of local historic homes even as the city continued to rebuild.

### Tourism Recovery Efforts

#### Developing a Post-Disaster Taskforce to Address Tourism Issues

In the wake of the disaster, a local hotel manager, a retail business owner and a tourism video producer launched a task force to "Save the Season"—an initiative to save the 1990 season's tourism business. Prior to the hurricane, Charleston tourism stakeholders—retail owners, small businesses, and others—were relatively autonomous. The task force rallied approximately 40 stakeholders who met on a weekly basis to discuss



recovery priorities. Joseph Riley, Mayor of Charleston, and John Bourne, Mayor of North Charleston, met with the group and heeded its counsel to prioritize cleaning up the visitor-heavy Charleston Market Area. The task force eventually integrated into the Charleston Convention and Visitors Bureau (CVB) as the Travel Council, which became the bureau's private-sector marketing fund as the CVB took over long-term, comprehensive recovery efforts.

### **Reallocating Tourism Dollars to Address Perception Issues**

Once recovery on the ground began to stabilize, the Charleston CVB launched a public relations campaign with the motto, "We're Going Strong." The Oprah Winfrey Show was televised from Charleston to raise money for recovery, and Mayor Riley appeared on the show wearing a t-shirt that said "Charleston, SC: WE'RE GOING STRONG." The key was to dispel the notion that damage was more extensive than it actually was. For instance, the national media would portray a collapsed building (which had already been in disrepair prior to the hurricane), while the building in the adjacent lot had suffered only minor damage from the storm. The CVB found that the most effective method of correcting extreme perceptions was to counter image-for-image. Ads ran on public information channels and in print media, displaying tourists seeing and enjoying local attractions. Today, tourism organizations are employing even more immediate technologies such as web cams, live feeds, blogs, and social media.

The "We're Going Strong" campaign was funded primarily by CVB reallocations from that fiscal year. The South Carolina Department of Tourism contributed a \$100,000 grant to be matched by the CVB as well as another \$50,000 outright. Charleston also received a \$100,000 grant from the U.S. Travel and Tourism Association (USTTA) for international marketing, and Coastal South Carolina USA received a \$500,000 USTTA grant. These funds supported the campaign between October 1989 and February 1990 to encourage tourism in the coming spring season.

### **Cooperating on a Regional Level**

As tourists are drawn to attractions regardless of municipal lines, a central component in Charleston's marketing efforts was regionalism. Charleston CVB represents nine different jurisdictions, including Charleston County. These groups worked together to form a recovery task force as well as to pool funds for regional marketing. Promoting the region provided a synergy that offered tourists the best possible range of activities. For instance, visitors can explore the cultural appeal of Charleston's historic downtown and cross over to one of Charleston's barrier islands to enjoy its beaches. The CVB determined that in regional marketing, the whole is often greater than the sum of the parts.

### **Proactive Leadership from both the Public Sector and Community**

One of the main factors that shaped the recovery process in Charleston was proactive leadership. Mayor Riley worked to coordinate recovery resources and to maintain an active presence in front of the media—local, regional, and national—to provide accurate information and to promote the city and the region. The CVB president also provided strong leadership in coordinating the "We're Going Strong" campaign and in working with local leaders to remove obstacles to tourism. In addition, industry volunteers were critical in organizing the task force and maintaining momentum in the guidance of recovery efforts.



### Prioritizing the Rebuilding of Unique Cultural Assets

Charleston’s leadership worked together effectively to channel the use of recovery resources and funds to build back the community and attract the return of both residents and revenue-generating tourists. In the words of Mayor Riley, “Boiled down, our philosophy about tourism is that all decisions for a city should be made with the resident in mind first.”<sup>152</sup> The focus on improving the quality of life and meeting the needs of residents often translates into an attractive place for both residents and visitors.

The Board of Architectural Review (BAR) had a strong vision for how many of the historic properties should be rebuilt in the historic districts. It formed a preservation consortium with the Preservation Society, Historic Charleston Foundation, the Charleston Museum, the southern regional office of the National Trust for Historic Preservation, and city planners. This consortium provided critical leadership to oversee the renovation work, realizing that insurance payments would help fund much of the needed repairs. To maintain authentic, historic design elements in the properties, they even brought in artisans from France to repair sleigh roofs. In addition, the injection of insurance payments allowed residents not only to restore but also to update homes, improving the quality of neighborhoods overall.

### Summary

Prior to the storm, Charleston had been experiencing gentrification of its poorer neighborhoods, development of its suburbs, and revitalization of its barrier islands at destination locales. Hugo, however devastating, presented the opportunity for Charleston to accelerate its urban renewal efforts. Insurance payments and a clear vision created what some locals refer to as the “Hugo Effect”—forced urban renewal. Said Mayor Riley, “without any question, this city emerged from the recovery stronger, more beautiful, and more economically vibrant than it was before.”

## Case Study 6: The Economic Recovery of Grand Forks Following the 1997 Red River Flood

### Community Profile

Grand Forks, North Dakota (2010 city population: 52,838) is a Midwestern city located in the flood prone Red River Valley. The city lies approximately 70 miles north and upstream of Fargo, and roughly 150 miles south of Winnipeg, Manitoba (Canada). Grand Forks, North Dakota is separated from its twin city East Grand Forks, Minnesota by the Red River, and both cities as well as the immediate surrounding plain comprise the Greater Grand Forks area (2010 MSA population: 98,641).

The Greater Grand Forks region was a noted fur trading area between Winnipeg and St. Paul beginning in the mid 19th century, and with the advent of the steamboat, the newly settled town of Grand Forks, North Dakota

<sup>152</sup> [www.nola.com](http://www.nola.com/speced/ruinandrecovery/t-p/index.ssf?speced/ruinandrecovery/articles/charleston.html) (2005, December). Retrieved from <http://www.nola.com/speced/ruinandrecovery/t-p/index.ssf?speced/ruinandrecovery/articles/charleston.html>



became an increasingly important center of commercial activity for traders traveling up and down the Red River beginning in 1870. Soon thereafter, the city's newly established linkage to two major railroad networks enhanced its geographic accessibility and helped establish the city's economic base, which included a formidable sawmill industry. An influx of immigrants, many of whom arrived from Scandinavia, helped mold the character of the city and strengthen its longstanding agricultural tradition which includes wheat farming and the related invention of the widely popular "Cream of Wheat" breakfast food. These factors as well as the founding of the University of North Dakota in 1883 helped the city to grow in importance and experience some degree of economic prosperity for the next several decades.

The establishment of the Grand Forks Air Force Base in 1956 bolstered the city's population as well as its retailing industry, which would be at its healthiest in the 1960s and 1970s. While research, defense, and manufacturing have been significant components of the local economy, by the 1990s the city's economy would begin to feel the effects of military downsizing as well as the ongoing farm crisis. In addition, the flood prone Devil's Lake Basin in the northeastern part of the state, an important part of the city's trade area, would experience a depopulation which would impact the Grand Forks commercial base. Immediately before 1997, the city's economy was sluggish as its taxable sales base grew at a slow rate that was outpaced by inflation, the University of North Dakota's enrollment was in decline and the city's population had even dipped from its peak in 1994. In recent years, Grand Forks has built a stronger and more diversified economy, and has emerged as a model city in terms of post-disaster economic recovery.

### Disaster and Impact

The disaster that befell Grand Forks in April of 1997 was statistically determined to be a 210-year flood. Heavy ground-saturating rain in the fall of 1996 and record snowfall in the winter of 1996-97 occurred in both Grand Forks as well as Fargo upstream. Because of extreme conditions that prevented the temperature from remaining above freezing for nearly four months, April thawing helped induce the flood that would overwhelm greater Grand Forks. Up until April 16, the National Weather Service had predicted a Red River cresting of 49 feet, a level perceived to be manageable based on the perceived capabilities of the city's dike system and the 3.5 million sandbags installed by residents, Air Force personnel, and volunteers around the downtown Red River area. The river crested to over 54 feet by April 21, however, and would not fall back to 49 feet for nearly a week. Over 75% of the city would be submerged, and a major fire triggered by the flood would burn for more than a day in the downtown area. Evacuations called for by Mayor Pat Owens helped prevent the loss of life, but the economic toll of the flood was substantial.

Estimates vary, in part because of the inherent difficulty in obtaining reliable assessments in the wake of a disaster. Based on pre-flood tax estimates and post-flood on site inspections conducted by FEMA and other agencies, the greater Grand Forks area was estimated to have suffered a total of \$3.5 billion in damages (\$5 billion in 2012 dollars), with the city itself suffering nearly \$2 billion. Influenced by the 49-foot flood level prediction of the National Weather Service, less than 10% of residents purchased flood insurance, and it took nearly four months before the floodwater receded to a level that allowed residents to return to thoroughly examine the damage. The central business district bordering the Red River suffered the greatest physical



damage, but the entire area suffered significant economic damage. Eleven historic buildings and 60 apartments in or near the four-block downtown area were destroyed by the fire and a total of 750 commercial buildings were damaged, accounting for over 60% of its commercial building stock. An estimated 75% of homes, 315 businesses, and 16 local schools were flooded, while over 5,200 businesses were damaged or adversely impacted by the flood through the loss of inventory and/or the immediate loss of its labor and customer base.

### Efficiently Using HUD CDBG Funds

The economic recovery of Grand Forks was made possible largely because of the city's access to and efficient use of federal funds, the most prominent of which was the Community Development Block Grant (CDBG) assistance provided by the U.S. Department of Housing and Urban Development (HUD). The impacts of this disaster, which left the vast majority of the community effectively homeless and unemployed, enabled the city to work within the community poverty and hardship guidelines attached to the use of these funds. With over \$171.5 million in CDBG money awarded to it within three years of the disaster in 1997, the Grand Forks community was able to finance a number of recovery initiatives that helped restore the city's economy in the long term. CDBG funds were used to partially finance a \$410 million flood protection system, directly providing \$10 million in assisting businesses, various gap financing uses to help to secure loan funds, purchasing strategic city properties, funding repairs, and even in hiring personnel to help plan the recovery, among other uses.

### Establishing an Organizational Structure for Economic Recovery

From the very beginning of the post-flood planning efforts in the spring of 1997, civic leaders almost invariably viewed Grand Forks' economic recovery as a critical issue to be considered within the broader context of the community's overall recovery. While the restoration of basic infrastructure would dominate immediate recovery efforts, the economic revitalization of Grand Forks was planned with short-term and long-term recovery phases that were related to other significant aspects of the community's recovery. The coordinated nature of the community's recovery efforts is evidenced by the city's post-flood organization, overall recovery strategy, the communications operations employed, and the major initiatives undertaken to restore Grand Forks' economy.

In April 1997, Pat Owens, the mayor of Grand Forks, recognized that critical technical expertise in addition to a substantial amount of federal aid was necessary in order to be able to plan and implement a successful recovery. While Mayor Owens (referred to by many as “America's Mayor” at the time of the flood and fire) was a personable public figure who had the skill set necessary to enlist the support of the federal government in terms of acquiring a significant amount of financial assistance, both she and a number of federal officials (including officers from HUD) astutely recognized the fact that she lacked the technical expertise to comprehensively administer the recovery effort.

### Tri-Chairs

Mayor Owens promptly appointed a “Tri-Chairs” committee of civil servants to respectively oversee the financial, public works, and community planning aspects of the recovery. The mayor and her council deferred heavily to this committee of three, which collectively had the authority to manage the city's recovery related



resources. Another function of the Tri-Chairs committee included the authority to set the agenda for recovery. Agenda items included setting prioritized goals and proposing steps and potential funding sources in order to achieve those goals. While in the first year following the disaster, the Tri-Chairs worked fairly closely together, in subsequent years the Tri-Chairs worked more independently as both the city's recovery goals and their respective responsibilities became more precisely defined.

### **Business Redevelopment Organizations**

The city's business community was a willing and proactive participant in the economic recovery process because its leadership recognized the importance of having its concerns addressed as well as the importance of lending its expertise to the recovery process. Within days of the disaster, a group of prominent Grand Forks business leaders approached the mayor in order to volunteer their services with respect to the community's economic recovery effort. The Mayor's Task Force on Business Redevelopment was quickly convened with a membership of 15 prominent businessmen. These leaders relied on their experience in order to identify key issues to be considered during the recovery, which included eliminating bureaucratic recovery obstacles, workforce development and retention, the acquisition of funding access for business recovery, and the planning of the city's downtown area, among others. This task force held regular meetings for approximately six months after the disaster, at which point it was reformulated as the Downtown Development Commission. While the Mayor's Task Force on Business Redevelopment focused mainly on economic recovery planning during the critical early months following the disaster, the Downtown Development Corporation which succeeded it was largely focused on the ongoing long term implementation of the city's efforts as they related to the revitalization of the all-important downtown area.

### **Consultants**

Using Community Development Block Grant (CDBG) funds, HUD helped organize a team of consultants to facilitate the planning of each major aspect of the community's recovery. Many of these consultants were effective liaisons between HUD and the city, and the technical expertise provided by them helped the city to define its recovery goals. Among the consultants enlisted to provide technical expertise was a group from the Urban Land Institute (ULI), which in 1997 conducted an important weeklong workshop that presented ideas for recovery. An earlier two day long citywide "Re-Imagining Downtown" charrette convened by Mayor Owens was useful in terms of generating enthusiasm for redevelopment in the city. The ULI workshop was important because it generated its own practical ideas for redevelopment and refined some of the ideas bandied about from the earlier charrette, ultimately incorporating them into a plan for downtown-focused revitalization that would eventually be adopted to a significant degree.

### **Developing an Economic Recovery Strategy**

The Tri-Chairs committee and city officials generally agreed that the foundation of the community's recovery was based on three critical priorities, in order: flood protection, population retention, and business redevelopment. The events of 1997 demonstrated that without a reliable flood protection system in Grand Forks, the possibility of retaining the population and sustaining a vibrant community for the long term was very



low. Dependable infrastructure as well as a significant workforce and tax base were necessary prerequisites in order for a healthy and sustainable city economy to exist.

During its meetings in the spring and summer of 1997, the Mayor's Task Force on Business Redevelopment identified three priorities of economic recovery. The first priority was redeveloping the downtown area, which was inundated by floodwater but perceived to be the heartbeat of the city and the necessary focal point of future commercial and retail activity. The second and third priorities were to retain small business as well as the manufacturing sector, both of which were significant components of the city's pre-flood economy and compatible with the collective skill set of the community's population.

Beginning in the fall of 1997, the Downtown Development Corporation (DDC) succeeded the Mayor's Task Force on Business Redevelopment, and began working on a plan to implement the priorities for economic development by focusing on the revitalization of the downtown area. Important considerations that needed to be resolved included the amount of the downtown area that could and should be salvaged after the disaster, and how best to program the salvageable downtown area to stimulate commercial and retail activity. These considerations would depend on the location of the flood protection system and its components. The flood protection system planning process, led by the Army Corps of Engineers (ACE), would last three years until the official plan was finalized in 2000.

### Enhancing the Recovery Process with Effective Communication

City officials and consultants alike supported initiatives designed to enhance communication, which was ultimately necessary for the benefit of the community. Internal communication between administrators and external communication between the city and the public were components of the recovery process that helped the city progress in different ways.

#### Internal Communication

Hired consultants were among the most important facilitators of effective internal communication. Consultants paid with CDBG funds recognized the importance of sharing information and coordinating efforts between various recovery agencies, and to this end, helped organize weekly meetings and conference calls between representatives from various local, state and federal agencies focusing on different aspects of the recovery process. These meetings had the added effect of fostering a spirit of cooperation among various organizations, which was very important in the critical first months following the disaster. Members of the business community who did not have an official role in the recovery were often indirectly involved in this process by being consulted with after the coordinated meetings with official recovery personnel were held. These separate meetings enabled influential members of the business community to bring their perspective and input to the recovery process without unduly slowing down the planning process conducted by administrators.

#### External Communication

The city supported the establishment of a public information office in June of 1997 primarily in order to educate and inform the public. Before the communications staff was hired by the city, the mayor's office was inundated



with frantic calls pertaining to various issues related to the recovery effort. The new staff, which was originally intended to exist for two to three years, had a peak operating staff of seven full time employees and provided a centralized location to field incoming queries from concerned citizens. It also helped organize press conferences and publish newsletters to disseminate information to the public.

The slogan “New Normal” was consistently and repeatedly used by the public information office as well as by public officials in order to describe a desired end state of redevelopment. While the word “new” was used to acknowledge that the city would never be exactly as it was before the disaster, the word “normal” was used to signal to the public that life in the community would eventually return to normal.

One of the most important functions of the public information office was the regular reporting of recovery initiatives, which had a beneficial psychological effect on the community, particularly during the earlier stages of recovery. With regular announcements, the public information office enabled members of the community (including those citizens who were more prone to permanently resettling in another community) to be reassured that real and tangible progress was being made towards the city's redevelopment.

### **Implementing the Strategy for Long and Short Term Economic Capacity Building**

Many civic leaders feared that despite its efforts, Grand Forks could potentially lose more than 20% of its population to nearby Fargo or other cities. With the construction of a formidable flood protection system as a future goal, a concerted effort was made to retain the population, workforce, and existing businesses in the immediate short term in order to preserve the community and enable the tax base to be able to make a full recovery in the longer term.

#### **One Stop Shop**

The construction industry was one of the few industries that experienced a boom in the wake of the disaster. The intense reconstruction efforts associated with rebuilding the city stimulated two major process demands. On one hand, construction had to be performed in a manner that enabled labor and contractors to accomplish their tasks in an efficient and expedited manner for the public, and on the other hand, the citizens of Grand Forks had to be protected from a potentially unscrupulous influx of opportunists who were likely to commit consumer fraud in order to benefit from the situation at hand. By the end of April 1997, the city's Department of Administration and Licensing as well as the North Dakota Office of the Attorney General and other state agencies cooperated in order to create a “One Stop Shop” in order to both expedite and regulate licensing in the construction industry.

All contractors and their employers involved in repair or cleanup activities were required to have photo identification and to be vetted with an official background check. Contractors were also required to file bonding information, pay processing fees and to obtain unemployment and worker compensation coverage. By the beginning of July 1997, the point when the One Stop Shop was discontinued and regular licensing procedures were adopted again, nearly 550 new contractors were licensed and 2400 identification cards were issued to



their workers. In addition, the required background checks conducted during the vetting process produced roughly two dozen arrests for outstanding warrants.

### **Business and Labor Retention**

In order to enable as many local firms to stay in business as possible, a variety of assistance measures were used by the city. While all uninsured businesses that were adversely impacted by the flood were potentially in need of some assistance, smaller businesses that were not equipped to capitalize on the reconstruction boom were particularly vulnerable. While big box retail stores and many types of construction related firms were given limited or no assistance, a significant amount of assistance was made available to other small businesses with the use of CDBG, SBA, and EDA funding. CDBG money was used to offer existing businesses up to \$20,000 in disaster assistance loans to continue operating; it was also used to back SBA funds, which provided low interest loans to businesses as well as homeowners. Additionally, a \$2 million EDA revolving loan fund was made available.

CDBG funds were also used to create public works projects, which had a beneficial effect on the economy on multiple fronts. For example, a number of volunteering religious organizations were offered housing when CDBG funds were used to purchase a closed hotel building. The hotel was turned over to the religious volunteers, with the city paying for laundry and other minor expenses, and the new facilities enabled the number of working volunteers to substantially increase the amount of free labor provided to the city. A separate investment of CDBG funds helped to enhance the physical state of the city with the creation of \$10 per hour cleanup and repair jobs. These jobs were of critical importance because they helped to keep the labor force in town, and eventually, with the improving infrastructure and available labor, small businesses found Grand Forks to be an increasingly viable location to conduct business.

Industry was also supported with the creation of a major retention facility. The Noah's Ark industrial business retention center was created using \$2 million in HUD CDBG funds with \$5 million in EDA funds. The large capacity industrial building housed displaced small businesses in Grand Forks until 1999. Another \$2 million in HUD CDBG funds would be invested in a 120,000 square foot industrial park with 30,000 square feet of incubator space.

While a full recovery was years away, within six months of the disaster, basic infrastructure and services were restored to the community and business rebounded in many industries (although retail and service industries were still crippled). Instead of the 20% or greater rate of depopulation feared for Grand Forks, only 3% of the city's population was lost in the years immediately following the flood.

### **Flood Protection System**

Perhaps the most important and controversial decision made with respect to the community's recovery concerned the location of the levees and dike lines relative to the river. In order to protect the population from the Red River's discharge in the future, a large area of the surrounding floodplain had to be cleared in order to be able to absorb the overflowing water. This process would force the permanent displacement of a number of



downtown businesses and homeowners by prohibiting building on the “wet” side of the dike system. The decision of where to locate the “line” was essentially a compromise between long-term safety and preservation of the past. Many business owners strongly resisted the Army Corps of Engineers’ (ACE) plan to construct a system to protect the community from a 250-year flood, and there were a number of public officials who received threats (not always anonymous) from members of the community.

Despite some strong resistance from many affected stakeholders, the city's leadership accepted ACE's plan for a 250-year flood system which was finalized in 2000. In physical terms, the plan required that much of the downtown, 2200 acres of space (an area roughly two and a half times the size of Central Park in New York City), would have to be cleared. The city would ultimately use \$30 million of its CDBG money for residential property buybacks and another \$30 million in downtown investments.

The cleared area would become known as the “Greenway”, and it would contain notable public recreational amenities including park space, a camping area, and a golf course. The 250-year flood protection system would cost \$410 million, with the expense shared by Grand Forks, East Grand Forks, and the federal government. The State of North Dakota covered over \$50 million of Grand Forks' \$135 million portion of the cost. A combination of CDBG funds, a city sales tax, and a city property tax accounted for the source of Grand Forks' remaining \$84 million share of the flood system's cost.

Despite the resistance and obstacles necessary to proceed with the flood protection system, the final plan enabled the city to move forward. Businesses, residents, visitors and others could be assured that there was a plan in place that would ultimately enable the city to experience a “new normal” state of existence by 2007. With the flood protection system's boundaries clearly defined, an increased focus on revitalizing the commercially salvageable area of the downtown could be made.

### **Downtown Redevelopment**

With the final decision made on locating the flood system's boundaries in 2000, it was possible to strategically rebuild the remaining downtown area that was to serve as the heart of the city's commercial activity. The new downtown scenically embraces its proximity to the river and builds upon the aesthetic character of the historic downtown. The Downtown Development Corporation (DDC) intentionally favored selling city owned buildings for lower than market prices to restaurants, theaters, museums, and other land uses that were consistent with its image of the vibrant new city.

The city invested nearly \$30 million of its CDBG funding to revitalizing the 30-block central business district, including upgrades to the city's downtown infrastructure. Both HUD and FEMA funds were used to buy flood damaged commercial buildings and repair grants not exceeding \$230,000 were offered to renovate damaged buildings. The city also invested nearly \$12 million to build the multi-story Alerus complex, an office building anchored by First National Bank and major law and accounting firms. While commercial activity and inflation adjusted downtown property value assessments remained sluggish for several years, private investment began to pick up considerably after 2004.



## Building a Stronger Grand Forks: The Road to Full Economic Recovery

Grand Forks is in many ways a stronger city than it was before the disaster of April 1997. While it is clear that an event such as the Red River Flood of 1997 is not one that any community would want to ever have to experience for any reason, the disaster presented the community with a unique opportunity to rebuild the city in a way that is safer, more sustainable, and significantly more conducive to economic development. Grand Forks has successfully experienced what some public officials refer to as “forced urban revitalization”.

### Recovery Pains

After the frantic first few weeks following the flood and fire in Grand Forks, a spirit of unity and cooperation helped energize the community. Citizens, civic leaders, consultants, volunteers, and others worked together to restore the city's basic operating infrastructure within six months. The initial optimism resulting from the progress of the city during its initial stage of recovery would lead to heightened expectations that were difficult to fulfill. While city officials appropriated and spent CDBG funds within three years of the flood, it would take several years for many of the longer-term initiatives to bear fruit and produce a full recovery. The plan for the flood protection system as well as the official location of the dike lines on the floodplain would not be officially submitted until three years after the disaster, and the city's buyback program would require the use of eminent domain in certain cases due to the reluctance of the public to let go of their properties and businesses. It wouldn't be until 2007 when the city would finally have its flood protection system in place. Many public officials and citizens agree that a completed flood protection system was necessary for many residents and businesses to feel safe enough to invest both financially and emotionally in Grand Forks.

### A Stronger Grand Forks: 1997-2007

Despite the many challenges it faced, the city was ultimately successful in implementing its economic recovery strategy. By the time the flood protection system was finally completed, the city's economy was clearly growing and diversifying, as the population of the city proper and even the enrollment of the research intensive University of North Dakota both surpassed pre-flood levels well before the ten year anniversary of the flood.

Before 1997, the city's downtown was vulnerable to flooding, much of the downtown area was turned away from the river and the downtown retail and commercial sectors were sluggish. The new Grand Forks features vibrant retail and commercial areas that take full advantage of the river's scenery. Moreover, citizens and potential investors can now breathe easy during the spring thawing season due to the flood protection system, and businesses can now invest in the city with more confidence.

Before the flood, many potential tourists considered Grand Forks to be a drive-through city on the way to Fargo. The city's Greenway, which is comprised of 2200 acres of land that had to be “sacrificed” for the creation of the flood protection system, has helped to establish the city as a tourist attraction. Many visitors from Winnipeg, Manitoba (Canada) and other cities who would formerly pass through Grand Forks or only make short rest stops on the way to Fargo now see Grand Forks as a legitimate destination in its own right. These visitors enjoy the



public amenities the Greenway has to offer (including its camping areas, golf course, and park space) and now pump an estimated \$70 per person per day into the local economy, often extending visits to two or more days.

The city efficiently used its funding to retain the population and businesses, and with wise investment and strategic rebuilding, it gradually led its city to the “new normal” state repeatedly and consistently referred to by public officials. By 2000, overall employment and aggregate revenues were growing at a faster rate than immediately before April 1997. Service industry employment surpassed pre-flood levels in 2002 and restaurant and retail employment met pre-flood levels four years later.

The CDBG and EDA funded industrial park, as well as other incentives, bore fruit with respect to the manufacturing sector. In 2006, the industrial sector in Grand Forks, which traditionally benefits from the research activity of the University of North Dakota, the defense related activities associated with the Grand Forks Air Force Base, and the presence of companies such as turbine blade manufacturer LS Glasfiber, reached a historic peak in jobs by accounting for over 4000 employees within the city.

## Summary

The economic recovery of Grand Forks following the 1997 Red River Flood was possible because in the critical early stages of the disaster, Grand Forks was able to secure a significant amount of federal funding as well as the technical assistance and organizational structure necessary to be able to efficiently leverage its resources for the immediate and long term benefit of the community. With the use of creative financing techniques and strategic investments of its CDBG funds as well as other sources of assistance, the city was able to retain its residents and businesses while it transformed itself into a safer, revitalized and more economically diverse community in the long term.



## Case Study 7: Neighborhood Revitalization Post-Disaster, Czech Village / New Bohemia, Cedar Rapids, IA

### Community and Neighborhood Profile

Cedar Rapids, Iowa, the second largest city in the state, is located in the central area of eastern Iowa. With a population of 126,000, the city is the core of the growing Cedar Rapids, Iowa Metropolitan Statistical Area (MSA), which represents three counties with a population of 256,324 people.

In the City of Cedar Rapids, located immediately south of downtown, is the Czech Village / New Bohemia Main Street District. This district is comprised of two sub-areas physically separated by the Cedar River. On the East bank of the river is the New Bohemia neighborhood and on the West bank is the Czech Village neighborhood. Both areas feature a business district with New Bohemia's focused around Third Street SE. The area is recognized as the Bohemian Commercial Historic District by the National Register of Historic Places and is known for its unique artistic and business community.



Czech Village / New Bohemia Main Street District, Cedar Rapids, IA.

Source: Google

The area has a rich cultural history of Czech, Moravian and Slovak immigrants and their descendants since the turn of the century. Prior to the flood, the neighborhood wasn't seeing the growth it has seen recently and faced an increasing number of vacant buildings and properties. Additionally, the area was facing identity issues with the two sub-areas of the district not seen as one, but two separate areas.

### Disaster Impact

In June 2008 the Cedar River, which runs through the heart of the city and borders downtown, crested at 31 feet in an area with a 12-foot flood stage, surpassing the 500-year flood plain and the previous flood record by 12 feet. This epic flooding impacted 10 square miles of Cedar Rapids, Iowa, or 14% of the city, and caused an estimated \$3 billion in damage. Part of the area flooded was the 40 blocks that make up the Czech Village/New Bohemia Main Street District (CV/NB Main Street), which experienced between 8 and 15 feet of flooding throughout the entire district. Many of the small businesses in Czech Village were essentially wiped out.

### Neighborhood Recovery and Revitalization

Recovery from a disaster for any neighborhood is challenging, but recovery for a neighborhood that was in decline before being impacted presented another set of challenges. What makes the district unique is that they recognized an opportunity to recover and to also revitalize and strengthen the quality of life within the neighborhood. Key players included the City of Cedar Rapids, the Czech Village/New Bohemia Urban Main Street



District (CV/NB Main Street), the historic preservation group “Save CR Heritage”, the National Czech & Slovak Museum & Library, Czech Village Association, The New Bohemia Group, developers, and community residents. Key assets that opened and acted as a catalyst in recovery include the NewBo City Market (discussed in length later in this profile) and the National Czech & Slovak Museum & Library.

This area of Cedar Rapids has a rich history and working to preserve this and provide a sense of place lets the district stand out amongst other neighborhoods. The emphasis on historic preservation, loyalty to the Czech heritage and history of settlement, continuing the “Bohemian” culture of arts, entertainment, and grassroots community involvement are all part of what makes the district unique. The neighborhood culture of empowerment of the individual to express their skills, whether they be culinary, musical, fine/performing arts, literary, antiquing etc., leads to a unique mix of one-of-a-kind businesses that make the district a destination as it continues revitalization.

### **Using the Main Street Program as Framework for Recovery**

CV/NB Main Street was first discussed pre-disaster but wasn’t established until 2009. Working with Main Street Iowa’s established framework of revitalization, the original CV/NB Main Street board of directors modified it for disaster recovery efforts. An additional benefit from establishing a Main Street program, aside from state resources, included resources from the City of Cedar Rapids, who granted \$50,000/yr to the program for 3 years as part of their flood recovery efforts. The program also was able to work with a local company to secure \$75,000 for a facade improvement program. Several property owners also benefited from \$50,000 Challenge Grants available through Main Street Iowa. Using this funding and other grants, the Main Street program has helped leverage an additional \$17.4 million in private investment for rehabilitation through 2012.

### **Filling the Gaps in Historic Neighborhoods**

The city of Cedar Rapids played a role in recovery of historic properties, many of which are located in a 100-year floodplain in the district, by changing state redevelopment guidelines. Initially, state guidelines prevented the redevelopment of flood-damaged properties within the 100-year floodplain that were purchased with federal funds. Working with the Iowa Economic Development Authority, the city of Cedar Rapids noted the importance of filling the gaps in historic neighborhoods, prompting an exception to the rule.

### **Marketing Vacant Space and the Neighborhood for Redevelopment**

One way to fight the increase of vacant properties post-disaster in an already vacant property-saturated area is through increased marketing efforts such as property tours. CV/NB Main Street, in partnership with the historic preservation group Save CR Heritage, advertised in various media outlets the opportunity for tours of vacant properties in the district. Attendees included developers and the general public and raised awareness of the available properties and the redevelopment progress of the neighborhood.

Another additional notable project was an effort between CV/NB Main Street and the local cable company, OnMedia. CV/NB Main Street negotiated to provide discounted commercials to neighborhood businesses. Additionally, before these commercials aired a blurb about the district appeared, benefiting both parties.



### Learning from Partnerships

CV/NB Main Street also benefited by learning from cities that reached out to them post-disaster. The city of Minot, North Dakota, experienced similar damaging floods and post-flood contacted the city of Cedar Rapids offering to share their experiences. Leaders of the Main Street Program learned tips about working with FEMA and experiences working in a recovering government. They also learned how to work with funding shortages when it comes to immediate relief. The director of the Main Street Program noted this was very useful and said it helped prevent “reinventing the wheel”.



### Retail as Catalyst for Revitalization – NewBo City Market

Opening post-flood in October 2012 and occupying a whole block, the NewBo City market is seen as a catalyst of redevelopment. The market idea originally started with a group of four women who were sitting around a table in the middle of March and noted they needed a community gathering place to visit. The idea of a public market developed that would be open year round was birthed. The group of women brought this to the city for help in the development. The city saw this as a valuable tool for economic development and incorporated funding from flood recovery for initial development.

The city hired Projects for Public Spaces, an international consultant, who toured the city and helped in site selection. They chose the site in the district because of a variety of factors, including the ability for it to spur redevelopment in the post-flooded neighborhood and the ability to rehabilitate a damaged industrial building. From this, a fundraising campaign kicked off and gathered support from the city, county, state, Solid Waste Agency, local foundations, and many more community donors.

The NewBo City Market today is a dynamic public space that provides space for 24 local entrepreneurs of fresh and prepared food, products, and experiences. Before the market opened there was plenty of entrepreneurial interest with over 300 applicants for 24 vendor spots according to Ann Poe, the market’s executive director. Acting similar to a business incubator, part of the mission of the market is to grow entrepreneurship. They support the vendors with marketing and retail assistance and below market rental rates of the vendor spots. The market hopes their vendors will outgrow their space and move into the district and community. Poe noted over 22,000 people visited on opening weekend, and they have averaged 1,000 people on Thursday nights and 6,000-8,000 on the weekends in the months following. These numbers should increase during the growing season of spring and summer when the outdoor farmer’s market component is open.

This sheer increase in visitors has increased the foot-traffic and sales of businesses in the district. A nearby business owner noted, "We've seen an increase of customers coming in that didn't even know we were here, and I've been down here for 13 years...The market has doubled business on the weekends".<sup>153</sup>

<sup>153</sup> NewBo City Market Spurs Growth at Surrounding Businesses (2012, November 8). *KCRG-TV9/Local News*. Retrieved from <http://www.kcrg.com/news/local/NewBo-Market-Spurs-Growth-at-Surrounding-Businesses-178024451.html?m=y&smobile=y>



While the market is only a few months old, the revitalization potential has been witnessed by multiple businesses. After the first two weeks of the public market being operational many surrounding businesses in the district noted they are looking into to extending their hours to match the market's hours and catch more of the traffic it generates.

Being still young, the market sees a bright future for the neighborhood and the market itself. Poe noted the market is a great example of a community pulling together to create a catalyst for not just the district's future, but also the community's future.

### Planning for the Future

The CV/NB Main Street program is focusing on continued redevelopment of the district and started in late 2012 gathering public input for a revitalization plan. Jennifer Pruden, Executive Director, said the revitalization strategy will guide future business growth and development within the historic district. The creation of a Revitalization Strategy has been made possible by a network of dedicated community members and neighborhood stakeholder groups. Additional consultants from Main Street Iowa and Downtown Professionals Network will conduct an in-depth analysis of market trends and demographic information to guide business recruitment. The \$100,000 price tag of the studies and plan will be funded by in-kind services, private donations, the local Main Street Program funding, and future grants.<sup>154</sup>

### Summary

The revitalization of the Czech Village/New Bohemia Main Street District has taken many efforts from various agencies and is ongoing. A significant part of successful flood recovery efforts has been the individual, incremental impacts of many different players that, working together toward a common goal of revitalizing this district, make a monumental difference.

CV/NB Main Street's primary role to seek available resources that make it possible for these individual, incremental projects to happen by helping fill in the gaps has been a valuable asset. All of this provides a sense of place and, by creating a revitalization strategy, CV/NB Main Street is ensuring continued growth within the desired guidelines for the district in its journey from an industrial declining neighborhood to a thriving arts and cultural district.

## Case Study 8: Beacon of Hope (BOH) Resource Center

### Background

Hurricane Katrina devastated New Orleans, LA with a storm surge on August 29th, 2005 that caused 53 levee breaches, flooding 80% of the city. With such widespread damage, one organization for neighborhood

<sup>154</sup> Revitalization strategy to develop vision for Czech Village/New Bohemia district. (2012, November 30th). *Cedar Rapids Gazette*. Retrieved from <http://thegazette.com/2012/11/30/revitalization-strategy-to-develop-vision-for-czech-villagenew-bohemia-district/#sthash.T0lrME9S.dpuf>



revitalization and recovery has emerged as a model of success. Beacon of Hope, since starting in one neighborhood, is now operated in 25 neighborhoods throughout New Orleans. Beacon of Hope (BOH) Resource Center formed as a nonprofit post-Katrina on February 14th, 2006. Denise Thornton, the founder, was originally providing her neighbors with assistance from her home (food, resources, communication services, contractor referrals, etc.). United Way, along with other foundations, heard of her activities and granted her funding to help sustain her activities. Beacon of Hope formed to provide neighborhoods with the structure and skills needed to revitalize their own communities.

### **Residential Engagement as a Model for Success**

Beacon of Hope's model for neighborhood redevelopment was first created organically and since has been organized into M.O.D.E.L., which is discussed later in further detail. This M.O.D.E.L. is a structure for which residents can engage in the recovery of neighborhoods, which is noted as the key to BoH success. These local residents are a viable tool in disaster recovery, and with a structure for them to get involved, success follows. Denise Thornton was originally on the ground just "doing" and as residents of the neighborhood saw her work and the workload she had, they began to take on parts of her work so she could concentrate on other roadblocks arising from the disaster. This evolved into the current M.O.D.E.L. Different teams of volunteers report in an organized manner to BOH and the government. Early on, Denise saw how many people were feeling helpless post-disaster. Training and structure to engage in recovery efforts allows neighbors to get involved and rebuild their neighborhoods and community together.

BOH started in one neighborhood, Lakewood, but by the end of the year Beacon had established 8 neighborhood Beacons, providing support to more than 7,000 households. This increase continued as neighborhoods noticed critical mass being achieved in communities where BOH was involved. These struggling neighborhoods would then seek out BOH to assist them in their neighborhood's recovery. BOH rarely has sought out neighborhoods since neighborhoods would come to them by word of mouth. When a neighborhood identified itself as needing redevelopment assistance (commonly to fight blight and abandoned properties, which BOH identified as the #1 deterrent to redevelopment) the organization would work to redevelop or develop a neighborhood association in the absence of one and implement the M.O.D.E.L.

### **The Need for a Strong Neighborhood Association**

The first neighborhood of Lakewood, which had a strong neighborhood association before Hurricane Katrina, had become fractured after the disaster. To bring the association back, several board members used their connections to bring together enough residents to begin meeting on infrastructure issues and power restoration. Word spread of these meetings and the numbers grew. Many of the services and resources needed by the residents were beyond the capacity of the association, and BOH was born. Working with the association and sharing information, BOH found that they could easily distribute information through a newly created block captain system and social media. BOH then implemented a volunteer coordination program to meet the needs of the residents.



If a neighborhood association didn't exist in the neighborhood, BOH would hold informational public events on recovery while simultaneously building the structure of a neighborhood association. These events were well attended since post-disaster citizens were looking for vital rebuilding information. From these public events, BOH solicits volunteers and identifies residents to form volunteer teams and core members to form a neighborhood association.

### **M.O.D.E.L.**

BOH staff trains resident volunteers in the areas of advocacy, governmental affairs, community relations and outreach, blight mitigation, flood mitigation and rebuilding resources. This MODEL empowers residents to facilitate their own recovery and revitalize their neighborhoods through:

**Mapping:** collecting, mapping, and analyzing neighborhood data.

**Outreach:** ascertaining the needs of community members.

**Development:** creating community and economic impact programs.

**Engagement:** ensuring residents are part of the solution.

**Leadership:** empowering residents to become community leaders.

### **Mapping to Fight Blight and Assist Local Government**

This part of the MODEL, mapping, shows how BoH was able to understand the issues at the parcel level of neighborhoods. This mapping differed from other condition surveys in that it engaged neighborhood residents to conduct the survey and ensure the quality of responses. BoH would train and deploy a volunteer survey team, lead by a survey captain, to go out and identify each parcel in the neighborhood and the progress of redevelopment (vacant, slab-vacant, non-gutted, gutted, renovating, and recovered). The 2006 neighborhood property condition surveys and maps were produced by hand, and results were discussed during community meetings to give residents an immediate picture of their neighborhood's recovery. Residents began to identify and report trouble areas to city authorities and act in a coordinated effort by utilizing the administrative structure put in place by the BOH.<sup>155</sup> This was a great start that allowed BoH to track blight and assist the city with code enforcement.

This data also became a powerful tool of advocacy for neighborhood associations. Neighborhood Associations successfully use this resident driven data collection method to apply for sustainable construction funding for materials and construction technology that help homes meet LEED Silver criteria, reducing the cost to home buyers. Data collected also substantiates whether or not a neighborhood is a viable candidate for FEMA water mitigation measures. Commercial developers also use this data to track neighborhood recovery as a basis for reinvestment, and has empowered residents through these community networks. The numbers could either attract businesses or resources depending on the need and how they were presented.

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<sup>155</sup> The Beacon of Hope Resource Center Maps the "New" New Orleans (2010, Spring). *ArcNews Online*. Retrieved from <http://www.esri.com/news/arcnews/spring10articles/the-beacon-of-hope.html>



### **Partnership with the University**

This mapping was brought into the digital age in the summer of 2008 and August 2008. After a Washington State volunteer assisted BOH with implementing an Arc GIS mapping program, they soon partnered with a local New Orleans university in an effort to standardize their program. The Beacon of Hope-University of New Orleans Community Recovery Project (BUCRP) formed. This was born to organize, analyze, support and document the creation of a Beacon GIS. This partnership also allowed BoH to organize and simplify the surveying process. After using a free, one-year trial license of the GIS program, BOH purchased the software license at a reduced price through a donation from the nonprofit “Tech Soup”.

The mapping of the neighborhoods isn’t the only tool Beacon uses to fight blight or redevelop a neighborhood. This is only a portion of the M.O.D.E.L and other programs such as their green space volunteer teams and block captain teams assisted in the effort. The green space teams look to identify potential green space in neighborhoods along with spaces that served as green spaces before and need assistance in recovery. Identifying potential vacant lots next to each other, these green space volunteer teams report this to the neighborhood captain, who then relays this to the BoH headquarters. From the headquarters the outreach team is able to connect needed resources.

### **Outreach**

Outreach Teams identify neighbors in need and connect them with information and resources. This was one of the founder’s initial activities when she was trying to navigate the rebuilding process for her home and fill the needs of her neighbors. Later on, the sole staff person at BoH headquarters was tasked with identifying all the other nonprofits working in the area and creating a database. This database included what resources these organizations have and their current efforts and abilities for recovery. In addition, these neighborhood teams help coordinate external volunteers to complete residential and green space projects. To date the green space and volunteer coordination teams have helped replant 25 miles of green space, rehabilitate 9 parks and playgrounds, complete over 1,700 homeowner projects, and coordinate over 30,000 visiting volunteers throughout the 25 Beacon neighborhood centers.

### **Development**

In development BOH has established sustainable programs that generate development throughout the community. Such programs include the Harrison Avenue Marketplace and Community Gardens to expedite residential and economic growth simultaneously.

### **Engagement**

Beacon of Hope Resource Center empowers and trains residents to become advocates for their neighborhoods. By mobilizing residents to facilitate their own recovery, they feel a sense of pride and ownership in their neighborhood and can facilitate their individual community needs.



## Leadership

By working with neighborhood associations to help residents who may not have been previously active within the community, BOH builds strong leadership skills. These residents became prominent voices as they work with nonprofit organizations and governmental agencies to address neighborhood and citywide issues.

## Summary

BoH now operates 25 neighborhood “satellite beacons” throughout New Orleans. As of September 2010 they have helped in the rebuilding of over 1,700 homes. BOH has proven how successful a resident-led model for recovery can be and since Katrina has consulted with organizations in North Dakota, Iowa (Block-by-Block program, Cedar Rapids 2008 flood), and Texas after their respective disasters. Most recently they have worked with LaPlace, Louisiana and established have established a Beacon of Hope New York to assist Staten Island residents affected by Hurricane Sandy.

## Take Away Lessons

A major key to BOH success is the level of residential engagement. Beacon of Hope describes their impact:

*“Neighborhoods who have implemented the MODEL now have the structure and skills necessary to revitalize their own communities and to remain resilient in the face of unforeseen events. Engaged residents have become community leaders, are now influential voices with local and state agencies, and have developed a sense of pride and ownership in their communities.”*

This again shows that a top-down neighborhood revitalization development does not work. Rather, building coalitions and working relationships across many interests and residents from the bottom-up produces a more sustainable recovery. Neighborhood residents are a viable tool in disaster recovery, and with a framework to help in recovering their own neighborhood, they can provide insight on issues not seen from many other approaches. Building this structure and capacity with residents enables a broader reach from one organization and allows effective communication post-disaster, often a hurdle in a recovery.

## Case Study 9: Economic Diversification in the San Fernando Valley after the 1994 Northridge Earthquake

### Community Profile

The San Fernando Valley is located on the northern edge of Los Angeles and is flanked by the Transverse Mountains on all sides. The Valley overlaps the city of Los Angeles; it comprises about 40 percent of Los Angeles, and 75 percent of the Valley lies within Los Angeles city limits. The Valley is home to 1.76 million residents. Its



key industries are aerospace, biotech, business services, entertainment, health services, manufacturing, and wholesale trade. Since World War II, the Valley has been home to a thriving aerospace industry; however, rising costs and declining government contracts have led firms such as Lockheed Martin, Hughes Aircraft Co., and Rocketdyne to relocate or downsize over the past 20 years. In addition, at the time of the Northridge earthquake, the area was suffering from a national recession as well as the loss of a 2,500-worker General Motors plant.

## Disaster Impact

These existing economic concerns were exacerbated by the devastating 1994 Northridge earthquake. The earthquake caused around \$20 billion in damage in the Los Angeles area, wreaking the most havoc in the west Valley. Sections of freeways collapsed and thousands of commercial and residential buildings suffered partial or complete collapse. Following the earthquake, Los Angeles distributed federal and state recovery funds evenly across 15 city council districts. This meant that districts that were 40 to 50 miles from the epicenter received the same amount of funds as the most devastated areas. In response, Valley leaders took recovery effort into their own hands by forming an economic development alliance, in the form of a public-private partnership, to address the unique needs of the region.

## Pursuing an Economic Diversification Strategy

### Establishing a Public-Private Partnership for Economic Recovery

A key group of Valley leaders from both the private and public sectors saw the need and opportunity to unite the recovery efforts of existing groups in the community. After the earthquake, U.S. Secretary of Commerce Ron Brown met with local leaders who determined that the best course of action was to form a new umbrella organization. This initiative was launched with a \$350,000 planning grant from the Economic Development Administration (EDA). The grant would fund the development of a collaborative economic development strategy to respond to the many economic shifts the region was experiencing. The new organization would oversee the strategy and ensure its continuity.

The founding leaders brought to the table the first four partner organizations of what became the Valley Economic Alliance (VEA): the Valley Economic Development Center, the Valley Industry and Commerce Association, the United Chambers of Commerce, and the Small Manufacturers Association. When the first VEA CEO was hired in 1996, he also recruited the San Fernando Valley Conference and Visitors Bureau (CVB), the Valley International Trade Association, the Southland Regional Association of Realtors, and the Valley Leadership Institute. Gaining regional participation was crucial to the process. Prior to the VEA, four Valley cities – Burbank, Calabasas, Glendale, and San Fernando – competed with each other and had uncooperative relationships with the city of Los Angeles. However, VEA leaders continued to emphasize the need for a true regional economic alliance, eventually winning the full support of these cities and formally adding them to the group in 1997.

The VEA took on the form of a 501(c)(3) not-for-profit economic development and marketing organization. Its formal mission is to work with public and private stakeholders to grow and sustain the economic base of the San Fernando Valley, as well as to improve the quality of life in the surrounding five-city region. The VEA is governed



by a 150-member general board of directors, 33 of whom also serve on an executive committee led by a chairman, president, five vice chairs, a chief financial officer and a treasurer. The VEA has an annual operating budget of approximately \$1.4 million, all of which comes from investor donations, special projects and events, and foundation grants.

### **Developing a Strategic Plan to Guide Economic Recovery**

The VEA brought together a large number of community stewards to devise a vision for a strategic plan. The planning phase began in 1995, and the plan was put into action the following year when the first full-time CEO was hired. Although VEA leaders contributed a good deal to the plan, they focused on capturing the community consensus. This was crucial to the plan's success because community leaders needed to feel a sense of ownership in the plan in order to make a stewardship commitment.

The ensuing report, *Economic Alliance Partnerships for Progress*, outlined a strategy to expand further into entertainment and information services, the Valley's fastest-growing industries. The hospitality industry and small businesses also became prime targets. The plan included five initiatives, each with an assigned vice chair, including:

- Workforce preparedness,
- Industry retention and expansion,
- Business in the community,
- Government relationships, and
- Small business assistance.

### **Developing the Plan**

#### **Prepare the Workforce for New Opportunities**

The plan advocated forming separate task forces to assess workforce issues for the entertainment and information industries (including finance, insurance, and business services). It also recommended setting up a Business Education Partnership with the Los Angeles Unified School District, high schools, vocational training programs, community colleges, and California State University-Northridge (CSUN) to coordinate with businesses in developing relevant educational programs. The partnership encouraged businesses to expand their internship and mentoring programs as well.

#### **Connect Business Retention, Expansion, and Attraction**

The plan suggested recruiting volunteers from Valley businesses to serve on public-private business retention teams. These teams worked with at-risk companies and contacted all Valley businesses over a certain employee threshold to encourage them to stay in the Valley. In addition, the teams did business attraction work. The plan recommended working with the CVB to develop marketing materials targeted at specific industries as well as prospective residents. The material included competitiveness data and highlights of the economic health of the Valley.



### **Tend to the Local Environment for Business**

In keeping with the strategic plan, the VEA created business-community forums to foster discussion of common issues. These can take place in the form of town hall meetings or a town council. To address the issue of crime reduction, for example, the plan recommended setting up neighborhood watch programs, marketing the Valley's positive image regarding safety, and organizing a coalition to influence safety and crime laws.

### **Facilitate Accessibility to Services**

The Valley is home to a high proportion of entrepreneurs. The VEA set up a Valley Government Business Center, a streamlined resource for business permitting, regulation, and information. A special advisory council was recommended to interface with government on regulatory reform. The plan also recommended forming a special task force to address the legislative concerns of home-based businesses in particular.

### **Develop Specific Programs to Grow Core Industry Sectors**

The plan advocated setting up a Small Business Assistance Center to provide one-stop, full-service management and technical assistance, as well as business and entrepreneurial training to local businesses. Another crucial step involved developing a small business revolving loan fund and securing an additional \$10 million EDA grant for this fund. The plan also proposed conducting a feasibility and planning study to establish a New Media Technology Center to serve as a business incubator, demonstration center, and after-school center for high school students interested in technology. Lastly, the plan focused on nurturing small manufacturers by developing a Manufacturing Enterprise Network to provide small manufacturers with timely information on regulatory issues, changing technologies, peer-to-peer problem solving, and other resources to maintain global competitiveness.

## **Results**

As the VEA carried out the plan, it began to see successes. The Valley's long-standing aerospace workforce offered transferable skills that were relevant to other types of high-tech manufacturing. New technologies, bioscience, and clean/green manufacturing increasingly replaced the departing aerospace industry. These smart technologies, based on intellectual capital, are less sensitive to jurisdictional disadvantages than traditional manufacturing.

The relocation of the MiniMed research and production facility to the CSUN campus is touted as one example of the VEA's success. CSUN's nonprofit auxiliary, the North Campus Development Corporation (NCDC), was tasked with developing 65 acres on the university's north campus. NCDC worked with economic development officials and a local investor-philanthropist to facilitate a public-private deal that relocated MiniMed to a 504,000-square-foot building on campus. This proximity to campus fostered a close relationship between the university and the facility. MiniMed collaborates with university faculty on research projects and offers student employment through work-study programs, internships, and scholarships.

The VEA continues to evolve economic development strategies and to increase collaboration in the region. In 2001, the VEA developed *Vision 2020*, a set of growth goals for the following 20 years. *Vision 2020* was



supported by private funding and focuses on market-driven economic development strategies and civic and leadership initiatives. In 2009, Los Angeles County brought together more than 1,000 stakeholder organizations to create the county's first consensus strategic plan for economic development. Local leaders also recently launched a San Fernando Valley Council of Governments, which engages the five local city governments on issues of planning, transportation, and economic development.

## Summary

The Valley's entrepreneurial culture contributed to a proactive response to the earthquake. Locals took it upon themselves to guide the rebuilding without relying on intervention from the outside. "What this Alliance has always done is filled out the blanks, smoothed out the surfaces, and made things happen," said a founder.

The public-private partnership that created the VEA leveraged the crucial assets of both worlds. In order to maintain global competitiveness, the private sector needs to drive the public debate and maintain relationships with decision-makers. To effectively address workforce issues and to develop a strong economic base, the public sector needs to actively engage the private sector. The Valley's recovery efforts, as well as long-term economic diversification, hinged on the partnership between public and private organizations across jurisdictions and industries. The result was collaborative brainstorming, dedicated implementation of the plan, and maximized funding mechanisms. Through this collaboration, VEA leaders succeeded in creating momentum in the Valley that continues to this day.

## Case Study 10: Growing from within Post-Disaster: The St. Louis County Best Practice

### Community Profile

St. Louis County, Missouri (2010 county population: 998,954; 2010 MSA population: 2,812,896) is a Midwestern city surrounded by three rivers: the Mississippi River, the Missouri River and the Meramec River. The city of St. Louis was originally part of the county but became an independent city in 1877. St. Louis County is currently home to half of the jobs in the region and a quarter of the jobs in Missouri. The county became the employment center of the region in the 1980s.

The county's economic base is traditionally manufacturing; however, the decline of this industry starting in the 1990s has driven the county to diversify the economy. Industry clusters include plant and medical sciences, information technology, transportation and distribution, and financial services. There are currently 13 Fortune 1000 companies headquartered in St. Louis County.

### Disaster Strikes...Again and Again and Again...

As the gateway to the West, the St. Louis region is historically known as a center for aviation and automobiles. In 1990, there were 40,000 employees working at McDonnell Douglas in St. Louis County. In June of that year, the United States Department of Defense (DOD) decided to cancel a \$57 billion contract for A-12 attack jets. McDonnell Douglas Corp. and fellow St. Louis manufacturer General Dynamics Corp. both lost their contracts.



Over the next six months, 9,000 employees were laid off or offered early retirement packages. Although McDonnell Douglas Corp. employed 3 percent of the metropolitan area's 1.2 million workforce in 1991, the company continued to reduce its staff over the next five years down to 23,000 in 1996.

Overall, between 1990 and 1996, the St. Louis region would lose more than 50,000 defense related jobs. In December 1996, Dennis Coleman of the St. Louis County Economic Council informed the Christian Science Monitor, "We've replaced the 50,000 lost [jobs] plus 50,000 new jobs...The economy in St. Louis is perking along. If we're going to absorb any job losses, this is the time to do it."

In 1993, St. Louis County received more than 41 inches of precipitation from January to September. The county usually receives 37.5 inches for the entire year. As a result, many of the waterways flooded within the county, breaking levees, damaging farms and crops, destroying homes, and dislocating many citizens from their homes. For 144 days, the Mississippi River stayed above flood levels, making this the largest flood within 150 years.

The county recovered from the defense cutbacks and the floods of the early 1990s only to see disaster strike again in 2006, 2007, and 2008. In March 2006, Ford closed its assembly plant in Hazelwood, Missouri and laid off 1,445 employees, most of whom were hourly workers. In 2008, the remnants of Hurricane Ike caused flash flooding in the St. Louis region.

Chrysler had two plants, the North Plant and the South Plant, in the Fenton, Missouri that were an economic fixture in the area for almost 60 years. The North Plant had been building trucks since 1966 except for a three-year hiatus from 1980 to 1983. The South Plant, known as the St. Louis Car Assembly Plant, had been active from around 1957 until 2009 except for a hiatus from 1991 to 1994. On December 12, 2005, Chrysler announced it was committing a \$1 billion reinvestment with five new suppliers in the two plants. At that time, there were 5,500 employees split between the two plants. There was little sign at that point of potential closure.

By 2009, both plants were closed. From February 2007 to July 2009, Chrysler slowly decreased employment, offered employees buyouts, and shifted towards closure. The closures resulted in a total loss of 6,365 on-site jobs and direct wages of about \$880 million. Additionally, there was an indirect job loss of 2,500 jobs at local supplier companies. Overall, the auto-plant closure led to a total loss of 40,000 (direct, indirect and induced) jobs within the region.

### Convening an Economic Adjustment and a Diversification Committee

In 1990, there were no regional organizations with economic development capacity in the St. Louis region. Realizing that the defense cutbacks were starting to affect the region beyond just St. Louis County, Denny Coleman called leaders of economic development, workforce development, human services, business, and universities as well as elected officials from surrounding counties in both Missouri and Illinois and invited them to come together to develop a regional response to the cutbacks. The support of the county executive, the mayor, and the regional chairperson of the Chamber of Commerce encouraged these leaders to be a part of the Economic Adjustment and Diversification Committee (EADC). Leaders from both outside and inside the region



needed to come together, because many of the workers lived beyond the county, making the impact widespread. Because the workforce development boards were organized by county, many of the board members had never met or spoken to officials outside their county. By bringing everyone together, the response was united regionally.

The committee initially met once a month and, in subsequent years, once a quarter. Some of the subcommittees were more active than others and lasted longer. In the end, EADC lasted around seven years. New groups were created and met on their own terms. Members of the EADC realized that a regional organization was necessary, leading to the development of Greater St. Louis Inc., a regional economic development network located within the St. Louis Regional Chamber & Growth Association.

### Assessing Damage and Developing a Long-term Strategy for Recovery

In order to respond to the defense cutbacks, the community had to do damage assessments and create a long-term recovery plan. Rather than create strategic plans, programs, and grant requests separately, the EADC, through the administrative support of St. Louis County Economic Council (SLCEC), worked with both the United States Economic Development Administration (EDA) and the United States Department of Defense Office of Economic Adjustment (OEA) to provide funding through one grant request. The committee created one list of recommended studies and plans, and the committee and SLCEC worked with both agencies to see which studies they could fund. In the end, the grants covered nine research studies including:

- A long-term economic diversification plan
- A survey of displaced workers that was completed three times
- A survey of defense contractors in the region
- A survey of the McDonnell Douglas Corp.'s subcontractors
- A survey of the region's global programs and initiatives
- An understanding of what financing programs for businesses were available on the federal, state, and local levels
- EDA grants were used in St. Louis County from the EDA grant funds in order to:
  - Establish a revolving loan fund
  - Create a job training program for the manufacturing industry
  - Expand the functions of the St. Louis World Trade Center
  - Create the Center for Emerging Technologies

McDonnell Douglas was very helpful to the EADC. As part of their assistance, they provided the contact information of all of displaced workers to the committee to conduct a survey. The survey of displaced workers was unique, because workers were surveyed three times over a period of four years. By surveying the workers multiple times, the EADC was able to track the displaced workers and have a better idea of the impact of the region over a longer period of time. This survey was first conducted by E. Terrance Jones, a professor at the University of Missouri, St. Louis, one year after the first round of layoffs instead of the typical three- to six-month time block. Interestingly, the majority of the displaced workers decided to remain in St. Louis or returned after leaving to look for jobs. Additionally, approximately 10 percent of displaced workers were interested in



starting their own companies. This signaled to the committee that entrepreneurship should be a focus of the adjustment and diversification plan.

### St. Louis County Grows from Within

McDonnell Douglas had some leased space available after the cutbacks. As part of their cooperation with the EADC, they donated the space for worker reentry programs to help their former middle- to high-income workers gain the information they needed in a place they were familiar. This cut any stigmatism felt by the displaced workers. Additional space was made available for two incubators within the county. These incubators were the first in the county and provided new ventures a resource for support; however, when the leases expired, they were closed.

During the Bush administration in 1991 and 1992, there were two conferences that brought some of the top engineers in the country together to discuss critical technologies to try to keep the best technologies in the United States. The second conference was led by a professor at Washington University in St. Louis. This brought attention to additional grants available to study the regional economy and explore where there were opportunities to be competitive in these technologies. As this study was completed, EADC was completing their plans for long-term recovery. From the plan, the Center for Emerging Technologies was created and funded by a grant from EDA. It was decided to locate the Center for Emerging Technologies near the University of Missouri, St. Louis. The Center for Emerging Technologies is now located within the CORTEX district, a life science community supporting young and mature life science ventures. Currently, the Center for Emerging Technologies is funded by the University of Missouri, St. Louis.

The 1993 flood provided federal grants for two additional incubators in South and West County. These incubators were funded by grants from EDA to reinvest in communities in the county that were impacted by the floods. The West County Enterprise Center opened in 1997 in the City of Chesterfield. South County Enterprise Center was delayed in opening due to contamination on the site that needed to be addressed. In 2000, the South County Enterprise Center opened.

Three other Enterprise Centers exist in St. Louis County. The Midtown Enterprise Center opened in 1994. It is jointly funded by the City of St. Louis and St. Louis County and governed by a joint board. The city and county came together to fund it through a corporate tax credit. There is no federal funding involved. Wellston Enterprise Center is privately funded and created out of one of the former McDonnell Douglas Company leased space incubators.

In 2010, St. Louis County Economic Council and the Donald Danforth Plant Science Center received a \$4.6 million grant from EDA to grow the plant and life science industries. This grant was used to build a new greenhouse for the Danforth Center and an incubator called the Helix Center. The Helix Center opened in 2004 and also used funds from a county bond. The Helix Center supports entrepreneurs and early stage plant and life science companies and includes wet lab spaces for growing companies. As an early seed capital fund, the Helix Fund supports plant and life science companies and commercialization of technologies. This fund is created through



monies from the South County Casino. The casino pays rent to the port authority, which is managed by St. Louis County Economic Council. Part of the rent funds are used to finance the Helix Fund. Companies do not need to be part of the Helix Center to receive funding from the Helix Fund.

St. Louis County and City of Saint Louis are continuing to focus on new efforts to promote entrepreneurship. Following the Ford and Chrysler auto plant closures, St. Louis County received a grant from EDA to develop a regional economic adjustment strategy to address the economic impact from the closures. An economic adjustment strategic plan was created in September 2011. Recommended in the plan is to catalog all of the existing entrepreneurship programs within the region and create a place for entrepreneurs to reach the information. St. Louis County Economic Council is currently putting together an entrepreneurship asset map and a portal for entrepreneurs. Through this project, the county is also ensuring there are no programs that overlap or compete with one another within the region. The County also saw progress taking place within Cleveland in entrepreneurship efforts and has reached out to Jumpstart to support their initiatives.

### **Funding Growing Businesses**

The St. Louis region is often faced with the challenge of helping growing businesses obtain capital when they are no longer able to borrow from banks, friends, and family. In discussions, there were comments made about being located in the Midwest, as venture capital is not always as readily available as it is on the coasts.

In 1994, St. Louis Development Corporation (SLDC), St. Louis County Economic Council and the Economic Development Center of St. Charles County received a one time \$1 million grant that has been recycled over the past eighteen years. Additional funding is added annually through community development block grants from the United States Department of Housing and Urban Development. One of the first companies to receive a loan from the revolving loan fund is now ranked in the top 150 on Forbes Largest American Private Business list.

Fast forward eleven years later. In 2005, the St. Louis Regional Chamber and Growth Association (RCGA) established a membership group of private investors. The St. Louis Arch Angels memberships provides local entrepreneurs the seed capital that they need to help grow companies locally. The network was established as a 501c3 organization that is managed by a private board of directors.

### **Growing the Plant and Life Science Sector in St. Louis County**

The plant and life sciences cluster has been exploding in St. Louis County with new programs and resources available to drive research and innovation. In 2008, the first building of the Bio-Research and Development Growth (BRDG) Park opened at the Danforth Plant Science Center. This new park will be a three building initiative focused on the plant and life sciences. The Nidus Center, a nonprofit biotechnology incubator, has since relocated to the BRDG Park with BRDG taking over the leases and activities for the current tenants. BRDG Park offers wet lab space, office space and on-site workforce training in the plant and life sciences. SLCEC's Helix Center is located next to the BRDG Park.



Vicki Gonzalez, managing director of Nidus Partners, has created a new solution to getting technologies out of the research stage and into commercialization. A partnership is created with local corporations who invest in the partnership. Once a quarter, they meet and review potential technologies to invest in. As a benefit for their investment in Nidus Partners, the corporate partners get first opportunity to review the technologies and decide whether or not to invest in them. A strategic technology council made up of executives from the corporate partners uses their knowledge and experience to advise on global market needs and select and de-risking selected technologies. Once a technology is chosen, it receives full support through their growth and commercialization process. This partnership was started in 2010 and continues to grow.

### Training Workers

In 1994, St. Louis County received a \$4.5 million grant to establish the Metropolitan Education and Training (MET) Center in Wellston, MO. This training center was opened in an area faced with poverty, severe disinvestment and inadequate infrastructure to train low-income residents with short term training programs and other resources to enter into the workforce. The MET Center was established through a partnership of public, private and nonprofit organizations to train workers to enter in advanced manufacturing, biotech, healthcare and digital technologies. The center is training workers for a future in high technology industries. A former Wagner Electric Plant, the land was contaminated and vacant for several years. It was a cornerstone partnership that came together to renovate the building and pursue environmental cleanup. Serving over 9,500 citizens since 2006, the MET center has received additional grants from EDA to expand.

### Competing in a Global World

Prior to the defense cutbacks, St. Louis County had purchased a franchise of the World Trade Center. It had a small staff. At the time of the studies, the EADC found that the franchise was not realizing its full capabilities. The research studies also showed that the region needed to compete better globally, and small and medium enterprises needed assistance entering into the export economy. Many of the larger corporations already had the assets and abilities to compete globally. A grant from EDA was used to expand the world trade center staff and services for small and medium size enterprises. Once the grant ran out, the expanded staff and services were funded locally.

Following the 2008 floods, St. Louis County worked with EDA to receive a grant for \$1.725 million to create a hub for the Midwest for U.S. and China commerce with the goal of driving exports and creating jobs.

### Summary

St. Louis County has had its share of disasters—both economic and natural. Though each disaster requires a different response, they are all robust and strategic. From the 1990s, officials learned that responses are not just local to the county but impact the entire region including both sides of the Mississippi River. The St. Louis Regional Chamber and Growth Association remains active in economic development initiatives.



Entrepreneurship continues to be a strong focus for St. Louis County and the region. The four enterprise centers' current clients and graduates (as of 2009) had revenues of \$165 million, 809 full time jobs, and a success rate of 80%. As with the Helix Center, new incubators continue to be in planning. Future incubators include focuses on the fashion and high technology industries. New incubators have also continued to open in the region, including one focused on the arts. The asset map currently being created will unlock the next direction of entrepreneurship strategy.



# Resources Appendix



## Resource 1: OFB-EZ™ Toolkit

### **Open For Business-EZ (OFB-EZ) Business Continuity Toolkit**

The Insurance Institute for Business & Home Safety (IBHS) developed a new streamlined business continuity program for small businesses that may not have the time or resources to create an extensive plan to recover from business interruptions called OFB-EZ™ (Open For Business-EZ).

OFB-EZ™ is a free toolkit designed to help even the smallest businesses focus on planning for any type of business interruption. OFB-EZ is available as a downloadable Adobe Acrobat (.pdf) toolkit and as individual module forms in both Adobe Acrobat (.pdf) and Word formats that can be filled in and printed for safekeeping. These can be downloaded at: <https://www.disastersafety.org/disastersafety/open-for-business-ez/>



## Resource 2: Critical Business Functions



### CRITICAL BUSINESS FUNCTIONS

Identifying critical business functions is integral in resuming operations following a disaster.

This template will walk you through the very important steps of identifying the most critical functions in your business. You may consider your critical functions as those activities that are vital to your organization's survival and to the resumption of business operations. Typically, your critical functions are the business functions that are (1) most sensitive to downtime, (2) fulfill legal or financial obligations to maintain cash flow, (3) play a key role in maintaining your business' market share and reputation, and/or (4) safeguard an irreplaceable asset. Keep in mind, the process of identifying your critical business functions will work in close conjunction with your risk assessment analysis.

#### Steps:

1. Identify the critical business functions of your business. Please reference the following considerations when determining the criticality of each business function.
2. Classify these critical business functions into the following categories: high (most severe), medium, and low (least severe). Please reference the preceding graphs for an illustrated example.
3. Complete the Critical Business Functions Chart with each critical business function.

#### Considerations when Determining Criticality of a Function:

- What business objective/goal does this function support?
- How often does this function occur?
- How many business units (departments) perform this function?
- Does the successful completion of this function depend on any other functions?
- Are other functions dependent on this function for its successful completion?
- Is there a potential for revenue loss if this function is not completed?
- Is there a potential for fines, litigation, or other punishment for noncompliance due to a required regulatory requirement?
- Is noncompliance tied to a specific downtime for this function?
- Does this function directly impact the business' image or market share?
- What priority ranking would you give this function as compared to other functions?

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# CRITICAL BUSINESS FUNCTIONS

## Critical Business Functions Chart

After you have identified the criticality and maximum downtime for each critical business function, you will record each function and the impact it has on other business functions in the chart below. It is your objective to identify all the resources and personnel required to restore or reproduce this function *during a recovery*. After identifying what will be required to reproduce each critical business function, make sure you include a brief guide on how to restore this function in a recovery environment.

Function	Criticality	Maximum Downtime	Person/Team	Required Resources	Impacted Functions	Brief Process to Complete Function
Example: Insurance Claims	High	2 Days	A. Jones – Mgr. Alt 1: K. Smith Alt 2: R Howard	10 employees, phones, claim mgt software, paper forms	Claims assessing, filing	Take calls, document in system, file
Example: Open new savings acct.	Low	1 Week	L. Singleton	1 employee, account mgmt software, N103-B form, printer	New accounts	Customer completes N103-B form onsite, enter into system

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## Resource 3: Critical Supplies



### Critical Supplies

Use this form to list supplies needed to fulfill your critical business functions. A critical supply is any item essential to keep equipment or work processes functioning, e.g. special fluid for a machine, special forms and/or checks. Be sure to list an order number.

If you do not have the supplier recorded on the *Supplier/Vendor* form, go back to the form to add the information.

*Note:* Do not include basic office supplies, e.g. pens, paper, stapler. Do not include office furniture either, e.g. filing cabinets, mail bins, desks or chairs, as they all should be listed in *Miscellaneous Resources*.

You can download copies of this form from: [http://www.disastersafety.org/business\\_protection](http://www.disastersafety.org/business_protection).  
Save a blank version so you can make additional copies as needed.

Item	Item Order Number	Quantity	Supplier(s)/Vendor(s):	Related Business Function(s)
<b>Recovery Notes:</b>				



## Resource 4: Voice / Data Communications



### Voice / Data Communications

Use this form to list your voice and data communications needs. Communication with employees, vendors, customers, emergency officials and other key contacts is vital to your ability to resume business operations following a disaster event. This form should be used to determine what telecommunications equipment you need to help you with that communication.

If you go to a recovery location, it is likely you will need to lease or purchase telecommunications equipment. You may use the *Voice / Data Communications* form to list what you would order, and in the *Description & Model No.* field, write "Unknown," or similar words, if you do not yet have that information. Be sure to explain in *Recovery Notes*.

If you plan to purchase or lease multiple items of the same type—e.g. telephones—you can condense the information into one record. List relevant details in *Recovery Notes*.

You can download copies of this form from: [http://www.disastersafety.org/business\\_protection](http://www.disastersafety.org/business_protection).  
Save a blank version so you can make additional copies as needed.

<b>Type Of Service:</b>		<input type="checkbox"/> Telephone <input type="checkbox"/> PBX w/ ACD (Private Branch Exchange w/ Automatic Call Distribution) <input type="checkbox"/> PC Data Communications <input type="checkbox"/> Mobile Phone	<input type="checkbox"/> Satellite Phone <input type="checkbox"/> Fax Machine <input type="checkbox"/> Two-Way Radio & Pager <input type="checkbox"/> Other Explain:
<b>Description And Model Number:</b> (Enter "unknown" if telecommunications item is to be leased / bought for recovery location)			
<b>Status:</b>		<input type="checkbox"/> Currently In Use <input type="checkbox"/> Will Lease/Buy For Recovery Location	
<b>Voice Communications Features:</b>		<input type="checkbox"/> Voice Mail <input type="checkbox"/> Speaker <input type="checkbox"/> Conference <input type="checkbox"/> Text Messaging	<input type="checkbox"/> Conversation Recorder <input type="checkbox"/> Other Explain:
<b>Data Communications Features:</b>		<input type="checkbox"/> Cable <input type="checkbox"/> DSL <input type="checkbox"/> T-1	<input type="checkbox"/> Dial-Up <input type="checkbox"/> Other Explain:
<b>Quantity:</b>			
<b>Primary Supplier/Vendor:</b>			
<b>Alternate Supplier/Vendor:</b>			
<b>Recovery/Install Location:</b>			
<b>Recovery Notes:</b>			



## Resource 5: Computer Equipment and Software

**Institute for  
Business &  
Home Safety**



### Computer Equipment and Software

Use this form to list the computer equipment, hardware and software you will need to fulfill your critical business functions.

If you go to a recovery location, it is likely you will need to lease or purchase computer equipment and replace your software. You may use this form to list what you would order, and in the *Title & Version or Model No* field write "Unknown," or similar words, if you do not yet have that information. Be sure to explain in your *Recovery Notes*. The important thing is that your final plan includes what you need to perform your critical business functions.

If you plan to order multiple items of the same type—e.g. keyboards or monitors—you can condense the information into one record. You can list relevant details in *Recovery Notes*.

When there is sufficient warning about an event, such as a hurricane, you might decide to move some of your computer equipment and software to a safe place, so that it can be utilized at your recovery location. For such instances, you want to list equipment you currently own or lease and / or software that you would take, and in the *Status* field check "Currently in use." Some disasters occur without warning, though, so be sure you have alternatives available.

If you currently own / lease the item, choose the supplier(s) / vendor(s) based on which one(s) you would use to replace the item if it were damaged in a disaster. It is always advisable to have an alternate vendor, though, in case your primary vendor is not available.

You can download copies of this form from: [http://www.disastersafety.org/business\\_protection/](http://www.disastersafety.org/business_protection/)  
Save a blank version so you can make additional copies as needed.

<b>Item:</b>			
<b>Type:</b>	<input type="checkbox"/> Computer Hardware <input type="checkbox"/> Computer Software		
<b>Status:</b>	<input type="checkbox"/> Currently In Use <input type="checkbox"/> Will Lease/Buy For Recovery Location		
<b>Title And Version/Model Number:</b> <i>(Enter "Unknown" if hardware/software is to be leased/bought for recovery location)</i>			
<b>Serial/Customer Number:</b>		<b>Registered User Name:</b>	
<b>Purchase/Lease Price:</b>	\$	<b>Purchase/Lease Date:</b>	
<b>Quantity (equipment) or Number Of Licenses (software):</b>			
<b>License Numbers:</b>			
<b>Primary Supplier/Vendor:</b>			
<b>Alternate Supplier/Vendor:</b>			
<b>Recovery Install Location:</b>			
<b>Recovery Notes:</b>			

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## Resource 6: Jefferson Parish Evacuation Re-Entry Plan

### Jefferson Parish Evacuation Re-Entry Plan

#### I. Purpose

This plan outlines protocols for a phased re-entry process designed for the safe, orderly and timely return of citizens, emergency responders, businesses, and critical service providers following a wide-scale evacuation when immediate re-entry by everyone is neither prudent nor possible.

#### II. Situation

- A. Jefferson Parish could experience, with or without warning, disaster conditions, including but not limited to hurricanes, floods, tornadoes, fires, storms, or any combination thereof, that result in (1) a Declaration of Emergency and (2) an Evacuation Order of all or part of the parish by the Parish President.
- B. Hazardous material incidents at either a fixed site or in transit, or acts of terrorism or other events-without-warning, or any incident that causes wide-scale evacuation may also precipitate the use of this plan.
- C. The immediate and/or simultaneous return of all evacuees might not be feasible due to post-event Parish conditions and the need to: (1) restore critical infrastructure, (2) protect homes and businesses of evacuees, (3) stabilize and prepare the parish for the permanent return of its citizens and businesses, and (4) insure the safety of returning citizens.
- D. Re-entry will be prioritized by parish emergency officials based on the assessment of the threat-level to public safety and security and the adequacy of post-disaster, sustainable living conditions.
- E. This assessment will consider factors such as road access, water levels, availability of utilities and critical services such as water and sewer service, subsistence capacity, search and rescue activities, impending weather threats, integrity of levee system, security of the area as determined by local law enforcement, environmental hazards, debris field, and other health hazards.
- F. **Residents will be allowed to re-enter as soon as the Parish President determines that there are sustainable living conditions and the parish is safe for residential re-entry.**
- G. If conditions warrant, a “Look and Leave” policy may be implemented to allow the public to assess damage to their property prior to cancellation of the Evacuation Order.



- H. The Parish President, under his emergency powers, may authorize whatever expeditious credentialing process he deems appropriate and necessary, in addition to those stated herein, to facilitate the re-entry of necessary personnel and businesses into the Parish.
- I. Emergency responders will have unrestricted access to all areas of the parish to facilitate rescue and security operations. Local, state and federal emergency responders include emergency operations management personnel, law enforcement, fire services, emergency medical services personnel, National Guard/Active Military forces, professional and volunteer Urban Search and Rescue Teams registered with the state and with the parish, logistics personnel required to support on-going emergency operations, and other personnel, maritime emergency responders, agencies and/or organizations designated by the Unified Incident Commander as critical for emergency response.
- J. Government agency first responders from the federal government, the State of Louisiana and the Parish of Jefferson need only have their valid agency picture identification and driver's license to enter Jefferson Parish. All other qualified emergency responders not traveling in recognized emergency- responder vehicles will be issued ER re-entry placards and must carry agency-issued photo identification and valid driver's license.
- K. Should conditions require the phased re-entry of businesses, their re-entry will be guided by the protocols outlined in this annex.
- L. Each tier subsumes earlier tiers.
- M. Prior to June 1 of each year hereafter, Jefferson Parish will:
  - 1. Identify and provide appropriate re-entry credentials to all contractors and subcontractors whose services and/or products may be required by the parish or its municipalities immediately after a disaster, along with their qualified personnel, as per criteria described herein.
  - 2. Identify and provide appropriate re-entry credentials to qualified public entities, agencies, and emergency responders, along with their qualified emergency contractors and subcontractors, based on criteria described herein.
  - 3. Implement a credentialing application and distribution process for other qualified businesses, groups, and individuals, as described herein.
  - 4. Coordinate with municipalities, regional and business partners, and law enforcement agencies to ensure effective plan implementation.

### III. Re-Entry Tiers

Overview. This annex outlines three tiers of business re-entry. Based on parish conditions, the Parish President may combine tiers or make other necessary plan changes. Each tier subsumes the tier or tiers preceding it. It is expected that qualified businesses will apply bi-annually for and be provided appropriate re- entry credentials prior to the onset of hurricane season, or, in the case of Tier-3 credentials, immediately prior to Tier-3 re-entry.

#### A. TIER 1: EMERGENCY RESPONSE



1. Implementation Threshold: Tier 1 will be implemented when the Parish President, based on the assessments described above, determines that conditions allow safe access to at least a portion of the parish.
2. Categories of Eligible Entrants: Tier 1 includes primary critical infrastructure companies, major utility companies, pre-designated staff of other parish/municipal agencies and offices, and pre-designated government contractors and their subcontractors who provide critical services to the parish, municipal governments, and state, federal, or other public agencies.
  - ☐ Tier-1 credentialed emergency contractors/subcontractors, and their credentialed essential duty employees, employed by Jefferson Parish, its municipalities, and/or hospitals located in the parish, and who are necessary for the restoration of critical infrastructure and the support of emergency response efforts.
  - ☐ Tier-1 credentialed damage assessment/stabilization teams from businesses and industries in Jefferson Parish whose facilities pose a public safety concern, environmental threat, or substantial danger.
  - ☐ Tier-1 credentialed damage assessment/stabilization teams, accompanied by security, from financial institutions.
3. Credentials: Tier-1 re-entry credentials consist of: (a) a non- reproducible, serialized, parish-distributed Tier-1 dashboard placard valid for the current year; (b) a company-issued letter of access stating that the holder is an authorized company responder to emergency events; and (c) company picture identification.
  - ☐ Alternatively, Tier-1 access will be afforded to the following **un- placarded** vehicles: (1) utility company repair trucks and (2) freight and cargo trucks that are loaded with emergency relief supplies and equipment. Entry of these **un-placarded** vehicles will only be allowed when the following conditions have been met: (a) the company logo is clearly displayed on each company vehicle (to include sub-contractor vehicles); (b) each company-vehicle occupant has a company-issued letter of access stating that the holder is an authorized company responder to the event; and (c) each occupant has valid, government-issued picture identification and company picture identification in his possession. Company supply vehicles must contain emergency response supplies or equipment. **Empty trucks are prohibited.**
  - ☐ Manifests of supply vehicles may be checked to confirm the need for entry.
4. Responsibilities
  - ☐ The parish will maintain a Tier-1 credentialing database and will distribute credentials prior to start of hurricane season.
  - ☐ Each business is responsible for: (a) distributing its Tier-1 parish credentials to the appropriate personnel; (b) distributing a letter of access to appropriate personnel; (c) maintaining a database containing information (name, job function, date



credential issued) regarding the recipient of each credential; (d) providing this database to the parish upon request; and (e) executing and providing to the parish the requisite agreement-to-terms-of-use document.

- ▣ Each person in a Tier-1 credentialed vehicle must be employed in the company's authorized business or activity and have legitimate response-support function.
- ▣ Companies found to be issuing credentials to non-employees or non-essential employees will be subject to suspension of their re- entry privileges and to fines and penalties established by Parish ordinances.

## B. TIER 2: RESPONSE SUPPORT

1. Implementation Threshold: Tier 2 will be implemented when the Parish President determines that credentialed individuals can access their places of business safely. Relevant factors include, but are not limited to, the: (a) need for dewatering; (b) degree of civil unrest; (c) extent of search and rescue efforts still underway; (d) stability of the levees; (e) conditions and functionality of the drainage pump stations and (f) conditions of the roadway network.
2. Categories of Eligible Entrants: Tier 2 includes: (a) core assessment teams of major employers and other businesses that are determined by the Parish President to be essential to the return of residents and/or to the economic vitality of the parish; (b) recovery teams of select businesses with unique circumstances (fragile inventory, designated hazardous waste facility, world-wide distribution, large workforce, multiple-parish service area, major plants, refineries, and manufacturers, etc.) and that have the capacity to be self-sufficient; and (c) humanitarian relief agencies and their workers.
  - ▣ Examples of Tier-2 re-entry eligible businesses include big-box retailers such as Wal-Mart, Lowe's, K-Mart, Target, Home Depot, and Sam's; fuel distributors and stations; debris management companies; financial institutions; food suppliers; pharmacies and medical suppliers; licensed construction companies; insurance companies; communication companies; health care providers; chemical plants/refineries; cleaning suppliers; hardware stores; building material suppliers; lodging managers; security companies; American Red Cross; and Jefferson Parish-approved faith-based groups and other relief agencies.
3. Credentials: Tier-2 re-entry credentials consist of a: (a) non- reproducible, serialized, parish-distributed Tier-2 dashboard placard valid for the current year; (b) company- issued letter of access stating that the holder is an authorized responder to the event; (c) government- issued photo; and (d) company identification.
4. Responsibilities:
  - The parish will implement and publicize an Internet, Tier-2 credentialing application process.
  - The parish will maintain a Tier-2 credentialing database and will distribute credentials prior to the start of hurricane season.
  - Businesses/relief agencies must apply for Tier-2 credentials via a prescribed Internet process and complete the agreement-to-terms- of-use document.



- Each business/relief agency is responsible for: (a) distributing its Tier-2 parish credentials to the appropriate personnel, (b) distributing a letter of access to the appropriate personnel, (c) maintaining a database containing information (name, job function, date credential issued) regarding the recipient of each credential, and (d) providing this database to the parish upon request.
- Each person in a Tier-2 credentialed vehicle must be employed in the company's authorized business or activity and have a legitimate response-support function.
- Each business/agency that applies for Tier-2 **recovery-team** credentials may also be requested to provide the parish with: (a) those portions of its continuity of operations/emergency plan that explicate the need for a disaster recovery team, its functions, and the resources/assets available to the recovery team (the parish will execute a non-disclosure agreement regarding the emergency/continuity of operations plan); (b) a list of its recovery team members; and (c) contact information for a 24-hour-a-day point of contact.
- Companies found to be issuing credentials to non-employees or non-essential employees will be subject to suspension of their re-entry privileges and to fines and penalties in accordance with Parish ordinances.

5. Regional Tier-2 Credentials: The parishes of Jefferson, Orleans, St.

Bernard, Plaquemines, St. Tammany, and St. John the Baptist may coordinate re-entry efforts such that regional tier-2 credentials may be provided to companies with legitimate business in multiple parishes. Such companies may apply with the parish in which their home office is domiciled. Businesses domiciled outside of one of these parishes shall apply for credentials with the parish in which the majority of their work occurs.

C. TIER 3: REPOPULATION SUPPORT

1. Implementation Threshold: Tier-3 implementation will depend on the stability of the parish and its ability to support Tier-3 credentialed businesses and their employees.
2. Categories of Eligible Entrants: Tier 3 provides for re-entry of business owners and their designated recovery and JumpStart employees, whose businesses have been determined by the Parish President to be essential to the imminent return of residents and/or to the economic vitality of the parish. Family members may be allowed to re-enter with a credentialed family member at the discretion of the Parish President, based on parish conditions. Eligible business categories are indicated on the online application website.
3. Credentials: Tier-3 serialized paper credentials will be issued by the parish via the Internet to qualified businesses and will be available **post-evacuation and prior to Tier-3 re-entry. Applicants will be notified of Tier-3 eligibility prior to June 1 but will be able to print re-entry placards only after an evacuation.** Jefferson Parish tax account numbers and other application data will be cross-referenced with the JPSO database.



#### 4. Responsibilities:

- The parish shall implement and publicize an Internet Tier-3 credentialing application process.
- The parish shall maintain a Tier-3 credentialing database and shall notify businesses of their eligibility prior to hurricane season.
- Paper credentials will be provided via Internet after a mandatory evacuation and prior to implementation of Tier-3 re-entry.
- Businesses must register for Tier-3 credentials via a prescribed Internet-based application process and must complete the agreement-to-terms-of-use document.
- Each business is responsible for (a) distributing copies of its Tier-3 credentials to the appropriate personnel, (2) distributing to the appropriate personnel company-issued letters of access (on company letterhead) with a verifiable phone number stating that the bearer is an authorized responder to the event, (c) maintaining a database containing information (name, job function, date credential issued, business address) regarding the recipient of each credential, and (d) providing this database to the parish upon request.
- Companies found to be issuing credentials to non-employees or non-essential employees will be subject to suspension of their re- entry privileges and to fines and penalties as established by Jefferson Parish ordinances.

#### IV. **Re-Entry Tier Implementation**

- A. Tier-1 re-entry will be implemented when the winds created by a major hurricane have fallen below tropical storm force and when the Parish President, in consultation with the Emergency Management Director have determined that flooding, debris and other dangerous conditions have been identified. Jefferson Parish will notify the Governor's Office of Homeland Security and Emergency Preparedness (herein after referred to as GOHSEP) through available phone, radio, data or wireless communications that the parish is ready to implement tier one re-entry. In addition, the Director of Emergency Management will also notify all other involved parishes of our plans to implement Tier 1.
- B. Tier-2 re-entry will be implemented when the Parish President, in consultation with the Director of Emergency Management, determines that the condition of the roadway infrastructure is safe for travel, that there is sufficient law enforcement in place to protect tier-2 businesses, there is no flooding or levee failures and that tier-2 re-entry will not interfere with search and rescue efforts. Some or all parts of Jefferson Parish may be opened for tier-2 re-entry based on the above mentioned conditions. Jefferson Parish will notify GOHSEP and the other involved parishes, through available communications, when it is ready to implement Tier-2 re-entry.
- C. Tier-3 re-entry will be implemented when the Parish President, in consultation with the Director of Emergency Management, determines that the conditions in Jefferson Parish are stable and safe for the return of Tier-



3 businesses and their employees. Jefferson Parish will notify GOHSEP and the other Region 1 parishes, through available communications, when it is ready to implement Tier-3 re-entry.

- D. General population re-entry will be implemented when the Parish President, in consultation with the Director of Emergency Management, determines that there are sustainable living conditions in Jefferson and that it is safe for the residents to return. General population re-entry may be allowed in all or parts of Jefferson Parish as conditions warrant. A “Look and Leave” period may be implemented to allow residents to assess damage to their homes and secure their property. If a Look and Leave period is implemented, strict time frames will be announced for the residents to enter and leave. Jefferson Parish will notify GOHSEP and the other Region 1 parishes through available communications when it is ready to implement the general population re-entry.

## V. Organization and Assignment of Responsibilities

Considerations for local government

1. The Evacuation Re-entry Plan shall be a special administrative assignment for the duly assigned Executive Assistant to the Parish President.
2. Pre-disaster duties include: **Each of these items must be completed annually by no later than May 1<sup>st</sup>.**
  - ☐ Every year the duly assigned Executive Assistant shall review this plan and update it accordingly.
  - ☐ Each year Emergency Management shall issue placards to new Tiers-1 and -2 businesses and issue renewal stickers to appropriate existing, registered Tiers-1 and -2 businesses.
  - ☐ Each year Emergency Management shall contact all Tier-1 hospitals, Parish and City contractors and update their employee lists and numbers.
  - ☐ Each year the Emergency Management Director shall file an updated copy of the re-entry plan with GOHSEP and the other Region 1 parish emergency management departments.

## VI. Direction and Control

All Evacuation Re-Entry activities will be coordinated through the Emergency Management Director in the EOC.

## VII. Records and Reports

All records and reports for the Re-Entry Plan shall be maintained by Emergency Management and copied to the appropriate Executive Assistant.

## VIII. Plan Development and maintenance

The Emergency Management Department will assume the primary responsibility for this plan.

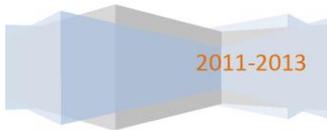


## Resource 7: Business Recovery Center Model

Fuel Small Business to Recover, Expand & Hire More Workers.

The goal after the Oil Spill was to develop county business recovery task force groups and centers using existing Chambers of Commerce to fuel small businesses to re-open their doors, recover, expand and hire more workers

Business Recovery Center Model  
Mississippi Gulf Coast



To complete this goal it was decided to develop a Pilot Model for a County Business Recovery Task Force & Center in Hancock County that can be replicated across the Mississippi Coast in two other counties: Harrison and Jackson

This was tackled by Hancock Community Development Foundation / Hancock Chamber of Commerce, Mississippi Coast Chamber of Commerce (Harrison County) and Jackson County Chamber of Commerce whom developed the model

which can be located [in this report](#).

Topics covered include: business recovery center benefits, business retention, expansion and attraction recommendations, economic diversification and resiliency, workforce development and education, and marketing & communications for tourism recovery. The link to the report is:

<http://restoreyoureconomy.org/wp-content/uploads/2013/02/Model-for-Business-Recovery-Center.pdf>

## Resource 8: NYC Restoration Business Acceleration

The City of New York has established the NYC Restoration Business Acceleration Team (RBAT) to assist businesses affected by Superstorm Sandy by coordinating the services, permitting and inspections needed to reopen as soon as possible. RBAT builds upon the expertise of the New Business Acceleration Team (NBAT) which has helped more than 1,000 businesses employing more than 10,000 people open more quickly—in many instances cutting in half the time required to open their doors. To date, RBAT has directly assisted 40 businesses. RBAT client managers serve as a single point-of-contact for impacted businesses, providing necessary information, coordinating scheduling with safety and regulatory agencies, and troubleshooting problems. To find out more information visit their website at <http://www.nyc.gov/html/nbat/html/rbat/rbat.shtml>.





## Resource 9: Executive Pulse Disaster Questionnaire



### Disaster Questionnaire Survey

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#### SURVEY INFORMATION

Interview date\*

\_\_\_\_\_

Interviewer 1\*

\_\_\_\_\_

Interviewer 2

\_\_\_\_\_

Company contact\*

\_\_\_\_\_

Survey information notes

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### DISASTER QUESTIONNAIRE

##### I. Background

What happened?

- Chemical/Oil spill
- Earthquake/Tsunami
- Fire/Forest fire
- Flood
- Hurricane
- Landslide
- Snowstorm
- Tornado
- Other

If *Other*, please explain

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

When did it happen?

\_\_\_\_\_

How many employees did you have pre disaster?

\_\_\_\_\_

How many employees do you currently have?

\_\_\_\_\_



## Resource 10: Synchronist Emergency Response Form

### SYNCHRONIST EMERGENCY RESPONSE FORM

Company Information	
Company Name	Date of Visit (mm/dd/yy)
Address	City/State/ZIP
Contact Name	Title or Role
No one available <input type="checkbox"/>	
Phone ( ) - Office Cell	Email Address
Interviewer(s)	
Lead Interviewer	Organization
Other Interviewer(s)	Organization
Emergency Event	
1. <input type="checkbox"/> Hurricane <input type="checkbox"/> Earthquake <input type="checkbox"/> Flood <input type="checkbox"/> Tornado <input type="checkbox"/> Wildfire <input type="checkbox"/> Oil Spill <input type="checkbox"/> Other _____	
Facility	
2. Has there been damage to the facility? <input type="checkbox"/> None <input type="checkbox"/> Minor <input type="checkbox"/> Significant <input type="checkbox"/> Major <input type="checkbox"/> Total	
3. Facility damage comments _____	
4. Are there obstructions blocking access to the facility? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Site damage comments _____	
6. What is the estimated physical damage to the facility? \$ _____	
7. How long is the estimated closure? _____ days	
8. Have you contacted local Emergency Operations Center (EOC) offices? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Workforce	
9. Are workers able to get to your facility? <input type="checkbox"/> Yes <input type="checkbox"/> No	
10. If no, why? _____	
11. What is the estimated number of jobs impacted due to non-operation? _____	
12. What is the estimated payroll affected due to non-operations? \$ _____	

*Highlighted section to be completed by staff or volunteer; balance by business executive.*



## Resource 11: University of Wisconsin Disaster Survey

### Appendix B

#### Print and Online Survey Format for Small Business Owners

##### 1. Local Business Impact Assessment - Flood Damages

Flood disasters have caused almost \$200,000,000 in damages around the Milwaukee metro area since 2008. For businesses, the cost of recovery and impact on growth can take years. The Urban Planning program at UWM is conducting a study to understand business flood experience and recovery needs.

We would like your help, as a business owner, in identifying the cost of damages, lost production time, financial impact over time, and other problems. Approximately 100 subjects will participate in this study. Please make an attempt to answer the survey as completely and accurately as possible. A report will be shared with a task force consisting of local economic development leaders, business organizations, and disaster management professionals.

Your responses are voluntary and completely confidential, and no individual participant will ever be identified with his/her answers. You may choose to withdraw from this study at any time without penalty. Data from this study will be saved on a password protected computer. Only the involved researchers: Sammie White, Ph.D., Cal Stoffel, and Gale Rahmlow will have access to the information. Identifying data will remain anonymous and confidential. Reported information will be compiled to protect your anonymity.

Risks to participants are considered minimal. There will be no costs for participating, nor will you benefit from participating, other than to further research. You may receive this survey from more than one organization. If you have already filled it out, thank you for participating; there is no need to respond again.

By completing and submitting the attached survey, you are voluntarily agreeing to take part in this study. Completing the survey indicates that you have read this consent form and have had all of your questions answered, and that you are 18 years of age or older.

For more information about the study or study procedures, please contact Gale Rahmlow at 414-302-3828, or email Cal Stoffel at [stoffel@uwm.edu](mailto:stoffel@uwm.edu).

You may contact the UWM IRB at 414-229-3173 or [irbinfo@uwm.edu](mailto:irbinfo@uwm.edu) for questions about your rights or complaints towards your treatment as a research subject.

I thank you for your participation!

##### 2. Local Business Impact Assessment - Business Information

\* 1. Name of organization which you received this survey from:

\* 2. Business information:

Company:

Contact:

Address:

City:

ZIP:

Email:

Phone:



## Resource 12: SBA Emergency Communications Checklist

Communication in the aftermath of an interruption is vital – and creating an Emergency Communications Plan is an important step in assuring your business is able to communicate both internally and externally no matter what the scenario.

<b>Determine Roles and Responsibilities</b>	
	Appoint primary decision maker/coordinator.
	Appoint back-up decision maker(s).
	Outline roles and responsibilities for additional participants.
<b>Determine Entities With Which You Communicate</b>	
	Employees
	Stakeholders
	Shareholders
	Clients/Customers
	Regulatory Agencies
	Media
	Other:
<b>Document When to Activate Plan, Using Criteria Such As:</b>	
	Length of time of outage/interruption.
	Severity of interruption.
	Percentage/Number of employees, departments impacted.
	Prolonged loss of contact with clients and/or vendors.
	Other:



<p>2</p> <p><b>Determine, document and publicize a emergency communications plan:</b></p>	
	Phone/email tree (include spouse/family information for employees).
	Employee evacuation plan
	Website emergency messaging system
	Phone/Voice mail emergency messaging system
	Plan for multiple forms of communication: text, email, voicemail, etc.
<p>2 <b>Educate employees about the communications plan</b></p>	
	Document in hardcopy and electronic formats.
	Train current and new employees.
	Remind employees about emergency communication plan, including pocket cards, fold-out cards, brochures and booklets.
	Update information regularly and re-educate employees.