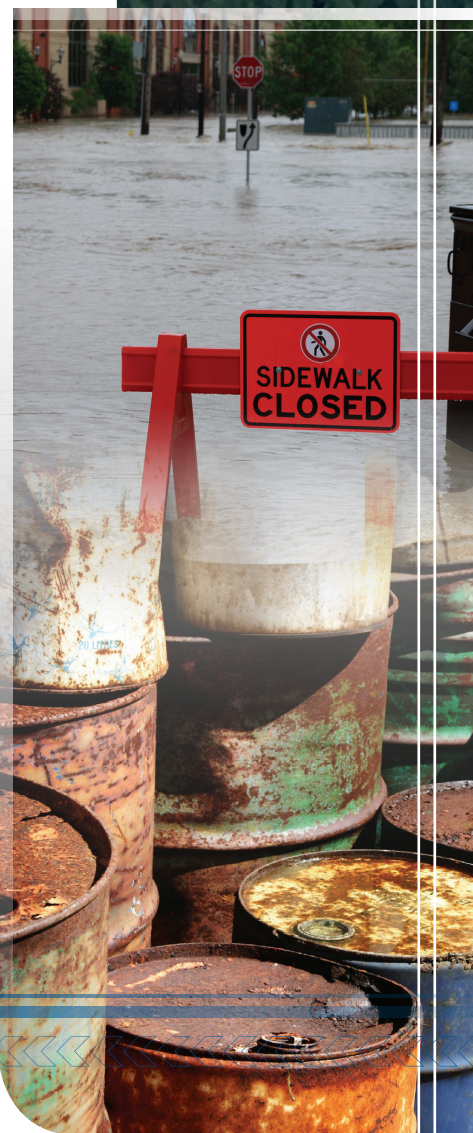


COMMUNITY TOOLKIT

for Economic **RECOVERY**
and *Resiliency*



ECONOMIC DISASTER RECOVERY



Canadian Version (2019)

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Background: Toolkit

In June 2014, the International Economic Development Council (IEDC) launched its U.S. disaster preparedness toolkit titled *“Leadership in the Time of Crisis”*.

In response to the 2013 floods in Southern Alberta, IEDC allowed the original toolkit to be customized for the Canadian context. The first Canadian edition of the Toolkit was released in the fall of 2014, followed by a second edition in 2017 and 2019. We are pleased to present this 2019 Canadian edition with updated case studies and content. The toolkit also serves as the manual for IEDC’s *Economic Disaster Resilience and Recovery Workshop*. While many U.S. case studies are still included in the 2019 Toolkit, Canadian examples are included where at all possible.

We trust this toolkit will assist many Canadian communities, economic developers, emergency personnel and elected officials as they continue to prepare for, respond to, recover from, and become more resilient to natural, man-made and technological disasters in the future.

Versions

Original U.S. Version (2014)

- International Economic Development Council (IEDC)

Updated U.S. Version (2015)

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Chapter I: Introduction



Economic developers serve as a vital bridge between the business community, and greater economic interests they serve in their community. Many local, regional, and federal governments empower their economic development organizations to be economic leaders, deal makers, and visionaries for attracting new investment and supporting existing businesses. In the case of a natural or man-made disaster, economic developers get called upon frequently to help local businesses respond and recover. If the community is not prepared, businesses and the local economy can be devastated.

Whether the risk posed to a community is natural (e.g. earthquakes, hurricanes, flood, tornados, fires), man-made (e.g. crime, chemical spills, industrial accidents) or economic (e.g. decline or closure of a major business or industry, military base realignment or closure, etc), every community is vulnerable to disruptions at one time or another. These disruptions can not only wreak physical damage to infrastructure and structures, but they can cause a lasting decline in the economy.

With so much at stake, it is essential for local economic developers to be ready to lead their community's pre- and post-disaster economic resiliency and recovery efforts. Economic developers are uniquely positioned to help local businesses respond to impacts on their employees, their facilities, their customers and supply networks

They are also most knowledgeable about their community; but more importantly, they are the only economic development entity that is directly

accountable to the local citizenry. That is why it has become a best practice for local government to lead their own recovery efforts.

The best way for a municipality to avoid destructive post-disaster organizational infighting and positioning for limited recovery dollars is to have a recovery plan developed in advance that clearly outlines key roles and responsibilities. Included in the plan would be identification of the primary agency responsible for the economic recovery support function, which would most likely be the local economic development department. Other community and government agencies with economic development related roles would be identified as potential support agencies.

This toolkit will help you to set up a plan of action to be a resilient community, in order to respond more effectively to the economic aspects of disasters, and lead business recovery efforts.

Chapter I provides an overview of post-disaster economic impacts. It also reviews how economic development practitioners can prepare for business and economic recovery. It discusses critical disaster preparedness efforts, including actions you can take now to enable your community to respond more effectively, and shorten your recovery time. Finally, it reviews essential initiatives to spur economic recovery, including developing and implementing a plan, and efforts to communicate with and retain local businesses after a disaster occurs. It also highlights best practices from disaster-impacted communities that have successfully achieved recovery efforts.

Economic Development Challenges and Issues with Disasters

Communication Challenges

Breakdown in communication has been cited by local officials and community stakeholders as one of the most difficult barriers to overcome immediately following a major disaster. Disruption of telecommunications, and the spread of bad or wrong information can greatly impede the economic recovery process. As a result, these challenges are often best expressed in terms of barriers caused by the following types of failure:

Technological failure: Physical damage to communications infrastructure can make previously accessible areas silent while temporary telephone lines and cell phone service is restored. Also, contact information for businesses or other community stakeholders could be linked with a number that would ring in a building that is inaccessible or destroyed.

Message failure: Challenges often abound to create consistent messages among many potential sources. Conflicting, confusing, or inaccurate information reported by word of mouth, social media, or mainstream media can exacerbate existing recovery challenges.

Flow failure: When there are insufficient, or no mechanisms to communicate business-sector needs and issues upwards to decision-makers; or when restoration or recovery planning information fails to get communicated downward to the business community.

Economic development groups should devise a crisis communications strategy ahead of time. Some priority areas to address in the strategy include:

- Communication between local government and the business community
- Communication between the economic development group, chamber of commerce and local businesses
- Public relations and community image problems
- Potential conflicts between economic recovery stakeholders

A proactive communication effort supports community recovery by providing credible, accurate information for residents and businesses. One of the biggest

barriers to recovery is the presence of uncertainty. For examples, uncertainty about how the downtown corridor will be rebuilt and protected; uncertainty about whether or not the major employer will leave town; and uncertainty about when key infrastructure will be restored. A proactive approach can also equip the business community with essential facts to inform and support their decision making process. Chapter VI on Crisis Communications further explains various communications issues, and recommends specific strategies for consideration.

Organizational Capacity

In the wake of a disaster, new realities emerge, and a host of opportunities and challenges are presented. Unfortunately, when the local capacity to provide increased or different services to residents and businesses is urgently needed, local and regional governments, business groups and other non-profits tend to face significant cash shortfalls and diminished human resources. Small jurisdictions are particularly vulnerable because they already have limited staff and budgets. Economic recovery plans and strategies are of no value to the public sector if there is no operational capacity to implement them.

Enhancing organizational capacity post-disaster is essential because existing staff will be overwhelmed. Additional support will be required. Plan for it ahead of time.

In recent years, hiring disaster recovery coordinators has become a mainstay of many local and regional governments. They are typically funded by philanthropic or federal funds, and provide much needed capacity. This allows local officials to resume their day jobs, and allows the coordinator to focus attention on recovery and rebuilding efforts. For example, in 2013, after the floods in High River, and in 2016 after the wildfires in Fort McMurray, funding was secured to help pay for additional staff in their respective business recovery centres.

Assessing Damages to Local Businesses and the Economy

Even though each province or territory will perform its own damage assessment after a major disaster, your community should also plan to perform its own independent economic impact assessment.

Disasters change the social and economic makeup of communities. A community that understands how these impacts have led to a new social, political, and economic environment is in a much better position to make decisions that spur future recovery. Economic, social, and environmental repercussions will also determine what resources are necessary for long-term recovery.

An economic impact study assesses both physical and economic damage to industry and the local/regional economy. Below is a list of the various types of economic impacts communities should measure:

- Tax revenue loss (e.g., sales, property, employment, etc.)
- Job loss and business relocation
- Loss of wages
- Business closures and interruption (e.g., loss of productivity)
- Loss of inventory
- Damage to infrastructure (e.g., sewers, public transportation infrastructure, intermodal facilities, etc.)
- Damage to property (e.g., commercial, industrial, and residential)
- Damage to natural resources (e.g., water, crops, etc.)

Business Retention

According to the Institute for Business and Home Safety (IBHS), at least one in four businesses will not re-open after a catastrophic event. The top reasons being: a lack of working and/or long-term capital; being under-insured; having damaged inventory and/or property; having limited workforce options; and experiencing a diminished customer base. Some businesses close because they are unable to meet the new realities of a post-disaster business climate. Business closures have a devastating impact on the local economy and community recovery due to reduced employment, decreased tax revenues, and diminished business services.

Economic development officers have connections with the private sector. These connections are a key asset in a community's recovery efforts.

An established Business Retention and Expansion (BRE) program can supply critical intelligence about the current business climate. Outreach efforts following a disaster help determine which critical businesses have been impacted, aggregate damage on the local business community, and where public and private resources should be targeted in order to promote business and economic recovery. This outreach is also critical in retaining businesses and fostering employment.

As a first step after a major disaster, your economic development group should consider establishing a business recovery centre (BRC) to provide companies with assistance to stay open, or re-open. BRC's carry out disaster recovery functions in a central location by providing a range of services to affected businesses, such as holding workshops with representatives from various provincial/territorial and federal agencies (e.g., the Canada Revenue Agency, federal economic development regional agencies), insurance, tax and accounting professionals. These ideas are expanded on in greater detail in Chapter IV.

Government tax incentives related to property, equipment or investment can also be used as financing mechanisms to retain major employers. By leveraging these resources, economic development officers can help local businesses get the financing they need, while reducing the likelihood of relocation or permanent closure.

Finally, economic development officers should seek to provide relevant, timely information on response and recovery efforts through their business networks. While establishing a business emergency hotline or online portal is an effective use of technology to disseminate information, you should not discount the importance of in-person canvassing when communication and power lines are out.

Specific Challenges for Small Businesses

Small businesses are often more financially vulnerable than large businesses in the wake of a disaster. Large businesses have significant resources and business continuity plans to continue operations and remain financially viable, while small businesses typically lack these resources. However, small businesses are the backbone of a local economy. They are the ones providing essential items such as groceries, gas, childcare, and health services.

Economic development organizations need to be ready to provide additional assistance to small businesses, particularly in terms of capital and technical assistance. After a disaster, small businesses may need working capital to meet payroll, replace damaged inventory and equipment, and fund other operational costs. Funds are absolutely crucial within the first few weeks in order to get businesses back up and running. As long-term recovery sets in, small or medium-sized businesses may have to adjust to a changed local or regional market; reorient their products or services; train their workforce with new skills; find new customers; or seek new vendors. Short- and long- term financing mechanisms must also adapt to the specific, timely needs of businesses.

Economic developers should identify and/or help develop public and private funding programs for small businesses by working with organizations like local banks, credit unions, Community Futures, provincial/territorial and federal departments.

In the short term, small businesses may want to access non-repayable grants, or require gap or bridge financing with low interest and/or flexible terms. Grants are great because they are non-repayable. Adding more debt through loans is something businesses should avoid if at all possible in dire circumstances. Gap financing provides businesses with working capital until they can secure funds from other sources such as insurance claims.

Chapter IV provides further details on the challenges small businesses face following a crisis, as well as the role economic developers should play in helping them recover.

Navigating the Federal system

In the event of a large-scale natural disaster, the Government of Canada steps in. The federal financial assistance program provides money to provinces or territories, not directly to affected individuals, small businesses or communities. While provincial/territorial representatives are the primary liaison with federal agencies, there is still a role for the local community to play.

Communication with Members of Parliament (MP's), and other relevant federal staff should be ongoing with respect to work being completed in the community.

Redevelopment

Engaging business leaders and other community stakeholders in a discussion on land-use issues and redevelopment priorities prior to a disaster enables the community to devote proper time and resources to a sensitive topic. This may include holding workshops to develop a redevelopment plan that will protect and improve the community's economic base while increasing disaster resiliency. Community and business leaders should also hold discussions on the appropriate building codes for their communities. Building codes may have a short-term impact of increasing construction costs, but they can also create long-term benefits by making buildings more resilient to disasters.

Summary

Local government needs to be prepared for the reality that their community is vulnerable to some form of disaster. It's not "if" it is going to happen, it's "when".

Even when federal and provincial/territorial resources are available, it is critical that municipal organizations develop their own capacity to respond to and recover from a disaster.

This chapter introduced the most common economic development challenges after a disaster. Well planned disaster preparation builds community resiliency. Without it, important community decisions will be made under the duress of the catastrophic event and ultimately a community's recovery process will take much longer.



Chapter II: Disaster Risk Management

Trends and Impacts

Over the past 50 years, the number of officially declared disasters has increased dramatically. Not only have they become more frequent, but their impacts have become more costly. With limited budgets, many communities and regions are struggling to respond to various types of crises.

The cost of a disaster goes up exponentially depending on the population density of the region where the disaster occurs. For instance, in the May 2016 Fort McMurray wildfires, by July 7, 2016, the Insurance

Bureau of Canada (IBC) and Catastrophe Indices and Quantification Inc. (CatIQ) reported insured damages to have reached \$3.58 billion, making it the most expensive disaster in Canadian history. This surpassed the 1998 ice storms in Ontario and Quebec (\$1.574 million) and the 2013 Southern Alberta floods (\$1.872 million). The 2011 Slave Lake Wildfire that destroyed one-third of the town of Slave Lake, cost \$742 million which at the time was the most expensive fire-related disaster in Canadian history.



10 COSTLIEST NATURAL DISASTERS IN CANADA

EVENT	LOCATION	DATE	LOSS*
Windstorm/thunderstorm	Southern Alberta	June 2013	\$1,827M
Icestorm	Southern Quebec/eastern Ontario	Jan. 1998	\$1,574M
Windstorm/thunderstorm	Toronto, southern Ontario	July 2013	\$1,000M
Fire	Slave Lake, Alberta	May 2011	\$742M
Windstorm/rainstorm	Ontario	Aug. 2005	\$625M
Windstorm/thunderstorm	Alberta	Aug. 2014	\$569M
Windstorm/thunderstorm	Calgary and region	Aug. 2012	\$562M
Wind/thunderstorm	Calgary/southern Alberta	July 2010	\$530M
Windstorm	Calgary	Aug. 2009	\$376M
Hailstorm	Calgary	Sept. 1991	\$363M

*Loss and loss adjustment expense. Not adjusted for inflation.

SOURCE: STANDARD AND POOR'S

NATIONAL POST

Canada Disaster Statistics¹

The chart above highlights the ten costliest natural disasters in Canada. This does not include the 2016 Fort McMurray wildfires which are now the most expensive.

In the U.S., Hurricanes Sandy and Katrina affected more populated areas than disasters in the past. They would not have had such an impact had they moved quickly through the areas, but they moved slowly over the coastal area. With Katrina, the failure of the levee and floodwalls surrounding Lake Pontchartrain caused flooding in New Orleans and its suburbs.

Developments in the field of emergency management have also brought forth several key assumptions and principles in disaster risk management.

- The first assumption is that the most immediate concern of local officials is to ensure public safety.
- Secondly, there is the expectation that as the size, scale, and complexity of an incident increases, so does the involvement of regional and federal government support.
- Finally, there is an expectation of local primacy that maintains the understanding that priorities and decisions of the community carry priority.

However, while the emergency management profession has grown and matured to realize these important principles, there is a greater need for economic

developers and the private sector to engage in this space as well. Particularly when it comes to recovery as there is an inextricable link between the consequences of disasters, the vitality of a local economy, and opportunities for future business activity. When businesses are affected, jobs are lost and government revenues decline. These impacts can harm communities far longer than the disaster itself.

This chapter provides an overview of disaster trends, types and impacts; the phases of the recovery process; and insights into the roles of various parties at the local, provincial/territorial and federal levels.

Types of Disasters

Disasters can take many different forms, and can range from an hourly disruption to days or weeks of destruction. Below is a list of the various types of disasters that can impact a community.

Natural Disasters

- Hurricanes and tropical storms are amongst the most powerful natural disasters because of their size and destructive potential. Tornadoes are relatively brief but violent, causing winds in excess of 300 km/hr.
- Floods and flash floods: Flooding is the most common natural hazard, and requires an understanding of the natural systems of our environment, including floodplains and the frequency of flooding events.

¹ <http://www.preventionweb.net/english/countries/statistics/?cid=31>

- Thunderstorms and lightning
- Tornadoes
- Wildfires Communities are more vulnerable to wildfires in the event of extreme dry weather conditions or drought.
- Agricultural diseases
- Earthquakes and sinkholes: Both earthquakes and tornadoes strike suddenly without warning.
- Drought and water shortage
- Extreme heat
- Winter and ice storms
- Emergency diseases (pandemic influenza)

Man-Made and Technological Disasters

- Hazardous materials and chemicals: Hazardous materials emergencies can range from a chemical spill to groundwater contamination.
- Building fire: Workplace fires are more common and can cause both significant property damage and loss of life.
- Power service disruption
- Environmental health
- Terrorism: Communities are vulnerable to threats by individuals and extremist groups who use violence against both people and property. High-risk targets include military and civilian government facilities, international airports, large cities, and high-profile landmarks.
- Chemical and biological weapons
- Cyberattacks against computers and networks are carried out to intimidate or coerce a government or its people for political or social objectives.
- Fraud and theft
- Civil unrest
- Radiological emergencies
- Major employer leaves or closes: Economic

disasters can also occur with the closure of a major employer or when shifts in the economy move industry away from a community. Like natural disasters, these can come both suddenly or gradually over time. Consequences on the local economy can be immediate, lasting, and complex.

The Nature of Disasters

While provincial/territorial and federal governments have a significant role in disaster response and recovery, it is important to remember that all disasters are local. Disasters disrupt the physical, social, and economic landscape of neighbourhoods, towns, cities, counties, and regions. While some events like hurricanes and flooding can provide advanced warning, others like tornadoes or terrorist attacks provide little to no warning, often catching communities off guard.

Natural and human-induced hazards and disasters are increasing in both number and frequency across the world, resulting in ever growing human suffering and economic cost.

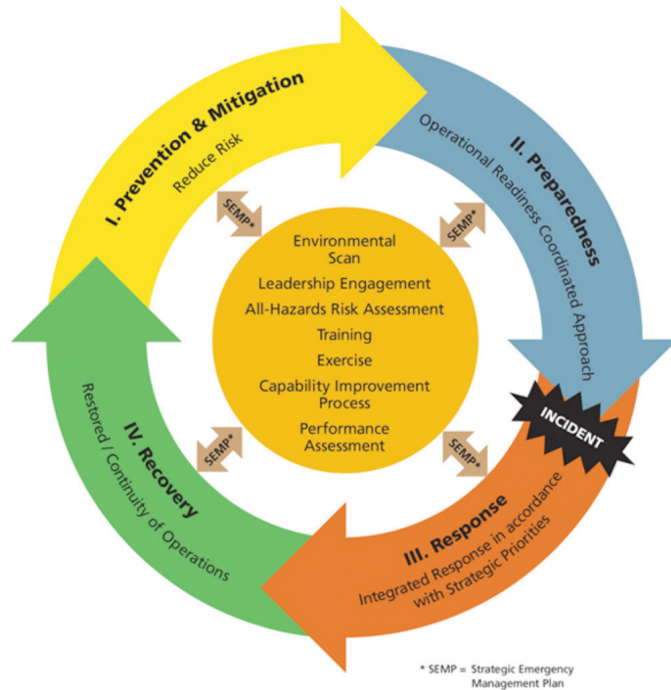
Canada is not immune to these events. Natural and human-induced hazards and disasters are becoming more prevalent in our urban and rural communities. Increased urbanization, critical infrastructure dependencies and interdependencies, poor planning decisions, climate change, environmental change, animal and human diseases, and the heightened movement of people and goods around the world have all increased the risks for potential catastrophes.

Cyclical Phases Of A Disaster

The ultimate purpose of emergency management is to save lives, preserve the environment, protect property and the economy, with the protection of life being of paramount importance. In the broadest sense, emergency management raises the understanding of risks and contributes to a safer, sustainable, more disaster resilient society.

The chart on the following page is an overview of the emergency management continuum. It shows four interdependent phases that may be undertaken sequentially or concurrently:

Emergency Management Continuum



Prevention and Mitigation

Prevention and mitigation involves steps to reduce vulnerability to disaster impacts such as injuries and loss of life and property. This might involve changes in local building codes to fortify buildings; revised zoning and land use management; strengthening of public infrastructure; and other efforts to make the community more resilient to a catastrophic event.

Preparedness

Preparedness involves taking steps before a disaster to reduce the risks of disaster impact on individuals, families, businesses, schools, and communities. Education, outreach, and training can build capacity to respond to and recover from a disaster. This may include business continuity training, pre-disaster strategic planning, employee preparedness initiatives, and other readiness activities.

Response

Response is the effort to provide lifesaving and life sustaining services in the face of immediate threats presented by a disaster. These actions usually include search and rescue, meeting humanitarian needs (e.g., food, shelter, clothing, public health and safety), debris removal, damage assessments, and immediate medical needs.

Triage efforts assess and deal with the most pressing emergency issues. This period typically feels somewhat chaotic and can last a month or more, depending on the nature of the disaster and the extent of the damage. Federal resources, such as action from Public Safety Canada (in the case of a major disaster declaration) and nonprofit resources from agencies such as the Canadian Red Cross, Salvation Army, Samaritans Purse and United Way are deployed during this phase.

Business re-entry into the community begins during this phase as well. Initially, businesses may face issues accessing their sites, completing preliminary damage assessments, or communicating with staff, vendors, suppliers, and customers. They may also face challenges accessing capital and workers, repairing damaged property or inventory, and dealing with a diminished customer base. It is often during this phase that the medium- and long-term health of a region's business community will either be saved or weakened. Depending on the size and scale of the disaster, local authorities may restrict business re-entry in various ways that can actually prolong the business disruption. It is critical that economic developers work with their local emergency management office to understand re-entry procedures so they can communicate them effectively to the business community.

Mobile or fixed-location one-stop centres for business are also set up during this phase in an attempt to centralize small business resources and offer support. These centres provide a location to connect businesses to local bankers, offer business counseling services, and other programs critical to maintaining business continuity. Case management services are delivered when businesses get personalized service. This can be done at the centre, or in a mobile setting, where business owners and managers have resources brought to them. For more information on one-stop recovery centres, visit: <http://restoreyoureconomy.org/recovery/business-recovery-centre>.

As the response progresses, the focus shifts from dealing with immediate health, safety and other emergency issues to conducting repairs, restoring utilities, establishing operations for public services (including permitting), and finishing the cleanup process.

It is not uncommon for disasters to reveal a weakened economic development landscape, with significant gaps in regional cooperation and alignment, organizational capacity, staffing, technical knowledge and financial resources. Thus, economic development agencies and

stakeholders also may need to rebuild, and require additional staff, capacity-building assistance and training. These gaps can often be highlighted because after the incident those organizations will be pressured to provide leadership and information both from bottom up and top down sources.

Recovery

In this phase, all aspects of disaster's impact on a community are restored. During this phase the impacted region has achieved a degree of physical, environmental, economic, and social stability. Individuals and businesses move from temporary to permanent homes and business locations, while reconstruction of community infrastructure moves forward.

This phase can be broken into two or three periods:

- The short-term recovery phase can start immediately following an incident when recovery operations are beginning, and community and business leadership is organizing for long-term redevelopment activities. The duration of this phase depends on the severity of the disaster and the level of community preparedness.
- An intermediate-term phase is sometimes added to describe activities undertaken to return essential government and commercial services, critical infrastructure, individuals and families to a functional state.

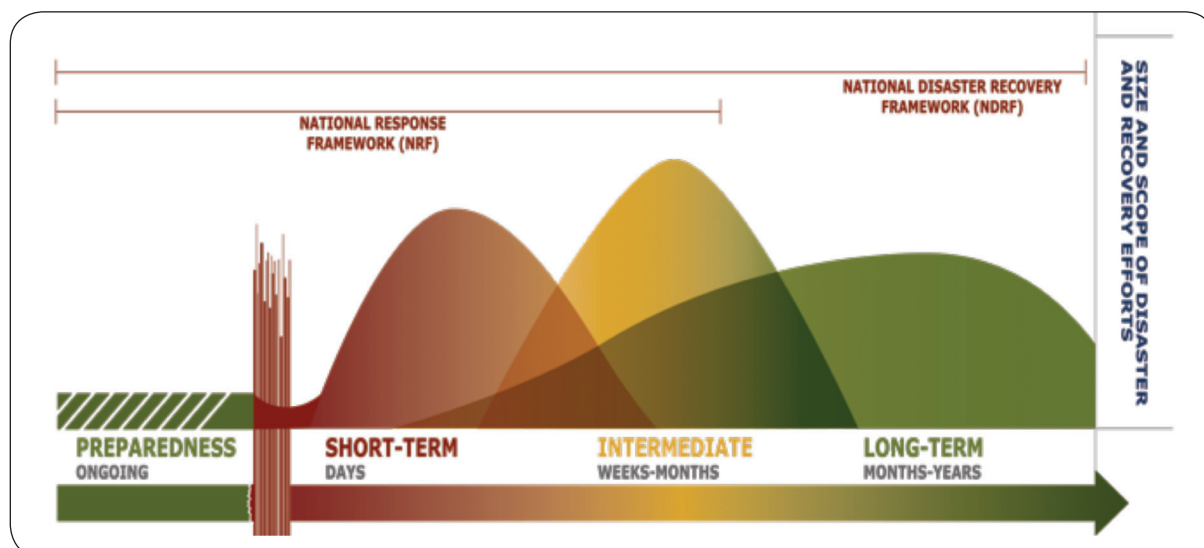
- The long-term recovery and redevelopment phase can take years or even decades while the community's economy returns to some sense of normalcy. Long-term financing is critical as businesses adapt to new environments.

Businesses may also need to recruit and train new workers. Employees may have difficulty getting to work if roads have been damaged, or there may no longer be affordable workforce housing near their previous workplaces. They may also need to find new customers and vendors. Companies that have historically catered to local customers may find their markets disrupted. They may require advice about exporting products or services to new areas which have different business licensing requirements and taxes. Capital may be required to find new markets in other jurisdictions that are not suffering from the same disaster.

It is important to understand that long-term business recovery and ultimately resiliency can take years even with strategic management. Experience has shown that communities who access and deploy a wider range of public and private resources tend to recover more quickly.

The following chart is from FEMA's National Disaster Recovery Framework and it illustrates the various periods of recovery.

FEMA's National Disaster Recovery Framework



For more specific details refer to [Resource Appendix 11](#).

Historically, Canada's emergency management efforts have focused on preparedness and response. Practitioners now recognize that all levels of government must work together to deal with specific risks, hazards and vulnerabilities through prevention, mitigation and recovery measures. Greater investment in prevention and mitigation work can actually prevent or significantly reduce the social, economic and environmental costs and damages caused by disasters. Forward looking recovery measures allow communities not only to recover from recent disaster events, but to build back better in order to help overcome past vulnerabilities.

Additional details on how to create a Disaster Recovery Framework and address Recovery Support Functions are provided in Chapter VIII: Strategic Planning for Recovery.

Government's Responsibility In Response And Recovery

Local Government

Local officials need to work with emergency management and hazard mitigation planners to define risks and assets. While many incidents may be relatively rare in frequency, their impact on a community can last for generations. For these reasons, it is critical that economic developers and other local officials engage in pre-disaster recovery planning.

Depending on the severity and magnitude of a disaster, the recovery process may take months or years to bring the community back to some sense of normalcy. While provincial/territorial and federal government agencies can bring significant resources to a crisis, local government has the most knowledge of local assets and public management systems, as well as relationships with the impacted constituents.

Residents and businesses expect their local government to lead immediate response efforts as well as support long-term recovery initiatives, particularly if they have trusted relationships with them.

Local government is responsible for providing the first level of response in emergency management. They assess the local situation and activate the Emergency Operations Centre (EOC) following a major incident. The EOC serves as the primary location for key decision makers to gather information about the incident, and manage the disaster response. This includes facilitating

field operations for emergency service and disaster personnel.

While the focus of short-term recovery efforts for local government is often on debris removal, permitting and restoring power; the community soon starts to become more concerned with activities that bring some sense of normalcy, including redevelopment of infrastructure and property. As the community moves into later phases of long-term recovery, local government plays a critical role in creating a disaster recovery plan for the impacted area with significant input from residents, and businesses. It also continues to monitor community impact, identify priority projects, communicate long-term recovery needs to provincial and federal officials, and assist with grant compliance.

If the magnitude of the disaster exceeds local resources, municipal local government may request assistance from the provincial or territorial government.

Provincial and Territorial Governments

Beyond the local community, provincial/territorial governments have a responsibility to respond to the emergency needs of its citizens. When the magnitude of the disaster is beyond a local government's ability to respond, the provincial/territorial government gets involved.

If the severity of an emergency and/or disaster be at a level that requires coordination of provincial as well as local government resources, the Premier may declare a state of emergency, activating the provincial emergency operations centre. Once a provincial state of emergency has been declared, the full resources of the province can be accessed in order to respond to the incident. This may include activating a provincial or territorial "crisis action team"; determining which jurisdictions are involved in the crisis and how they will be impacted, identifying activities for immediate response; determining whether or not to activate the Emergency Alert System, or setting up a joint information centre.

As local communities report on both damage and impact, the provincial and federal role is to commit resources to assist local jurisdictions in responding to the incident.

Federal Government

When disasters cause so much damage they exhaust all local and provincial/territorial resources, it is time for the federal government to join the recovery effort.

Public Safety Canada takes the lead role in coordinating federal resources for immediate response and cleanup, but they can also enlist other departments to provide support in the early stages of a disaster.

Public Safety Canada defines partnerships in this way:

All Canadians are involved in emergency management. Individual citizens, communities, municipalities, and federal, provincial, territorial governments, Aboriginal peoples, emergency first responders, the private sector (both business and industry), volunteer and non-governmental organizations, academia, as well as international organizations and allies may be involved in emergency management. Good partnerships based on effective collaboration, coordination and communication are key components of FPT emergency management systems².

For more detailed information on the roles and responsibilities of the federal government, refer to Chapter VII, on Government Roles & Responsibilities.

Role of The Economic Development Organization

Economic development organizations may be a division of local government, or have public officials on their board of directors. In some cases, they are incorporated as a non-profit agency. Regardless of structure, they serve as an intermediary between local government leadership and the private sector.

Increasingly in the U.S., more and more communities are including economic development officers in the EOC to help facilitate critical communication. This is something Canadian communities should be considering as well. Communicating on important issues like availability of power, access to transportation networks and facilities, financing, and temporary facility space for displaced businesses is critical during the early stages of recovery.

Local businesses need to open their doors as quickly as possible. Local workers need access their facilities to get back to work. They also need access to public services; infrastructure and utilities that help support their business activity. Local government, utilities, and public safety personnel need to partner with local businesses and their intermediaries to make all of this happen quickly. Without jobs and income, few residents will remain in the affected area.

Economic development organizations may also form an economic recovery team as a way to share information between emergency management personnel, corporate leaders, and local business owners. These teams aggregate information on damage to businesses and the local economy, and help develop long-term strategies for economic recovery. They also may be involved in establishing a business recovery centre to serve impacted local businesses.

Long-term financing is also critical as businesses adapt to a new environment, requiring a new business model. They may need to recruit and train a new workforce, find new customers and identify new suppliers. Investment in economic development capacity building becomes essential to foster economic diversification, attain new resources, build new partnerships, and implement effective recovery strategies and tactics.



²<http://www.publicsafety.gc.ca/cnt/rsrcts/pblctns/mrgnc-mngmnt-frmwrk/index-eng.aspx>

Chapter III: Disaster Preparation Measures - Building Capacity for Recovery

Overview

Local government implements emergency management plans that are likely to have a direct impact on business recovery, such as community reentry, access to property, cleanup activity, and rebuilding of infrastructure.

Economic development groups are the business community's link to local emergency management operations. They should be aware of emergency management response plans, and work with emergency managers in advance to include business needs such as reentry and damage assessment into the plan.

The economic development group holds the most local knowledge of businesses operating in the community; therefore, they can usually determine quickly what the major issues are.

Economic developers that take the time to train local businesses in disaster preparedness and continuity planning will be better positioned to provide effective support at a very critical time. Even though they may be struggling internally to recover their own organization, they will be expected to reach out to local businesses in

order to determine immediate needs, and inform them about various emergency response and recovery programs. To make matters worse, they may have to carry out all of this work operating out of temporary quarters if they are unable to accessing their primary office location.

Business continuity is the process of planning and engaging in preparedness activities that centre on enhancing your resilience to a major emergency or disaster. It equips you with defenses needed to survive threats, emergencies and/or disasters, and helps establish recovery strategies for critical business functions.

All organizations should have a plan in place to ensure they can continue operations during a state of emergency. This includes having a plan to stay in touch with employees after a major incident, and establishing an effective plan for disaster response and recovery. Even small actions taken in advance will enable you to be in a better position to respond, and shorten your recovery time.



Identify Critical Business Functions

Immediately following a disaster, organizations are likely to be operating at reduced capacity. Any number of factors could affect operations, such as displaced staff, damaged facilities, reduced operational funds, and/or utility outages. As a result, they need to identify their critical business functions.

IBHS Checklist for Identifying Critical Business Functions

First ask yourself:

- What are your most critical and time-sensitive business functions?
- Which functions would I classify as highest priority? Medium priority? Lowest priority?
- How much down time can I tolerate for each business function?
- Which business functions are necessary to fulfill my legal and financial obligations and maintain cash flow?
- Which business functions are essential to maintain my market share and reputation, or to strategically adjust to changed circumstances?

Considerations when Determining Criticality of a Function

- Reference the following considerations when determining the criticality of each business function
 - What is my organization's core business?
 - What would the consequences be if I lost or did not have access to my:
 - Facilities/buildings
 - Contents/ inventory
 - People (employees or customers)
 - Vital records
 - Equipment
 - Utilities
 - Support Systems (e.g. computers, networks, communications, transportation)
 - Suppliers

Source: Adapted from IBHS' Open for Business Toolkit for the Small to Mid-Sized Businesses.

For a more comprehensive business continuity toolkit, download the Open for Business (OFB)® Disaster Protection and Recovery Planning Toolkit for Small and Mid-Sized Business at www.disastersafety.org. It provides 50 pages of content and forms to help make sure small and mid-sized businesses are prepared to withstand the effects of natural and human-caused disasters.

Critical business functions are activities that are vital to your organization's survival, and to the resumption of your business operations. Identifying which ones are critical is integral in resuming operations following a disaster. Steps outlined in the "Identifying Critical Business Functions" text box will help you identify them for your organization.

Typically, critical business functions are functions that:

- Are most sensitive to downtime
- Fulfill legal or financial obligations to maintain cash flow
- Have a key role in maintaining your business' market share and reputation, and/or
- Safeguard an irreplaceable asset

Keep in mind, the process of identifying critical business functions should work in conjunction with a risk assessment analysis.

The Insurance Institute for Business and Home Safety (IBHS) developed the OFB-EZ™, a free, downloadable business continuity planning toolkit to help businesses recover, re-open quickly, and reduce losses. It gives business owners tools to better understand the risks they face; keep in touch with key suppliers, vendors and employees; make sure their information technology systems continue to function; and improve their ability to make quick, informed decisions after a disaster. Additional business continuity information can be found in Resource 11 at the back of this toolkit.

Understand and Adjust Your Insurance

As a general practice, plan to review your insurance plan at least once a year in order to make sure you have appropriate coverage in terms of replacement costs, and business interruption insurance for different types of hazards. Here are a few questions that should be a part of your annual review process:

- Are you located in an area that is particularly vulnerable to specific hazards such as flooding, tornadoes, forest fires, earthquakes or hurricanes? Be aware what your insurance will and will not cover. Too many organizations are underinsured because of a lack of knowledge about their insurance policy.

- Do you require additional insurance coverage? Most commercial property insurance does not cover flood or windstorm damage. Overland flood insurance is available for businesses excluding those operating out of the home. It is the responsibility of businesses to confirm and understand their insurance coverage.
- Are you shopping around for more affordable insurance? Beware of companies that offer a low-ball bid where the quote comes in 20 to 50 percent less than prevailing rates. This type of bid translates into either a stripped-down service or rate increase when the insurance policy comes up for renewal.
- Has your organization grown in recent years? If so, you'll need to review liabilities for your organization in terms of expanded equipment or operations. Are you covered for sufficient amounts to either rebuild the structure of your operations or replace fixtures at current replacement prices? After a disaster, your organization will not be in a position to shop around for good prices, as supplies will be short. It is better to overestimate replacement costs. Do you have cyber liability insurance to protect you from the threat of cybercrime? Talk to your insurance agent about whether any recent business changes should cause you to adjust coverage.

OFB-EZ[®]™ -Business Continuity Planning Toolkit

OFB-EZ[®]™ is a free business continuity tool designed to help even the smallest businesses focus on planning for any type of business interruption, so they can quickly re-open and resume operations following a disaster.

The tool covers the following:

- Know Your Risks
- Know Your Operation
- Know Your Employees
- Know Your Customers, Contacts, Suppliers and Vendors
- Know Your Finances
- Know Your Information Technology
- Know When to Test Your Plan

Note: The OFB-EZ[®]™ Toolkit is available for download as a pdf at <http://disastersafety.org/ibhs-business-protection/ofb-ez-business-continuity/>. > It is also available as a mobile app.

Identify a Backup Office Location

As part of your business continuity plan, you should plan for at least one backup office location, preferably two, to use in the case of an emergency. This ensures that if the first alternate location is also impacted, a second location is available. In the case of High River, Alberta, the EOC had to be relocated three times due to additional flooding which further compounded the crisis.

If your BRE database is only stored at your office, you may lose the ability to access emergency contact information, or lose the data permanently depending on the scale of damage to your facility.

More and more businesses and public agencies are backing up data in remote locations; your organization should this as well. Hosting your BRE database in a cloud server makes it available from any computer with access to the Internet. The BusinessCounts program in BC and Alberta are cloud based programs using the Executive Pulse platform. Access is available to users through the Internet using computers, tablets and cell phones.

Establish a Backup Data System for Your Organization

Your business operation relies on access to data and information; therefore, arrange to have remote data backup of your computer network. You may also want to contract services of a data storage and recovery facility where your data can be backed up offsite in real time. Some experts recommend a backup off-site location that is at least 50 km. away; however, that depends on the type of disasters you may face. A hurricane can have a path larger than 50 km. so in that case it may be better to consider another province.

As a minimum, your organization should seek to back-up all vital records that include employee data, payroll, financial records, strategic plans, customer or client lists, vendor lists, building plans, blueprints, leases, insurance records and other valuable documents that contribute to your bottom line.

If one of your key functions is Business Retention and Expansion (BRE), and your database is only stored at the office, you could lose the ability to access emergency contact information, or lose the data permanently depending on damage to your facility. More and more businesses and public agencies are creating redundant systems, choosing to back up their

Case Study: Disaster Preparation for EDOs in Joplin, Missouri

A catastrophic, EF-5 tornado with wind speeds of up to 300 mph tore a path roughly one mile wide through the southern part of Joplin, Missouri on May 22, 2011. It caused the tragic loss of 161 people and demolished 8,000 buildings (one-third of the city), including 530 places of employment. Two years later, approximately 449 businesses (85 percent) had reopened in the area. The Joplin Area Chamber of Commerce played a critical role in assisting businesses in the recovery process. The chamber president, Rob O'Brian, recognized the importance of having a disaster plan in place before a potential disaster. As Mr. O'Brian says, "First, you have to be functional yourself" before you look to assist others. He recommends the following critical disaster preparedness actions:

Have a disaster plan in place for your organization in the event of a catastrophe.

In 2010, the Joplin chamber staff attended an event, "A Day Without Business" in Tulsa, OK, where they learned about creating a disaster plan for their organization. While there are disaster plan templates, the plan should be tailored to the needs of the organization and its own potential disaster threats.

Know how to effectively communicate with internal staff and external members.

When phone lines, internet and cell phone towers go down, it's important to have a back-up method to stay in contact. In their plan, the chamber designated emergency meeting locations and used SMS text messaging to communicate with their own employees. It is important to collect cell phone numbers of local business owners in case of an emergency.

Know your data is securely backed up in real time and in an offsite location. This includes all computer data such as supplier and client contacts, contracts, monthly financials, and other documents that critically support your operations. Tape backups may fail or become corrupted. Backups that are kept in your office, car, or house may be destroyed in a large-scale event. As part of its preparation plan, the chamber backed up its data electronically, in real time, at a secure, underground server vault 80 miles away. A

backup location will depend on the type of disaster your community is vulnerable to. This enables your organization to focus on important recovery initiatives, not retrieving basic business data.

Prepare and maintain resources and lists that businesses can use to deal with their immediate response needs.

This includes lists of general contractors, suppliers of heavy equipment, generators, or office equipment, available building space, local banks, and other professional services that are in great need following a disaster. These lists should include contact information including a phone number and/or temporary location address for any critical service that supports the local business community.

Create and strengthen partnerships before a disaster arrives at the door of your community. The Joplin chamber relied heavily on the cooperative relationships that it had established with the city and local schools in the 1980s and 1990s. It is recommended to take time during normal periods to clearly define roles of various stakeholders in the event of a disaster. This includes designating who is responsible for business recovery activities or can serve as a spokesperson for the business community after the disaster.

A full case study can be found in [Case Study Appendix 1](#).

data in the cloud. See the text box on the Joplin Area Chamber of Commerce's efforts to establish a backup data system prior to the 2011 tornado.

Collect Critical Emergency Contact Information

Local Businesses

Economic development organizations should have several different ways to contact local businesses in the event of a disaster, particularly when the incident

causes widespread damage to power and transportation systems. Immediate outreach to business owners in your network will demonstrate your care about their personal and business concerns.

When a disaster strikes, disrupted communication channels can further compromise a community's ability to act. Modern telecommunications channels may be disrupted by power outages, damage to infrastructure, or system overload. As a result, municipal organizations should have several different methods in place to contact local businesses. Disruptions in power could mean Internet and e-mail are inaccessible. While text

may work in an emergency situation, cell phones may be down for a period of time. Make sure you collect personal cell phone numbers of key local business owners and executives ahead of time.

Using an online registration system to collect this information can be useful. Programs like ExecutivePulse³ have been designed to help economic development officers collect this data in advance. Communities purchase an initial software license and then input basic company information into the system. This data is then easily accessible as it is backed up offsite. If your community is hit by a disaster, you will be able to access the information in order to contact local businesses, learn about the impacts of the disaster, and determine their most immediate needs.

In 2016, this database was utilized to register businesses and their needs at the Wood Buffalo Business Recovery Hotline. Businesses were encouraged to call the hotline, register their business, and complete a short phone survey. This basic data was given to the municipality

General Supply Checklist for Disaster Response

Ensure your business has a disaster response kit with the following items.

- Battery powered or hand crank radio, with extra batteries
- Manual can opener
- Plastic bags
- Coolers and ice
- Drinking water in non-breakable containers
- Dust mask to filter contaminated air, hand sanitizer
- Local maps
- First Aid Kit
- Whistle
- Medication and Personal Items
- Flashlights and Light Sticks
- Nonperishable Food and Utensils/Paper Supplies
- Tools
- Bedding and Blankets
- Cash and ATM/Credit Card(s)
- Emergency Contact List

Source: The Institute for Business & Home Safety. A PDF form to list critical supplies is available at <http://disastersafety.org/wp-content/uploads/2016/04/ez-prep-ibhs.pdf>.

daily, allowing them to identify emerging trends, and address priority business needs in a timely way.

Employees

Does your disaster plan take into account the needs of your employees' safety and well-being? Disasters can happen after hours, on weekends and holidays. Do you have their emergency contact information readily accessible?

Senior management needs to take extra care in communicating with employees, as they are often your most key assets to protect and serve. Your employees may be experiencing significant loss in terms of damage to their homes, closure of daycares and schools, transportation challenges, and potential injury or loss of life by family members and friends. They may be worried about whether they have a job to return to, or whether they will get paid.

Procure key contact details for your employees, including personal cell phone and e-mail addresses in advance. Consider various ways to connect with them in case the phone system is not working or you have a major power outage, like in the case of Puerto Rico following Hurricane Maria in 2017.

Depending on the size of the business, you may want to set up a special number for employees to call-in to, or arrange a programmable forwarding of your main business line. An out-of-province number may also be viable option in order to enable employees to get through. Other options would be sending e-mails to work and personal e-mail addresses, and posting updates on your organization's website.

Make sure all contact information is updated regularly. Meet with your employees at least once a year to review emergency plans and update their emergency contact details.

Employee Needs Following a Major Disaster

Consider the following issues that may arise for your employees in their ability to resume working:

- Need for alternative modes of transportation
- Provision of emergency housing
- Short-term financial aid for immediate needs
- Child care facilities
- Payroll continuity is key!

³ www.executivepulse.com

Case Study: Slave Lake, Alberta

In 2011, fire forced the evacuation of 7000 residents from Slave Lake, Alberta. The fire destroyed nearly one-third of community and many surrounding homes.

Key government buildings were lost in the fire and many of the community's emergency personnel lost their homes. As a result there were stages during the fire where communication between key responders was lost.

A valuable lesson from the fire links directly to the need for emergency personnel and municipal government officials to coordinate disaster response lists prior to an emergency and to house the list in more than one location.

Prior to the disaster, you should develop a contact list of first responders, emergency personnel and utility companies including cell phone numbers and personal email addresses.

- Planning for economic preparedness in the face of disasters
- Building organizational capacity for economic recovery
- Establishing a tiered system of re-entry for the business community
- Making preparations for business financing after a disaster
- Preparing media messages, communication channels, and templates
- Identifying neighbourhood redevelopment and re-use strategies
- Considering opportunities for sectoral strategies and workforce development strategies

If a corporation like a bank provides financial services, it has a key role in providing timely, flexible financing solutions for small businesses. It can also play an important role in educating its clients on the topic of financial literacy as it relates to insurance payouts. For example, in the Gulf Coast, some business owners took the insurance money and did not invest it wisely.

Engage Businesses in Disaster Preparedness

Business owners and executives don't naturally see a role in their community's disaster preparedness effort; therefore, it is important for the economic development group to educate them about the value. Involving businesses in disaster preparedness helps ensure their specific needs are addressed in emergency plans, accelerates their recovery and increases their overall resilience. While local government has the legal responsibility to address disaster risks and make emergency management plans, businesses and the business community will recover faster if they have taken preparedness steps in advance.

Economic development organizations are in a unique position to coordinate involvement and leverage resources from the business community after a disaster. They are also in a good position to accelerate job recovery and stabilize the community's economic base.

In order to carry out this role effectively, economic developers should carry out a number of preparedness activities in advance like:

- Engaging and educating the business community in disaster preparation

Establish Partnerships

Historically, communities and governments have not partnered well with the private sector. In order to be successful, it is important that all parties understand what their unique resources, assets and needs are, and how they can best work together to achieve mutually beneficial results.

Some of the most obvious benefits of increased public-private sector collaboration include:

- Improved decision-making
- Increased access to resources and technical capabilities
- Expanded reach and access for disaster preparedness and relief communications
- Improved coordination
- Increased effectiveness of emergency management efforts

- Stronger relationships built on mutual understanding
- More resilient communities
- Increased capacity to prevent, protect against, respond to and recover from major incidents

Partnerships between public and private sector organizations can help increase a community's preparedness in other ways as well. In the U.S., many states and communities are actively entering into public-private partnerships to improve their emergency management capabilities.

The National Partnership-Business Operations Center Alliance was organized for the purpose of strengthening the capacity of the public sector, private sector, and Department of Defense to prevent, prepare for, respond to, and recover from disasters through effective education, scientific research, and organizational partnerships to include but not be limited to private sector, public sector, and Federal Agency partnerships⁴.

Another good example is the Institute for Sustainable Development (ISD) based in Washington, D.C. ISD's mission is to promote innovation and public-private partnerships for sustainable and inclusive long-term recovery, resilience, and community transformation. It is registered as 501(c) 3 organization and depends on contributions to continue to provide leading edge programming and technical assistance to disadvantaged communities and businesses facing chronic stresses, disasters, and other challenges⁵.

Other public- private partnerships that have been successful include:

- Safeguard Iowa Partnership - (<https://safeguardiowa.wildapricot.org>)
- Chicago FIRST- (www.chicagofirst.org)
- Citizen Corps (USA)- (<https://www.ready.gov/citizen-corps>)
- All Hazards Consortium- (<http://www.ahcusa.org>)

Emergency management is a discipline many large corporations integrate into their daily operations. Developing an emergency plan is a cyclical process

common to many risk management disciplines like business continuity, and security risk management. Once natural and human-caused hazards are identified, each one is risk is assessed against business operations for risk and vulnerability. Other issues that need to be looked at are Impacts on workforce, workplace, supply chain and information technology. Companies like Shell Canada engage in situational awareness planning on a regular basis. Situational awareness is about "knowing what is going on so you can figure out what to do". Advance planning in emergency management allows managers to create action plans for when certain thresholds are crossed. If an emergency occurs, they have a plan in place to mitigate risks and ensure business continuity of critical operations. Communities should learn from corporations like Shell Canada, in the area of emergency preparedness, risk identification, mitigation, and recovery. They take business continuity and preparedness very seriously. They also have technical expertise and resources that could be very valuable for communities. The challenge is how to best match their assets with pressing community needs.

In a crisis situation, responders from different organizations may find their priorities and goals in conflict with each other. By engaging corporations, government leaders and economic developers in preparedness drills and exercises on a regular basis, those involved in response and recovery begin to develop a shared understanding of basic principles and processes, should the need for activation occur. It can also help create and nurture organizational relationships; promote a mentoring environment allowing inexperienced participants to build competency and expertise; and meet portions of contingency plan readiness requirements.

The private sector can also bring significant resources and expertise to the economic recovery process of disaster- impacted communities. In fact, significant benefits can result if communities are able to enhance the level of public-private sector collaboration in their economic recovery efforts. For example, the private sector can:

- Provide technical support services or in-kind donations of goods or services for the preparedness and emergency response phases of disaster management
- Improve disaster consciousness of the general population and local business community through participation in awareness initiatives

⁴ https://www.fema.gov/pdf/privatesector/beoc_partnership.pdf

⁵ www.isdus.org

- Contribute time, products, and money
- Build community confidence by making a commitment to stay in the community, to rebuild, retain employees, even expand and reinvest
- Identify issues for post-disaster business re-entry and help develop a tiered system for business re-entry
- Identify contracting and procurement opportunities for economic recovery services for local businesses
- Help find solutions for workforce housing
- Organize capital availability for businesses
- Review plans and preparedness tactics since many large corporations have emergency response planners on staff
- Provide security personnel
- Help identify other financial resources
- Identify local resources for technical assistance to businesses

Another interesting model is the formation of mutual aid groups. For example, Sundre, Alberta is home to the Sundre Petroleum Operators Group (www.spog.ab.ca). This is a mutual aid group, consisting of representatives from industry, government and non-profits. Membership usually consists of those who have a role in emergency response management; however, membership varies, and usually falls under one of the following types:

- Municipal only
- Industry only
- Municipal/industry combined

Mutual Aid Alberta (www.maaerp.ca), a not-for-profit society established in 2014, is dedicated to ensuring everyone gets the help they need during an emergency. They believe public safety is enhanced when emergency responders have access to the resources they need to respond quickly and effectively. Their approach emphasizes building relationships and linking response partners through a common emergency management system, and involves

improving resident emergency notification and reducing personal information privacy risk by ensuring secure emergency contact data collected and stored by a single source. This makes data gathering simpler for community stakeholders by having one company with one approach.

Offer Business Continuity Training

Small-and medium-sized businesses are usually more vulnerable to disasters than large ones. It is estimated that one in four small businesses are expected to experience a disruptive disaster in the near future, regardless of their location. According to a survey by Ohio-based Nationwide Insurance, 52 percent of small business owners said it would take at least three months to recover from a disaster, and more than 75 percent don't have a disaster plan in place⁶.

Small businesses are also least likely to have disaster recovery insurance, yet they are the ones most affected by a disaster. That's why it's essential for small businesses to have a disaster recovery plan. Most underestimate the likelihood and impact of a major crisis on their business. Yet, when disaster strikes, many will lose their customer base, property, inventory, and sales records in a single day.

Communities can't afford to lose small businesses, especially when they make up a significant portion of your local employment base.

Economic development leaders need to connect their small to midsize firms to business continuity resources, and educate them on the importance of having a plan. Ideally, businesses will have a formal business continuity plan that describes a clear set of actions for the owners and employees to follow so they can quickly restore core business functions. A few resources are listed below:

- Provide businesses with business continuity resources listed in Resource 11 of the toolkit
- Consider holding workshops and/or webinars to disseminate important disaster-related information like business continuity efforts and the need to carry business interruption insurance. Note, careful thought should be given to a convenient time, location and format of the event as well as appropriate promotional efforts so the maximum number of small business owners will participate.

⁶<https://www.claimsjournal.com/news/national/2015/09/01/265508.htm>

- Most importantly, encourage business owners to keep their business continuity plan in multiple locations. There is no use in having a plan if it is not accessible or followed.

Case Study: Charleston Metro Chamber's Business Continuity Efforts

The Charleston Metro Chamber of Commerce in South Carolina created a Business Continuity Planning Council to help encourage small businesses to make business continuity plans. The chamber reached out to its network and brought in teams of local experts to speak on the various aspects of continuity planning. The chamber performs the following functions:

1. Provides resources including online literature, hard-copy literature, and local experts who can speak on a variety of continuity planning issues.
2. Conducts workshops and presentations on pre- and post-disaster issues such as communications planning, IT preparedness and other business continuity issues.
3. Coordinates with other emergency-related resources—on the local, state, and federal levels—like county emergency operators, the U.S. Coast Guard, and the Department of Homeland Security.

Chamber workshops were held every few months at its facilities. Each workshop focused on a specific topic in business continuity. For example: technological components; social media policies; data loss and backup; anti-virus and security protection; hardware recovery and testing. To market the workshops, the chamber used its own channels through its member relations team, e-mail, and other member communications—while also engaging the help of the Small Business Charleston Network and advertising in the Charleston Regional Business Journal. Resources needed for this business continuity initiative were already in the community. The Charleston Metro Chamber simply brought them all together.

A full case study can be found in [Case Study Appendix 5](#).

Establish a Business Re-entry Program

After a disaster, business owners may be restricted from returning to their property depending on the nature and scale of the incident. As a result, they could lose their perishable inventory, employees and/or existing customer base.

In the case of Galveston, Texas after Hurricane Ike, business owners were not allowed to enter the community for 12 days, which allowed floodwaters to further destroy their facilities and inventory. This same situation occurred in High River, Alberta causing business owners a significant amount of stress and loss of inventory.

In the 1995 Oklahoma City bombing, approximately 60 percent of the businesses within the police perimeter closed permanently (even those without physical damage) due to the fact they had limited or no access to the area following the event. Business closures can also severely limit access to essential products and services like local grocery, gas, daycare and health services in the impacted area. It could also mean decreased employment opportunities for local residents and a significant decline in the tax base.

To respond to this issue, emergency management personnel use a tiered system of community re-entry following a wide-scale evacuation. The purpose of this system is to allow for the safe, orderly return of community members, such as emergency responders, critical service providers, relief workers, businesses and citizens.

Basically it is a credentialing program where ID cards or passes are issued to individuals and businesses. Local law enforcement is trained to recognize these passes, and allows access when their tier or level is activated. This system helps facilitate timely re-entry of critical businesses to assist in the community's recovery effort. Without an approved business re-entry plan, the local economic recovery engine will be severely hampered at a time when they need it most.

Plan to Establish a Business Recovery Centre (BRC)

One of your first objectives following a disaster is to help impacted businesses return to operations as soon as they can. This is particularly important for small businesses that lack capital reserves and resources to weather a lengthy business disruption.

Depending on the nature and magnitude of the disaster, communities should have their BRC up and running within a week of the event if possible. For example, in Jefferson Parish, the community adjacent to New Orleans, they were able to establish their "One Recovery Centre" two weeks after Hurricane Katrina with help from various community partners.

Case Study: Town of High River Re-Entry Plan

In 2013, The Town of High River implemented a phased re-entry plan due to the fact there was consideration variation in the state of homes. Re-entry proceeded gradually because neighbourhoods were integrated with common access routes, utilities and other systems. Safety teams patrolled the area and maximum safety precautions by residents were encouraged because of the condition of some of the homes. Two weeks after the flood, nearly 95% of the businesses were in various stages of recovery. In order to facilitate an orderly re-entry process, The Town and Alberta Government developed a three phase re-entry:

Phase 1 - Town Made Safe

This phase was focused on achieving key re-entry criteria, setting up the Re-entry Station and Welcome Centre. As directed by the Emergency Operations Centre, this phase allowed for re-entry of designated locations within the town. Government officials communicated with residents at reception centres, comfortable were built, interim accommodation was secured and controlled bus tours were arranged that originated from reception centres to the town. When the Emergency Operations Centre felt confident this phase was complete they declared the move to Phase 2.

Phase 2 - Staged Re-entry

As directed by the Emergency Operations Centre, times and locations for occupation of the town were released to the public. Residents were advised of the area ready for re-entry, the date and time of re-entry, and the location of the Re-Entry Station. Staging during this phase allowed those with businesses and/or residences that were habitable to re-enter and remain. Those with businesses and residences that were not immediately habitable or uninhabitable were advised to check in with the Re-Entry Station and return to their interim accommodation. When ready, the Emergency Operations Centre declared commencement of Phase 3.

Phase 3 - Termination of State of Emergency

Once all practicable re-entry was complete, the EOC was shut down and an official handover took place with the Town of High River. This phase ended when the Associate Minister recommended termination of the State of Emergency to the Lieutenant Governor in Council. The Assistant Deputy Minister's Recovery Task Force was engaged to assist with long term recovery and restoration efforts.

The full report can be accessed at <https://www.alberta.ca/albertacode/images/High-River-Reentry-Plan.pdf>

In 2016, due to the magnitude of the wildfire in Fort McMurray, Alberta it took approximately three months to establish their BRC. While they were waiting, they used a business emergency hotline to gather information about business needs.

Usually the economic development group takes the lead in establishing the BRC in cooperation with local, provincial/territorial, and federal partners. For rural areas, regional economic development or provincial/territorial staff is likely to have representation at the centre as well.

A BRC is a one-stop shop set up to provide local, provincial/territorial, and federal resources to businesses – often small and medium-sized firms – after a catastrophic event to help them recover.

BRC's help facilitate the flow of critical two-way communication. Centre staff is typically informed with up-to-date information on disaster response and

recovery information and/or have a staff member that is connected with the community's Emergency Operations Centre (EOC). As they are in direct communication with the business community, they are also able to facilitate the two-way exchange of information back to government officials.

BRC's are typically established separately from emergency operations centre (EOC). This ensures businesses are able to access services quickly, and helps avoid confusion associated with individuals that are more in need of social services. As noted by economic recovery practitioners, businesses will begin to complain or stay away from these centres if the services are not set up to take into account the limited time they have and specialized information they require as business owners.

Communities typically establish a BRC in the most impacted area to provide close access to affected businesses. Locations could be in a conference space of

a local business, a vacant retail space in a mall, a trailer, etc. It is important to arrange for two backup offices in case the main office is damaged in the disaster. Make sure your hours of operation accommodate the needs of a business owner. Not all can drop in Monday-Friday, between 8:00 AM and 4:30 PM. Be open evenings and on the weekends. You may also need to develop a mechanism that allows you to bring resources to them.

The BRC will require trained staff to respond to the range of business recovery needs. Economic development organizations should invite local, regional, provincial/territorial and federal partners to place staff in the BRC, and delegate who will fulfill each recovery function based on their specific capabilities, networks and resources.

Representatives of financial institutions that provide government assistance loans are also valuable resources to incorporate into your BRC. This includes financing coordinated by agencies like Community Futures, and other alternative lenders, as well as resource providers such as Futurpreneur, BDC, specialized technical assistance counselors, industry associations, chambers of commerce, or workforce development entities.

Make sure everyone working in the BRC and those answering the hotline know what the local, provincial/territorial, and federal government can and cannot do. Programs will change on a regular basis. All staff will need to be kept up to date on a regular basis.

They should also be trained to watch for mental health issues. Psychological impacts of disaster can be great – especially if there is a large social and humanitarian component. Following a disaster, there is usually a surge of adrenalin associated with surviving the event; however, this feeling eventually diminishes. It is important for business counselors to pay attention to the needs of others, identify key warning signs and connect those individuals with adequate mental health care workers who can assist.

Never underestimate the mental health implications a disaster has on individuals, business owners, and municipal staff. Maintaining their health is important to your long-term recovery and resiliency.

You will also need to think about how you are going to market the BRC. The lead economic development group should develop a marketing and promotion campaign to advertise the business recovery hotline number as well as the BRC's location and services.

Consider traditional methods, such as a reference on your organization's website homepage, as well as local media channels such as radio, print newspaper, TV advertisements, and well-located billboards where you can advertise this information.

Consider alternative methods like distributing flyers directly to impacted businesses and local chambers, business organizations, city hall and other local government offices as well to further distribute the message. Make sure all collateral materials are produced in relevant languages, depending on the demographics of your community.

A Three-Tiered Re-entry System Following an Evacuation

Many communities have established a three-tiered system to give re-entry priority to specific community stakeholders. This tiered system considers the needs of specific businesses and industries to be prioritized for re-entry in order to serve the community, the local economy and the needs of citizenry.

Tier 1: The first tier is commonly reserved exclusively for re-entry of agencies/groups involved in emergency response. This tier includes search and rescue personnel, emergency healthcare staff, utilities and infrastructure repair personnel, damage assessment teams and pre-designated government staff. In some communities, credentialed businesses and industries whose facilities pose a public safety concern, environmental threat, or other substantial danger are also allowed access.

Tier 2: The second tier is limited re-entry for other important groups that can include: relief workers, healthcare agencies and suppliers, insurance agents, business operators such as important food and building material retailers, fuel distributors and stations, debris management, financial institutions, and select businesses with unique circumstances (fragile inventory, hazardous waste, large workforce, global distribution etc.)

Tier 3: The third tier allows open access for all remaining residents and business operators (not allowed under tier 2) that can prove they live, own, rent, or lease in the restricted area. This tier also includes licensed contractors, other repair service providers, and family and friends who re-enter with an eligible resident.

Be prepared to keep the BRC open anywhere from a few months to as long as a year for extremely large-scale disasters such as Hurricanes Katrina and Sandy or the flood in High River. Consider applying for federal grants to fund temporary workers at the BRC as discussed above to ensure staffing capability. A BRC can also serve as an important vehicle for local and regional economic development, recovery partnerships and coordination.

Establish a Business Recovery Fund

Before a disaster, the economic development group should bring local banks together to discuss how they can make business loans available to impacted businesses for recovery purposes.

A province or territory may also choose to establish specific business recovery programs to assist businesses following a disaster. For example, the Government of Alberta established a Small Business Rebuilding Program after the 2013 floods, targeted specifically to businesses with 21 to 50 full time employees. It was designed to complement the Disaster Recovery Program that assisted businesses

The Important of Mental Health in Post-Disaster Recovery Alberta Floods

As a result of the 2013 floods in Alberta, the Alberta Government announced \$50 million in funding for post-flood mental health recovery, to be divided as follows:

Enhancement of Community Services (\$18 million): Direct support for those displaced from the flood, including roving multi-disciplinary support teams made up of outreach workers, counsellors, therapists, community facilitators and recreation therapists to help those living in new temporary neighbourhoods. Treatment would be made available to all who needed it, including group, family and child counselling.

Targeted support and programs (\$12 million): Programs and support for those dealing with the stressful aftermath of the flood, including specific programs and resources for children, youth, immigrants and seniors. More than 85,000 resources were delivered and distributed, including a flood recovery coloring book for children and playing cards that described stages of recovery, information on where to get counseling assistance, and how to manage stress.

Training and Education (\$5.5 million): Training for disaster responders to increase Alberta's capacity to effectively respond to and manage the effects of a future disaster. Ongoing training was offered to disaster responders and people personally involved in the flood, including suicide prevention training, loss workshops and mental health first aid.

Capacity Building for on and off Reserve Aboriginal Populations (\$5 million): Resources to provide emotional support for Aboriginal, First Nations, Métis and Inuit in a culturally relevant manner.

Monitoring, Surveillance and Evaluation (\$4 million): Monitoring of the mid-long term emotional health impact of the flood, assisting in planning and setting priorities for supports and services, and evaluating the effectiveness of interventions.

The Office of the Chief Mental Health Officer (\$3.5 million): Working with health delivery partners and stakeholders, the office lead and implemented a social emotional disaster recovery plan, established core "Disaster Mental Health Response teams" and prepared responders in government, Alberta Health Services, and community stakeholders to provide mental health supports quickly and efficiently in the face of any disaster.

Public Communications: \$2 million - To ensure Albertans and stakeholders have the information they need to access resources and assistance.

Source: <http://www.health.alberta.ca/newsroom/news-bkgd-2013-10-25-recovery-funding.html>

Establishing a Business Recovery Centre in Hancock County, MS

Hancock County is the southernmost county in Mississippi with a population of approximately 43,000 with the county seat of Bay St. Louis. Hurricane Katrina ravaged this county, causing the deaths of 200 people, devastating 75 miles of beachfront, destroying thousands of homes and businesses, and cutting off the community in terms of transport and communications with damaged bridges and downed power lines. Approximately 1,800 businesses were impacted by the storm, with over 50 percent severely damaged or destroyed. Long-term business owners found themselves having to start from scratch in a post-disaster environment plagued with rising insurance and construction costs.

Despite reduced capacity, the Hancock County Chamber of Commerce quickly acted and emerged as a key provider of business assistance. With help from the Mississippi Development Authority (MDA), the Chamber established the first Business Assistance Centre on the Mississippi Coast, bringing all of the resources for small businesses together under one roof. According to the Chamber president, Tish Williams, the Chamber “served as the ‘window to the world’ for [their] businesses and residents--- providing access to the internet, and phone and fax services”.

Their organization looked to provide all of the business support services in one central location – housing the Small Business Development Centre (SBDC) business counselors that came from across the U.S. to help local businesses reconstruct their financial papers to apply for SBA disaster loans. Volunteers from IEDC also staffed the office to provide technical advice to affected businesses.

As a result of their proven leadership in assisting small businesses, the Hancock County Chamber of Commerce was recognized nationally as a model for disaster recovery. They received the National Phoenix Award for Outstanding Service by a Public Official from the U.S. Small Business Administration (SBA) – with the award being presented by then acting U.S. President George Bush. And out of the ashes, the phoenix rises. Hancock County has proven itself resilient in terms of redeveloping two downtowns, establishing a main street program, rebuilding businesses, homes, bridges and beachfront, attracting 200 resident artists to the area, and developing increased capacity at the Chamber’s new 501(c) 3 foundation to provide ongoing financial and business counseling services.

For a copy of a business recovery centre plan for the community of Hancock County, MS, which was the first county in Mississippi to establish a business recovery centre following Hurricane Katrina in 2005, visit: <http://restoreyoureconomy.org/wp-content/uploads/2013/02/Model-for-Business-Recovery-Center.pdf>

with up to 20 employees and the Hand-up Plan which provided low- interest loans and interest rebates to small businesses.

One cautionary note about these programs is to ensure you aren’t encouraging companies to take on more debt than they will be able to handle. There have been many cases where businesses were encouraged to sign up for easy low interest loans, that ended up going out of business later when rates went up, and their previous market had not yet come back. Sometimes non-repayable grants are the best solution.

Disaster Planning for Economic Recovery

Communities are often unprepared for the chaos that emerges after a disaster strikes, and have difficulty planning for long-term economic recovery when there are other pressing humanitarian, cleanup and rebuilding needs to address. Engaging in difficult conversations

before a disaster strikes can prevent major dissatisfaction later.

Economic development groups should engage community and business stakeholders in a pre-planning process to discuss sensitive topics such as land use, as well as property re- use and redevelopment priorities, particularly in environmentally sensitive areas. They should also identify sources of capital for future redevelopment projects well before a disaster occurs. Government funding can take time to administer, which is why private and non-profit dollars should be leveraged when possible.

The community should also hold discussions around improving building codes and using improved building materials to build more resilient communities. Community and business leaders need to consider both disaster resiliency as well as energy efficiency in these conversations. Improved building codes are likely to

increase the cost of construction, which can meet with some resistance from the business community; however, the community can and should work through the costs and benefits of re-building back better.

Comprehensive planning processes help local communities identify policies, operational strategies, roles and responsibilities that will ultimately guide their long-term recovery and redevelopment efforts following a disaster. For more information on this process refer to Chapter VIII on Strategic Planning.

Case Study: Cedar Rapids Chamber of Commerce and Priority One

After the 2008 flood in Cedar Rapids, Iowa, the local Chamber of Commerce and Priority One (a regional economic development organization) established an “Adopt-a-Business” program. This program allowed unaffected businesses to donate resources to 602 businesses affected by the flooding.

These resources included temporary facilities, business coaching, and financial assistance; clean up labour, [and] construction materials. The program also allowed businesses to become operational more quickly without incurring more loans, and contributed to the strong sense of community that emerged following the flood.

The full case study can be accessed in [Case Study Appendix 3](#).

Case Study: Polk County Office of Economic Development

In 2004, a series of three hurricanes swept through Florida over the course of three months and hit Polk County with significant force. Despite extensive damage throughout the area, the Polk County Office of Economic Development (OED) responded quickly to mobilize an economic recovery team immediately after the first hurricane. OED 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 OED’s economic development, tourism and small business office staff. OED’s unique relationship with local chambers allowed each municipality to conduct business surveys in their respective jurisdiction and report back to OED on ground-level impacts and damages. This team assisted OED in identifying capacity issues and helped collect and disseminate valuable economic information to local, state, and federal officials. As recovery efforts moved forward, they also engaged local bank representatives to join the recovery team as they started to distribute business recovery loans.

After Hurricane Charley, the recovery team 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 the Federal Emergency Management Agency (FEMA), enables government agencies to better coordinate their disaster response and recovery efforts in multiple areas. The ESF 18 group deals with recovery efforts related to business and industry. Creation of the ESF 18 team at the local level allows Polk County’s economic recovery team to have greater access to federal and state emergency funds for planning and mitigation. Polk County has used these funds to work on a Post-Disaster Redevelopment Plan, that engaged the private and public sectors in how to redevelop and make their community more resilient in the future.



Case Study: Jefferson Parish's Re-entry Program

Jefferson Parish is the community immediately to the west of New Orleans, which serves as a major economic engine for the entire region. The parish suffered substantial damage to its commercial and industrial areas after Hurricanes Katrina made landfall in August 2005. In the week following Katrina, evacuees were prevented from returning to their homes due to a lack of basic services like water, sewer and electricity. Traffic was restricted to emergency and utility vehicles only.

When the parish did re-open its doors, highways were filled with standstill traffic as a mix of residents, contractors and business owners all tried to return to the area. The parish government developed an "on-the-fly" re-entry plan that consisted of a contractor issuing paper credentials that allowed business representatives to re-enter the community to re-establish business service. Later on, the business community would demand a codified re-entry plan - which would involve the cooperation of parish government and the local economic development organization, JEDCO. The end result was the creation of the JumpStart Jefferson Re-entry Application Process - a tiered re-entry system that was composed of the following three levels:

- Tier 1:** Primary infrastructure and major utility companies, pre-designated government staff and contractors, suppliers of emergency relief goods and equipment;
- Tier 2:** Humanitarian relief agencies, small disaster response teams of large businesses essential to the economy of Jefferson Parish, those with unique circumstances such as fragile inventory or hazardous materials;
- Tier 3:** Return of business owners and designated employees whose businesses are vital to the return of citizens and the parish's economy.

Jefferson Parish had an online system for registering local businesses and allowing them to apply for re-entry status prior to any type of evacuation. After registering, businesses are assigned to a tier that's correlated to how important the business is to preparing the community for citizens and receive an authorization placard for their vehicle to re-enter the parish after a major evacuation. The program automatically recognizes and sends certain applications, like hospitals and other critical infrastructure to the parish administrator to be reviewed for inclusion in tier one.

Over time, this re-entry program has become a regional system whereby a common database is shared amongst regional parishes in the Greater New Orleans area so re-entry credentials can be honored in nearby parishes.



Summary

It is essential that economic developers take the time to train local businesses in disaster preparedness and continuity in advance of a disaster. Efforts put into business continuity before the event will enhance your resilience, and equip you with defenses you will need to survive threats, emergencies and/or disasters. They will also help you establish recovery strategies for your critical business functions.

All organizations should have a plan in place to ensure they can continue operations during a state of emergency. This includes having a plan to stay in touch with employees after a major incident, and establishing an effective plan for disaster response and recovery. Even small actions taken in advance will enable you to be in a better position to respond, and shorten your recovery time.

Chapter IV: Business Retention and Expansion - Before and After a Disaster

Overview

This chapter is focused on the critical role business retention and expansion (BRE) efforts play both before and after a disaster, highlighting critical actions required to prepare businesses for a disaster, and retain them after a disaster strikes. Even if an economic development officer has engaged the business community in pre-disaster planning, communities are often unprepared for the chaos that emerges after a disaster.

Local businesses are likely to call on your organization for guidance and direction. Others may not call but still need to know they are a valuable part of your community, and critical to your community's recovery process.

Plan to utilize multiple outreach methods to contact businesses, in order to gather information on how they've been impacted, and what they need to recover. Pre-existing relationships are crucial as communication channels can become disrupted and chaotic. Businesses will need your help locating recovery information, financial programs, technical assistance, and planning resources.

This chapter will highlight the importance of business retention and expansion efforts to your pre- and post-disaster strategies. Having a robust BRE program in place prior to a disaster will be critical to your short-, medium- and long-term success. Some of the case studies provided should help illustrate effective practices in spurring local recovery through strong business retention efforts.



What Is Business Retention and Expansion (BRE)?

Business retention and expansion (BRE) is probably the most important community economic development strategy you will implement, as it supports and fosters the development and growth of your local business community.

The key goal of BRE is to strategically plan, manage and implement programs that help existing business thrive and grow. The outcome is a sustainable business community that provides a sustainable community foundation.

- BRE programs are a means of connecting businesses with resources and opportunities that will improve their competitive position, market networks and ultimately their profitability
- Existing businesses are the main resource for new job creation and the development of a skilled workforce
- BRE recognizes the importance of the local business community for its community economic development stability and growth
- BRE is the key to building future business investment and attraction activities, encouraging entrepreneurs and creating strategic alliances with trade partners
- BRE acknowledges the lifetime value (LTV) of existing companies within the community. LTV is the value of tax contributions, employment wages, community donations/sponsorships and providing a community with a 'local choice' to shop.
- CED has recognized that the rate of return for BR&E activities is often less costly and more rewarding than investment attraction activities⁷

Most BRE programs are sanctioned by a municipal Council, administered by an economic development officer or business organization like a chamber of commerce. BRE strategies may include the identification of activities, programs, and opportunities that will assist local businesses in sourcing labour, expanding operations, operating more competitively, receiving business counselling etc.

A BRE program can produce immediate benefits to local businesses and contribute to the development of long-term sustainability. It can also slow down or even stop businesses from exiting your community.

Short-term objectives include:

- To establish and build relationships with local business
- To implement a process to provide community support for business
- To improve communication between the government, community and local business
- To link businesses to opportunities and resources to improve their bottom line
- To create awareness of 'red flags', urgent business concerns and issues
- To develop a 'red flag' warning system for business moves, closures, or job layoffs

Long-term objectives include:

- To contribute to the property tax assessment and non-residential tax assessment base
- To increase local employment levels, job creation and business development
- To establish and implement strategic actions for local economic development
- To strive to improve the competitive advantage of local business
- To facilitate the growth and vibrancy of the local economy
- To develop key resources to help set priorities for business revitalization and community economic development projects

BRE programs, projects and events may be stand-alone projects or run in conjunction with each other. A key strategy would be to coordinate activities that share a common goal, (e.g., 'for Economic Development practitioners and organizations to work collectively as a region to achieve suitable economic, social and political environments in which balanced community growth is realized'). Depending on the financial,

⁷Business Retention and Expansion Community Economic Development Participant Manual, Economic Developers Alberta, 2018

human and capacity resources available a community may have one or several BRE projects running in conjunction.

Examples of possible BRE projects include:

- Initiating a business visitation program (BVP)
- Introducing an Import Replacement Program (IRP)
- Forming a working committee to establish a small business incubator with expert advisors to work with each business
- Entrepreneurism and home-based business development
- Introducing a downtown revitalization plan⁸.

When a disaster hits, organizations with existing business relationships are able to facilitate better communication and recovery support. In large-scale disasters, it is important to remember that many business owners will be dealing with a number of overwhelming challenges, including the loss of loved ones. At the beginning, many economic developers find themselves playing the role of counsellor, having to deal with frustrated, desperate, emotional business owners. It is important that any staff serving in this support function be prepared and trained on how to be sensitive responding to these issues.

BRE Pre- and Post-Disaster Preparedness Activities

A BRE program can be effective in several ways, depending on local needs and community capacity. Using a BRE program to build capacity for pre-disaster preparedness and post-disaster recovery can be an effective, flexible way to build your organizational capacity as well. Types of activities you may want to consider are:

Pre-Disaster

- Encouraging businesses to develop business continuity plans
- Collecting important contact information
- Ensuring continuity and availability of BRE

⁸Business Retention and Expansion Community Economic Development Participant Manual, Economic Developers Alberta, 2018

Case Study: BRE Efforts in Cedar Rapids Flooding

In 2008, Cedar Rapids, Iowa experienced the worst flood in its history. Flood waters rose for over a month, spanned over ten miles of the city, and covered downtown businesses and public buildings. Although the local media tried to provide updates on response efforts, the information did not come quickly enough or include what was critical to businesses. Priority One, the region's economic development organization saw this gap and immediately launched a communication effort targeting the business community. They began by collecting cell phone numbers of the affected businesses, and they contacted businesses according to three tiers of priority:

- **First Tier:** Businesses that sustained physical damage from the flood
- **Second Tier:** Businesses that sustained economic damages
- **Third Tier:** Suppliers and vendors to first and second-tier businesses

Priority One's five staffers had existing relationships with businesses and quickly became advocates on their behalf. They requested updates from firefighters and building inspectors on the status of facilities and were able to keep businesses informed of the progress. They also connected with the chamber of commerce representative in the Emergency Operations Centre (EOC) and made sure emergency response information flowed to businesses as well. Priority One's intermediary role meant it not only delivered information from city officials to businesses, but it also pushed for faster response from the city's inspection and cleanup crews.

A few years after the disaster, Priority One reflected on a few key lessons learned. First, communication channels are chaotic in the wake of a disaster. The most reliable communication is by cell phone. In fact, it will usually take several days for communication channels to come back to normal. Second, economic development organizations need to connect with critical response personnel like the EOC, utilities, law enforcement, public and private cleanup crews, and so forth, to deliver the most value to businesses. Third, economic development groups should pursue media channels like television, radio, newspaper, and media websites to make sure they include information relevant to businesses. Although recovery is costly and slow, having a strong communications plan can make the difference for a business impacted by disaster.

For more details on the recovery efforts of Cedar Rapids, IA, please see [Case Study Appendix 3](#).

program resources after an incident:

- Preparing media messages and templates for crisis communications
- Providing business continuity and risk management workshops to small and midsize firms
- Promoting hazard mitigation investments
- Encouraging business self-assessments for insurance liabilities
- Establishing plans and procedures for establishing a business recovery centre
- Convening local banks to discuss the need for flexible financing
- Integrating business assistance resources from multiple providers
- Establishing spatial data collection and analytic capability to capture business establishment data
- Establishing plans with local utilities and emergency management authorities to facilitate prioritization of utilities
- Building an economic recovery support function team
- Establishing a business recovery fund to channel donations for business recovery

Post-Disaster

Even if an economic development group has engaged in pre-disaster planning activities, disasters create a chaotic environment. Many businesses may be unable to access their offices. Many will not know the extent of their damages. Suppliers and customers could end up holding or looking for shipments that cannot access warehouses and stores. The workforce may not be able to get to work. Business owners may have damage to their homes. Employees will have concerns about getting paid. Businesses will need to determine what their insurance covered, and file claims. Some will have to access bridge financing to cover loss of production, and determine options for getting back into business. The needs are great, and resources stretched in every direction.

Economic development groups need to have resources and knowledge in place to implement effective post-disaster BRE efforts. Having clear, organized support from the local economic development group will help restore stability to the business community in the aftermath of a disaster.

Some common post-disaster BRE tactics include:

- Deploying a business recovery centre and hotline (brick-and-mortar or virtual)
- Integrating multiple resource providers into the centre with traditional and alternative sources of capital
- Conducting post-incident business impact assessments through surveys, meetings etc.
- Using spatial data to prioritize business outreach efforts
- Implementing a case management system to help problem-solve individual business recovery challenges
- Gathering and disseminating information to the business community
- Providing short-term and long-term financial services
- Ensuring targeted and appropriate incentives for the local business community
- Utilizing the BRE database to drive regular communication to and from business community
- Convening topically-focused workshops for businesses related to common recovery issues

A disaster-impacted community will also need to develop a long-term vision for how it will rebuild its economy. The community will require extra care to recover from the losses and to address long-term resiliency. It takes time, leadership, and resources, all of which will be in short supply, to develop an economic recovery plan with buy-in from community stakeholders. A post-disaster strategic plan provides the opportunity to re-evaluate economic objectives in light of vulnerabilities and establish strategies and action steps to make progress toward long-term recovery.

Case Study: Understanding & Addressing Business Needs in Joplin, MO

Following an EF-5 tornado destroying almost one-third of the city of Joplin in 2011, the regional chamber immediately sprung in the action to connect with local businesses in a direct and personal way. Within a week of the tornado, chamber staff walked the streets to reach business owners, to console, and let them know the chamber would provide recovery support in their time of need. By circling the destroyed area every day, 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. Knowing that they were not alone, that someone cared, and that someone was in charge of a recovery plan made employers more willing to rebuild.

This direct outreach was followed up by the establishment of a one-stop shop for business recovery needs: The chamber immediately set up a business recovery centre at its offices, where the Small Business Technology Development Centre 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 centre was able to offer technical business advice including how to prepare an SBA loan application and provide the appropriate supporting financial records as well as redirecting them away from financial products they didn't need.

For more information on Joplin's recovery, see [Case Study Appendix 1](#).

Establishing a Business Recovery Centre in Hancock County, MS

Hancock County is the southernmost county in Mississippi with a population of approximately 43,000. Hurricane Katrina ravaged the county, causing 200 deaths, devastating 75 miles of beachfront, destroying thousands of homes and businesses, and cutting off the community in terms of transport and communications with damaged bridges and downed power lines. Approximately 1,800 businesses were impacted by the storm, with over 50 percent severely damaged or destroyed. Long-term business owners found themselves having to start from scratch in a post-disaster environment plagued with rising insurance and construction costs.

Despite reduced capacity, the Hancock County Chamber of Commerce quickly acted and emerged as a key provider of business assistance. With help from the Mississippi Development Authority (MDA), the Chamber established the first Business Assistance Centre on the Mississippi Coast, bringing all of the resources for small businesses together under one roof. According to the Chamber president, Tish Williams, the Chamber "served as the 'window to the world' for [their] businesses and residents--- providing access to the internet, and phone and fax services".

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As a result of their proven leadership in assisting small businesses, the Hancock County Chamber of Commerce was recognized a model for disaster recovery. They received the National Phoenix Award for Outstanding Service by a Public Official from the U.S. Small Business Administration (SBA), which was presented by then acting U.S. President George Bush. Out of the ashes, the phoenix rises. Hancock County has proven itself resilient in terms of redeveloping two downtowns, establishing a main street program, rebuilding businesses, homes, bridges and beachfront, attracting 200 resident artists to the area, and developing increased capacity at the Chamber's new 501(c)3 foundation to provide ongoing financial and business counseling services.

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Survey Local Businesses

One of the most effective methods of tracking a disaster's impact on local businesses is to distribute a survey immediately after a disaster. ExecutivePulse has a standard online survey for pre- and post-disaster assessment of businesses in the community, which was first piloted during the 2013 Southern Alberta Floods, and expanded for the 2016 Fort McMurray wildfires. The 2013 survey tool is available in Resource Appendix 5.

How you carry out the survey will depend on which communication lines are most reliable. It may include direct mail, telephone (landline and cell), website, e-mail, town hall meetings, conferences or workshops, surveying at the BRC, local media, or door-to-door canvassing. In many cases, devastated communities are unable to provide government with reliable data on business impact. Business surveys like the one in Appendix 5 can help provide this type of data.

Use A Case Management Approach For Retention

Case management is an important service that can be established within the first few weeks of a disaster. Whereas a BRC carries out disaster recovery functions through a centralized physical location, or several locations, a case management approach involves dispersing recovery staff to individual businesses.

Similar to BRE site visits, case management allows a business to receive assistance on its own timetable and its own turf. Each case may last up to several years, and case managers follow through with each client until the recovery plan is completed. Case managers are trained to assess damages, gather documentation, identify helpful federal, provincial/territorial and local resources, and develop a disaster recovery plan with the business. Key services they should be equipped to provide are:

- **Grant eligibility.** Assisting with online applications, preparing documents, answering questions, and providing status reports on grants
- **Resource matching.** Determining specific needs, matching or introducing businesses to mentors, following up on mentor services
- **Direct business counseling.** Developing marketing and execution strategies, analyzing customer bases, providing business continuity planning,

providing advice on financial reporting and interpretation, assisting with relocation if needed

- **Advocacy.** Researching, developing, and designing grant programs, assisting with government loan applications, advocating with the federal government regarding grant eligibility, assisting with city codes and license applications, and representing businesses to government
- **Other business decisions.** Assist with technology/IT and other issues like building leases, staffing/management, loans, etc.

In addition, case managers should be prepared to respond to the immense psychological impacts of a disaster. In fact, case managers often talk about how their visit and continued assistance created an impact simply by making businesses feel like someone cared.

Communicate!

Communication is often challenging in a post-disaster environment. To bolster that effort, economic development groups play two important roles in communicating with businesses in a post-disaster situation; as a relay and a transmitter. The first is listening to businesses to understand their needs. The listening part is critical to understand the issues faced by the business community (and those that might serve as barriers in the recovery process). The second role is quickly disseminating relevant information to businesses regarding available resources and service providers who can help. In a post-disaster environment, communication to businesses should be frequent, consistent, and provide meaningful and actionable information to help businesses and other economic recovery stakeholders to rebuild.

Step 1: Set Up A Business Recovery Hotline

Establish a hotline number that business owners can call to get information about various response and recovery services that are available to them. Businesses will need access to critical information for their own recovery, like when utility services will be restored. They will also need to know about the city's inspection and rebuilding requirements, a list of local- and/or provincial-licensed contractors, how to select and pay a contractor, how to deal with insurance companies, and more. Small businesses in particular, need information on how to navigate local, provincial/territorial, and federal government assistance programs.

Step 2: Develop An Online Web Portal

The economic development organization should establish an online web portal to facilitate communication between local government, recovery agencies and businesses. A web portal can be a critical source of recovery information for businesses in addition to a business recovery hotline. The website can also allow displaced businesses to provide updated contact and resource information. This information can be put together in advance of a disaster and made visible to the public once a disaster happens.

Step 3: Establish an Outreach Campaign for Priority Businesses

An outreach campaign is an important effort for assessing the recovery needs of the business community, connecting businesses with resources, and engaging in major business retention efforts for identified at-risk businesses. Having reliable executive cell phone numbers and other backup contact information is critical. Depending on the type of disaster, economic recovery stakeholders may want to consider reaching out first to businesses that are critical economic anchors in the community and businesses that provide essential services in the local community such as gas stations and grocery stores.

Following the flood in 2008, the Cedar Rapids regional economic development organization, Priority One, instituted a three-tiered business call program to contact the region's major employers. The three tiers represented different levels of impact that local businesses experience, including: those directly impacted, those indirectly affected, and those whose suppliers or customers were affected. See case below for more details. After Hurricane Gustav, Louisiana Economic Development called the top 1,000 employers in the state in order to learn how they could assist major employers and help mitigate potential job losses.

As businesses express their recovery needs during an outreach campaign, an economic developer should advocate for a quick response from the city to expedite utility services, reentry, and other issues. For example, Priority One staffers served as a liaison between businesses and the city to expedite the city's emergency personnel response.

Beyond The Survey

While information gathering is a key component of any

BRE efforts, surveys, focus groups and business outreach must be used judiciously after a disaster strikes. Distributing surveys to distraught business owners in the wake of a disaster can be perceived as callous. As a result, there needs to be multiple open doors to care for, assist and gather information in the wake of a disaster. In some cases, surveying may not be the best way to understand the situation and provide assistance.

After a disaster, it may be more appropriate to meet with business owners face to face either through personal visits or focus groups. When conducting business visits after a disaster, owners and employees can be in an emotional state; therefore, it is important for economic development officials to listen with compassion. Interviewers may know which questions they would like answered, and take notes to be entered into a database, but they also need to recognize the visit may not go exactly as planned. Bringing in crisis counselors and financial planners may also be a helpful resource depending on the individual circumstance.

Interviewers may also consider working in teams. After a disaster, business owners may be frustrated and angry with local leaders and staff. Conversely, they may be experiencing emotional events such as injury or loss of an employee or family. Working in teams can help interviewees to bear the emotional burden, and process their experiences.

Another method of information collection is convening larger groups, a tactic that typically results in more focused and strategic discussions than the business visits. These groups are able to discuss the immediate issues and challenges and start planning for preparedness in the future. Additionally, the larger groups boost morale, as people do not feel as isolated and can share their experiences with others who had been similarly impacted.

Deliver Business Recovery Workshops

An economic development officer can also organize workshops that address common and/or unique business and economic recovery issues. Ideally, workshop speakers should include representatives from local, provincial/territorial and federal agencies, as well as the local permitting office and other local professional service advisers such as tax preparers, insurance brokers and lawyers. Representatives should be invited to make presentations and answer questions from the impacted businesses. Engage other economic

recovery partners (e.g. other economic development organizations, business districts, chambers of commerce and municipalities etc.) in order to create a more extensive network of resources and marketing channels.

Workshops can be implemented on a relatively small budget and serve local businesses on a local or regional basis. Municipal government facilities can serve as meeting spaces, and economic development organizations can advertise events through their existing communication channels.

In Houston, Texas, the regional economic development organization, Bay Area Houston, conducted a business recovery workshop shortly after Hurricane Ike. They partnered with eight of the local governments in their jurisdiction to market to local businesses throughout the region. Police walked door-to-door to businesses with flyers advertising the workshops. The workshops were well received and well attended by impacted businesses seeking recovery assistance. Representatives from state

and federal agencies, local government officials, and private sector firms attended to provide information on recovery resources and programs. The most popular official in the room was the Internal Revenue Service (IRS) representative that advised businesses they could claim tax losses as far back as three years.

To assist local businesses following the 2008 hurricane, the Galveston Chamber of Commerce hosted a recovery expo for local businesses only a month following their event. Representatives from FEMA, SBA, small business development centres, chambers of commerce, insurance companies, attorneys, and companies like Best Buy came to discuss how to help affected businesses. In an environment of uncertainty and risk, over 400 local business owners were provided with information on how to navigate through different sources of assistance. This information helped them to evaluate their options and make decisions on whether or not to rebuild on Galveston. The expo served another important function of bringing the business community together to discuss how to get the community on its feet again.

Case Study: Tailoring Assistance to Meet Local Business Needs in Cedar Rapids, Iowa

After the 2008 floods in the Midwest, business stakeholders in Cedar Rapids, Iowa put together a case management program to help businesses recover. The program was an initiative of the Small Business Recovery Group, which was formed by the Cedar Rapids Chamber of Commerce and the local small business community. The program launched about 18 months after the flood. Although the local SBDC and SCORE volunteers were already visiting businesses at that time, they needed far more funding and staff for the task at hand.

To support the new program, the Small Business Recovery Group secured \$750,000 over two years in CDBG grants and private donations. The group hired outside contractors to work as case managers, and there were eight case managers at the peak of the program. These case managers were seasoned business owners and managers who came from media, accounting, finance, and human resources backgrounds, and most had over 20 years of experience in their respective fields. Other than brief consultation with SCORE and SBDC, the case managers received no training other than their personal business experience.

The case managers quickly developed a "Needs Assessment" form to document damages and priority needs of each business. The form also served as a starting point for deeper conversation with a business on its recovery needs. The case managers then called or e-mailed all 1,200 businesses in the Cedar Rapids area and managed to schedule in-person appointments with about 85 percent of companies. Each client could access a host of case management services.

After working with hundreds of companies, it became apparent that grant assistance and funding advocacy were most needed. The State of Iowa advocated and received a total of \$85 million in grants from Congressional appropriations. The business recovery fund for Cedar Rapids totaled approximately \$6 million, with contributions from local and state sources.

The case management team helped develop programs of businesses closed, while the national post-disaster average is 55 percent closure. Today, five case managers are still working on 50-75 active cases.

For more details on the recovery efforts of Cedar Rapids, IA, please see [Case Study Appendix 3](#).

Financing Options For Small Businesses

Immediately following a disaster, businesses face the need for working capital to meet payroll, replace damaged inventory and equipment, and fund other operational costs. Small businesses are also the ones with limited resources. Even though they need expedited financing, many times they struggle accessing capital due to a lack of financial documentation, collateral, credit issues, or they are perceived as not being bankable. Bridge loans are one tool that can provide quick financing, enabling firms to work on rebuilding efforts quickly.

It is not uncommon for small business owners to deplete their retirement and personal savings, borrow from family and friends, take out second mortgages on their homes, and max out their credit card borrowing limits in order to stay afloat after a disaster.

In the case of the 2008 floods in Cedar Rapids, Iowa businesses took on an excess of \$120 million of additional debt load, while at the same time experienced revenue decreases of more than 40 percent.

Florida's Small Business Emergency Bridge Loan Program

The most well-known bridge loan program in the U.S. was established in 1992 in the aftermath of Hurricane Andrew. The Florida Small Business Emergency Bridge Loan Program was activated by the Governor of Florida in their emergency declaration. It provided expedient cash flow to disaster-impacted businesses. Loans were made interest-free, and ranged from \$1,000 to \$25,000. Eligible applicants were small businesses with less than 100 employees, in counties impacted by the disaster. Terms were 90 or 180 days. Payments were not required during the loan term, but had to be paid in full by the end of the loan term.

The program has been activated 24 times since it was first activated. As of May 2019, the program has made over \$123 million in total loans to 4160 small businesses statewide. Repayment comes in the form of profits from a revived business, payment of insurance claims or long-term loans provided through public or private sources. The fund is supported by General Revenue funds from the state.

Short-Term / Gap Financing Needs

In the immediate aftermath of a disaster, traditional loans are considered risky for small businesses. Small businesses really need access to short-term or gap financing with low interest and/or flexible terms. Gap financing provides businesses with working capital until they can secure funds from other sources, such as insurance claims and other long-term financing sources. These funds are typically made in smaller amounts than long-term financing – often ranging from \$5,000 to \$25,000 for a small business. Economic development organizations and chambers of commerce can do a lot to help local small and midsized businesses secure appropriate short-term financing.

Establish A Bridge Loan Program

Local, provincial/territorial, or federally funded emergency bridge loans are usually distributed to impacted businesses within the first few weeks after a disaster. A bridge loan is designed to provide no-fee financing with flexible terms so that businesses can have quick access to working capital.

A bridge loan serves as a short-term cash-infusion, which allows businesses to defray short-term expenses, and survive until they can be paid back after receiving longer-term financing. Small businesses often use this type of financing to assist in initial recovery efforts including cleanup, rebuilding of damaged property, covering payroll, or replacing destroyed inventory.

After business owners rebuild their property and reopen, a second wave of urgent need becomes cash flow to cover rent or mortgage, payroll, inventory and other medium-term expenses.

Establish A Business Grant Program

A business grant program targets particularly devastated businesses that are not interested in applying for a conventional loan because of debt concerns. A grant or forgivable loan can help accelerate recovery when a business is uncertain either about rebuilding or incurring more debt.

- The State of Iowa created the Jumpstart Iowa Small Business Assistance (SBA) Program to provide short-term financing to small businesses before an anticipated \$85 million grant was scheduled to be disbursed. The Jumpstart program was financed through \$20 million from

the State of Iowa, and provided forgivable loans up to \$55,000 per business. The loans were forgiven if the business reopened its doors within 12 months of receiving the loan. The requirement that businesses have already obtained a disaster loan from the SBA or another federal- or state-chartered financial institution ensured that grants only went to viable businesses.

- Hurricane Sandy caused an estimated \$19 billion in damages throughout New York City in 2012, including thousands of small businesses. In response to the devastation, former New York City Mayor Michael Bloomberg created a relief fund by seeding it with \$5.5 million in matching grants for New York City businesses most impacted by Hurricane Sandy. The grant was administered by the New York Business Development Corporation and developed in collaboration with the City's Economic Development Corporation and Department of Small Business Services. Matching grants were designed to provide additional financial assistance for local businesses already seeking low-interest loans through the City's existing Emergency Loan Fund. The Mayor also announced that in addition to the \$10 million Emergency Loan Fund launched by the City and Goldman Sachs immediately following the storm, an additional \$5 million was committed to the loan fund by a consortium of New York financial institutions through the New York Bankers Association, bringing the total amount of loans, grants, and other financial assistance available to businesses most affected to more than \$45 million.
- In 2016, the Canadian Red Cross implemented an Emergency Grant Program after the wildfires in Fort McMurray. Phase 1 provided \$1000 emergency support. Phase 2 provided up to \$8000 to support fixed and new expenses resulting from interrupted business operations based on need. Phase 3 provided up to \$11,000 towards eligible costs that may not be covered by insurance (e.g., replacement of essential, site cleanup, moving or storage expenses, professional cleaning, small repairs, overdue utility bills, lease payments and short-term lease of business equipment or vehicles)

Long-term financing

Long-term financing will help businesses rebuild

property, purchase equipment and inventory, and reorient their business around new markets. As long-term recovery sets in, a small or mid-sized firm may have to adjust to a changed local or regional market, causing them to reorient their product or service, train their workforce with new skills, find new customers or seek out new vendors. Consideration should be given to combining local, provincial and federal sources to create a long-term financing program. Financial assistance to address long-term needs often includes sources that require more paperwork and authorization. Sources for this include insurance claims, local banks, federal or provincial/territorial loan programs, renewed profits or other sources of income. Local economic development groups, chambers and banks can help support these programs, providing the capacity to meet local business recovery needs as they evolve over time.

Establish or Repurpose An Existing Revolving Loan Fund

Revolving loan funds (RLF) are able to provide long-term financing. In this model, repayment of old loans is used to finance new loans. In the U.S., RLFs can be established using funds from federal, local or state governments, foundations, and the private sector. In establishing an RLF, economic development groups should not seek to replace private financial sources, but seek to serve businesses that cannot access traditional sources of financing.

In Canada, not much has been implemented in the area of revolving loan funds; however, much more could be done in this regard. Economic development organizations should encourage the creation of these types of solutions in the event of a disaster.

Identify Alternative Methods of Financing

Ideally, economic development officers take the time to establish a bank consortium in advance which brings various lenders together to provide a pool of funds for business recovery. The best time to discuss financial product types, terms, and limits for lending is during "blue sky" periods. At that time, bankers are in a better position to evaluate how to develop affordable, flexible terms for businesses while not breaking the bank.

Post-disaster lending is critical in helping the local economy get back on its feet, and private financing plays a key role in that process. While federal or provincial/territorial loans and grants are invaluable

sources of financing when a local community or region has exhausted local sources, they are usually insufficient in meeting local needs. Government lending programs can also take a long time for funds to be appropriated and come with a number of strings attached in terms of requirements. Sometimes communities wait months for these funds to come through, wasting valuable recovery time. Private financial institutions are usually able to meet local business needs in a more expedient manner.

Economic development groups should proactively reach out to various lenders to identify potential funding gaps, and educate local businesses on the various types of funding available. This includes outreach to local banks, credit unions, alternative lenders, foundations, the Canadian Red Cross, and co-operatives. Private and other small business assistance providers can also play a critical role in nimbly and quickly deploying funds. Banks should be encouraged to consider creative lending options that enable taking an equity position in the business in exchange for the business receiving a low-interest or forgivable loan. This equity stake in a small to midsize business would provide an appropriate incentive for the small business owner to repay the loan, so funds would continue to circulate in the local economy.

Create Incentives

Incentives can also be used to provide a boost for viable businesses. Typically, incentives are focused on reducing the cost of doing business, increasing the flow of capital for business recovery and growth, persuading businesses to reinvest, or prompting real estate investors to further invest in impacted areas. For example, local and provincial/territorial tax incentives related to property, equipment or investment can be used as financing mechanisms to reduce the chance of firms relocating or closing permanently.

Incentives serve different purposes; therefore, economic development organizations should develop a strategy to ensure the right mix of incentives is available. Economic development officers should look at how other communities and provinces have developed or advocated for incentives in order to encourage redevelopment and/or reinvestment in disaster-impacted areas. Unfortunately, in some jurisdictions, incentives are not an option; therefore they focus more on private financing means.

The most relevant types of incentives post-disaster include:

- **Property Improvement/Restoration:** Used to defer property taxes on renovations and improvements to facilities
- **Equipment/Machinery:** Exemptions on property, sales, usage, franchises, taxes on new building materials, machinery and equipment
- **Retention/Reinvestment:** Based on saving jobs and investments of a company that may be in danger of closing

The Government of Canada offers a Small Business Loan Guarantee Program that secures small business loans against inadvertent non-compliance with payment terms, including a range of reasons like disasters. Assets guaranteed include real property improvements, leasehold improvements and/or the purchase of equipment. It also offers an Employment Insurance Work Sharing Program that includes measures to help employers avert temporary lay-offs by providing income support to workers who are willing to work a temporary reduced work week when there is a reduction in business activity beyond the control of the employer. The program includes special criteria to allowing easier access to the Work Sharing Program for business affected by major disasters or public threats.

Other potential federal funding programs in Canada are:

- AgriRecovery
- AgriStability
- Compensation Program for Destroyed Animals
- Environmental Damages Fund
- Housing Emergency Repair Program/Homeowner Residential Rehabilitation Program
- Farm Credit Canada Loan Assistance
- Shelter Enhancement Program
- Ship-source Oil Pollution Fund
- CRA Taxpayer Relief Provisions

Provide Technical Advice And Counseling

After a disaster, new market realities emerge, revealing a host of opportunities and challenges for small businesses. In this unsettling environment, owners need wise counsel on how to avoid pitfalls and pursue opportunities to ensure their survival.

When faced with a crisis, they need sound business advisers to help work through problems and connect them to resources. They need advice on acquiring further debt, particularly if their financial records are not in order. They also need assistance in the form of business planning, market intelligence, finance, taxes, insurance and how to further market and promote their product.

Local, provincial/territorial and federal funding for business support services is actually quite limited. This is felt most acutely by small businesses that lack the resources to hire the professional services they need. Public officials and business leaders need to realize the importance of providing small businesses with technical assistance in conjunction with financial services to support their recovery.

Mobile Assistance Resources

On the right are two examples of mobile units developed to provide small business and entrepreneurship support in rural areas. Both examples are located in a Gulf Coast state, where they have been used to assist in disaster recovery.

Summary

This chapter outlined some of the resources, strategies and steps an economic development organization can take to protect and help restore their business community in the unfortunate event of a disaster. Whether reaching out to a business, communicating with city officials, or liaising with federal agencies, the many roles of an economic development office requires full engagement with the local business community before, during and after a disaster. Existing relationships are crucial during a disaster as communication channels can become disrupted and chaotic.

Although not all impacts of a disaster can be mitigated, economic development officers have proven that BRE actions taken both pre- and post-disaster can make a real difference for local businesses in accelerating their business and economic recovery.

Florida Small Business Development Center Network

The Florida Small Business Development Centre Network (FSBDCN) developed a Mobile Business Assistance Centre Program and announced it prior to hurricane season in 2006. The program was developed to focus on two underserved markets: (1) post-hurricane small businesses and (2) rural clients who need help and don't or can't visit centre locations in urban or campus areas. The Mobile Assisted Centre's (MACs) are two 38-foot RVs outfitted as self-contained centres with laptops, printers, satellite communications, business libraries, supplies and more.

Following a major event, staff is deployed to the field for immediate business recovery assistance in the form of consulting on the forms and paperwork, marketing, business planning, leadership development etc. Tents and tables are set up outside so that SBDC Certified Business Analysts (CBAs) can provide consulting and assistance needed for clients. The Florida SBDCs have been partnering with economic development organizations and chambers throughout the state to highlight the new MAC Program and plan rural strategies.

Louisiana Business and Technology Center

The Louisiana Business and Technology Centre's (LBTC) mobile classroom at Louisiana State University (LSU) is a converted semi-trailer that seats up to 30 entrepreneurs and business owners. The mobile unit hosts workshops in leadership development, entrepreneurship training, marketing in the 21st century, basics of federal contracting, basics of lean manufacturing and how to grow businesses using e-commerce. They seek to provide services to Louisiana's businesses and entrepreneurs in more rural populations by traveling to rural parishes to present various programs. They serve more than 350 businesses annually by hosting seminars and training for technology usage, marketing and financial advice, international trade and more. They hold workshops and seminars in conjunction with the local chamber, SBDC, incubator or economic development group.

Necessity is often the mother of invention. LBTC created one of their most successful endeavors shortly after Hurricane Katrina. They are able to reach out to small businesses and entrepreneurs in rural and far reaching places in Louisiana as a result of this creativity. This mobile classroom has received numerous awards.

Chapter V: Assessing Economic Impacts of a Major Disaster

Overview

Post-disaster, impact assessments are conducted as a standard practice. These assessments document financial costs of a disaster using economic indicators such as physical property, business and industrial activity, tax revenues, wages, the loss of business income, and other damages to the local economy. They provide an outlook on how local economies can expect to fare after a catastrophe strikes, and reveal the extent of a community's needs for external resources for response and recovery assistance. They also help determine eligibility for federal support, inform the local decision-making processes, and evaluate impacts to specific sectors (e.g. critical infrastructure, impacts to structures, housing, local government functions).

While the overall format of these assessments is relatively standard in nature, there tends to be minimal efforts to evaluate business and economic impacts. As a result, it is imperative that your economic development group push for a more detailed assessment. Detailed business and industry impact assessments can provide important information for response, recovery, and mitigation efforts. Economic damages go beyond accounting for direct losses such as physical damages. They include indirect costs of

business interruption due to power failures, temporary business closures and market losses. This in-depth knowledge of what is really happening in your community can help shape initiatives to restore the local economy and prevent further catastrophes.

The National Oceanographic and Atmospheric Administration (NOAA) collects, assesses, and evaluates many forms of weather incidents and their impacts. They also estimate economic losses from those incidents; however, the outcome typically represents a "total loss" value. This is where evaluation of a specific disaster as "a billion dollar" disaster comes from. From an economic recovery perspective, that value provides very little actionable information. For example, there is no routine evaluation of industry-level impacts, changes in investment risk, local market conditions, workforce dynamics, or other topics that may yield more specific actions for economic development professionals.

This chapter will provide insight into the types, applications, and components of a post-disaster economic impact study, including how to develop and implement it.



Types of Economic Impact Studies

The table below provides a summary of various types of economic impact studies:

Assessment Type	Issue(s) Addressed	Conducted by	Geographic Scope	Target Audience
Market study	How local market conditions may have changed	EDO, higher education or a consultant	Local	Business community
Economic impact assessment/analysis	Full scope and economic consequences; concerns about projecting tax revenue losses; lack of economic data in impacted areas.	Higher education, consultant, or government	Local, regional	Local, provincial/territorial government
Industry impact assessment/analysis	Impacts to specific industries	EDO, consultant, trade group or association	Local, regional	Business community, EDOs
Workforce assessment/analysis	Identify skills gaps and/or surpluses, retraining opportunities, impact on unemployment	Higher education, workforce agency, consultant	Local, regional	Local, regional, industry, higher education
Resilience analysis	Actions that can be taken to mitigate future impacts	EDO, local and regional government	Local, regional	Local, regional, federal government, private sector
Small business impact analysis	Specific impacts to small businesses, changes to business outlook	EDO, local and regional government, higher education	Local	Local and regional government, EDO, businesses
Economic development assessment	Changes to investment risks, impacts to economic development efforts and programs?	EDO, government, consultant	Local, regional	Local government, EDO
Cluster or entrepreneurship analysis	Has there been any impact on existing or nascent clusters? Are there any "clusters of opportunity" that could be prioritized for recovery? Is there an impact (positive or negative) on business churn or innovation?	EDO, higher education, local government, consultant	Regional, state	EDO, state government, higher education

Source: Leadership in Times of Crisis, IEDC, 2015, pg. 95

Defining a Post-Disaster Economic Impact Study

Given the variety of assessment types, economic development groups should be clear on who the information is for, and what it will be used for. Without a clearly defined "so what" objective, efforts can quickly become overly academic. Important questions to consider are:

- If we conduct this assessment, what will be the deliverable?
- How will that deliverable be used?
- How will the assessment support our recovery decision-making and planning?

- How will the assessment make our economy more resilient?
- How will the assessment help allocate resources, funding, and program assistance to the areas/sectors of greatest need?

Studies can take anywhere from several weeks to several months to complete, depending on scope. In cases of immediate need, where local government has to provide a cost figure for purposes of securing aid, they may be asked to retrieve information in a matter of days. This initial assessment should always be compared to a "gut check" analysis to make sure the

community isn't grossly underestimating or overestimating the damages. It should also be noted that there will be a number of obstacles to constructing an accurate figure immediately following an event as data will be absent and/or sparse.

The preliminary assessment should be followed up by a more thorough economic impact study approximately six months to a year after the event. This will allow for a more realistic analysis of damage, particularly since most federal data will take at least three to six months to be updated following a crisis.

Various cost factors and community capacity issues must also be considered when conducting economic impact studies. Many small and medium-sized communities lack financial resources that are required to conduct an extensive study even though the information would be extremely valuable. One way to help lessen the overall cost is to ensure your community is collecting the right baseline data prior to a disaster.

Distinguishing a Post-Disaster Study from a 'Traditional' Economic Impact Assessment

Traditional economic impact assessments examine a proposed policy or economic development project to determine how it will impact the local economy in terms of changes to economic activity levels. This involves measuring increased output, business or industry revenue, employment, wages, and tax revenues. These types of studies are typically used to gather public support for a proposed project by determining if the community will be more prosperous. They also highlight net benefits to the community in terms of jobs and wages. Depending on its methodology, there may also be an evaluation of the project or policy's direct, indirect, and induced impacts.

These studies also tend to be narrower in scope. For example, evaluating a proposed real estate development project, city zoning policy or land use change for a neighbourhood. In this case, the goal is to outline how the local economy will be boosted by a specific project or policy, not measure economic damages post-disaster.

On the contrary, post-disaster economic impact studies measure how a community has been adversely affected by a major incident. This may include closures of a commercial port or airport, closure of a major bridge or road, devastation of buildings and neighbourhoods, or evacuation of an entire region. Economic impacts

post-disaster are much more difficult to assess because so many things happened at the same time, affecting the larger economy.

Determining economic impacts post-disaster also varies greatly due to factors like:

- The magnitude of the disaster
- Challenges with limited data
- Organizational capacity within the community to gather the needed impact information
- Varying methodologies that measure the disaster's economic impact on local businesses and economy

The Purpose of Post-Disaster Economic Impact Studies

Post-disaster economic impact studies provide insight to public officials, business leadership, and local industry in how the community has been damaged. It also informs future decision making in terms of response, recovery, and mitigation.

Public Officials are assisted by:

- Better understanding how industry and business has been impacted by the disaster
- Having economic impact information they can share with provincial/territorial and federal officials in order to secure additional resources
- Being informed in a way that influences better decision-making in a time of crisis
- Taking critical actions for short- and long-term recovery
- Understanding the extent of damage to public infrastructure
- Understanding how current and future tax revenues have been negatively impacted and how public services might be affected
- Holding organizations accountable for man-made disasters (e.g. Montreal, Maine & Atlantic Railway after Lac-Mégantic's train derailment)

Economic Development Organizations are assisted by:

- Developing an outlook of how the local economy has been impacted by the event
- Understanding how employment, wages, and tax revenues have been adversely affected
- Providing support for identifying strategies, programs and projects for short- and long-term recovery
- Educating community stakeholders on the current situation
- Providing insights on how the community should move forward

Local Businesses are assisted by:

- Knowing the current market situation for business planning purposes
- Understanding how labour markets and supply chains may have been impacted
- Understanding how various sectors have been impacted

Challenges In Conducting A Study

It is also important to understand potential obstacles that could arise when conducting a study in a post-disaster environment so you know what to expect. The following list identifies a number of issues disaster-impacted communities have faced in the past:

- Limited quality and availability of data
- Difficulty collecting data and information due to disrupted communication channels
- Insufficient resources for the local economic development officer to manage the project
- Reluctance by impacted businesses to share specific damage information
- Identifying topics that should be covered in the study
- How to fund the study

HAZUS

In the U.S., Hazus is a nationally applicable standardized methodology that contains models for estimating potential losses from earthquakes, floods, and hurricanes. It uses Geographic Information Systems (GIS) technology to estimate physical, economic, and social impacts of disasters. It graphically illustrates the limits of identified high-risk locations due to earthquake, hurricane, flood, and tsunami. Users can visualize spatial relationships between populations and other more permanently fixed geographic assets or resources for the specific hazard being modeled, a crucial function in the pre-disaster planning process.

Hazus is used for mitigation and recovery, as well as preparedness and response. Government planners, GIS specialists, and emergency managers use Hazus to determine losses and the most beneficial mitigation approaches to take to minimize them. It can also be used in the assessment step in the mitigation planning process, which is the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. Being ready will aid in recovery after a natural disaster.

Potential loss estimates analyzed in Hazus include:

- Physical damage to residential and commercial buildings, schools, critical facilities, and infrastructure;
- Economic loss, including lost jobs, business interruptions, repair, and reconstruction costs;
- Social impacts, including estimates of shelter requirements, displaced households, and population exposed to scenario floods, earthquakes, and hurricanes, and tsunamis

As the number of Hazus users continues to increase, so do the types of uses. Increasingly, Hazus is being used by states and communities in support of risk assessments that perform economic loss scenarios for certain natural hazards and rapid needs assessments during hurricane response. Other communities are using Hazus to increase hazard awareness. U.S. federal, state, and local government agencies and the private sector can download the latest version of Hazus free-of-charge online by visiting the FEMA Flood Map Service Centre. International users can download the Hazus software, but not the U.S. state or territory datasets.

Source: www.fema.gov/hazus

How To Conduct A Post-Disaster Economic Impact Study

As mentioned previously, certain communication channels can be severely hampered in the immediate aftermath of a disaster. Additionally, professionals often acknowledge that there is a “timing-accuracy continuum,” where the sense of urgency to complete the study needs to be balanced with the fact that more accurate and complete data will be available at a later date. Groups requesting and/or conducting impact studies should consider either allowing for a delay before beginning a study, or conducting an initial report with a series of updates as more information becomes available.

Some experts recommend letting at least one to two months to pass before commissioning a study. However many disasters call for an immediate response when communities are seeking government aid. While it is a general rule that the longer the waiting period the more accurate the data will be, leaders must balance the availability of good data with the exigency of the particular situations they face.

There are several steps to carrying out a post-disaster economic impact study. In addition to deciding on timing, you will need to decide on who will coordinate the study, what roles other groups will play in the process, and how the study will be funded. From there, the geographic scope must be identified, questions determined, and inputs identified. Results should also be reviewed and scrutinized to ensure they are accurate. The following section will help you ensure the process is well thought-out.

Step 1: Define the Geographic Area

Geographic scope can vary greatly. Typically the party requesting the study specifies economic boundaries that will be analyzed; therefore, it is important to know exactly what you hope to learn from the study. Two factors that will influence the geographic focus are the type of disaster, and kind of group for which the study will be conducted. For instance, a study requested by the Louisiana shrimp industry on the impact of the Gulf Oil Spill would have a different scope than a study on the economic impact of the Alberta flood commissioned by the provincial government.

In the event where no specific geographic area is indicated, analysts will determine boundaries based on the areas experiencing direct damage from the

disaster. Ideally, the party conducting the study will gather as much data available regarding impacted industries, and cross reference it with geographic information to determine an appropriate area for the study. This may result in the investigation of a specific region within a province, or the development of a tailor-made analysis that crosses regional and/or provincial/territorial borders.

In our interviews with experts that have conducted these types of studies in the past, we have identified the following factors to consider in determining economic area:

- **Cross boundaries.** Disasters don’t recognize civic, regional, national or international boundaries. The impacted area may not be focused in and around a single metro area, but between several metro areas with economic interconnections.
- **Consider impacts.** The epicentre of destruction is not always the centre of regional commercial activity. Interdependence is inevitable. You may want to broaden scope beyond the borders of direct physical damage, due to regional economic interdependence. A broader area helps differentiate between resident and job transfers within a region, from those outside the region.
- **Different types of disasters call for different geographic scopes.** In the case of a hurricane, one may observe rings around the immediate area along the coast, around the area that is a few kilometres inland, or around the area further inland where evacuees may relocate. This approach may not be appropriate for other types of disasters.
- **Non-declared disasters does not mean non-impacted.** Federal funds may be limited to eligible regions that are formally declared disaster areas even though damages may cover a broader geographic area.

Step 2: Select Specific Indicators To Measure

The study should look at direct, indirect, and induced impacts; as well as which industries will be examined. This information will vary depending on the type and nature of the disaster. For example, a hurricane is a large-scale event that will likely impact both property and a range of industries. An oil spill, on the other hand, will induce limited inland property damage and primarily impact the energy, fishing, and tourism sectors.

The most common types of indicators included in impact studies are⁹:

- Loss of tax revenue (e.g., sales, property, employment etc.)
- Change in employment by industry
- Loss of wages
- Business interruption (e.g. change in gross product, output shifts)
- Loss of revenue for key industries within the impacted area
- Business relocation and business closures
- Damage to infrastructure (e.g., sewers, transportation networks, intermodal facilities etc.)
- Damage to property (e.g., commercial, industrial and residential land, structures and equipment)
- Damage to the environment and natural resources (e.g., damaged water supply, crops, beaches)
- Insured vs. uninsured losses

Additional indicators for more in-depth studies, include:

- Capacity losses in nursing homes, hospitals, and intermediate care facilities
- Capacity losses in logistics centres (e.g. tonnage capacity in sea ports and airports)
- Declining enrollment in schools and child care facilities
- Tourism decline and loss of hotel revenue
- Tax delinquency (e.g. on damaged property, property taxes, sales tax and royalties)
- Trends in the number of building/housing permits issued before and after the disaster
- Shifts in insurance rates

Step 3: Collect the Data

Conducting business surveys can be time consuming. The process of realistically collecting data should be contemplated in light of communication obstacles. When communications networks are impacted for a significant period of time, response rates for business surveys will be affected. As a result, impact studies conducted directly after a disaster might provide business impact estimates that will need to be adjusted over time. Some of the immediate challenges include:

- A lack of clarity whether certain business owners have left
- Many business owners are still evaluating their prospects in the wake of the disaster
- Businesses are negotiating with their insurance companies
- Economic development organizations are unable to contact business owners as they don't have accurate contact information
- The lag between collecting and reporting data like employment and tax information makes it difficult to separate short- and long-term impacts
- Some studies may over-estimate or under-estimate economic impact when compiled too hastily, making them unacceptable to publish
- Long-term figures such as population trends but may not be available for a period of time

Government agencies dedicated to collecting data are generally viewed as reliable sources. Professionals often look to federal data first, as the reliability of data generally increases as the level of data becomes broader¹⁰. Generally speaking, the smaller the region, the more difficult it is to retrieve accurate data. Economic impact studies usually include employment data from Statistics Canada, or other provincial/territorial data. Tax revenue data can also be gathered from provincial/territorial and/or local government revenue departments and taxing agencies¹¹.

Primary data collection can help offset information gaps. Consultants, chambers of commerce, business councils, and other economic development

⁹Interviews (General Consensus)

¹¹Rookard, M. (2012, July). Personal Interview by Carrie Mulcaire and Patrick Terranova.

organizations may be able to provide primary data for the study. Universities, particularly those with economic research centres, can also be a reliable data source. In instances where tourism may be impacted, hotel owners or hotel associations should be contacted in order to assess room vacancies and resulting revenue losses. Business surveys can identify which firms have remained in the area, impacts on employment levels and revenues, property damages, as well as the cost of repairs or replacement.

Below are some things to keep in mind when collecting data¹²:

- **Extrapolate from realistic assumptions.** When information gaps exist or data is not legitimate, make realistic assumptions rather than use unreliable figures.
- **Utilize local connections.** There are advantages to having ties to the local area. Businesses may be more likely to answer questions with people they know and trust. Local economic development organizations typically know who is likely to provide data and information. The CEO or business owner is not always the appropriate source to collect needed information.
- **Diversify your communication.** While e-mail or text messages can be an effective tool, consider employing other communication methods to reach local business owners.
- **Seek partners.** Chambers of commerce and trade associations are generally a good resource for business outreach and can be critical advocates when the area is in disaster mode.
- **Tie the disaster impact study to the real world.** The study should be approached not merely as an analysis conducted in a software program, but as a case study too.

Step 4: Analyze the Data

The most common technique used to quantify post-disaster economic impact is input-output analysis. Input-output is a common method of explaining the dynamics at play in a local economy, illustrating how different industry sectors affect each other within a given geographic area. It is set up as a matrix where input-output data reports the dollars each industry

puts into, and receives from other industries. Impact studies can use this information to project changes in economic output based on how disasters affect the corresponding inputs.

Among professionals, REMI, IMPLAN, and REDYN are the most common tools used; however, some university researchers, economic development agencies, and consultants have developed their own proprietary models.

It is worth noting that when running these models, the user can extract tax revenue impact data from the overall impact analysis, which some people consider to be the most valuable information to come out of a study. Doing so provides the public with information they can relate to, and provides a common variable that can be compared to other impact studies. It is also important to note that all models require customization to account for local variations. Below are some things to keep in mind when analyzing data:

- **Account for false variables.** It can be difficult to differentiate recession characteristics from disaster impacts. If long-time series data is available, observe patterns from previous recessions and trends in order to separate the two within a reasonable margin of error. Another way to account for this variable is by using a dummy variable in a multiple regression model.
- **Consider workforce size.** Ensure there is a 'reality check' on data relative to the workforce. Make sure plans are underway to ensure the workforce size assumed in the study is accurate.
- **Share draft findings with industry experts and community partners.** Have your analysis peer-reviewed and vetted by the larger business community before going public. This will ensure your data links with other data being reported. It also decreases the possibility of embarrassing politicians that are operating on limited information.
- **Build in seasonal assumptions.** Productivity loss and business interruption can be captured by revenue losses; however, make sure to make seasonal adjustments with reasonable assumptions, and take into account seasonal or macro trends indicating a time of recession or growth.

¹²Interviews (General Consensus)

Step 5: Report the Data

While impact studies can be a useful tool to understand repercussions and seek funding, they can also be misinterpreted. The entity leading the study has the responsibility to control and frame the information, as well as support methods used to create it. Be prepared to back up methodology and figures to government officials.

Since the study is a projection of one or more possible scenarios, economic development organizations must use caution and judgment in sharing their findings. Be careful studies aren't quoted and taken as a fact. While the media will want numbers before the disaster is over, be aware that information will change over time.

Use information honestly with credibility. You will find receptive allies. Arm them with the ability to convince skeptics and/or answer questions. Point out positives of advocated positions. Be straightforward and upfront.

Advice on Hiring a Consultant

Given that many local governments do not have internal capacity or expertise to conduct these types of studies, hiring an outside consultant may be the most appropriate option. If you choose that route, make sure your project scope and goals are clear. This includes outlining cost, geographic scope, specific indicators to measure, proposed methodology to collect and analyze data, project reporting and final deliverables.

For provinces, territories, regions, or metropolitan areas, resources may be more abundant, facilitating the ability to carry out internal studies. On this level, groups that have this type of capacity include regional economic development councils, regional planning commissions, and the need for a final product should be balanced with respect to timing, available funding, and reputation of the potential analyst/consultant.

Shaping the scope may prove difficult. In this case, consider asking an economist or university researcher to help develop a request for proposal (RFP) and recommend a methodology. This will not only help determine proper goals for the study, but it can also provide a rationale to help you decide between multiple consultants who are proposing different methodologies.

Several kinds of entities perform economic impact studies. It is important to seek consultants that are

Case Study: The Economic Impact of the Deepwater Horizon Oil Spill

On April 20, 2010 the Deepwater Horizon oil well burst, leading to a catastrophic oil spill that spread throughout the Gulf Coast. Greater New Orleans (GNO) Inc., a regional economic development organization representing 10 parishes in Louisiana, was among several groups that made efforts to measure the economic impact of the spill. GNO Inc. conducted a three-part series throughout the year following the disaster that included both quantitative and qualitative analysis revolving around regional economic impact in three areas: fisheries, drilling moratoria, and brand damage.

To project the impact of damage to fisheries, GNO Inc. used RIMS II multipliers from the Bureau of Economic Analysis. GNO Inc. created three-year estimates for lost revenues, the number of negatively impacted full-time employees, and loss of output and earnings across the regional economy due to the damage to fisheries. In observing the effects of the drilling moratorium on local businesses, the organization categorized impacted firms into three categories: direct (e.g. oil companies), indirect (e.g. drilling equipment suppliers), and induced (e.g. stores with customer bases that include those from direct and indirect categories). GNO Inc. also observed the level of wages, tax revenues, and royalties associated in these categories. They also looked at indicators without tangible dollar measures, such as the number of new drilling permits granted.

One of their observations was the importance of isolating fiscal impact so tax revenue can be singled out. Given the variance between different studies, tax revenue can be considered a common variable that stakeholders can relate to.

non-partisan while having experience in conducting these types of post-disaster economic-impact studies. If they are a controversial figure, local, provincial/territorial and federal officials may not accept the final results of the study. It is also important to note, not all economic development consultants know how to complete these types of studies. They are not the same as a general economic impact study. Make sure they have both experience and expertise to carry out the work. In addition to private consultants, some universities have economic research arms that conduct this type of work. If you choose this option, make sure

they can deliver the product within the expected project deadline.

Depending on scope, an economic impact study can cost anywhere from \$10,000 for a basic study to \$100,000 for a more extensive study. While a basic study can be completed for a relatively low cost, communities should plan to spend between \$40,000 and \$75,000 for a more robust study. Much of the cost is associated with data collection.

University studies tend to be less expensive than those conducted by private consultants due to the non-profit nature of the institution and the availability of student labour. Studies are also less expensive if input data is pre-collected and less primary data collection is involved. In the case of regional planning councils, it is useful to have a relationship with an organization responsible for negotiating software contracts, as it may be able to influence costs¹³.

Once a consultant has been identified, the contracting agency should carefully review the proposed scope of work(s) and make final recommendations before the consultant is hired. This includes questions about milestones, the extent to which the consultant is permitted to independently engage community stakeholders, as well as public messages about how and why the study is being conducted. Unfortunately, many impact assessment efforts have been derailed by consultants who have misrepresented their client's commitment and inappropriately elevated (or diminished) local expectations. In other instances, efforts have been so tightly controlled the consultant was unable to reach a broad enough audience to gather the requisite information. Make sure you have these issues addressed up front to avoid embarrassment later on.

The AUBER Network

AUBER stands for Association for University Business and Economic Research. Since 1947, this group has served as the professional association of businesses and economic research organizations in public and private universities. They work to improve the quality, effectiveness, and application of research in business, economics, and public policy.

According to their website, www.auber.org, their members engage in a diverse array of applied economic research, with many AUBER member organizations providing their communities with public presentations, forums, economic outlooks, and workshops in areas of interest to the business community. Many of their members maintain State Data Centres and facilitate public access to a wide variety of federal, state, and local data and statistics.

Their website provides a location service to find local AUBER units which can provide research such as economic studies and impact analyses.

Summary

Post-disaster economic impact studies are helpful in determining economic losses and demonstrating the need for outside aid and resources. This type of study serves a critical function in securing resources necessary to recover from the event. It should complement, not replace your long-term recovery plan.

When doing this type of study, it is important to consider both time and resource constraints mentioned earlier. Upon completion, intelligence gathered from this type of study can pay off dividends in helping communities understand how their economy has been impacted, and chart a course of resilient recovery in the future.



¹³O'Neil, P. (2012, July). Personal interview by Carrie Mulcaire and Patrick Terranova

Chapter VI: Crisis Communications

Overview

Traditional channels of communication are almost always compromised following a major disaster due to the disruption of telecommunications and transportation systems. Businesses may struggle with contacting their employees, vendors, customers, and even their local economic development organization. They don't always know who to trust or where to get accurate information. Rumors spread quickly in this type of environment, greatly impeding business and industry recovery. For example, a business may hear from an unauthorized source that power won't be restored for four to six weeks, when in fact the utility company is about to expedite restoration. If this information isn't corrected quickly, business owners may choose to relocate, further exacerbating community recovery.

The Emergency Operations Centre (EOC) functions as the central location for coordinating and carrying out local emergency planning, training, response, and recovery efforts. In a case where the EOC is fully activated by a major incident, it includes co-location of representatives from various municipal departments, emergency responders, and provincial/territorial and federal agencies, non-profit and faith-based organizations. In a disaster situation, EOC personnel have to make decisions quickly. Some of these

decisions will have a direct consequence on local businesses and their ability to recover. For example, if the local utility company and community leaders know at an early stage that company "x" will shut their doors and relocate out of the area if their power isn't restored in "x" days, then efforts can be put in place in advance to meet that need and retain the firm.

It is in the best interests of your community to include the business community when developing and implementing your disaster response and recovery plans. There are a number of ways to do this, however the most common is to include a business representative seat (usually the economic development officer) inside the EOC; or a liaison role outside of the EOC. Economic development officers are logical choices for this role as they have pre-established relationships with municipal government as well as the local business community. Either way, you should have a business voice at the table. Ideally this person has been identified in advance as part of the community's official emergency response, so trust can be established, and roles and responsibilities are clear. This step is absolutely critical if you wish to ensure effective two-way communication between the municipality and the business community. It is also an essential element in accelerating business and economic recovery efforts.



Matching Needs

As the lead economic recovery organization, you will have to address the urgent needs of local businesses following a major incident. Your role includes:

- Connecting businesses with available information, resources and service providers that can help with cleanup, financing, business counsel and rebuilding efforts
- Persuading local, provincial/territorial and federal decision makers to provide additional resources required to meet the needs of businesses

Communicating with the Emergency Operations Centre (EOC)

As mentioned earlier, economic development organizations should ensure they have a senior staff member attached to local EOC to facilitate two-way communication, and dispel rumors and misinformation. Communication regarding local business damages and what they need to recover is an important function of the business representative in the EOC. This representative needs to know what programs and services are available for business from the local, provincial/territorial and federal government departments.

Communicating with the Media

You also need to have a strategy in place to deal with the media. Media have a 24/7 news cycle. They need to fill it. Depending on the scale of your incident, you may have to handle local, national, and/or international media interest.

With widespread availability of 24-hour cable TV news, online news streaming, and the diversity of social media tools and blogs, communities struggle to meet increased demands for content. If a spokesperson for your business community fails to respond to media calls quickly, they will find an alternative source. In fact, their alternative may be speaking with a disgruntled business owner or community resident who represents you in a very negative way. For more information on how to create an emergency communications checklist refer to Resource Appendix 6.

Create A Strategy Before A Crisis

Regardless of the disaster's nature and severity, your economic development organization should develop a crisis communication strategy that addresses the following factors:

- Communication between economic recovery partner organizations and businesses. Many disaster-impacted communities cite difficulty in communicating with affected businesses (particularly those that temporarily relocate out of the area), as a huge challenge. Economic recovery partners can't help the business community recover if they are unable to communicate with each other. Having a plan in place can help these partners reconnect with their member businesses, meet their needs, and work to ensure they don't relocate permanently.
- Communication between local government, disaster response agencies, and the business community. Your business community needs to know the status of recovery efforts; how to access assistance; and what decisions are being made at the provincial/territorial and federal levels that will affect them. Inaccurate information spreads quickly through the business community, and harms confidence in recovery efforts. Businesses need clear, accurate information from trusted sources.
- Public relations or image considerations. You will want to influence how external audiences perceive your community so your economic recovery efforts are not jeopardized. Simultaneously, you may want to communicate to those in a position to provide assistance, such as provincial/territorial and federal governments, that help is needed. This can be particularly challenging if tourism is a major industry in your community.
- Conflicts between economic recovery organizations. Economic recovery partners must ensure that the needs of their business community are being met in the time of a crisis. Local communities may have multiple economic development partner organizations that may or may not have a history of working closely together with their various business networks. During a crisis, these relationships can become further strained. Advance planning to discuss and allocate roles and responsibilities amongst the various partner organizations, in particular identifying who

will do what, with whom, how and when, will go a long way towards ensuring no one group is overwhelmed. Backup plans should also be in place in case one or more of the partner organizations is directly impacted by the crisis, and therefore unable to fulfill their role.

Creating Your Crisis Communications Plan

Step 1: Establish a Crisis Communications Team.

Establish strong team members that know the community and assign responsibility for a primary and secondary spokesperson, a technical expert, and a public relations officer.

Step 2: Be Creative and Expect the Unexpected.

Run different scenarios on different types of disasters that may happen. Include your geographic area, the current (and future) political climate, potential security and communication challenges, financial concerns, weather, logistical issues, health considerations (and the ability to respond), etc.

Step 3: Establish a Strong, Diverse List of Contacts. It is important to have a contact list of those who have a critical function either internally or externally for your organization (employees, vendors, clients, and key local officials). Ensure you have comprehensive contact details include emails, cell phones, addresses and other phone numbers. You never know what kind of a disaster may occur so you will need to have as many ways as possible of communications available.

Step 4: Update, Update, Update.

Review your plan frequently, but at least a minimum of once per year. It is important to run the unexpected scenarios, update your list of team members and the contact list. People move and change addresses frequently.

Maintain Open Communication Channels

As mentioned previously, local government will make emergency management decisions that will have a direct consequence on local businesses. Emergency management plans prepared far in advance of a major catastrophe should address issues that will impact a local businesses' ability to respond and recover. This includes issues like business re-entry, access to property, as well as a phased approach to power restoration. If any changes are made to the plan, it is important to let the business community know.

Case Study: EDO Role in Post-Disaster Communication in Polk County, FL

The Central Florida Development Council (CFDC), Polk County's economic development organization, understood that communication was crucial when Polk County was struck by a series of three hurricanes in 2004/05. The Polk County Emergency Management office released a daily news flier in English and Spanish on general community recovery, and the CFDC in partnership with the county's 13 chambers of commerce provided needed information for the business community. CFDC updated its website homepage on a daily basis to provide updates on recovery information needed by local businesses.

Updates 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. The list of licensed contractors was especially valuable, to avoid scams by unlicensed contractors taking advantage of the disaster. The CFDC also provided hard copies of the list to each of the 13 chambers to distribute through their own business networks to make sure the information was distributed despite power outages.

CFDC also utilized local media to communicate about the locations of economic recovery meetings and services available to local businesses. CFDC spent approximately \$15,000 on several newspaper ads in the local newspaper. Although expensive, this was crucial in reaching businesses without power and internet access.

The municipal emergency manager is responsible for creating the emergency management plan, and for key decisions that may have a direct impact on the business community. The most prepared regions have regional and provincial structures in place that enable industry and business input at the emergency management table.

To gain a seat at the table, economic development officers need to be regarded as a valuable link between the EOC and the business community. This means there needs to be an established relationship already in place. In a disaster, businesses will approach organizations they feel they can rely on for timely, credible response and recovery information. Many times, this is the local economic development

organization. Economic development organizations should therefore ensure that one of their senior staff members participates in emergency preparation and planning activities, in order to advocate for policies that affect businesses like re-entry, utility restoration, and cleanup. This person should also be a member of the crisis communications team.

In the U.S., states like Florida, South Carolina and Louisiana have established a state-level emergency support function (ESF) for business and industry, in order to enable greater coordination and planning between different government agencies, the private sector and other non-profits.

If you have not established a this type of structure, you may want to consider advocating that a 'business and industry' ESF structure be established to help ensure your business community is appropriately involved in disaster response and recovery.

Provide Timely, Accurate Information

With eyewitnesses and participants able to upload photos, videos and commentary about disasters as they develop, organizations don't usually have the luxury of time to assemble a team, gather and verify information, or navigate an extended approval process before issuing an initial statement. Today leadership is expected to issue its first comment, acknowledging it is aware of the incident, within 15 minutes. Providing timely, accurate information from a credible source to business and industry will help dispel rumors and misinformation that can be harmful to the business community following a major event.

Establish an Internal and External Crisis Communication Plan

Your crisis communications plan should consider both internal and external audiences in your community. For example, there should be an internal system in place to communicate with staff as part of your overall business continuity planning effort. You should also have an external system to monitor what is being said about your community by national or international media.

Internal Communication

In a fast-moving crisis, you will need a communications medium that can be activated quickly. You don't have time to go through numerous email threads, newsletters or other distracting correspondence. One

potential solution to manage all of this content is Slack. This real-time app for teams is designed to help you communicate effectively. You can switch from direct one-on-one messages to group messages seamlessly, create a special channel dedicated to managing the crisis, and attach images, tweets, and media files easily. Push notifications also make it impossible to miss direct messages or @mentions. In addition to internal staff processes, economic recovery partner organizations need to be prepared to communicate with various partners (e.g., major employers, smaller businesses, cultural, tourism and other non-profit organizations) as well. Partners may want to share their information with the lead economic recovery organization so a central contact database can be created and updated as required.

Case Study: Joplin Internal Communications

Rob O'Brian, president of the Joplin Area Chamber of Commerce, noted that having a business continuity plan for his chamber was an important tool after Joplin was struck by an EF-5 tornado. The plan included methods for effectively communicating with internal staff members even when phone and internet lines were down. The chamber's plan designated emergency meeting locations and used SMS text messaging. It also had on file the cell phone numbers of key local business owners.

For more on Joplin, see [Case Study Appendix 1](#).

External Communication

Economic development organizations should also decide how they will communicate with external partners such as the media in the event of a crisis. Their plan should identify the primary and secondary spokesperson, what they want to share, and what they want to avoid. Spokespeople should be media-trained on camera! Planning this well in advance helps the organization is better prepared. For more information on efforts on how to prepare your organization and your local business community see Chapter III in this toolkit.

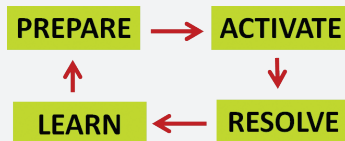
Part of your external communications plan needs to include technical elements. For example, investing in a generator will ensure electricity for at least a limited amount of time. You can also set up at least one employee's cell phone as an Internet hotspot, which can be used to send e-mails and update social media. Battery powered satellite phones can continue to

operate even if electricity is out and cell phone towers are blown down. Basic technologies such as amateur (ham) radios and regular FM/AM radios can be helpful as well. Finally, you may choose face to face communication to distribute hard copies of your message to stakeholders.



Crisis Management Process

Shell has a global Crisis Management process with four stages:



In the Prepare stage, Crisis Management Team (CMT) members are nominated and trained to address a crisis. Contact information is gathered so that they can be contacted 24-hours a day, seven days a week. This information is continuously updated and a Crisis Management Manual is prepared. Activation follows a consistent process as outlined in the Crisis Management Manual. Once activated a consistent and repeatable process is executed by the Crisis Leader, Chief of Staff and Communication Lead. The Resolve phase contains a number of detailed steps, including Stakeholder Engagement. The Learn phase follows the Crisis so that the Crisis Management process can be continually improved.

Acknowledge the Disaster Is Occurring

Public statements in the early stages of a crisis need to show leadership, acknowledge facts, describe actions taken to date, and express concern for those affected. Once these basic messages have been established, they should be repeated regularly in public statements, including press briefings and interviews.

If a weather event such as a tornado or flood is clearly on its way, local government should acknowledge it through its communication channels (social media, e-mail, website, phone recordings, TV, radio). Messages should also acknowledge the nature of the disaster. Mention factual information like potential areas of

impact, and if possible, provide a time for the next update. Messages do not need to be lengthy but they should be reassuring. This is especially important if the organization communicates with tourists and visitors.

One of the key organizational objectives must be to establish, and maintain credibility. This will ultimately depend on the audience's perception of the honesty and sincerity of statements that are made, and whether they truly reflect how the organization is responding to the event.

Sometimes it is not possible to provide all of the available information to media. It is acceptable to withhold information for reasons such as public safety or the potential for a criminal investigation. However, presenting factual information as soon as it is known helps avoid the spread of inaccuracies. Ideally there will be one official source; usually the local Emergency Manager.

A Note About Tourists

When a disaster occurs without notice, tourists already in the area need information about local conditions and where to find help. For example; they will want to know if the airport is open and flights are departing or, if roads are closed or transportation is compromised. They may also need to determine an alternate way to get home. If they haven't yet arrived, they will want to know if they should still come. Any updates should note the availability of accommodations, transportation, attractions and other tourist-related services. Usually this information is provided by the official tourism organization, convention and visitor's bureau or economic development group. Tourism operators should be encouraged to provide timely updates on their status to ensure the correct information is being shared.

Before Hurricane Isaac struck in August 2012, the New Orleans Convention and Visitors Bureau created a webpage to provide tourists and tourism stakeholders with updated information. They also included this information on their Facebook profile, and invited partners to post status updates. It's also important that the information be optimized for viewing on various mobile devices, not just desktop computers.

Provide A Unified Response

In a disaster, consistent, accurate messaging from authorities builds confidence amongst community residents and business owners.

Case Study: Coordinated Communication in Cedar Rapids for Flood Recovery

The recovery effort after the 2008 flood in Cedar Rapids, Iowa could have been severely hampered because of damage to the communication channels. Phone lines and internet were down, and the high volume of traffic caused cell towers to become overloaded. Although mass media was an effective tool for evacuating the community, it was difficult to use during recovery due to the many different programs and organizations running simultaneously. Resources were not being used efficiently and different groups would be unknowingly handling the same tasks.

To solve the communication issue, representatives from different programs and government organizations established the Emergency Operations Centre (EOC). Through the centre, tasks were divided and assigned more efficiently. Because Priority One, a regional economic development organization, and the Chamber of Commerce were invited to have a seat in the EOC, communication between the public and private sector was fluid. Priority One and the chamber could communicate information it learned directly from its business clients to the EOC and vice versa.

A week after the flooding, the city manager of Cedar Rapids created the Recovery and Reinvestment Coordinating Team (RRCT) to facilitate collaboration between programs. The RRCT included the chamber, local nonprofits, arts and cultural groups, schools, organized labour, landlords, the Downtown District, local government, and neighbourhoods. Meeting once a week, the RRCT offered a unified response to issues caused by the flood. Some of the RRCT's accomplishments included obtaining grants, allocating CDBG funding, and collaborating with the Army Corp of Engineers on flood mitigation efforts.

To learn more of Cedar Rapids' story, you can read the full case study in [Case Study Appendix 3](#).

Each partner has a network of businesses they communicate with on a regular basis. After a crisis, they have an important role to play in disseminating response and recovery information to their network. By engaging them in pre-disaster communications planning, you will be able to ensure your communication and outreach efforts hit the broadest possible range of businesses.

The economic development group will also be responsible for:

- Facilitating the flow of correct information to businesses
- Coordinating concerted outreach to reconnect with businesses and identify at-risk companies
- Building relationships with and maintaining current contact information for economic recovery partner organizations, as well as city, provincial/territorial and federal partners
- Coordinating post-disaster media and political strategies.

In the case of Garner, North Carolina (near Raleigh) the economic development director serves on the city's crisis communications team in the event of a major incident. Following major flooding in Cedar Rapids, Iowa in 2008, the city established a Recovery and Reinvestment Coordinating Team (RRCT) and invited the local chamber's executive director to serve on the team and regularly meet with other community leaders.

* See the Cedar Rapids text box for more information.

Communication Strategies

After a disaster, it is essential to communicate on all platforms to reach businesses with relevant information. This includes timing on restoration of utility service; relevant inspection and rebuilding requirements; a list of local- and/or provincial-licensed contractors; how to select and pay a contractor; how to deal with insurance companies and more. Business leaders will also want to know how to get involved in rebuilding the community. Even though the process may not be approved yet, it is important for local officials to communicate progress with community stakeholders rather than leave a vacuum filled with speculation and misinformation.

Businesses also need information on how to navigate local, provincial/territorial and federal government

Determine Organizational Roles

Prior to a disaster, the economic development group should convene a meeting with its partners to discuss how to best coordinate communication in the event of a crisis.

assistance programs. Communities should promote recovery resources through the local media, and use grassroots efforts when Internet and phone lines are not working. A summary of key information for business recovery and assistance should be made available in hard copy format to distribute to businesses without access to e-mail, Internet or phone. Some communities distribute flyers to advertise local business recovery centres immediately after a hurricane to ensure direct contact with local business owners. In other cases like in Joplin, Missouri, the local chamber went door to door to visit businesses a few days after an EF-5 tornado struck. Chamber staff showed compassion to those business owners who were often still in shock regarding their loss. This effort went a long way in establishing trust when the business owner was deciding where and how to rebuild.

Texting

Due to differences in networks between texting and cell phone services, texting is often available even when cell services are down. Especially in the immediate aftermath of a disaster, texting can facilitate immediate communication on where to find safe spaces and resources such as food and water or where to get in touch with immediate business recovery services such as the business recovery centre.

- Collect cell and home numbers before the storm so you are prepared to send text messages in the event of a disaster.
- Know your audience. Text messages should be calibrated to the audience they are meant to reach. An internal text message will have a different tone than one sent to the general public.
- Keep it simple and clear. Craft clear, simple messages that convey key information. Consider sending messages in multiple languages if targeting a diverse population.
- Arrange for a mass text messaging service before the crisis. Contract with a mass text messaging service in advance of disaster. When sending a mass text message, be prepared for questions and requests for further information. Be aware of provincial/territorial and federal rules and regulations regarding mass communication.

Social Media

Social media has become an essential component of disaster communication. Wireless networks enable the Internet to be accessed by smartphones even when telephone or cellular networks are down.

In Joplin, Missouri the chamber started posting critical information on their Facebook page an hour after the tornado struck the city. Their Facebook page quickly became a credible source of business recovery information because the communications manager posted timely, reliable information. For more information, see the text box on Joplin.

Under Mayor Michael Bloomberg, New York City increased its social media presence, which proved to be an effective communication strategy during Superstorm Sandy. Throughout the storm, NYC Digital (part of the Mayor's Office of Media and Entertainment) monitored social media, sending daily reports to city hall. Questions on Twitter were responded to directly and the City's Tumblr account and Facebook page published information after each press conference. Residents were encouraged to sign up for text alerts from the Mayor's Twitter account (@NYCMayorsOffice) as an alternative digital resource to the City's website when people lost power and Internet access¹⁴.

There are four primary ways citizens use social media technologies during natural disasters¹⁵:

- Family and Friends Communication: Connecting with family members in affected and unaffected communities for situation updates and planning responses. This is the most popular use. Primary tools used are Twitter, Facebook and/or a blog.
- Situation Updates: Neighbours and communities sharing critical information on road closures, power outages, fires, accidents and other related damages.
- Situational/Supplemental Awareness: Situations where citizens rely less and less on official traditional communication (e.g., television, radio, phone).

¹⁴ <http://www.emergencymgmt.com/disaster/Sandy-Social-Media-Use-in-Disasters.html> https://communities.firstresponder.gov/DHS_VSMWG_Lessons_Learned_Social_Media_and_Hurricane_Sandy_Formatted_June_2013_FINAL.pdf

¹⁵ M. Badger, Social Media Use in Crises Situations, <http://www.mediabadger.com/2011/07/social-media-use-incrises-situations/>.

- Services Access Assistance: Citizens using social media channels to provide each other with a ways and means to contact different services they may need after a crisis.

Critical tasks that can be implemented by social media¹⁶:

- Preparing citizens in areas likely to be affected by a disaster
- Broadcasting real-time information both for affected areas and interested people
- Receiving real-time data from affected areas
- Mobilizing and coordinating immediate relief efforts
- Optimizing recovery activities

Although the world of social media is rapidly changing, below is a basic overview of some of the more popular social media channels, and how they are being used in crisis communications:

- Managing content. How you communicate during and post-crisis can determine the damage done to your brand. You may want to consider a social media management tool for that purpose. Tools like Buffer come in handy for situations like this. For example, you'll want to be able to:
 - o Press "pause" on any social marketing campaigns or fun posts and keep the focus on communicating updates
 - o Schedule posts for specific times, such as when you're going to be releasing a formal update
 - o Spread posts linking to new information or updates for people who didn't see it the first time
- Tracking content. Staying on top of the daily stream of dialog is the best way to identify a crisis before it blows up. For basic tracking, set up Google alerts to track your organization or community brand. You can use Twitter search to find discussions about your brand, and set up an RSS feed for monitoring

- Facebook. This is a great tool for managing ongoing dialog with your community after the crisis initially unfolds. An existing corporate Facebook group may be fine for managing a minor crisis; however, if there's a major crisis you'll want to establish a dedicated group, with a reference to the crisis in the title. You can post links to your response page, video, and discussions group threads. Ideally, you'll want to point traffic back to your own Web site rather than have crisis response distributed over the Web. Use discussion threads on Facebook to talk about broader issues that impact your brand, such as how you've dealt with the crisis and the aftermath. In June 2017, Facebook announced the launch of Disaster Maps. This feature provides aid workers with real-time data visualizations via heat maps of users' actions as disaster unfolds. Workers can then decide how to best proceed and reach people as fast as possible.

Case Study: Joplin's Social Media Strategy

On May 22, 2011, an EF-5 tornado tore a path roughly one mile wide through the southern part of Joplin. The tornado affected technology-based communications, so the Joplin Area Chamber of Commerce chose to communicate with businesses in person. The chamber had backed up its data to a secure server more than 80 miles away as part of its preparedness plan, so they were ready to assist businesses days after the tornado. Joplin also utilized social media extensively, posting on Facebook within an hour of the tornado to relay initial information and resources. The chamber rebuilt their website to focus on resources and provide an update on the status of the businesses. They also created an employer tracking system from emergency grant funds, staffed through the workforce investment board.

It also set up and staffed an information hotline in order to combat potential misinformation from other sources. They dedicated several staff members to answering calls from businesses about utility restoration, cleanup, business services, rebuilding efforts and other practical matters important for businesses in deciding whether or not to return and rebuild. Three weeks after the tornado, 1100 chamber members and 200+ non- members had been reached in some form.

More information about Joplin's recovery can be found in the Prioritizing Economic Recovery Actions Following a Major Disaster webinar on www.RestoreYourEconomy.com.

¹⁶ Rowan University, Tips on Using Social Media During a Natural Disaster, <http://www.newswise.com/articles/tipson-using-social-media-during-a-natural-disaster>.

- Twitter. If you have a crisis, getting the word out with a link to your own response page is critical. Twitter is one of the best ways to do that. Having an active Twitter presence will help ensure you're able to get the word out far more quickly.
- LinkedIn. Has far less utility for crisis management than the tools previously mentioned; however, if you maintain links to professional or corporate groups relevant to your business, this could be a good crisis communications channel. This tool helps you reach professionals that may not be wired into the other social networks. In the recovery phase after a disaster, this tool can also help you connect with key audiences. Increasingly LinkedIn is developing targeted advertising methods that can be helpful as well.
- Google+ is a social networking service that allows companies to create an online profile. It also links to all Google services, including Google Search and YouTube. With more than 540 million users, it is the second largest social networking site after Facebook. Companies use their Google+ page to share photos, videos, promotions and other information with customers and online followers. After an accident or major incident, statements or images published on any other online platforms should also be posted to the company's Google+ page.
- Instagram, Flickr and Pinterest enable users to publish photographs. When Hurricane Sandy ripped through the Eastern U.S. coast, more than 10,000 Instagram images were uploaded per second with #sandy. Many photos had geo-tagged locations attached to them, which proved invaluable to the American Red Cross and other agencies tasked with deciding where to deploy assistance. It was essentially a real-time data pipeline of victims needing help.
- Yelp. This app is often used to locate retail businesses or review their products and services. There are creative ways the app was used to advertise businesses in Lower Manhattan neighbourhoods following Hurricane Sandy.
- Blogs. If your organization has a blog with followers who are in your target audience, and you have access to electricity, make sure this is updated frequently. It is extremely valuable in the recovery process as it allows you to monitor the local community blogs, and link to pertinent

stories or calls for help. Some of the more popular blogs are Blogger, WordPress, and microblogs at Tumblr and Twitter.

- Online message boards and bulletin boards. These are primarily used post-disaster. Examples include Pinterest, Hootboard, Proboards and Craigslist. These are particularly effective in locating missing persons, offering or seeking assistance.

Social Media For Business

Social media is one of the best ways businesses can communicate the status of their business operations to customers, vendors and suppliers. For example, they can use Twitter, Facebook, Vine, YouTube and countless other platforms to announce whether they are open, if they have a temporary location, as well as what products are available or unavailable. Loyal customers will often support businesses by re-tweeting and re-posting information for them¹⁷. In order to be effective, however, this strategy depends on businesses establishing social media accounts and audiences prior to the crisis.

To ensure customers are not confused by misinformation, economic developers should recommend to businesses that they establish a special crisis communication team whose responsibilities will include social media. In the case of an emergency, employees should be reminded that this social media team is authorized to discuss the business' emergency and recovery efforts¹⁸.

One publicity strategy is to tie business-related posts into larger recovery efforts by adding messages of condolence to victims, support, special offers for emergency workers, or civic pride by using trending hashtags, such as #bostonstrong from the 2013 Boston Marathon bombings.

Another is to make the best of an unfortunate situation. For instance, during Hurricane Sandy, New York restaurants used social media to advertise 'Sandy Specials' and 'Hurricane Menus'. Manhattan restaurant

¹⁷ Missouri Business Development Program (2014). Recovering and rebuilding after a disaster: Part 1 – Where to begin? [Article one from a series of seven on Business Disaster Recovery]. Retrieved on August 15, 2014, from <http://missouribusiness.net/article/recover-rebuild-disaster1-where-to-begin>

¹⁸ Goldman, S. B. (2014, August 6). The top ten business continuity and disaster recovery trends. Retrieved August 15, 2014, from <http://continuitycentral.com/feature1211.html>

Pounds & Ounces tweeted that it was holding a ‘Bring your own flashlight’ party¹⁹. Since customers may have limited battery life and internet access early in the disaster recovery, businesses should be relatively brief in their social media broadcasts²⁰.

Organizations leading communication efforts can contribute by generating standardized messaging and centralized platforms for businesses to use. In the aftermath of the Joplin, Missouri tornado, locals set up an online clearinghouse for information, www.joplintornado.info, which included a listing of businesses and their status (open, relocated, closed etc.) that businesses could update on their own²¹. When flooding hit Southern Alberta in 2013, a task force which included Calgary Economic Development, the Calgary Chamber of Commerce, and the Calgary Hotel Association launched a coordinated blog www.yycisopen.com and hashtag, #yycisopen, for businesses to use in posting their status updates.

Businesses can even incentivize locals to blog about their recovery efforts. When the 2011 Christchurch, New Zealand earthquake caused a precipitous decline in tourism, the #blog4nz campaign was announced to show the country was open for tourism. For 72 hours, organizers encouraged travel bloggers to publish as many articles as possible about New Zealand. It also encouraged Twitter users to tweets about travelling to the country.”²² In response, the travel industry, led by Air New Zealand, offered flights, hotel stays and other rewards to the Twitter users who got the most views and re-Tweets for the campaign²³. In each of these examples, businesses coordinated with other local stakeholders to deliver a clear, consistent message about business conditions.

¹⁹Morabito, G. (2012, October 31). The ultimate Hurricane Sandy guide to NYC. Retrieved August 15, 2014, from http://ny.eater.com/archives/2012/10/the_ultimate_hurricane_sandy_dining_guide_to_nyc.php

²⁰Ryan, M. (2013, April 4). Social media has an emerging role in disaster recovery. Houston Business Journal. Retrieved August 15, 2014, from <http://www.bizjournals.com/houston/blog/socialmadness/2013/04/social-media-has-an-emerging-role-in.html?page=all>

²¹Joplin business status (2011). Retrived August 15, 2014, from http://joplintornado.info/joplin_open_for_business/joplin_open_for_business.htm

²²Blog4NZ takes New Zealand to the world. (2011, March 17). Retrieved on August 15, 2014, from http://www.newzealand.com/travel/en/media/press-releases/2011/march-2011/tourism-news_blog4nz-to-the-world_press-release.cfm

²³Blog4NZ: NZ is open and pumping. (2011, March 22). Retrieved on August 15, 2014, from http://www.newzealand.com/travel/en/media/press-releases/2011/march-2011/tourism-news_blog4nz-pumping-nz.cfm

Web Portal For Businesses

Ideally the business recovery web portal is integrated into the lead economic recovery organizations’ website. It should contain business information about how to prepare for a disaster as well as critical resources for a post-disaster situation. Some communities hide the recovery page on their website until a state of emergency is declared. In the interim, they update the page on a regular basis so it is ready to be activated should the need arise. The portal should also:

- Be a central source of information. The lead group and all partners should promote the site to their various business constituents as the primary place to turn for key information post-disaster.
- Help you create a business contact database. A web portal can also house a database for displaced businesses to provide their updated contact information. This process is easily achieved with accessible technology found on Google Drive, or software like ExecutivePulse.
- Enable the site for mobile visitors. Increasingly, mobile technology is used to browse the Internet. A web portal should be easy to use via phone or tablet.
- Ensure accessibility. It should provide business recovery materials and loan/grant applications in relevant languages to assist major demographic groups in your communities.

Business Recovery Centre and Hotline

As mentioned earlier, a business recovery centre (BRC) is a one-stop shop set up to provide local, provincial, and federal resources and services for businesses after a catastrophic event. It typically includes a suite of public and private sector partners such as Community Futures, loan officers, business counselors, and other stakeholders that serve local businesses. Because their services are tailored to address business needs, they are typically established separately from a local EOC to avoid confusion with individuals needing individual social services. For more information on BRC’s see Chapter III.

Media Relations

Communities need to understand how the general public perceives damages to their economic assets,

and craft an effective marketing campaign to confirm or change perceptions. Vivid images of floodwaters not receding or significant tornado damage can plague the minds of Internet and television viewers, keeping them away much longer than is necessary. Furthermore, once shared, Internet search results of a community may return pictures of wreckage and news reports focused on the disaster at its worst.

To counteract these negative images, it is necessary to demonstrate to media outlets that important community milestones and successes have been achieved. Community leaders, tourism boards and economic development organizations should not be shy in boasting about the local area's successes in recovery. More often than not, there is the need to implement a strong "We are Open for Business" marketing campaign on behalf of the local community and its businesses. Through local, regional or national news channels, the public is informed that local businesses are still in operation and the community is in the process of recovery. Business successes in re-opening should be communicated in a personalized story format and provided within the context of the overall community recovery.

Mayors and civic leaders often make the mistake of using national media to point out recovery problems to show the need for additional financial aid. This is not the proper outlet for gaining sympathy from provincial/territorial and federal partners. Your business community needs city support in sending out positive messages about the community's recovery, and casting a broader vision for that process.

As part of your media strategy, consider that media outlets will often update the progress of recovery within the community on the one-year anniversary of the event as well as the five-year anniversary. Be prepared to develop a media strategy for these anniversaries. Make sure you develop a personalized recovery stories that are positive and powerful, with the overall goal to improve your community's reputation. Consider hiring a public relations firm. If your organization doesn't regularly work with one of these, consider having one 'on call' in the event of a crisis. Where possible, leverage the resources of your community partners and don't seek to communicate critical messages on your own. The repetition of key messages by various public and private sector partners will go a long way in helping the media pick up on more positive community messages.

Developing Media Releases

Traditional communication with media requires sending key information through a media release, media alert, or other proactive communication. As a common tool, developing media releases before a crisis can help your organization structure appropriate key messages in order to convey it under various scenarios. It is best to consider drafting a sample media release in a steady state, as opposed to a crisis if possible. Media releases should include contact information for the leader of the economic development organization, as well as contact information for agencies that are dealing directly with emergency response. Information from verified government sources should also be included, but only if it is current and available. The media release should explain the role that the economic development organization is taking in recovery, and point businesses to resources like a business recovery hotline, centre, web portal etc. The following tips will help ensure your media release is distributed efficiently following a major crisis:

- **Proofread.** Writing a media release before a disaster allows ample time to proofread for spelling and grammar. Credibility will be harmed by poorly written media releases.
- **Use a wire service for distribution.** Services to distribute media releases to larger audiences can be costly but can provide direct access to media outlets not otherwise available.
- **Share everywhere.** In addition to sending your media release to an organization's own list and a paid distribution list, it should also be shared on websites, social media, and even printed and distributed to community partners.

Working with The Media

If your organization is an appropriate source to comment on a crisis, then make sure you provide a written fact sheet or media release with contact information that is being monitored on a 24/7 basis. A news reporter's deadline is often after hours. Your organization should establish a primary spokesperson that is known to the media, and trained to handle media inquiries. For every spokesperson, on-camera videotaped media coaching is absolutely essential. You need a credible, professional source.

External messages need to dispel common myths and promote opportunity. It's important to inform key

audiences outside of the impacted region that certain industries are still functioning, or that the region has largely recovered. The following tactics can help you in crafting messages for the media:

- Discuss and promote noteworthy achievements during redevelopment and rebuilding. Every groundbreaking event and ribbon cutting ceremony should have its own media release with a personalized story.
- Publicize information about incentives available for business investment.
- Aggressively promote any new business activity, such as business expansion, in the national media. Construct and distribute a recovery story that is interesting and affirmative.

Determine your key target audience for each message. Seek funding to plan and execute the strategy. It is important to understand, marketing efforts to influence a community's brand image can cost a significant amount of money; therefore, it is critical to understand your various audiences, and how to effectively reach them with limited marketing resources. Your target audience can vary based on objectives. Possible target audiences could include:

- Visitors
- Representatives of the tourism and convention industry
- Decision makers at domestic firms and/or international companies
- Investors and developers
- Displaced citizens and workers

Do Not Use "No Comment"

Even in the case of ambiguity, it is important for your organization to avoid using the phrase "no comment" as it conveys a message of guilt or fault. It is far better to state specific details are unknown at the time then to remain silent on a subject with the media. Media experts recommend it is better to be prepared with a comment like "The situation is under investigation at the moment, so it would be premature to give you a statement." Be sure to follow up later when you have the facts.

Case Study: Fort McMurray Virtual Town Halls

In May 2016, when the entire community of Fort McMurray was evacuated due to massive wildfires, they decided to utilize Virtual Town Halls as a way to provide information to residents about their ongoing response and recovery efforts. As community residents were spread all across Canada during the evacuation, it was one way they felt they could easily connect and provide information. Virtual Town Hall technology turns phone systems into a talk-radio broadcast. The system has the ability to dial out and connect hundreds, thousands or hundreds of thousands of people online at one time across any geographic area. It allowed the municipality to reach displaced residents easily. As each person was connected, they heard a brief recorded message from the municipality and were then placed into the live town hall. Everyone who joined was muted; however, they could raise their hand to ask a question by pressing *3 on their keypad. They were then routed to a screener who took their question and entered it into a dashboard that was visible by moderators working on the event. Moderators were able to select questions from the question queue. Weekly town halls were held from June 27-October 3. Each week they would address a specific topic. All sessions were taped and uploaded to the municipal website for future viewing if someone was unable to attend the live session. Over that period of time, guests included members of the Wood Buffalo Recovery Committee and Task Force, municipal staff, representatives from Alberta Health Services, the Canadian Red Cross, the Insurance Bureau of Canada and/or other organizations depending on the topic. Topics included issues like: "When is re-entry?" or "Is the air safe to breathe?" By answering questions in this format, hundreds (or thousands) of residents got an answer immediately. The Municipality held its last Town Hall on Oct. 3, 2016, because residents' questions had become more detailed and personal to their own unique situations, which was great, but it also meant that only one resident would get an answer. In response to this growing need for personal dialogue, the municipality established "Here for You" community information sessions that were held each Thursday from 4 p.m. to 8 p.m.

More information can be found in [Case Study Appendix 6](#).

Case Study: Grand Forks Media Communications

The city of Grand Forks, ND was severely flooded in 1997 after the Red River submerged over 75% of the city. In order to manage external communications, the city established a public information office. This type of communication is crucial for residents who are unsure whether or not they are planning to stay and rebuild in the community. The office had seven employees at its peak, who were responsible for managing calls and questions on the recovery effort. They provided regular reports of recovery initiatives, organized press conferences and published newsletters to keep residents aware and updated on the progress of recovery. The efforts taken by the public information office were important to communicate to the public that tangible progress was being made towards the city's redevelopment.

More information can be found in [*Case Study Appendix 6.*](#)



Chapter VII: Government Roles & Responsibilities

Overview

This chapter is intended to help guide economic recovery stakeholders, including economic development organizations, local and provincial/territorial government agencies, and other recovery officials, through a complex system of resources.

Recovery and rebuilding after a disaster can be quite costly, particularly when the local economy has been crippled by the disaster. It leaves local communities and regions in a position to rely on the available resources of the provincial/territorial and federal governments. These financial resources are not “free money” but taxpayers’ dollars at work; therefore, they usually require significant oversight and documentation for compliance and reporting purposes.

In an emergency, the first response is almost always by local authorities or at the provincial or territorial level

because disasters occur most often locally. Should a provincial or territorial government require resources beyond their capacity to cope in an emergency or disaster, the federal government responds rapidly to any request for assistance by a provincial or territorial government.

In understanding the various roles and responsibilities for each level of government, local communities are better able to access much needed resources for economic recovery. The chapter covers the local, provincial/territorial, and federal government roles in disaster management. It also includes a breakdown of federal disaster assistance programs which economic developers should include in their disaster planning and recovery strategies.



Role of Local Officials

Most emergencies in Canada are local in nature, managed by the municipality or at the provincial/territorial level, depending on scope. Potential roles a municipal elected official may play after a disaster include:

- Inspiration for Community Recovery
- Spokesperson
- Analyst
- Visionary/Catalyst
- Gap Filler
- Connector/Advocate
- Project Manager

Other key responsibilities include:

- Coordinating immediate response efforts
- Applying for provincial/territorial/federal assistance
- Developing and implementing recovery and mitigation plans
- Integrating efforts across government offices, the private sector and NGOs during recovery
- Undertaking an appropriate community planning process
- Managing the rebuild process while reducing risks and complying with design standards
- Leading community restoration efforts including critical infrastructure, essential services, business retention, and redevelopment of damaged housing units
- Supporting and remaining knowledgeable about long-term recovery initiatives
- Establishing metrics to evaluate and communicate progress
- Ensuring accountability

Each province/territory has an emergency management organization (EMO) responsible for planning and research, training, response operations, administration and delivery of disaster financial assistance programs.

These include:

- Alberta Emergency Management Agency
- Emergency Management BC
- Manitoba Emergency Measures Organization
- New Brunswick Emergency Measures Organization
- Newfoundland and Labrador Fire and Emergency Services
- Northwest Territories Emergency Management Organization
- Nova Scotia Emergency Management Office
- Nunavut Emergency Management
- Office of the Fire Marshal and Emergency Management
- Prince Edward Island Emergency Measures Organization
- Québec Ministère de la sécurité publique
- Saskatchewan Emergency Management Organization
- Yukon Emergency Measures Organization

These EMO's then mandate local authorities to:

- **Develop a Municipal Emergency Plan (MEP).** This document summarizes all planning and preparedness activities. It is designed to ensure a prompt, coordinated response for events that extend beyond routine emergencies. The Director and emergency management agency help develop and maintain the MEP.
- **Appoint Members of Council to an Emergency Management Committee.** One or more members of Council should advise Council on emergency plans and programs, and review them regularly.
- **Appoint a Director of Emergency Management**

(DEM) that will:

- o Prepare and co-ordinate emergency plans and programs for the municipality
- o Act as director of emergency operations on behalf of the municipal emergency management agency
- o Co-ordinate all emergency services and other resources used in an emergency
- o Perform other duties as prescribed by the local authority
- **Establish an Emergency Management Agency.** To act as the local agent to carry out a municipality's statutory powers and obligations. They prepare and implement the municipal emergency plan. Often a municipality passes a municipal emergency management by-law to establish authority for a local emergency management program. The by-law also describes the local structure, authorizes the municipal emergency plan and outlines mutual aid arrangements with neighboring authorities.
- **Declare a State of Local Emergency.** Municipalities declare a State of Local Emergency. In most cases the head of local government, usually the Mayor or Reeve, makes the declaration after consulting with other members of Council. From there, local government takes necessary action to eliminate the threat. A state of local emergency may be for all, or part of the municipality. It must identify the nature of the emergency and the area in which it exists. The local authority is also required to notify the affected population. After a local state of local emergency is declared, it is monitored and cancelled if it is no longer required. Municipal government usually has the most knowledge of local assets and public management systems, as well as stronger relationships with impacted constituents.

Role of Economic Development Officers

Economic development officers have the unique ability to coordinate and leverage resources from the private sector. They are also the most logical entity to take a leadership role in stabilizing the community's economic base and facilitating job recovery. After a catastrophic

event, much of the work will be done in an environment of emotional and physical duress. The community may look to the local economic development organization to lead the charge for business and economic recovery whether you are prepared for this role or not. A lot of the work you do on a daily basis will go into high gear after a disaster strikes.

How the Roles of Economic Development Officers are Impacted By Disaster

The International Economic Development Council has developed a matrix that outlines specific types of roles an economic developer plays both before and after a disaster.

Short-term strategies for economic development officers include:

- Marketing and communication (e.g., addressing brand damage)
- Economic development capacity/coordinated response (e.g., managing communications infrastructure)
- Small business assistance/access to capital (e.g., continuity plans)
- Business retention (e.g., performing outreach campaigns)
- Economic impact assessment and analysis
- Workforce retention and development (e.g., connecting displaced workers)

Economic development officers should clearly define their long-term economic role at the beginning of the recovery process. The following list is a summary of long-term recovery strategies that should be considered:

- Business retention, expansion and attraction
- Economic diversification (e.g., value-added industries)
- Economic development capacity/strategic planning (e.g., re-evaluating vision and mission)
- Small business development (e.g., economic gardening)

- Entrepreneurship support (e.g., technology transfer)
- Workforce development (e.g., customized curricula)
- Marketing, communications, and infrastructure

Provincial/Territorial Role

If the magnitude of the disaster exceeds resources of the local community- they may request assistance from their provincial or territorial government. As mentioned earlier, each province/territory has an EMO responsible for coordinating emergency response efforts in order to ensure the protection of people, property, the environment and the economy from the effects of an emergency event. The EMO coordinates its provincial/territorial response for an emergency event that exceeds local resources or expertise, or where assistance is requested by a local authority. Each province/territory will have different departments involved in their response and recovery model; however, most will include health, environment, transportation, infrastructure, public affairs, economic development, solicitor general and social services.

Of the magnitude of the disaster exceeds provincial resources, they may request federal assistance.

Federal Response

Canada's federal government works collaboratively with provinces and territories in order to support disaster-impacted communities.

Two important pieces of federal legislation outline the national framework and principles for federal involvement.

1. Emergencies Act - This Act replaced the War Measures Act. It describes types of national emergencies as well as responsibilities of Public Safety Canada (PSC). It also enables the Government of Canada to invoke exceptional, yet incident-specific powers to deal with emergencies. Four types of emergencies are covered under the Act:

- o Public welfare emergencies: Severe natural disasters or major accidents affecting public welfare, which are beyond the capacity or authority of a province or territory to handle.

- o Public order emergencies: Security threats that are beyond the capacity or authority of a province or territory to handle.
- o International emergencies: Intimidation, coercion or the use of serious force or violence that threatens the sovereignty, security or territorial integrity of Canada or any of its allies.
- o War emergencies: War or other armed conflict, real or imminent, involving Canada or any of its allies.

2. Emergency Management Act (EMA) - Canada's Emergency Management Act recognizes the roles of all stakeholders in its emergency management system. It sets out the leadership role and responsibilities of the Minister of Public Safety Canada, including coordinating emergency management activities among government institutions and in cooperation with the provinces and other entities. Responsibilities of other federal ministers are also set out in the Act. The federal government works collaboratively with provinces and territories to support communities when disasters strike.

In addition, to emergency response, there is a legitimate role and urgent need for federal leadership in Canada's post-disaster economic recovery efforts. Although Public Safety Canada is mandated to assist in recovery; there does not appear to be a lead agency responsible for 'economic recovery' following a disaster. As it currently stands, local economic development organizations, chambers of commerce, business assistance organizations, and other economic development stakeholders have to navigate through a number of programs in order to address the business and economic recovery needs in their community. There is no clear communication about which agencies offer what support. In Canada, no federal agency is mandated to deal with business and economic recovery which means, it does not get the attention it requires.

Canada's Emergency Management Framework

Since 2007, Federal, Provincial and Territorial (FPT) collaboration in emergency management has been guided by An Emergency Management Framework for Canada which was last updated in 2017. This Framework takes an all hazards approach to address natural and human-induced hazards and disasters. It

also recognizes emergency management is a shared responsibility across all sectors of society, and strengthens the way governments and partners assess risks and work together to prevent/mitigate, prepare for, respond to, and recover from the threats and hazards that pose the greatest risk to Canadians. Given each FPT government also has a responsibility for emergency management and public safety in Canada, the Framework aims to strengthen collaboration and ensure more coherent, complementary actions amongst various government initiatives.

National Disaster Mitigation Strategy

On January 9, 2008 the Government of Canada, together with provincial and territorial governments, launched Canada's National Disaster Mitigation Strategy. It is based on the recognition by federal, provincial, and territorial governments that mitigation is an important part of an effective emergency management framework, and that all stakeholders are committed to working together to support disaster mitigation in Canada. It sets out a common vision for disaster mitigation activities; promotes mitigation through a transparent national strategy that integrates disaster mitigation into Canada's emergency management framework; and identifies primary actions that will be undertaken by federal, provincial and territorial partners to support implementation. It also recognizes that full implementation of the national strategy will be a long-term effort.

The goal of the National Disaster Mitigation Strategy is: To protect lives and maintain resilient, sustainable communities by fostering disaster risk reduction as a way of life. Its principles are:

- Preserve Life – Protect lives through prevention
- Safeguard Communities – Enhance economic and social viability by reducing disaster impacts
- Fairness – Consider equity and consistency in implementation
- Sustainable – Balance long-term economic, social and environmental considerations
- Flexible – Be responsive to regional, local, national and international perspectives
- Shared – Ensure shared ownership and accountability through partnership and collaboration

Disaster prevention and mitigation measures are important in order to reduce impacts and hazards before an emergency or disaster happens; however, it is important to understand that in addition to physical mitigation measures, there is a critical need for businesses and communities to mitigate their economic risk as well. Steps taken in advance to prepare and mitigate will enable them to recover more effectively.

UN Sendai Framework for Disaster Risk Reduction (2015-2030)

In 2015, Canada joined 187 countries at the UN General Assembly in adopting the UN Sendai Framework for Disaster Risk Reduction (2015-2030). The Sendai Framework is focused on disaster risk reduction (DRR) over the next 15 years. It is a non-binding international agreement that establishes international priorities for DRR, and creates direct linkages with United Nations climate change and sustainable development efforts.

One of the key elements is the importance of adopting a whole of society approach, which seeks to leverage existing knowledge, experience and capabilities within emergency management partners in order to strengthen resilience for all. It outlines seven clear targets and the following four priorities for action to prevent new and reduce existing disaster risks:

- 1) Understanding disaster risk;
- 2) Strengthening disaster risk governance to manage disaster risk;
- 3) Investing in disaster reduction for resilience and;
- 4) Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

Canada's Emergency Management Strategy

In 2019, Canada launched its *Emergency Management Strategy*. This helped fulfill the federal government's commitment under the *Sendai Framework*, for a pan-Canadian DRR Strategy. It also established FPT priorities to strengthen the resilience of Canadian society by 2030. This strategy supports the roles and responsibilities outlined in the *Emergency Management Framework*, and guides FPT governments and their respective emergency management partners in carrying out priorities.

5 Priority Areas Of Activity

- 1) Enhance whole-of-society collaboration and governance to strengthen resilience;
- 2) Improve understanding of disaster risks in all sectors of society;
- 3) Increase focus on whole-of-society disaster prevention and mitigation activities;
- 4) Enhance disaster response capacity and coordination and foster the development of new capabilities; and
- 5) Strengthen recovery efforts by building back better to minimize the impacts of future disasters.

The chart below shows the current federal governance structure: (source www.publicsafety.gc.ca)

Federal/Provincial/Territorial (FPT) Ministers occupy the top tier in the emergency management governance structure.

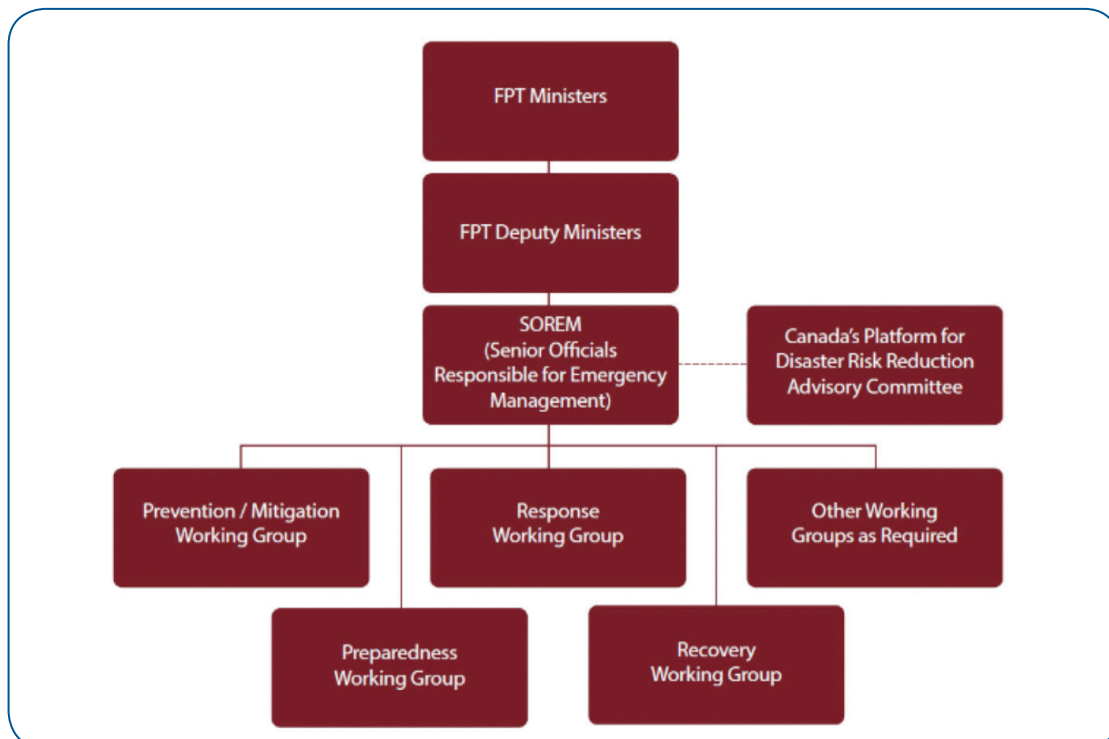
FPT Deputy Ministers are the second tier of the structure. They are responsible for implementing ministerial decisions by setting priorities and assigning FPT Senior Officials responsible for emergency management to take responsibility for action items.

Working Groups report to FPT Senior Officials, submitting proposals and reporting on the results of their ongoing work. There is no reporting relationship between the FPT Senior Officials responsible for emergency management and Canada's Platform for Disaster Risk Reduction Advisory Committee; however, the two groups work closely together to advance DRR and emergency management priorities.

The composition of Working Groups is based on the multi-sectoral nature of emergency management and may require the participation of FPT government partners from different departments.

There are also four standing Working Groups that are organized according to the four components of emergency management, and additional horizontal Working Groups which are created and operate as required.

Regular meetings and teleconferences support the ongoing operations of the entire FPT governance structure. Working Groups hold meetings and teleconferences as required based on workload and timelines, while respecting the schedule of other tiers of the FPT emergency management governance structure.



Public Safety Canada

Public Safety Canada is the lead federal department responsible for helping Canadians protect themselves from emergencies and disasters through national leadership in the development and implementation of policies, plans and a range of programs²⁴. It maintains and leverages partnerships with other federal government institutions, provincial and territorial emergency management organizations, first responders, volunteer organizations, and other stakeholders in order to support a collaborative approach to emergency management.

As stated previously, emergencies are managed first at the local level by first responders such as medical professionals and hospitals, fire departments, police and municipalities. Local authorities can request additional assistance from provincial or territorial governments if necessary. If an emergency escalates beyond provincial or territorial capabilities, they may seek assistance from the federal government.

The federal Government Operations Centre (GOC) is the primary means by which the Minister of Public Safety establishes an integrated approach to emergency response. Housed at Public Safety Canada, it provides an all-hazards integrated response to events of national interest. It provides 24/7 monitoring and reporting, national-level situational awareness, warning products, integrated risk assessments, as well as national-level planning and whole-of-government response management. During periods of heightened response, the GOC is augmented by staffs from other government and non-governmental departments and organizations that physically work in the GOC or connect to it virtually²⁵.

In the event of a large-scale natural disaster, the federal government provides financial assistance to provincial/territorial governments through Disaster Financial Assistance Arrangements (DFAA), administered by Public Safety Canada. When response and recovery costs exceed what individual provinces or territories could reasonably be expected to bear on their own, the DFAA provides the Government of Canada with a fair and equitable means of assisting provincial and territorial governments. Provincial/territorial governments design, develop and deliver disaster financial assistance, determining the amounts and

types of assistance that will be provided to those who have experienced losses. According to the Public Safety website, they deliver the following programs for disaster recovery:

- Disaster Assistance Programs
- Disaster Financial Assistance Arrangements (DFAA)
- Federal Disaster Assistance Initiative (FDAI)
- Chemical, Biological, Radiological, Nuclear and Explosives Resilience Strategy and Action Plan for Canada

A province or territory may request Government of Canada disaster financial assistance when eligible expenditures exceed one dollar per capita (based on provincial or territorial population). Eligible expenses include, but are not limited to, evacuation operations, restoring public works and infrastructure to their pre-disaster condition, as well as replacing or repairing basic, essential personal property of individuals, small businesses and farmsteads. Through the DFAA, assistance is paid to the province or territory, not directly to affected individuals, small businesses or communities. Federal auditors process a request for reimbursement under the DFAA immediately following receipt of the required documentation of provincial/territorial expenditures and a review. Examples of provincial/territorial expenses that may be eligible for cost sharing under the DFAA

- Evacuation, transportation, emergency food, shelter and clothing
- Emergency provision of essential community services
- Security measures including the removal of valuable assets and hazardous materials from a threatened area
- Repairs to public buildings and related equipment
- Repairs to public infrastructure such as roads and bridges
- Removal of damaged structures constituting a threat to public safety
- Restoration, replacement or repairs to an individual's dwelling (principal residence only)

²⁴www.publicsafety.gc.ca

²⁵www.publicsafety.gc.ca

- Restoration, replacement or repairs to essential personal furnishings, appliances and clothing
- Restoration of small businesses and farmsteads including buildings and equipment
- Costs of damage inspection, appraisal and clean up

Examples of expenses that would NOT be eligible for reimbursement

- Repairs to a non-primary dwelling (e.g. cottage or ski chalet)
- Repairs that are eligible for reimbursement through insurance
- Costs that are covered in whole or in part by another government program (e.g. production/crop insurance)
- Normal operating expenses of a government department or agency
- Assistance to large businesses and crown corporations
- Loss of income and economic recovery
- Forest fire fighting

Challenges

The increased frequency and magnitude of major disasters in Canada in recent years has caused the federal government to become more involved in disaster recovery assistance. In fact, the “billion-dollar disaster” increased dramatically between 2010 and 2014. Even the most resilient local communities and provinces require federal assistance for response, recovery, and rebuilding efforts. Yet, many economic development organizations are not well versed in how to work effectively with provincial/territorial or federal partners when it comes to disaster response and recovery. The process of navigating the labyrinth of various government agencies, programs, and requirements can be an intimidating process. Usually local community leaders are not familiar with obtaining and maximizing the use of federal funding assistance until they are confronted with having to request these funds for the first time.

Local governments tend to identify the following challenges in seeking federal funds for economic recovery purposes:

- **Lack of knowledge.** It is critical to build an understanding of federal disaster recovery programs in advance so communities are better prepared to navigate the application process, and make requests to waive complex federal requirements.
- **Limited federal funds for business and economic recovery.** The amount of federal money available for business and economic recovery is much smaller than dollars allocated to address humanitarian needs. Economic development organizations need to educate municipal leaders and community stakeholders on the need to expend funds on priority recovery projects, as well as to patch together resources from multiple sources for business needs.
- **Lack of flexibility in the use of federal funds.** Generally speaking, federal funds are designated for specific purposes and do not provide much flexibility to meet the myriad needs of post-disaster business recovery. It is the provincial/territorial government’s responsibility to work with the Government of Canada to identify the level of federal support to be provided.
- **Inconsistent requirements amongst different federal agencies.** Many federal agencies have different, and sometimes competing, requirements for the use of funds. As economic development organizations and businesses assemble funds from a variety of sources, meeting these requirements means more time and costs in an already challenging post-disaster environment.

Outreach and Advocacy

The best time to begin outreach and advocacy efforts related to disaster recovery is before disaster strikes. It is a critical component to any disaster preparation effort. Like the balance of activities related to disaster recovery, connecting with federal representatives and its administration can seem very complicated. In reality, sometimes it can be as simple as picking up the phone or sending an e-mail.

Connecting with your Member of Parliament (MP)

Every economic development professional should have a “hotline” to their local MP’s office. While this does not need to be connected to the flashing red phone, it should be a link to get an urgent message to your federal representative following a disaster. This hotline should be established well before a disaster strikes. As a matter of routine, economic developers should be in regular contact with their MP to ensure they are aware of their ongoing work in the community and how the federal government can support it. Local constituency offices communicate regularly with their Ottawa offices; therefore they are the most direct link available for you to deliver information to Parliament.

Economic development officers may wish to include regular visits to Ottawa as well in order to establish contacts within the parliamentary office. Regular contact will serve an economic development organization’s interest in more ways than one. Follow up does not need to be anything more than “just checking in” or sharing a news article from the local media about a recent successful project. The objective is to establish a connection that results in name recognition and, more importantly, a higher priority in receiving a future response. Before a disaster strikes, it is important to talk with MP’s about how the local community has benefitted from federal programs. Outcomes and positive results should be shared in both verbal and written form. In particular, it is vitally important that they understand the importance of swift, efficient delivery of federal assistance. This may translate into the need to ease complex federal requirements in the case of a catastrophic event that has devastated the community.

Federal disaster assistance is often thought of as something that comes after an event; however, most decisions regarding funding for federal responses are

made months and sometimes years in advance. Funding for direct assistance and other services are determined through the normal course of budget deliberations. By communicating with representatives early and often, there is both the opportunity to impact the amount and type of aid received immediately after a disaster, as well as any support provided at a later time.

After a disaster, your community should encourage its provincial/territorial representatives to advocate for an equitable amount of federal disaster funds based on need. This may mean elevating issues to the Premier’s Office to help ensure bureaucratic obstacles are minimized when accessing federal funding.

Developing a coalition of public and private sector leaders to visit parliamentary representatives in Ottawa is a popular strategy after a major disaster as well. In this case, it is important to have a unified message amongst regional stakeholders to show support for critical needs. Sharing information on economic impacts of the disaster with your parliamentary representatives will go a long way to making a case for the need for federal assistance. They need to better understand that the specific event has overwhelmed local and regional resources and that it necessitates federal assistance. While not all communities will conduct a comprehensive economic impact study, the locality or provincial will need to provide at least a preliminary damage assessment to determine loss and recovery needs. Where possible, it is important to point out the impacts on the regional and even the national economy. This information provides intelligence and support for any request to Parliament for additional recovery funds. For more information on assessing economic impacts of a major disaster see the Chapter V.



Chapter VIII: Strategic Planning for Recovery

Overview

Disaster recovery planning and preparedness is no longer strictly for communities that regularly experience flooding, forest fires or hurricanes. Whether the potential disasters are natural or man-made, communities must plan for recovery in order to mitigate the impact it could have on local businesses and residents.

Planning for post-disaster situations can be a complicated, challenging, and controversial process. Communities are often unprepared for the chaos that is likely to emerge after a disaster strikes. They also have

difficulty planning for long-term economic recovery when there are pressing humanitarian, cleanup and rebuilding needs to address.

Disaster-impacted communities need to develop a vision for how they will rebuild their devastated local economy. They need to take the opportunity to redevelop their economic and social assets in order to not only emerge stronger from a disaster, but also be better prepared for future disasters. Strategic planning is key to developing this vision.



Pre-Disaster Planning: Creating a Disaster Recovery Framework (DRF)

Your community should have a Disaster Recovery Framework (DRF) in place before an incident. This helps set expectations for how strategic planning decisions will be made, identifies stakeholders, and defines the structure of the organization. It also describes the vision, organization, and core values that promote effective community recovery. It links the community, private businesses, non-governmental organizations, faith-based organizations, and community-based organizations to regional and federal recovery policy and post-disaster assistance. It also recognizes that recovering from a disaster is complex, and requires the coordination of numerous recovery activities and partners. A DRF is meant to complement your local emergency operations plan (EOP). It provides a mechanism for organizations with recovery roles to engage in pre-disaster coordination, enhance recovery-related preparedness, and build additional capacity. It also provides a framework for the implementation of an effective recovery program and identifies specific operational recovery support functions (RSFs).



Source: Master Your Disaster (Community Version), December 2017, Leann Hackman-Carty

Addressing Recovery Support Functions

In addition to your DRF, you should have a Recovery Support Function (RSF) document that describes how you will organize recovery related agencies and community partners by function. While your community may choose to add additional RSFs to its plan, the most common are:

- Community planning and capacity building
- Economic
- Housing
- Infrastructure systems
- Natural and cultural resources
- Health and social services

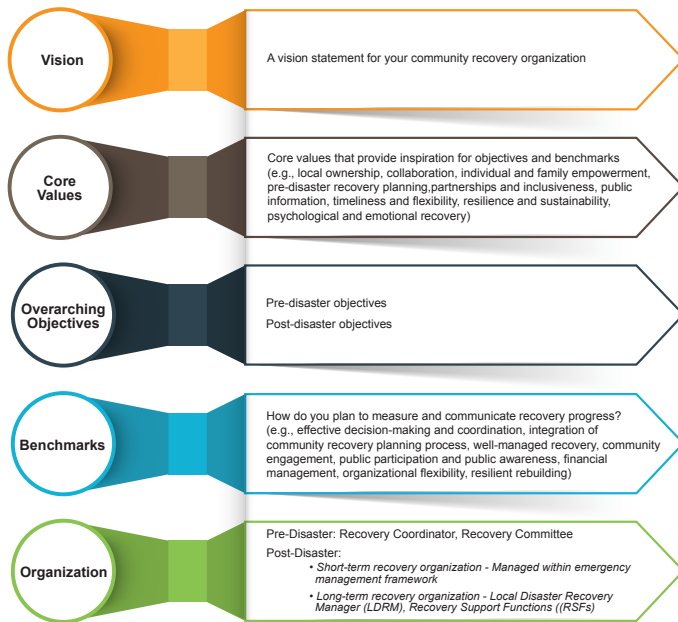
Each RSF should be addressed individually in your document by scope, purpose, desired outcomes, lead and supporting agencies, pre- and post-disaster actions, and potential issues and constraints. The primary distinction between primary and support organizations is the frequency at which the agency is expected to actively participate in an RSF operation.

Each RSF has a coordinating agency, primary agency and support agencies associated with it:

- The coordinating agency provides leadership, coordination, and oversight for the RSF, and ensures communication and coordination between primary and support organizations.
- Primary agencies have significant authorities, roles, resources, or capabilities for a particular function within an RSF, and coordinate support within their functional area.
- Support agencies are those entities with specific capabilities or resources that support the primary agencies in executing the mission of the RSF.

The visual representation on the following page shows the type of information you collect for each RSF.

Recovery Support Functions (RSFs)



Source: Master Your Disaster (Community Version), December 2017, Leann Hackman-Carty

Economic Recovery Support Functions (RSFs)

Economic development organizations are uniquely positioned in the community to lead the Economic RSF. Through their established connections with local businesses and business organizations, they can coordinate involvement and leverage resources from the business community and are most likely to take a leadership role in facilitating job recovery. This chapter provides guidance on how economic development organizations can help lead economic recovery efforts before, during and after a disaster.

The Economic RSF plan should cover scope, purpose, desired outcomes, lead and supporting agencies, pre- and post-disaster actions, and potential issues and constraints. It also offers guidance to those agencies with responsibilities for the functional area. Below is a summary of what the RSF could look like when completed²⁶:

²⁶Master Your Disaster (Community Version), Recovery Support Function (RSF) Guide, Leann Hackman-Carty

Scope

To integrate the expertise and resources of local and outside assistance, including that of the federal government and the private sector, to sustain or rebuild businesses and employment and develop economic opportunities that can lead to the creation of a sustainable, economically resilient community after a large-scale, catastrophic incident.

Purpose

- To work closely with the public, private, and nonprofit sector to sustain or rebuild local businesses in an effort to maintain and expand employment opportunities.
- To coordinate long-term economic recovery efforts with the federal and state/provincial governments.
- To leverage federal and provincial/territorial resources, information, and leadership to attract outside private-sector investment.
- To coordinating the use of provincial/territorial and federal recovery programs, integrating them with private-sector efforts, and including NGO and private volunteer organizations, non-profit organizations, investment capital firms, and the banking industry.

Desired Outcomes

The Economic RSF seeks to achieve the following outcomes:

- Establishment of workforce development initiatives and creation and retention of jobs, without discrimination on the basis of race, color, national origin, religion, sex, age, or disability
- Establishment of entrepreneurial and business development initiatives
- Creation of community-wide economic development plans with broad stakeholder input that considers economic recovery and resiliency
- Development of strategies for quickly adapting to changed market conditions, reopening businesses, and/or establishing new businesses

- Development of business initiatives to employ workers and generate revenue
- Development of management plans to ensure the most effective use of outside funds
- Ability of private- and public-sector actors to receive information they need to make informed decisions about recovery

Leadership

The following agencies will be lead or support the Economic RSF:

Coordinating Agency

The CAO is the designated coordinating agency for the Economic RSF. It will provide leadership, coordination, and oversight for the RSF. It will also ensure communication and coordination between primary and support organizations.

Primary Agency

The Economic Development Department is the designated primary agency for the Economic RSF. It will orchestrate support and execute actions to accomplish the mission of the Economic RSF.

Supporting Agencies

The following organizations will provide support to the Economic Development Department to accomplish the mission of the Economic RSF:

- Planning and Development
- Infrastructure and Public Works
- Housing
- Human and Social Services
- Information Technology
- NGOs
- Business and trade associations
- Industry and business leaders
- Financial lenders

Pre-Disaster Actions

The Economic RSF should consider taking the following actions before a disaster occurs:

- Complete an inventory of current assets and economic drivers. This should include:
 - Demographics
 - Key industries and/or clusters
 - Key employers and their location
 - Labor and workforce characteristics
 - Buildings and infrastructure of economic importance
 - SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis
 - Current and future land-use and infrastructure development projects.
 - Local policy framework (e.g., building codes, local and state incentives and regulations, environmental mitigation policy, etc.
- Conduct scenario planning to evaluate various alternatives, such as redevelopment options, as well as impacts to various types of disasters
- Promote community and economic development planning in disaster recovery; encourage and facilitate this planning through all local agencies
- Incorporate planning for transitioning from response to recovery into preparedness and operational plans
- Review hazard mitigation plans and leverage mitigation efforts to create strong communities resilient to disasters
- Perform an economic vulnerability analysis to identify risk factors for economic recovery as well as those businesses and geographic areas that are most vulnerable
- Work to implement disaster-resistant building codes and incentivize commercial building owners, businesses, and individuals to undertake pre-disaster mitigation and preparedness activities

- Where appropriate, seek to promulgate resiliency policies and practices in agency programs and stakeholder operations
- Encourage the establishment of disaster information networks for local commercial building owners and businesses
- Consider planning for the establishment and operation of business recovery centres
- Collect, store, and protect data concerning the current condition of the local economy and update the data annually
- Understand what data will be required to obtain federal, provincial/territorial, and private-sector recovery assistance
- Develop a list of anticipated post-disaster recovery projects, including mitigation projects
- Develop a tiered reentry program for businesses
- Review existing policies and procedures for budget expenditures and project approvals, and propose procedures to expedite these processes after the disaster
- Conduct disaster recovery exercises to enhance skills and develop needed expertise

Post-Disaster Actions

The Economic RSF may undertake the following actions after disaster incidents:

- Activate the RSF, and notify lead and supporting departments/agencies
- Complete an independent economic impact assessment. The study should assess both physical (properties, inventory, etc.) and economic (loss of wages, taxes, etc.) damages to industry and the local and/or regional economy
- Produce a complete economic analysis that includes a detailed look at key industries, anchors, workforce characteristics, transportation, and infrastructure has been impacted by the disaster. It should also provide insights into the current state of the economy, whether economic development targets should be reevaluated, offer

a better understanding of the community's competitive positioning, and lay a foundation for long-term economic development efforts.

- Review existing strategic plans and studies to determine the extent to which they need to be updated to reflect the new realities on the ground.
- Evaluate existing business development targets and revisit economic issues faced by the community before the disaster. While certain economic issues could have exacerbated following the disaster, others might become irrelevant.
- Solicit information and input from the working groups as well as the community at large.
- Conduct focus groups around key topics to help identify specific challenges and opportunities for the community's long-term economic recovery.
- Hold an economic redevelopment charrette with various stakeholders (economic developers, planners, local government, businesses, citizens, etc.) to develop strategies for specific geographic areas like downtowns, industrial park(s), and the neighbourhoods most impacted by the disaster.
- It is important that all economic stakeholders understand the findings of the economic analysis before any action steps are proposed or implemented. A deep understanding of the current situation, as well as the long-term vision for the community, will provide critical insight on how the community should move forward
- Create an action plan with strategies- Intelligence gathered through your economic analysis serves as the basis for the development of the community's long-term economic recovery plan. Specific action strategies and tactics should be developed to provide direction on economic recovery priorities. A phased approach to economic recovery where clear goals and objectives are set for the short-, medium-, and long-term should be developed. Emphasis should be placed on long-term goals, which could be 10 years, 20 years, or longer depending on the extent of damage. At the same time, strategies should be specific and include measurable outcomes to monitor progress and provide adequate guidance for the implementing agencies regarding what is expected. Assign appropriate organizations to take ownership of and carry out each task. Ensure

these organizations have the resources—in terms of in-house capacity, ability, and finances—to carry out the tasks. Business retention and expansion (BRE) should be addressed before any recruitment efforts take place. Existing businesses are the ones that are most likely to rebuild the economy. In addition, programs and policies supporting new business development and entrepreneurs should be established. Not only will these programs complement BRE efforts in the community, but they are also likely to spur job growth and private investment in the community.

- Apply and integrate pre-disaster plans to effectively leverage outside resources and available programs to meet local community recovery needs while aggressively integrating with the private sector to facilitate early and productive engagement
- Develop an interagency action plan to ensure coordinated action of departments, stakeholders, and supporting entities in support of local communities
- Conduct damage and needs assessments throughout the recovery phases
- Incorporate mitigation measures into redevelopment plans after a disaster to rebuild a stronger community and minimize future risk
- Build on relationships developed during pre-disaster planning, and work closely with local community representatives to offer technical assistance and information related to economic development
- Maintain robust, accessible stakeholder communication throughout the recovery process to ensure ongoing dialogue and information sharing
- Establish a business recovery hotline and business recovery centre
- Establish a private-sector liaison to support the recovery of commercial and industrial centres as well as critical businesses
- Review and implement new post-disaster budget and project approval processes

Issues or Constraints

The following issues or constraints have the potential to negatively impact the effectiveness of the Economic RSF efforts:

- Damage or disruption to banking services
- Legislative requirements that limit future growth opportunities
- Failure to recognize post-disaster opportunities to rebuild the community
- Failure to include business restoration and new business development in recovery planning
- Failure of some businesses to conduct business continuity planning
- Failure to establish an objective means by which to prioritize the funding of recovery projects and/or community assistance
- Lack of sufficient and convenient housing for the recovery workforce
- Loss of tax-based revenue and fee-generating government operations

Integrating and Updating Your Plan

The Economic RSF is one of six plans that should be addressed by a community in advance. It is part of a larger comprehensive Disaster Recovery Framework planning effort, and should be linked to other community plans to ensure consistency. Local government leadership should adopt the DRF and subsequent RSF plan to increase awareness and ensure implementation.

The plan should also be revisited regularly, preferably on an annual basis. One of the greatest benefits of the planning process is the collaboration and relationships that are created in advance amongst stakeholders. Convening stakeholders annually to evaluate and update the plan should continue to foster these connections. For example, many plans in Florida are updated ahead of the annual hurricane season, whereas major revisions and rewrites are conducted every five years.

Greensburg, Kansas, Long-Term Community Recovery Plan (LTCRP)

Following an EF-5 tornado in May 2007, Greensburg, Kansas was faced with the challenge of rebuilding its economy although its population of less than 1,400 was halved by the disaster. The tornado caused serious damage to 90 percent of the structures in the community. Though insurance companies paid substantial claims, most plans only covered the value of the buildings. Because of the aging building stock, substantial subsidies were necessary to rebuild.

The community undertook a detailed comprehensive planning process to develop the LTCRP. The plan recommended the creation of a Sustainable Development Resource Office, building all public facilities to LEED-Platinum level, and creating a Greensburg Green certification program. The plan emphasized that rebuilding Greensburg in a sustainable manner will not only reduce long term financial expenses but also create a tourism draw. By blending past tourist attractions with a sustainable living model, Greensburg hopes to attract an increasing number of tourists, lengthen stays, and create an economic driver.

The LTRP included an outline of action steps necessary for developing a comprehensive economic development plan. The recommendations include a 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 a tourism director and an economic development director.

For more information on Greensburg please see Case Study Appendix 4.

Case Study: Jefferson Parish Alters their Strategic Plan after Katrina

Jefferson Parish Economic Development Commission (JEDCO) had only recently completed an update to its five-year plan, Jefferson EDGE 2010, when Hurricane Katrina wreaked havoc along the Louisiana and Mississippi Gulf Coast. A community adjacent to New Orleans, Jefferson Parish received significant damage to its commercial and industrial space after Katrina and Rita. It was apparent that the effects of these hurricanes on the local and regional economies would be far reaching. Therefore, JEDCO decided to re-examine its economic development strategic plan only two months after the storm. They convened a meeting between their organization and the Jefferson Business Council and had a large amount of participation from the business community. They updated it with additional short- and long-term measures to support business recovery and long-range economic development, and the parish council quickly adopted the plan.

The revised plan, The Jefferson EDGE 2010: Road to Recovery, was released by the end of 2005. The plan has since been replaced by a more recent strategic plan, (Jefferson Edge 2020) but it is still available on the JEDCO website: www.jedco.org.

region's ability to withstand or avoid a shock. Responsive initiatives can include establishing capabilities for the economic development organization to be responsive to the region's recovery needs following an incident.

Some examples of steady-state economic resilience initiatives include:

- Engaging in comprehensive planning efforts that involve extensive involvement from the community to define and implement a collective vision for resilience that includes the integration and/or alignment of other planning efforts (e.g., hazard mitigation plans) and funding sources;
- Undertaking efforts to broaden the industrial base with diversification initiatives, such as targeting the development of emerging clusters or industries that (a) build on the region's unique assets and competitive strengths; and (b) provide stability during downturns that disproportionately impact any single cluster or industry;

Factoring In Economic Resilience

At the regional or community level, economic development practitioners are instrumental in building capacity for economic resilience. Economic development professionals and organizations often become the focal point for post-incident coordination, information dissemination, responding to external inquiries, and the lead grant administrator for federally-funded recovery initiatives. In building economic resilience, it is critical that economic development organizations consider their role in the pre- and post-incident environment to include steady-state and responsive initiatives. Steady-state initiatives tend to be long-term efforts that seek to bolster the community or

- Adapting business retention and expansion programs (e.g., economic gardening or other enterprise supports) to assist firms with economic recovery post-disruption;
- Understanding resiliency best practices for key industries in the regional economy;
- Building a resilient workforce that can better shift between jobs or industries when their core employment is threatened through job-driven skills strategies and support organizations;
- Maintaining geographic information systems (GIS) that link with municipal business licenses, tax information, and other business establishment data bases to track local and regional “churn” and available development sites. GIS can also be integrated with hazard information to make rapid post-incident impact assessments.
- Promoting business continuity and preparedness (i.e., ensuring businesses understand their vulnerabilities (including supply chains) in the face of disruptions and are prepared to take actions to resume operations after an event); and
- Employing safe development practices in business districts and surrounding communities, such as locating structures outside of floodplains, preserving natural lands that act as buffers from storms, and protecting downtowns and other existing development from the impacts of extreme weather.

Some examples of responsive economic resilience initiatives include:

- Conducting pre-disaster recovery planning to outline key stakeholders, roles, responsibilities, and key actions;
- Establishing regular communication and monitoring of business community needs and issues (which can then be utilized after an incident);
- Establishing/utilizing a capability to contact key local, regional, state, and federal officials to communicate business sector needs and coordination impact assessment efforts; and
- Establishing/utilizing coordination mechanisms

and leadership succession plans for short, intermediate, and long-term recovery needs.

Community Resilience Models

Project Impact

Project Impact was developed by U.S. Federal Emergency Management Agency (FEMA) Director James Lee Witt in the late 1990s. Fundamental to the program was the belief that the key to building a disaster resistant community was mitigation. In order to build a disaster resistant community, it was essential to identify and mitigate risks before a disaster happened. The program proved early on that steps taken to identify and mitigate risks helped ensure the safety of citizens, decreased property damage to facilities and accelerated economic recovery. It was found that for every \$1 USD invested in upfront mitigation, a community could save \$4-7 USD in economic recovery costs.

Project Impact helped mobilize municipal leaders to build relationships with voluntary organizations, business groups, and critical infrastructure managers; conduct needs assessments; share information; build trust; and, practice managing different scenarios that might arise. The initiative promoted total community involvement, and brought together stakeholders to create a mutual learning and assistance network, identify needs, and promote long-term recovery, transformation and resilience (LTR).

Project Impact showed any community could become a disaster resistant community. Perhaps the greatest proof of concept occurred on February 28, 2001, when Washington State experienced a 6.8 earthquake, one of the largest in the state’s history. Thanks to Project Impact communities in the impact zone had identified and retrofitted the most vulnerable infrastructures they knew were at risk, and didn’t need a taxpayer bailout. At its peak, there were 250 Project Impact communities participating in the program across the U.S. with more than 1,000 business partners involved. Unfortunately, in 2001, the project was cancelled by President Bush.

Resilience READY©

In 2018, a new model was developed by the Institute for Sustainable Development (ISD)²⁷ in order to provide communities with a comprehensive suite of prevention and mitigation expertise, as well as preparedness,

²⁷www.isdus.org

response and recovery services. This model helps communities develop and implement a comprehensive community-wide approach to disaster resilience. Resilience is not just about getting the relationship between the built and natural environment right; human and social networks are also key. Government and business continuity managers soon learn that they may have excellent workplace processes in place, but they are still stymied if their citizens and employees are facing medical emergencies, their kids can't go to school, or their neighborhoods are devastated.

Resilience READY® integrates the following five key elements: Risk Identification, Engagement of Leaders, Adoption of Best Practices, Designing a Plan, and facilitating Your Participation in an International Network (READY). It is not tied to any government or political party. It is a bottoms-up approach where the "whole of society" is dominant, integrated with a needs assessment and systematic process of stakeholder engagement. Its key deliverables are:

- A local, cross-sector community stakeholder network
- A Resilience Needs Assessment report
- Prioritization by community leaders of projects they commit to work on
- A proposed work plan/recommendations to address key priorities

Its ultimate goal is to help communities enhance their resilience capabilities through a multi-pronged approach that leverages partnerships and networks in a cost-effective manner. It involves working with the private sector and civil society organizations to create regional networks and partnership hubs to help participant communities leverage non-government resources. It is believed that as more communities participate in this framework they will be able to share information about best practices, build up goodwill, and explore additional ways to support each other through mutual assistance agreements. In the U.S., the buddy system that was piloted in Project Impact led to Galveston helping Cedar Rapids, Cedar Rapids helping Nashville, Tuscaloosa helping Joplin, and so on, as leaders from one community shared their experiences with others going through similar disasters.

100 Resilient Cities (100RC)

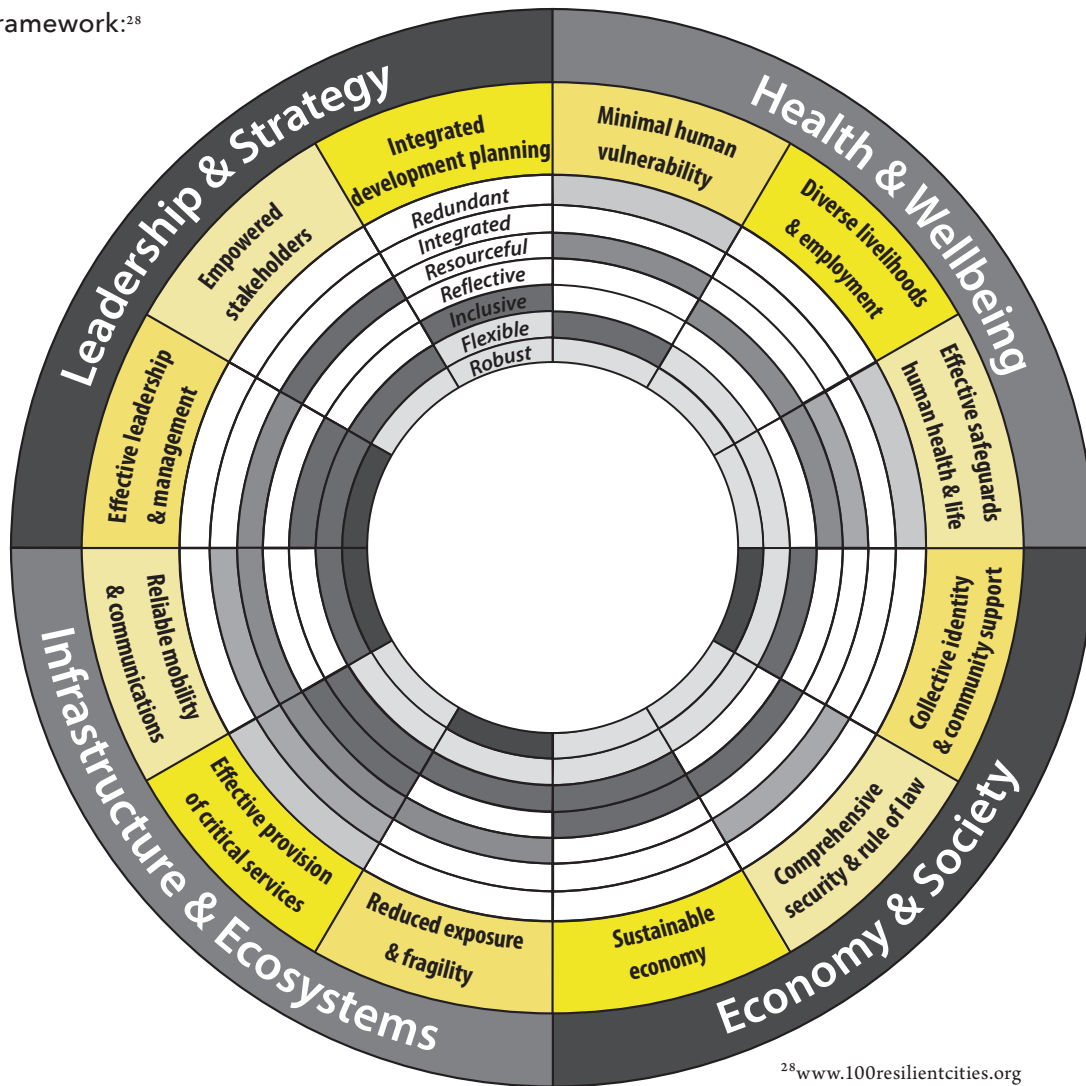
Pioneered by The Rockefeller Foundation, 100RC is dedicated to helping cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. It incorporates a view of resilience that includes not just the shocks (e.g., earthquakes, fires, floods, etc.) but also stresses that weaken the fabric of a city on a day to day or cyclical basis. Examples of these include high unemployment; an overtaxed or inefficient public transportation system; endemic violence; or chronic food and water shortages. By addressing shocks and stresses, a city becomes more able to respond to adverse events, and is overall better able to deliver basic functions in both good times and bad, to all populations.

Cities in the 100RC network are provided with the resources to develop a roadmap to resilience along four main pathways:

1. Financial and logistical guidance for establishing an innovative new position in city government, a Chief Resilience Officer, who will lead the city's resilience efforts
2. Expert support for development of a robust Resilience Strategy
3. Access to solutions, service providers, and partners from the private, public and NGO sectors who can help them develop and implement their Resilience Strategies
4. Membership of a global network of member cities who can learn from and help each other.

100RC aims to help individual cities become more resilient, and facilitate the building of a global practice of resilience among governments, NGOs, the private sector, and individual citizens. It is financially supported by The Rockefeller Foundation, managed by Rockefeller Philanthropy Advisors (RPA), by an independent 501(c)(3) nonprofit organization that provides governance and operational infrastructure to its sponsored projects. 100RC has staff and offices in New York, London, Mexico City, and Singapore to support the work in cities across regions. In Canada, Montreal, Vancouver and Calgary are participants. All of the participants are large urban areas.

The 100RC Framework:²⁸



²⁸www.100resilientcities.org



Chapter IX: Infrastructure & Building Back Better

Overview

Among the many challenges in recovering from a disaster is repairing and redeveloping damaged buildings and infrastructure. Depending on the type and scale of disaster, infrastructure damage may be underground (e.g., water pipes, natural gas lines or telecommunications cables), above ground (e.g., electricity lines, bridges, roads, levees and water treatment plants), or both. In addition to infrastructure, homes, businesses and community facilities may also be damaged or destroyed. Homes might need to be removed out of a flood plain, structures may need to be rebuilt to better withstand earthquakes or hurricanes, and communities may need to be relocated to a different location.

Though enduring and recovering from a disaster is a difficult process, in many cases, leaders find the opportunity for community improvement. Redevelopment after disasters in the U.S. has been used to revitalize downtowns, reduce vulnerability to future damage, replace damaged and inadequate infrastructure, replace affordable housing and preserve historic buildings²⁹. These and other rebuilding strategies also can be unprecedented opportunities to leverage economic growth.

Post-disaster redevelopment planning presents the following paradox: The need to act quickly to restore normalcy, reduce uncertainty and build confidence, co-exists with the need to make carefully considered

decisions about land use, risk, and infrastructure. Rehabilitation of public facilities is needed to attract private investment, yet the decisions made in the first 18 months after a disaster will impact a community's growth patterns for decades³⁰.

Economic developers have an important role to play in this process. After a disaster, public officials are immediately concerned with public safety and cleanup, and rightly so. However, economic developers can help maximize the potential for community improvement in the recovery and rebuilding process by focusing on larger, long-term strategies for economic growth and business success. For example, when a damaged bridge is rebuilt, they can advocate for the inclusion of a secondary access road to make a local industrial park more marketable; or implementation of a long-desired street redesign when water and sewer lines are replaced downtown; or a new parking garage in a damaged area to accommodate denser future development.

²⁹Olshansky, R. B. (2005). How do Communities Recover from Disaster? A Review of Current Knowledge and an Agenda for Future Research, University of Illinois at Urbana-Champaign. Presented at 46th Annual Conference of the Association of Collegiate Schools of Planning Kansas City, October 27, 2005. Retrieved from: <http://cbr.tulane.edu/PDFs/ACSP%20Disaster%20Recovery%20Oct05%20Olshansky.pdf>

³⁰City of Grand Forks, North Dakota (2011). Grand Forks Flood Disaster and Recovery Lessons Learned [Working Document]. Retrieved from: <http://www.grandforksgov.com/home/showdocument?id=528>



Key Principles for Post-Disaster Redevelopment and Infrastructure Planning

Determine your List of Economic Recovery Challenges

After a major disaster, full consequences to the local and regional economy may be very difficult to determine for days, weeks, and even months after the incident. Often, consequences are not readily or reliably known through common economic indicators (e.g., unemployment, GDP, or tax revenues) because of delays in the collection of these indicators and the difficulty in determining causality. Instead, redevelopment and infrastructure planning should be informed by the issues currently impacting the community and the region so that addressing them may provide some relief. The odds are that infrastructure or redevelopment issues that arise after one disaster will reappear after a later disaster if they aren't addressed.

Develop your List of Strategic Projects

Ideally, strategic projects come from your recovery plan developed ahead of time, linked to your existing comprehensive land-use plans, economic development strategy and mitigation plan. However, if your community does not have a post-disaster redevelopment plan in place you will have to create one. An efficient, timely process is critical for developing a list of projects and making funding plans and requests.

Incorporate Critical Infrastructure

Critical infrastructure supports the security, public health, and safety of the community. They include assets, systems, and networks necessary for a fully functioning community. For example:

- Power grids and networks
- Water and sewer systems
- Transportation corridors
- Communication systems

When infrastructure is being restored, economic developers need to ensure it is supporting economic disaster recovery as well. For example, there may have been inadequate infrastructure servicing key areas

prior to the disaster. The cost-effective time to upgrade your power system, water or sewer main, or information and communications networks is during the rebuild process. In a post-disaster environment, you may have an opportunity to install new infrastructure like broadband or fiber optics to support more advanced communications. In this case, the disaster has given you a chance to build back better.

Build Public-Private Partnerships

Since the private sector owns between 80 and 90% of critical infrastructure³¹, there are often opportunities for the public sector to partner, provide assistance, and even access to financial incentives for owner-operators to rebuild more quickly and/or to consider certain public good outcomes in their recovery, such as incorporating resiliency.

Build Back More Resilient

The opportunity to redevelop in a way that increases public safety, protects critical infrastructure, and mitigates hazards is a silver lining after a disaster. In the U.S., the Infrastructure Security Partnership (TISP) Regional Disaster Resilience Committee, comprised of more than 100 practitioners, policy makers, and technical and scientific experts from across the nation, developed *Regional Disaster Resilience: A Guide for Developing an Action Plan*. The Guide provides a highly detailed way to look at resiliency, providing a strategy to develop the necessary level of preparedness for communities to manage major disasters in today's complex and interdependent world.

As stated in the previous chapter, resilience is about increasing a community's resistance to costly damages and disruptions to life and property, as well as strengthening a community and its potential for economic growth. Here are some examples:

- After the Loma Prieta earthquake, which struck Santa Cruz, California, in 1989, five bridges across the San Lorenzo River were replaced in order to reduce their chances of failure in a future earthquake. They also were built higher to decrease the risk of flooding in downtown. In addition, historic masonry buildings that survived were reinforced, and new structures built to meet the seismic code.

³¹The Telecommunications Industry Association (n.d.). *Securing the Network: Cybersecurity Recommendations for Critical Infrastructure and the Global Supply Chain*. Accessed at <http://www.tiaonline.org/policy/securing-network-cybersecurity-recommendations-critical-infrastructure-and-global-supply-i>

- Following the 2008 flooding of Cedar Rapids, Iowa, the city successfully lobbied the Iowa state legislature for the creation of the Flood Mitigation Program, which allows the recapture of sales tax growth to help fund flood protection projects on both sides of the river. Also in Cedar Rapids, the federal government provided \$4 million for the construction of new steam production facilities for Mercy Medical Centre, in order to curb rising energy costs and to locate above 500-year flood levels.
- When the Red River flooded Grand Forks, North Dakota, in 1997, approximately 12,000 homes and properties were damaged. To prevent future property damage, houses and streets that once abutted the river were bought out and replaced by a greenway. The greenway was part of a new, permanent flood-protection project that also included a sophisticated system of water diversion and a larger, higher earthen levee system.
- In Cedar Rapids, its flood protection system raised the flood wall at the Quaker Oats plant to protect it against flooding similar to that suffered in 2008.
- In Grand Forks, the city built a corporate centre to replace burned-out office space, provide a downtown anchor, and encourage others to rebuild.
- Corridor improvements proposed for Lyons, Colorado, after its devastating flood in 2013 were planned to improve the aesthetics of the town, improve safety, increase bicycle use and improve parking, and provide multi-modal paths to connect blighted commercial areas and residential neighbourhoods to the central business district.

Build Back for Economic Impact

You should also take the opportunity to improve the quality of development, and coordinate land use and infrastructure in a way that can leverage future economic growth. Economic developers should focus on finding opportunities to build back for economic impacts that will persist beyond the rebuild period. The difference between economic impact and economic activity are often confused as interchangeable after a disaster. This is not the case. There are often very noticeable and high-expenditure rebuilding efforts that produce substantial economic activity through construction, hiring tradespeople, and replacing lost inventory or equipment.

- In the case of Santa Cruz, where 27 commercial buildings in the historic downtown had to be demolished, the community wanted to maintain the downtown's historic character and role as a social and cultural centre, but also bring in a weekday population to support small retailers and restaurants. As a result, one of the city's redevelopment goals was to rebuild as much downtown office space as possible. Part of its strategy was to increase height limits to five stories. Santa Cruz rebuilt its downtown streets with wider sidewalks, outdoor public spaces, and other improvements, including a conduit for easy installment and repair of telecommunication lines in the future to be used for broadband Internet delivery.

Conclusion

The time just after a disaster is difficult under the best of circumstances, and depending on the magnitude of the event, can continue to be so for months or even years. In this time of stress and uncertainty, however, is a window of opportunity to make changes that result in a more physically resilient, economically vibrant community over the long term. By remaining focused on the big picture and the potential impact of catalytic infrastructure and redevelopment projects, economic developers can ensure that this opportunity isn't missed.



Chapter X: Neighbourhood Revitalization Post-Disaster

Introduction

What happens at the neighbourhood level has a profound impact on people's lives. Whether neighbourhoods move forward economically is largely dependent upon its residents, businesses, and property owners. It is important to create a framework for these stakeholders to co-exist in a valuable, mutually supportive manner, while working together to create and sustain a vibrant, energetic neighbourhood.

Sometimes disasters severely impact particular neighbourhoods. In those cases, business recovery

depends on an integrated redevelopment of the neighbourhood. In other cases, neighbourhoods that were economically challenged prior to the disaster will have greater difficulty recovering due to a pre-existing lack of financial resources and stability. In the wake of a disaster, economic developers have the opportunity to leverage community engagement in the disaster recovery process into full neighbourhood revitalization in order to support a stronger business climate.



Neighbourhood Revitalization and Recovery Efforts

After a disaster, existing, emerging, private, institutional, and public organizations mobilize to meet recovery needs. By its very nature, neighbourhood revitalization processes integrate a wide variety of stakeholders and stakeholder needs. The most successful processes let each partner bring their resources to bear, weaving them together in support of a shared vision and assessment of community needs.

Neighbourhood revitalization is often a component of an economic developers' recovery work, where businesses in the impacted neighbourhood are a subset of their inventory. In this case, they are able to bring the strength of their existing knowledge base and resource offerings to support neighbourhood development.

This chapter first reviews the particular challenges and opportunities during disaster recovery in a pre-existing distressed neighbourhood. It then outlines the following neighbourhood recovery processes:

- Mobilizing the community/neighbourhood for change
- Assessing neighbourhood need
- Developing a shared vision
- Potential organizations to drive planning strategies
- Putting together a Neighbourhood Revitalization Plan

It also identifies particular revitalization opportunity areas in disaster recovery, including: infrastructure, streetscape and façade improvements, incentive zoning and permitting, and disaster recovery funding. The final section reviews communication strategies that support the success of this work. Note that all implemented strategies must be tailored to the contexts of their respective communities. Not all disasters present the same challenges to communities, and distressed neighbourhoods are frequently characterized by particular, pre-existing economic development challenges.

Challenges and Opportunities

Neighbourhood revitalization in the wake of a disaster

requires local economic development projects to nurture and accrue individual and collective assets for the community. Often, a holistic approach, utilizing both traditional and non-traditional economic development activities, is required. Such an approach requires a revitalization plan that addresses socioeconomic needs, including a focus on local points of social conflict, barriers to entrepreneurship, barriers to affordable housing, infrastructure status, chronic vacancy, crime rates, unemployment rates, workforce issues, and the neighbourhoods' history.

The following challenges and opportunities provide a baseline of questions and criteria that are useful when conducting a holistic assessment of the neighbourhoods' post-disaster needs:

Challenges

Neighbourhood revitalization and disaster recovery are two separate, specialized economic development undertakings. Integrating the two processes presents the following unique challenges:

- **Pre-disaster conditions:** Pre-disaster conditions and issues are exacerbated post-disaster, making revitalization a challenge. Disasters bring stress to those impacted directly and indirectly. This stress elevates tensions, pushing previous issues to a heightened level, such as crime, class or social issues. Disasters can also cause blight with increased vacancies, crime, and closing of neighbourhood businesses or community centres.
- **Lack of capacity:** If a neighbourhood was in need of revitalization before a disaster; it was usually because there was a lack of community capacity. Recovery barriers exist if there is a lack of formalized, active neighbourhood groups available to disseminate information or provide necessary leadership.
- **Neighbourhood-oriented commercial activity overlooked:** Neighbourhood-oriented commercial activity competes for public and private sector attention when an active central business district exists. Downtown districts are perceived as highly visible symbols to the public sector; therefore, pre-disaster and post-disaster efforts tend to be directed to downtown areas, not surrounding neighbourhoods. This makes it hard to develop awareness of surrounding neighbourhood needs, including funding, capacity or other issues.

- **Difficulty seeing revitalization potential:** It may be hard for local residents to see the potential for their distressed neighbourhood. They must be encouraged to get involved. Many will not be able to see the neighbourhood as anything other than what they have known.
- **Small neighbourhood businesses hit hard:** Many neighbourhood businesses are locally-owned family businesses. This presents challenges especially if the family's home is in the same impacted area. Taking on additional debt for recovery may not be possible, forcing families to abandon the business. This is especially true if the neighbourhood is impoverished where cash reserves are low, and sales cannot support additional debt.
- **Divisive social lines:** In many distressed neighbourhoods social and class issues exist. During recovery, increased tensions can make a neighbourhood even more divisive. One class may yearn for a certain type of recovery that doesn't represent the neighbourhood equally. These challenges require identifying divisive lines or broken social networks, and developing programs to address these issues.
- **Ability to rehabilitate or repurpose existing neighbourhood assets for new purposes:** Every neighbourhood has assets. In a post-disaster situation these assets can serve new purposes. This includes vacant spaces or buildings, which can be used to house (temporarily or permanently) city services, offices, or businesses. Increased vacant land can also allow for large development projects or increased green space.
- **Ability to improve quality of life:** A blighted neighbourhood hurts a city and its residents in many ways. When property values are reduced, it directly impacts the city's tax base. Disasters present the opportunity for revitalization, resulting in increased property values and quality of life.

Getting Started - Mobilize for Change

In a post-disaster situation, efforts need to be organized while the disaster is still front and centre in people's minds. The daunting task of recovery and revitalization requires a collaborative effort from multiple parties. Committing to a specific recovery strategy is not required immediately after a disaster; however, ensuring the neighbourhood and its unique needs are included from the start is an important first step in neighbourhood revitalization. In order to mobilize for change, it is important to identify relevant stakeholders and assess revitalization needs.

Identify and Engage Relevant Stakeholders

- **Identify key stakeholders:** It is important to ensure the neighbourhood is properly represented so recovery efforts can be easily organized.
 - **Individual residents:** Drivers of redevelopment and primary stakeholders. They participate in neighbourhood organizations, provide input for planning efforts, attend neighbourhood meetings and hearings, and support local businesses.
 - **Neighbourhood groups and associations:** Include local development companies, local business development organizations, religious groups and local community centres. They represent neighbourhood interests and provide capacity for redevelopment.

Opportunities

While distressed neighbourhood revitalization post-disaster presents many challenges, it also presents unique opportunities that can be used to an advantage, including the:

- **Opportunity to re-group, re-connect, and re-focus:** Disasters enable everyone impacted to relate to the same issues and pains of recovery. This common bond provides an opportunity for them to re-group, re-connect, and re-focus on important neighbourhood issues.
- **Ability to prevent the economic impact of a disaster from spreading:** Economic impacts of a disaster can easily spread to other areas when people abandon their houses and businesses and go to other areas. Your recovery program presents an opportunity to stop and eliminate this spread. This is especially appealing to surrounding neighbourhoods and residents who may be concerned with their property values declining.

- **Economic development professionals:** They can provide information on needs, be a catalyst and advocate for change, connect the community to resources, educate public and other officials, as well as be a visionary to assist with neighbourhood revitalization.
 - **Local government:** Various departments and agencies have many responsibilities in neighbourhood economic development. They provide resources for disaster recovery, support strategies for revitalization, and collaborate across departments and agencies. They recognize individual neighbourhood needs, enforce housing codes to fight blight and vacancy, streamline the permitting process, and work with community organizations to stimulate neighbourhood confidence.
- **Identify a revitalization champion(s):** In order to be successful, a revitalization champion or champions should be identified. This allows for an individual or organization to be the point of contact and resource, allowing one stream of clear communication. Identifying local residents as champions can occur at neighbourhood meetings, and empower individuals who have a vested interest in their neighbourhood.
- **Gather residents to spur interest and educate:** Gathering local residents of distressed neighbourhoods doesn't have to require long preparation. Meeting right after a disaster can allow the opportunity to educate residents on resources available for recovery and on the goals to revitalize a neighbourhood. This can also help ease abandonment of properties in the neighbourhood by showing property owners revitalization is in the works, and plans to improve the neighbourhood will be developed. Just knowing efforts will happen to improve the neighbourhood can be a powerful message to persuade residents to stay.
- **Clarify roles and responsibilities:** Neighbourhood revitalization strategies require a commitment of numerous participants, including residents, neighbourhood institutions and organizations, and economic developers. These roles and responsibilities may have changed from the pre-disaster situation. Adapting to the new environment will enable a more cohesive revitalization.

Assess Revitalization Needs

Assessing revitalization needs can begin during the initial organization of efforts, visioning, or recovery planning process. Ideally it happens before people and businesses leave a neighbourhood permanently. Assessing needs in a distressed neighbourhood post-disaster requires additional work as compared to a regular post-disaster assessment. While the assessment doesn't have to be a long intensive process, it should be done at the local level if resources allow.

Be wary of over-assessment. People can get weary of having multiple assessments post-disaster. If this happens, assessment results will not be true. In that case, other informal evaluations can occur such as casual one-on-one meetings. The overall goal is to identify specific needs or barriers that exist in a neighbourhood in order to complete revitalization. Information collected can include key neighbourhood assets to reopen/preserve, neighbourhood values, prior issues/barriers that may arise again, neighbourhood-wide recovery needs, and property status.

Tools to Assess Revitalization

Business outreach

Businesses require special attention during recovery to identify their needs and issues. Ways to identify needs and issues can include online or paper surveys, phone, or in-person meetings. Examples of information to collect, regardless of format include:

- Estimates of property and/or equipment damage
- Economic activity loss
- Workforce disruption and loss
- Utility disruption
- Loss of suppliers
- Loss of customers
- Financial and technical assistance needs

A business or community survey is also a great way to gather information on issues facing the neighbourhood. Qualitative and quantitative information can be used to formulate issues, gather ideas for redevelopment, and gauge what is valued in the neighbourhood. Groups like

the economic development organization, chamber or other business group can implement the survey. Whoever is chosen should have a level of trust and relationship with recipients to ensure a more accurate response. A sample business survey can be seen in *Resource Appendix 5*.

It is also important to meet with business owners in an impacted area as soon as possible to obtain information that may be missed from a survey or online form. Business owners are under extreme pressure. They need to know what is happening as soon as possible in order to make critical business decisions going forward. If your organization has the capacity, or a limited number of businesses were impacted by the disaster, having one-on-one meetings with business owners can provide a wealth of knowledge. Hearing personal anecdotes can be fruitful in identifying needs you can address during the revitalization planning process. Meeting in person, whether in small groups, at neighbourhood business meetings, or other forums will open communication channels of needs and issues, and allow your organization to build, mend, or create a relationship that will be useful later.

Neighbourhood Asset Mapping

Neighbourhood asset mapping shows various assets and highlights interconnections between them. Assets are not only physical assets, but they include relationships, cultural mapping, and human capital. This mapping process can be completed at the city level, and doesn't have to be very detailed if staff time is already being stretched thin. While there is no one right way to complete neighbourhood asset mapping, for more information, and to see a sample structure refer to The Asset-Based Community Development Institute (<https://resources.depaul.edu/abcd-institute/Pages/default.aspx>) or the Southern Rural Development Centre community asset mapping guide (http://www.nebhands.nebraska.edu/files/227_asset_mapping.pdf).

Neighbourhood Meetings

Another way to gather input is through local community meetings, especially when residents are looking for answers on how to recover. This is also a way to distribute a business or community survey and receive immediate personal feedback. Case Study 8: Beacon of Hope Resource Centre is an example of how community volunteers were used to identify property vacancy status.



From: Kretzmann, J. P., & McKnight, J.L. (1993). *Building Communities from the inside out*. Center for Urban Affairs and Policy Research, Northwestern University Press.

Develop a Vision

To build support for neighbourhood revitalization, all stakeholders need to start building a vision. Without the engagement of local residents, success will face grim survival odds. Building a vision and engaging local residents creates a sense of ownership, including its various challenges and proposed interventions.

Distressed neighbourhoods can have divisive lines or a shattered social network. Having a shared disaster experience provides a common ground for residents to connect. It allows them to begin the physical rebuilding process as well as build a new identity and connectedness of a neighbourhood.

To jump-start the process, a visioning meeting should be organized to engage residents and revitalization partners. An example of this is highlighted in the spotlight box of Broadmoor. Potential exercises include charrettes or other activities that get attendees identifying issues in their neighbourhood and begin developing a vision of what it can become.

Identify Revitalization Organization

The first two steps of recovery are mobilizing the neighbourhood for change and assessing revitalization to help feed a planning strategy. The purpose of a planning strategy is to guide the vision and provide a framework from which revitalization decisions can be made. Many of the strategic planning processes as outlined in the Strategic Planning chapter of this toolkit can be tailored to neighbourhood revitalization.

Below, a few select strategies are discussed. Choosing one of these strategies will not facilitate revitalization alone, but coupled with neighbourhood support and partnership with other local stakeholders it can be a good start. Other organizations can undertake a recovery planning process such as a business improvement district or special assessment area. Choosing which organization works best for you should be completed in the “identifying initial stakeholders” stage. After a disaster, many things will change, but a planning strategy and the lead delivering organization should account for this by being flexible while outlining a framework for the revitalization to continue.

Neighbourhood Revitalization Task Force

A redevelopment or revitalization task force is a group of key neighbourhood stakeholders and community

stakeholders. Developing a task force/coalition of neighbourhood-based actors that can pool financial and human resources is one effective way to take advantage of the neighbourhoods’ existing resources. The scope of the task force can vary depending on neighbourhood need. It can be used to oversee revitalization efforts, or to bring neighbourhood level needs to agencies’ and local government’s attention. A task force is beneficial in that it can provide local insight on neighbourhood issues and work specifically to address these issues.

One of the first steps in creating a redevelopment task force is to identify stakeholders who will be members. This can include residents, neighbourhood organizations, government officials, and professionals with potentially relevant skills. Residents can be gathered from the visioning meeting or a neighbourhood rally meeting. If there is no interest or a lack of stakeholders, bring in nearby neighbourhood stakeholders or organizations and explain how issues in the impacted neighbourhood will directly affect or spread to the surrounding area and city unless work is done. An additionally important step is to define the scope of the task force work. This will enable the task force to stay on track, and defines goals that can be described to outside parties.

Guiding steps for forming a task force:

- Involve stakeholders of the public and private sector with varying skills. Liaisons to other recovery strategies and neighbourhood representation are just as important.
- Identify clear goals and scope of the task force, including who they report to, who reports to them.
- Give the task force a voice. Identify representatives who can speak on behalf of the force to city, regional, and state officials.
- Partner with an enforcing power. Partnering with a City office or other organization allows the task force to use established organizations’ representations to enforce planning steps and reach out during the planning effort.

Create a Main Street Program

A Main Street program is a great tool for neighbourhood revitalization because it can focus resources on a specific area. Even though the words

“Main Street” are in the title, it doesn’t mean they only work in downtown’s main streets. For example, the highlighted case study of Cedar Rapids was a commercial area south of the city’s downtown. They were able to secure Main Street status, and as seen in the profile, assisted with the successful revitalization.

As a unique economic development tool, the Main Street Four-Point Approach® is the foundation for local initiatives to revitalize their districts by leveraging local assets—from cultural or architectural heritage to local enterprises and community pride. It is a comprehensive strategy that addresses the variety of issues and problems that challenge traditional commercial districts.³² The four points are Organization, Promotion, Design, and Economic Restructuring.

In Canada, the National Trust for Canada³³ operates the Main Street program. First launched in 1979, the National Trust’s trademarked Main Street Regeneration Approach® has helped hundreds of Canadian communities. Beyond economic benefits for downtown businesses, this approach fosters innovation, renews a sense of place, and strengthens a community’s pride by building on the physical, cultural and human assets in a downtown area. Its Main Street® approach emphasizes the importance creating a dynamic quality of life downtown by simultaneously focusing equally on its social, cultural, physical and economic health. It also puts the community in charge of developing and implementing a comprehensive revitalization plan that meets their needs. Strategies and actions are then implemented in five key areas: marketing and promotion, organizational development, cultural development, design and economic development.

Neighbourhood Revitalization Plan

One of the most common strategies for neighbourhood revitalization is to develop a plan that guides and organizes ongoing efforts. It should capture the vision, identify current issues, define action steps, and propose a structure.

Initiatives and Strategies for Revitalization

- Identify and map blight to better understand the sprawl over time and use as a tool for advocacy. Beacon of Hope in New Orleans used volunteers and donated software to map all parcels in the neighbourhoods (See Beacon of Hope Profile in Case Study Appendix 8)
- Organize vacant property tours for developers and the public to raise awareness of available properties. (See NewBo Case Study Appendix 7)
- Find creative uses of vacant spaces – urban farming, pop-up art installations, pop-up cinemas/ event venues, temporary parks.
- Partner with the city to create a vacancy program. Examples include Newark, NJ: Adopt-a-Lot and Pittsburgh, PA: Vacant to Vibrant program.
- Work with city for re-zoning or overlay to ease/ speed new commercial activity.

Connect The Plan With Broader City Recovery Plans And Policies

Where possible, connect the plan to the broader recovery plan and policies. Your plan should not just conform to the broader plan, but it should also work to inform the plan. Being able to provide a neighbourhood level perspective, action items, and other decisions provides valuable input to the city on subject matter that may otherwise have been overlooked.

Engage The Public and Private Sector

A revitalization plan that has not adequately engaged the private and public sectors will not garner support for adaptation. Including them early on in the process is key.

Ensure The Plan Reflects New Market Realities Post-Disaster

Post-disaster economies are different than pre-disaster economies. Customer profiles and needs can change. Businesses may cease operations in certain neighbourhoods. Social and physical needs of a neighbourhood can change. Your plan should avoid utopian ideals and recognize the changed market of the neighbourhood.

³²National Main Street Centre (n.d.). The Main Street Four Point Approach. Retrieved from: <http://www.preservationnation.org/main-street/about-main-street/the-approach/#.U-uEj-NdXOV>

³³ www.nationaltrustcanada.ca

Identify Action Steps to Fight Prior Issues and Barriers

Acknowledging why the distressed neighbourhood was the way it was pre-disaster is the first step towards identifying future solutions. Identifying action steps to combat these issues is critical to revitalization. Common challenges and solutions to address of vacancy and blight are addressed later in this chapter. Follow up with implementation and monitoring Without identifying implementation steps in the plan, including who will be responsible and for what, your plan can become easily shelved. As a result, it is important to discuss that up front so you can hold those responsible for implementation accountable, and ensure the plan is carried out properly.

Revitalization Opportunity Areas

Improving Infrastructure

Distressed neighbourhoods often face issues with infrastructure, such as broken sidewalks, insufficient street lighting, or older water and sewage systems that can cause economic stagnation or decline. Without proper infrastructure in place, commercial activity cannot function to a degree of normalcy. As a result, it may relocate within the community to an area with better infrastructure. This also holds true post-disaster when infrastructure can be severely damaged.

Using the disaster as an opportunity, you may be able to work with your local government to identify funds or grants that can revitalize the neighbourhood and its failing infrastructure. Infrastructure is also important to consider if your redevelopment vision proposes a different use that requires different infrastructure. More details on infrastructure redevelopment opportunities are outlined in Chapter X.

Streetscape and Facade Improvements

Along with infrastructure, neighbourhood streetscapes in commercial areas can speak loudly to your overall image. Seizing the opportunity to rebuild post-disaster by accessing funding for streetscape improvement (e.g. benches, street-lights, banners, planters etc.) should be actively pursued. Infrastructure and streetscape improvements can be a critical impetus for reinvestment from developers in an area, if completed in conjunction with a revitalization strategy. Similar to the benefits of streetscape improvements, a facade improvement program can bring about a

sign of recovery with improved faces to commercial establishments. Working with local organizations and businesses to identify funding opportunities, connect volunteers, or address other barriers to improving the façade is a great means to start an improvement.

An example of a successful façade program is with the Czech Village and New Bohemia Main Street Organization in Iowa. In this case, a local organization gave them a \$50,000 donation for a matching façade program. This money was then used to match what local businesses could pay to improve façades. It started with a few neighbourhood businesses taking advantage of the program. Gradually, word of mouth accelerated the number of participants. The program was a great means to improve many of the historic façades that otherwise would be financially difficult for business owners to complete on their own.

Another example of façade improvements comes from New Zealand, where a “Façade Squad” worked in distressed neighbourhoods to repaint vacant or other buildings in need of repair. Made up of local volunteers with donated materials, they were able to give a fresh look to buildings.

Zoning and Permitting

As part of the recovery process, it is important for the city to work with local businesses to ease the permitting process for rebuilding, renovating, or creating new businesses. As seen the spotlight on Freret Street residents recognized this need and identified a way to accelerate redevelopment.

Attracting Resources

Neighbourhood revitalization post-disaster can also be an opportunity to attract other sources of funding and resources.

- Seek donations of not just monetary, but professional services from organizations and businesses in the community who were not affected by the disaster
- Tap volunteer networks for not just labour, but also organizational work, such as updating social media pages
- Seek donations from local foundations and organizations

- Seek grants that apply to your neighbourhoods' circumstances, such as low-income, food deserts, or historic preservation grants/tax credits
- Work with the city to establish tax incentives (e.g., opportunity zones, enterprise redevelopment zones, revitalization overlays etc.)

Case Study: Encouraging Business on Freret Street:

In post-Katrina New Orleans, Freret Street neighbors were looking for ways to revive the neighbourhood. Like many post-disaster areas, they were dealing with a once vibrant commercial street with very little business activity. Local neighbourhood leaders launched multiple efforts, including starting the Freret Street Market. More notably though, neighbourhood leaders successfully encouraged City Council to designate Freret street as an "arts and cultural overlay district," welcoming nighttime establishments that met certain standards, such as limited operating hours. This fueled a small- business resurgence with 20 new small businesses opening from 2008-2012. A city planning designation, put into effect in 2008, eased the permitting process for restaurants, entertainment venues, and galleries, bringing them into the area at a faster pace than if they had not rezoned the neighbourhood. The street is now seen as a "restaurant row" destination for the community, and activity continues to flourish as businesses continue to thrive on Freret Street.

Source: http://www.nola.com/business/index.ssf/2012/11/freret_street_resurgence_conti.html

Market the Revitalized Neighbourhood

Part of neighbourhood revitalization is building a new identity for it. Distressed neighbourhoods tend to have a negative identity. Celebrating recovery efforts can showcase development, spark interest, and bring in new businesses or residents. It is important to celebrate success not just amongst neighbourhood residents, but through the media to raise community awareness as well. This can be done by:

- Hosting large neighbourhood events at anniversaries (e.g., marking one year post-disaster)
- Hosting ongoing celebrations for re-openings, or new business ribbon cuttings

- Pitching feel-good recovery stories to media, even if unsolicited, about businesses that have excelled post-disaster, new neighbourhood assets such as parks or infrastructure, or even proposals for new development

Case Study: Marketing Post-Disaster, Goderich ON

In August of 2011 a F3 ripped through the town of The town of Goderich, Ontario is a good example of how to market post-disaster. In August of 2011 a F3 ripped through the town of Goderich, Ontario, severely damaging the city's historic downtown. Through recovery efforts, 137 out of 158 businesses opened up again in their original location within a year. This is in part due to many efforts from the city, the citizens of Goderich, and the province of Ontario. This is important not only to the local economy, but to the thousands of tourists that visit the city every year. Goderich claims to be "Canada's prettiest town" and this is shown by the droves of tourists every year. To make sure Canada knew that Goderich was "open for business," media campaigns were organized. Todd Letts, the Community Economic Revitalization Committee Executive Director, and Susan Armstrong with the Business Improvement Area, tackled two media campaigns. The first was a "Thank you Ontario" and a "Thank you Canada" campaign that told stories of the recovery while giving thanks for assistance. This went out to numerous media outlets and was seen by over 300,000 people. The city also invited one of Canada's national morning shows to host a show in the historic town square, which displayed recovery efforts. To not let these efforts go to waste, a second campaign leveraged the current efforts of outreach, and the Rediscover Goderich Campaign was launched. This campaign built an Internet presence through www.rediscovergoderich.com/ and social media sites such as Facebook. This focused on showcasing to people and businesses how resilient the city is and why they should rediscover the city for life or business. Both Todd and Susan stated that these campaigns were effective in feeding positive news stories to the media. Post-disaster, much of the news, especially around the year after, can be negative. Feeding news outlets, even if they didn't ask for them, positive stories of recovery can help shine a light on the city and raise awareness that the city is "open for business."

Source: Interview with Todd Letts and Susan Armstrong, December 2012.

Social Media And Online Presence

Communication has taken on an additional role in the age of technology with new avenues onto which information can be distributed. Using social media and websites post-disaster can provide a quick, real-time opportunity to deliver information that traditional communication doesn't allow. It helps build your reputation and raise awareness of recovery efforts that may not otherwise have been known.

- Update information and provide useful links regularly to keep readers engaged
- If you do not have social media accounts, as you build your social presence you can:
 - o Deliver information to partnerships to post to social media sites
 - o Co-sponsor events with established partnerships and gain credibility via their social media presence
 - o Build an online presence with easy interfaces that allow simple site building and free hosting, such as with Google sites

- o Ensure your neighbourhood is recognized by on major map sources like Google maps. Google Map Maker (<http://www.google.com/mapmaker>) allows you to build and submit information on your neighbourhood so when users are looking at the map, your neighbourhood is identified which helps provide recognition and further market the neighbourhood.

Summary

Working to revitalize a neighbourhood post-disaster takes a long-term strategy, and requires creative thinking, collaboration, and communication. As many of the strategies outlined in this chapter exemplify, building support for revitalization is key for sustainable success of efforts. Without local buy-in, only resistance will be met along the path for revitalization. This is important to avoid post-disaster, as a distressed impacted neighbourhood can become a bigger issue for surrounding neighbourhoods and the community itself. Organizing efforts quickly post-disaster allows efforts to begin in a time frame that can bring commercial activity back and work to build an environment that encourages further business activity.



Chapter XI: Economic Diversification Post-Disaster

Overview

Economic diversification yields an array of benefits to a region. Academic research has shown that a diverse economy improves cross-industry spillovers (externalities), increases productivity, and reduces frictional unemployment.^{34,35} Most importantly, economic diversity increases regional resiliency and stability.³⁶

A diverse region is more able to withstand shocks, be it an economic downturn or natural disaster. This is known as a portfolio effect.³⁷ A natural disaster or recession will affect certain industries more than others, but in a diverse region, the affected industry will make up a smaller portion of the local economy, distributing the risk more evenly. Amidst chaos, post-disaster situations can also present the opportunity for change.

This chapter explores economic diversification as a recovery strategy, and as a tool for communities to increase their disaster resilience. The first part of the chapter discusses steps to create and plan for economic diversification. This includes assessing the region, examining the workforce, looking for partners, and identifying resources. The latter part of the chapter delves into various types of economic diversification strategies, and how to implement them, including:

- Promoting entrepreneurship and supporting small business development
- Improving and building upon the local workforce
- Encouraging regional clusters
- Increasing export activity

Economic diversification works best in a regional setting. Economies don't operate strictly based on jurisdictional boundaries. Similarly, natural disasters don't recognize jurisdictions. Taking a regional perspective from the beginning is therefore important. Including and involving various regional partners before a disaster strikes will make it easier to establish task forces and recovery programs later when timing is a critical and resources are even more stretched.

Engaging in regionalism does not mean ignoring local realities and priorities. In fact, local needs can be addressed even more effectively with a regional approach, as you are able to gain access to a larger pool of resources. Engaging regional partners and diversifying earlier, prepares your community for a range of shocks and disruptions. Depending on the amount of resources you have ultimately have access to, you may look at incremental diversification efforts, or explore complete economic transformation.

This chapter provides guidance on how to assess your regional economy, engage local partners, choose, and implement various strategies for economic diversification.

³⁴Jacobs, J. (1969). *The economy of cities*. Random House; Audretsch, D. & Feldman, M. (2003). *Knowledge Spillovers and the Geography of Innovation*. Prepared for the Handbook of Urban and Regional Economics, Volume 4. Retrieved from: [http://spol.unica.it/didattica/paci/Economia%20applicata%20avanzata%20\(1mod\)/audretsch-feldman.pdf](http://spol.unica.it/didattica/paci/Economia%20applicata%20avanzata%20(1mod)/audretsch-feldman.pdf)

³⁵Scott, A.J. (1988). *Metropolis: from the division of labour to urban form*. Berkeley: University of California Press.

³⁶Xiao, Y., & Drucker, J. Forthcoming. Does economic diversity enhance regional disaster resilience? *Journal of the American Planning Association*

³⁷Brewer, A. (1985, February). Trade with fixed real wages and mobile capital, *Journal of International Economics*, 18(1-2); Malizia, E. E., & Ke, S. (1993). The Influence of Economic Diversity on Unemployment and Stability. *Journal of Regional Science*; Frenken, K., et al. (2007). Related Variety, Unrelated Variety and Regional Economic Growth. *Regional Studies*, 41(5)



Balancing Recovery and Resilience Strategies

When economic development organizations are examining their recovery objectives there are often two competing priorities:

Do we build back to prevent future loss, or do we build back quickly to hasten the recovery?

Ultimately, the extent, scope, and severity of the incident will dictate which objective will be favored. Economic development organizations should be challenged to seek balance between these two approaches. While some academic arguments challenge the compatibility of employing diversification or cluster-based initiatives, in a post-disaster environment conditions could be right for pursuing both objectives in parallel. To help paint the picture for how this balancing act might work, we have included some baseline assumptions and hypothetical scenarios below.

Assumptions

In considering these two different strategies, we have noted several underlying assumptions that form the basis for this approach:

1. Recovery-focused initiatives seek to maximize the return on investment and minimize the time required to realize that investment. Where the community sees a need to hasten the restoration or creation of jobs and business opportunity to replace those lost or displaced from the disaster. Cluster-based initiatives are considered recovery-focused. Success is often measured in terms of businesses establishments recovered and/or jobs created or saved.
2. Cluster-based initiatives focus on prioritizing and enabling the recovery, rebuilding, and expanding existing concentrated industries.
3. Resilience-focused initiatives seek to minimize potential future losses to the economic sector, while not necessarily focusing on minimizing the time required to realize the benefits. They also seek to maximize investment savings relative to the pre-disaster environment due to the opportunity presented by the rebuilding process. For example, it is far cheaper to construct a new building ten feet above ground level than elevating an existing structure. Diversification initiatives are considered

resilience-focused. Success is often measured in terms of the proportion of industries relative to the total.

4. Diversification initiatives focus on expanding into related industries where there may be transferrable industrial or workforce assets already accessible in the community.

Balancing Strategies

Consider a hypothetical community that has a relatively monolithic industrial base. They have a strong dependence on a single industry, and a small handful of firms in that industry. They also have some sub-industries supporting the primary industry as service providers, and part of their supply chain. This community also sustains a modest service industry (e.g. restaurants, gas stations, grocery stores), but residents need to leave the community to satisfy their demand for goods.

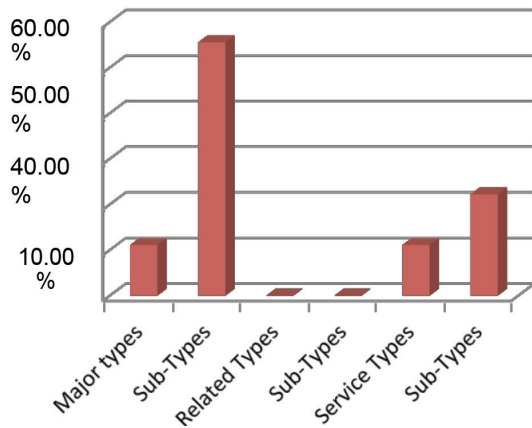
This example explores the application of four scenarios; pre-disaster condition, diversification focused, cluster focused, and a blended approach.

Scenario 1: Pre-disaster condition

Industry Types Scenario 1: Monolithic Industry (baseline)	
Major Types	11.11%
Sub-Types	55.56%
Related Types	0.00%
Sub-Types	0.00%
Service Types	11.11%
Sub-Types	22.22%
	100.0%

In Scenario 1, as the graph on the following page and the previous table suggest, the community had predominantly a single industry profile with some supporting service industries. For the purpose of the exercise, there were no additional industries.

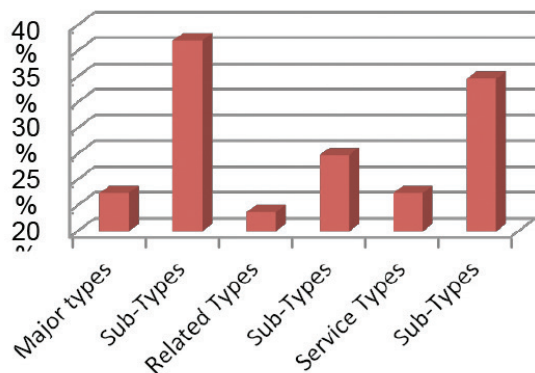
Scenario 1: Pre-Disaster, Monolithic



Scenario 2: Diversification focused

Industry Types Scenario 2: Employed Diversification Initiatives	
Major Types	8.70%
Sub-Types	43.48%
Related Types	4.35%
Sub-Types	17.39%
Service Types	8.70%
Sub-Types	17.39%
	100%

Scenario 2: Employed Diversification

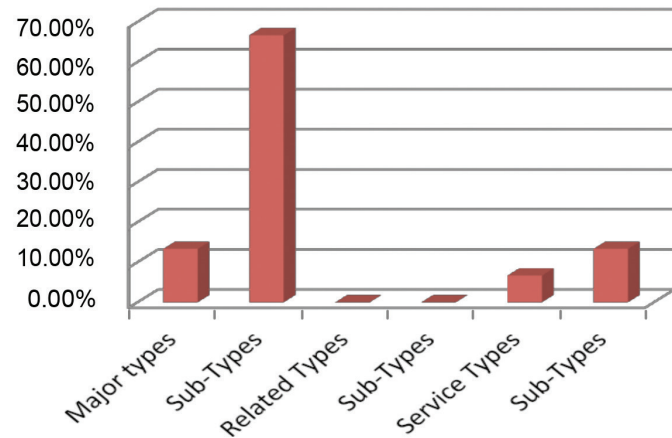


In Scenario 2, the community was focused on employing diversification initiatives. In doing so, they sought to build capacity to attract related types of industries, and build on their existing industrial base. The increase in industry types also attracted more service sector firms.

Scenario 3: Cluster-Focus

Industry Types Scenario 3: Employed Cluster-Focus	
Major Types	13.33%
Sub-Types	66.67%
Related Types	0.00%
Sub-Types	0.00%
Service Types	6.67%
Sub-Types	13.33%
	100%

Scenario 3: Employed Cluster-Focus

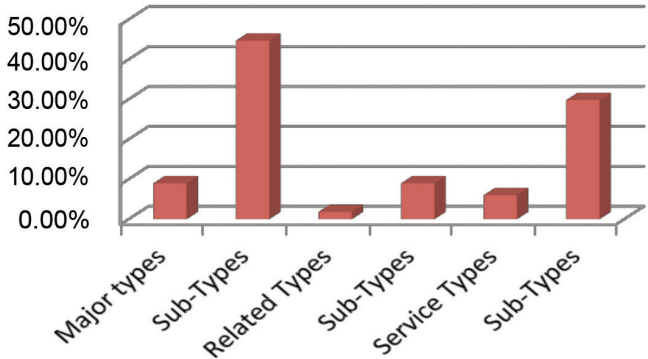


In Scenario 3, the community focused all of its energies into bolstering, supporting, and accelerating recovery of their existing industry. This allowed for an expansion in demand for the number of industry establishments, and its sub-industries to support the supply chain. No efforts were made to attract other related industry types. There was a modest increase in demand for service sector firms; however, lack of market differentiation resulted in a more muted expansion.

Scenario 4: Blended Approach

Scenario 4: Employed Blended Approach	
Major Types	8.93%
Sub-Types	44.64%
Related Types	1.79%
Sub-Types	8.93%
Service Types	5.95%
Sub-Types	29.76%
	100%

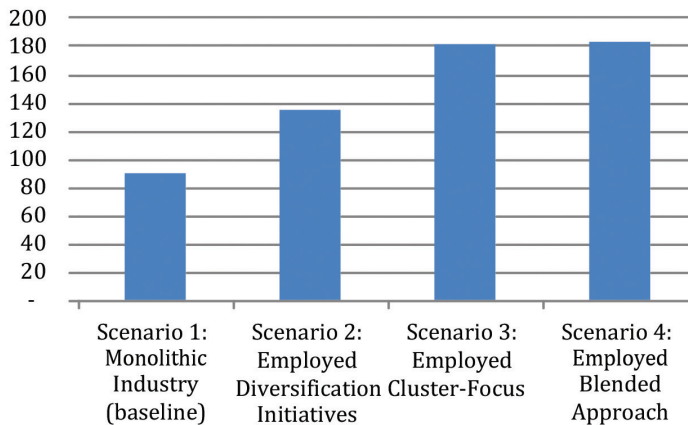
Scenario 4: Employed Blended Approach



Scenario 4 attempts to compromise the diversification model with the cluster model. In this scenario, the community divided its investment evenly between diversification and cluster initiatives. The result was a modest increase in existing industries, as well as an increase in related industries. More expansion of the services sector was made possible through growth in the existing industry and addition of new market demand by the related industry.

Recovery-Outcome Analysis

Total # of Establishments



The total number of establishments in the previous scenarios can be used to evaluate overall recovery effectiveness. If the recovery objective is the rapid restoration of business and the resulting jobs, the number of establishments (in this exercise) can serve as a reasonable proxy. As depicted in the figure above, blended and cluster scenarios are comparable in terms of total establishments.

While the analytic process may appear somewhat laborious to explore, it provides a useful exercise to consider advantages and disadvantages of balancing recovery

with resiliency strategies. Captured in the previous scenario charts was a depiction of the spread of industry concentration. In these scenarios, a sole focus on diversification would likely create the most positive outcome of broadening the industrial base, making the community more resilient. However, in considering the benefit of potential business establishment, job creation and retention that a cluster approach can facilitate, a blended approach is likely to be the optimum choice. While this example does not consider long-term cost savings from diversification initiatives, it does suggest that it is important for a community to find a balance between accelerating growth in existing clusters and economic diversification.

Case Study: Diversifying the Economic Base Following the Northridge Earthquake in San Fernando Valley

The San Fernando Valley's regional approach to recovery and diversification after the 1994 Northridge Earthquake began with the establishment of a public-private partnership. The resulting Valley Economic Alliance (VEA) was formed in 1996 as a 501(c) 3 not-for-profit economic development and marketing organization. The partnership's four cities—Burbank, Calabasas, Glendale, and San Fernando—previously competed with each other. However, VEA leaders continually emphasized 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 establishment of the VEA allowed for improved workforce development and business assistance based on cooperation between the private and public sectors. To improve the workforce, the VEA established a Business Education Partnership with the Los Angeles Unified School District, vocational training programs, community colleges, California State University-Northridge, and other schools to help align curriculum with business needs. In turn, businesses expanded their internship and mentoring programs. The VEA also created business retention teams to work with at-risk companies after the disaster and encouraged major employers to stay in the Valley. These teams also worked to attract businesses by working together with the San Fernando Valley Conference and Visitors Bureau (a member of the VEA) to develop promotional marketing materials for target industries.

The full case study on the diversification of the San Fernando Valley can be found in [Case Study Appendix 9](#).

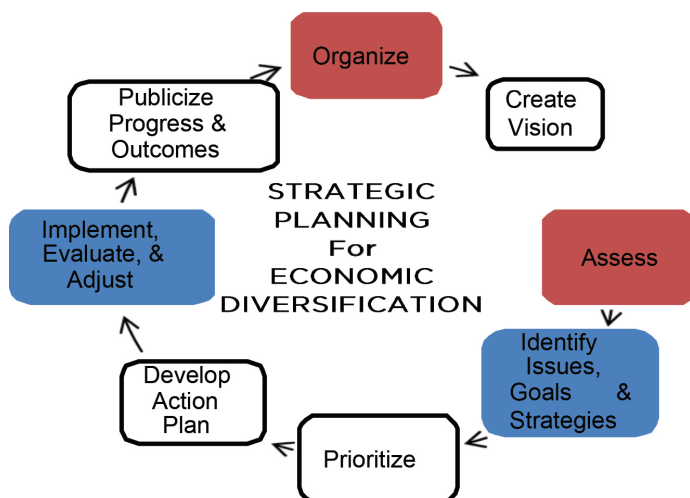
Plan for Economic Diversification

Assess the Region

Economic diversification is a deliberate process that requires a shared vision, clear goals, specific objectives, and a well-crafted implementation plan. It also requires competent partners that work together to make the vision and plan a reality. The strategic planning process, as discussed earlier in the toolkit, serves as the basis of your assessment. It organizes relevant information in order to develop and execute a strategy.

Communities may differ on timing and the level of depth on their assessment. The strategic planning process is continuous, customizable, and dynamic so communities may pick-up and continue regardless of what stage they are in the process. Below is a quick snapshot of that process. The coloured stages will be discussed in depth in this chapter as they pertain to economic diversification. The stages in red are important for the next part of this chapter which is assessing and mapping the region, and the blue stages will be discussed later in the chapter when focusing on implementation.

As illustrated by the red-highlighted segments of the graphic, the strategic planning process is grounded in a thorough knowledge and assessment of the region. This assessment provides the foundation for a successful strategy through the evaluation of a region's strengths and untapped opportunities. For economic diversification, this means identifying potential partners for the planning and implementation process, and developing an inventory or mapping the region's leading industries and workforce assets.



Adapted from *Economic Development Strategic Planning* (2011).
International Economic Development Council, p.14

Identify Economic Development Partners

Potential economic development partners may come from the local, regional, and provincial/territorial level. They may include regional, county, and city public agencies, public authorities, public-private partnerships, non-profit organizations, urban planners, chambers of commerce, trade associations, business leaders, educational institutions and others.

- Possible partners for developing a diversification strategy include:³⁸

- ✓ Economic development foundation, agency, or organization
- ✓ City or regional planning agency
- ✓ Chamber of commerce (local and provincial)
- ✓ Main Street organization
- ✓ Convention and tourism organizations
- ✓ Better Business Bureau
- ✓ Special improvement districts
- ✓ Business improvement districts
- ✓ County economic development authorities or commissioners
- ✓ Regional economic development councils or partnerships
- ✓ Government: city, county, and provincial/territorial
- ✓ Government advisory boards
- ✓ Convention centre
- ✓ Economic development districts
- ✓ Indigenous organizations
- ✓ United Way

- Educational/Workforce Institutions

- ✓ Provincial/territorial departments of public schools, technical schools, and higher education
- ✓ Primary education: public and private schools
- ✓ Higher education: universities (private and public, community colleges, vocational training centres and career technology centres)

³⁸ Adapted from *Managing Economic Development Organizations* (2011).
International Economic Development Council. Washington DC, pp. 110-112

- ✓ Private training facilities
- ✓ One-stop shops
- ✓ Certified business incubators
- ✓ Libraries: local, regional, and/or provincial/territorial facilities

- **Local Businesses/Associations**

- ✓ Retail and business establishments
- ✓ Industrial establishments
- ✓ Building centres
- ✓ News sources
- ✓ Civic clubs
- ✓ Professional associations
- ✓ Board of realtors, other real estate professionals
- ✓ Manufacturing alliances or associations
- ✓ Health care providers, hospitals and clinics

- **Provincial/Territorial Agencies and Organizations**

- o Departments of Transportation, Revenue, Labour and Employment, Economic Development and Trade etc.

- **Infrastructure and Utility Organizations**

- ✓ Utility providers (e.g. electric, natural gas, water, sewer, waste management)
- ✓ Railroad
- ✓ Cable and IT communications
- ✓ Regional airport

- **Financial Institutions**

- ✓ Banks
- ✓ Credit unions
- ✓ Community Futures
- ✓ Organizations with a revolving loan fund
- ✓ Angel investors

- **Civic Organizations**

- ✓ Municipal organizations (e.g. Alberta Urban Municipalities Association, Union of British Columbia Municipalities etc.)

- ✓ Kiwanis International
- ✓ Lion's Club International
- ✓ Rotary International
- ✓ Faith based organizations

Examine Existing Industries

A diversification strategy rests on the culmination of many small steps. Rather than simply relying on attracting businesses in an underrepresented sector, a successful diversification strategy facilitates the process by working with existing businesses and figuring out what they need for expansion. Start with one business and build from there. Look for opportunities for expansion and alignment with these businesses. For example, overlap with emerging technologies, missing supply chain links, new export markets, etc. It is important to identify:

- **Large employers:** Determine who the largest employers are with regard to metrics such as the number of employees and revenue. Meet with the region's largest employers to learn more about their relevant successes, challenges, and any anticipated changes, such as planned relocation or downsizing.
- **Current and future employment trends:** Use employment data and interviews with local businesses to analyze current employment by sector, determine the unemployment rate, and identify industries that are growing or declining.
- **Supply chains and key markets for local industry:** This information may clarify existing gaps and opportunities for expansion in industry supply chains as well as which companies are already exporting or those that are considering expanding to new markets.

Several analyses can be used to identify economic concentrations and specializations. Location quotient, shift-share analysis, and input-output modeling are the most commonly utilized.³⁹ These analyses help determine the relative importance of a specific industry to a local and regional economy. They are useful for identifying existing and emerging industry clusters, which will be discussed later.

³⁹ Strategic Planning Manual (2011). International Economic Development Council. Washington, DC.

Evaluate The Workforce

Aligning a region's economic diversification goals with workforce development creates a more comprehensive strategy. Workforce development can foster small business growth and strengthen cluster development, both of which are strategies for diversification. Evaluate the region's labour force by identifying:

- **Existing workforce talents by industry and skill set:** Develop an understanding of the regional workforce's strengths as well as areas of improvement.
- **Local and regional training opportunities and providers:** Seek out large or prominent programs and capacity of those programs to train workers. Look for potential areas of alignment between skill gaps and these programs. Include community colleges, universities, technical colleges, etc.

This information can be obtained through official government statistics providers or possibly through conversations with various workforce groups and anchor institutions such as a university or community college.

Analyze Clusters

Cluster-based economic development has become widely deployed by economic developers in recent years. Emerging clusters, however, are more difficult to identify. In order to measure clusters:⁴⁰

- **Inventory the region's assets:** Determine the natural fitness for certain kinds of industries. For example, research specialties of a university or college, uniquely skilled workforce, presence of a certain resource, etc. Look into industries that are starting to export as these may indicate an emerging cluster.
- **Evaluate the economic base:** Location quotient (LQ), shift-share, input-output or a combination of these techniques. Identify exporting (basic) industrial sectors.
- **Engage the research community:** Working with area research institutes and higher education (including satellite campuses) can provide a fertile ground for identifying commercialization opportunities.

- **Map groupings:** Once specialized exporting industries have been identified; group them together with their suppliers, intermediate goods and services, and raw materials related to their value chain.
- **Gather input:** Interview business to find out:
 - o Who their major suppliers and buyers are by industry
 - o Approximate percentage of their production needs come from within the region
 - o Percentage of customers located in the region
 - o Why the company located in this particular area
 - o What critical resources support their business
 - o How sales have been in the past three years
 - o If they plan to hire additional workers in the next three years
 - o If they engage in any joint ventures with nearby firms
 - o How much they spend on R&D
 - o How many patents their firm has generated
 - o What kind of relationships they have with local colleges and universities
- **Analyze the competition:** Clusters exist due to competitive advantage. Understand how your region compares to peer regions by calculating their LQs. Also do LQ calculations for each industry over time to see how the strength may be changing.

Develop Strategy

Successful economic diversification strategies are founded on principles of sound economic development planning and robust implementation. This section discusses the following strategies and tactics in detail along with examples of successful implementation in a community. Elements from multiple strategies may be necessary to develop a well-rounded economic diversification plan, rather than relying heavily on a single aspect.

- **Align economic development resources and programs**

⁴⁰Strategic Planning Manual (2011). International Economic Development Council. Washington, DC.

- Encourage entrepreneurship and support small business development
- Workforce development
- Establish or enhance regional clusters
- Increase export activity

Economic development organizations are often thought of as facilitators and conduits for resources already available within the community. However, for some strategies the organization has internal capacity to be service providers. For example, when connecting small businesses and entrepreneurs to capital, some organizations may have the ability to establish a revolving loan fund. Typically, however, economic development organizations have the most success with providing services already within the expertise and competency of the staff. This includes providing market research, providing guidance for business plans etc. When deciding what services to provide, consider what is within the organization's capacity to provide and what resources are already established and available in the community.

Some communities find it advantageous to create a public-private partnership (PPP) after a disaster to facilitate economic diversification. PPP's can lead or assist with the planning and implementation of a diversification strategy, be established as a non-profit corporation or authority, and receive funding and expertise from the private and public sectors. They can also act like for-profit institutions, with a board of representatives from the public and private sectors, some of which are political appointments. Board members can also include members from partner organizations.

There are several benefits of a PPP when compared to a purely public economic development group. A PPP is typically more financially and strategically flexible. A carefully constructed PPP can also be a great asset to economic diversification. Characteristics of a successful public-private partnership include:⁴¹

- A clearly defined mission that addresses the concerns of both the private and public sectors
- Consensus among members regarding how to implement the mission
- The commitment of both the public and private sector reflected by an adequate level of funding to achieve goals

- A validation system designed to establish and monitor performance, determine change-of-course program modifications, and justify continued support and funding

As mentioned previously, PPP's can minimize problems, and retain advantages, of organizations in both sectors. Some examples of these advantages are listed below:⁴²

- Its goals and direction reflect a consensus of the local government and the business community, thus ensuring broader support for programs and initiatives.
- They have a greater degree of freedom in hiring, firing, and setting salaries than public agencies. In addition, an unpaid board directing a public-private organization has little to lose from making bold decisions since their salaries are drawn from other sources.
- Their resources and powers are not as constrained as those required of public agencies (e.g. a public process, citizen review and civil service restrictions).
- They are free to expand activities beyond that of local government since they are not restrained by a city charter or county legislation.
- They can propose a project, sample public reaction and allow local government to either support or oppose it.
- They may be able to draw on a broader range of expertise than the public or private sectors would normally afford or traditionally use. Working together builds upon and creates new skills and understanding.

In addition, there are a variety of financial advantages to organizing as a PPP:

- They can mobilize both public and private resources and are financially flexible.
- They can invest in a private business venture using their own funds, whereas public organizations will normally have to demonstrate a clear public purpose.

⁴¹Managing Economic Development Organizations (2011). International Economic Development Council. Washington, DC.



⁴²Ibid.

- The local government debt ceiling may not be affected by a PPP's borrowing since they are independent from the city. However, local government financing is often required for major projects, such as infrastructure.
- They can insulate governance from financial risk and liabilities through incorporation laws.
- They may eventually be financially self-supporting through management and service fees, and/or membership dues, eliminating the need for continued local government contributions.
- They facilitate communication between different service providers in the region.

It is valuable to have a database of existing economic development programs in order to determine the most effective role for the economic development group to take on, but it also creates efficiency and effective management of resources when implementing a diversification strategy. Programs and resources should be aligned both horizontally and vertically.

- Horizontal alignment: Create a full spectrum of resources and services across different organizations. For example, if the local chamber offers networking and training, the economic development group could focus on financing or providing marketing information. Seek out existing resources from other organizations and find a complementary, comprehensive strategy in how the programs can be administered.
- Vertical alignment: Make sure that businesses are supported at all stages of growth and development. For example, fledgling businesses have access to permitting and business plan assistance and mature small businesses have access to angel or venture capital.

Together, this should form a matrix of programs available within the community that is irrespective of business stage and type:

	Horizontal alignment (organization) 			
Vertical alignment (business stage) 		Organization ₁	Organization ₂	Organization ₃
	Seed	Program ₁	Program ₂	
	Start-up	Program ₂	...	
	Mature			

Economic Diversification Strategies

Successful economic diversification strategies are founded on principles of sound economic development planning and robust implementation. This section discusses the following strategies and tactics in detail along with examples of successful implementation in a community. Elements from multiple strategies may be necessary to develop a well-rounded economic diversification plan, rather than relying heavily on a single aspect.

Strategy 1: Encourage Entrepreneurship and Support Small Businesses

Small businesses are an important asset to the local economy. Encouraging small businesses and entrepreneurship is a way to diversify by growing the local and regional economy from within. Although each small business employs a few people, as a class they represent a large share of employment and a majority of new net jobs. Small firms are flexible and innovative as compared to larger firms. Since small businesses and entrepreneurs are locally based, money that is spent at a local business stays and recirculates in the regional economy at a higher rate. Locally owned businesses tend to generate two to three times the amount of local economic activity than national chains.⁴³

There are several ways to assist small businesses and entrepreneurs after a disaster, including but not limited to:

- Business counseling and loan application assistance
- Establishing a business recovery centre
- Creating local financial programs such as a bridge loan program or revolving loan fund
- Encouraging local spending in small business through a "buy local" marketing campaign

After a disaster, some of these services can be extended beyond the short-term recovery phase to promote small business and entrepreneurship as a long-term recovery and diversification strategy. Jefferson Parish received funds from the state of Louisiana to assist in their recovery after Hurricane

⁴³Urban Conservancy and Civic Economics (2009, September). Thinking Outside the Box. Retrieved from <https://bealocalist.org/thinking-outside-box-report-independent-merchants-and-local-economy-profile>

Katrina. The Jefferson Parish Economic Development Corporation used these funds to create a revolving loan fund to assist small businesses. Even though Hurricane Katrina occurred in 2005, as of 2017 Jefferson Parish continues to use the revolving loan funds to assist new and emerging entrepreneurs and small businesses in the region.

Longer-term strategies for supporting small businesses and entrepreneurs include:

- **Provide space for new businesses to grow in a supportive environment, such as a business incubator.** Incubators created with the goal of economic diversification may want to consider housing emerging manufacturing or service firms due to their job-creation potential.
- **Connect the research and development efforts of regional industries and universities with entrepreneurs and small business support services.** Research and development activities at universities provide numerous opportunities for businesses to be spun off. It helps generate additional local economic activity and may even help retain talented workers in the area. This strategy can be combined with an incubator strategy—tech industry incubators are often supported by universities. Often, communities will create policies for small business support that target high-technology clusters of small business. Additionally, tech transfer offices at universities can help university researchers that are looking to commercialize their products connect with small businesses.
- **Provide supportive networks and structures for small businesses.** Examples of this include economic gardening, networking and educational events, and counseling for all stages of business growth.
- **Continue to develop and encourage “buy local” campaigns.**
- **Connect small businesses and entrepreneurs to financing.** Economic development organizations don’t necessarily need to provide the financing themselves. Rather, they should be able to connect small businesses and entrepreneurs to existing resources in the community.

One very successful approach being used to deal with the economics of business and job creation is Jobenomics™.⁴⁴ Its focus is on citizens at the base of the

socioeconomic pyramid with special emphasis on minorities, women, youth, veterans and other hopefuls who want to develop a skill, career and start a business. Jobenomics™ is a grassroots movement that started in the U.S. and expanded to Canada in 2019. To date, the concept has reached an estimated audience of 30 million people via media, website, blog, and lectures. Since its inception, Jobenomics™ has received widespread support for its economic, urban renewal, small business, and workforce development efforts, in over two dozen U.S. communities. The concept is particularly applicable in small- to medium-sized communities that want to create jobs, but have limited resources to do so. Initiatives and programs include:

- Community based business generators
- Digital economy, scale-ups and academies
- Direct care
- Urban mining and material reclamation
- Urban agriculture
- Renewable energy and green micro-businesses
- Experiential tourism

Case Study: St. Louis, MS

St. Louis County, Missouri, received a grant from EDA to create a regional economic adjustment strategy in 2011. One of the plan’s recommendations was to catalog all of the existing entrepreneurship programs within the region and create a central source for entrepreneurs to have access to this information. St. Louis County Economic Council created an entrepreneurship asset map and a portal for entrepreneurs to ensure there are no programs that are overlapping or competing with one another within the region.

The result can be found here: <http://www.acceleratestlouis.org/>. More information on the diversification of St. Louis can be found in [Case Study Appendix 10](#).

⁴⁴www.jobenomics.com

Strategy 2: Workforce Development

Workforce development efforts aim to improve the quality and skills of the workforce, help businesses meet their human resource demands, and provide channels for businesses and workers to connect. This ongoing process should be part of a continuous feedback loop between economic developers, workforce development professionals, major employers, local educational institutions, and other relevant stakeholders. Workforce development includes education as well as job training, and involves basic skills such as literacy and math, hard skills such as welding and IT certification, and soft skills such as work ethic and attitude. As part of an economic diversification effort, workforce development is an opportunity for economic developers to better align or enhance existing connections between the needs of employers, existing workforce skills and knowledge, and educational programs.

A workforce development strategy should be developed with a consideration of workforce, industry, and market realities. Once an assessment of the existing workforce has been completed, economic developers can then ask:

- What knowledge and competencies (existing or needed) are applicable across different industries?
- What knowledge and competencies (existing or needed) are transferable across segments of the workforce?
- What are the institutions best suited to promote and instill new types of knowledge or produce patents?
- How can we measure and validate the existence or growth of a new cluster in our region?

In Akron, Ohio, economic developers focused on workforce development when the community faced the prospect of losing thousands of jobs with the decline of the rubber industry. With a desire to keep the local workforce in the community, economic developers worked with employers and local universities' polymer science and polymer engineering programs to transition workforce skills from rubber to polymers. As a result, Akron was able to minimize job losses, and create new jobs for the local economy. Akron is currently home to world-class facilities for polymer research, testing and training.

Workforce development efforts should be collaborative

and include representatives from the economic development, business, education, and workforce sectors. This effort should be organized and utilize the unique perspective of the different sector representatives. Possible workforce development objectives for this type of group include:⁴⁵

- Encouraging business participation in the workforce system. Business executives have knowledge about their specific industries and the direction in which these industries are moving and they can provide valuable insight on the skills and training necessary for new jobs.
- Creating public-private partnerships between firms, labour unions and government agencies to expand a skilled workforce
- Reorganizing economic development and workforce development to achieve better alignment
- Partnering with educational institutions and businesses to link educational programs with industry needs.

Aligning workforce and economic development initiatives with colleges and local training centres will help to train existing and upcoming workers in target fields. This will help to make diversification efforts more effective, especially if communities are looking to expand into new industries or technologies. Benefits of working with universities, community colleges, and training centres include the following:⁴⁶

- Community colleges and other institutions of higher education can:
 - o Adapt education offerings to current economic conditions
 - o Tailor programs to local industry needs and labour shortages
 - o Work with private-sector partners to define needs
 - o Provide professional instruction, training facilities and advanced technologies

⁴⁵ *Workforce Development Manual* (2011). International Economic Development Council. Washington, DC.

⁴⁶ Ibid.

- o Serve as the region's most valuable information source
- Establishing training centres can:
 - o Act as outside consultant to develop training programs and curricula
 - o Verify industry needs and labour shortages
 - o Non-profit training centres will partner with businesses to increase available services

Conducting a cluster analysis in conjunction with a workforce development strategy can be beneficial to diversification efforts. A cluster analysis will help economic and workforce development practitioners identify the skill sets that are required or need to be upgraded by the business community.⁴⁷

Strategy 3: Establish Or Enhance Regional Clusters

In general, cluster development is a strategy that builds on concentrations of competing and complementary firms within industrial sectors. As mentioned earlier, efforts in cluster development should be based in data and analysis. Clusters cannot be created artificially out of nothing.

In order to diversify, a community can both expand upon its existing industry clusters and anticipate and facilitate the emergence of new clusters to add new industries to the region. Regional clusters foster innovation and knowledge sharing through externalities, linkages and spillovers. These externalities include technology transfer, access to specialized human resources and suppliers, pressure for higher production and efficiency due to proximity between firms and the development of pools of employees with specialized expertise.⁴⁸ Clusters can be linked vertically through buyers and suppliers and horizontally through businesses that compete in the same market or share resources (e.g. technology, raw materials or workforce).

More specifically, clusters can be built around the support services of:^{49 50}

- Complementary industry segments and interconnected companies
- Supplier chains and specialized suppliers

- Venture capital availability and entrepreneurial capability
- Masses of talent, technology and capital
- Research facilities and specialized infrastructure

Case Study: Post-Disaster Redevelopment Planning in Polk County, FL

As part of a comprehensive post-disaster redevelopment plan for Polk County, Florida, an economic analysis was conducted to determine the vulnerabilities in the community and accordingly plan for disaster recovery. Both physical damage and economic losses due to business disruption were evaluated. The analysis started with an examination of the major employers in the community and their current employment levels.

An industry cluster analysis highlighted seven industrial sectors that should be targeted based on strong growth trends within the county and the surrounding region. The cluster analysis also compared growth trends to industry wages and determined that most of the top ten industrial clusters in the county had high employment concentration ratios (near or above national averages) as well as rapid employment growth in the recent past.

The analysis also looked for economic sectors that were particularly vulnerable to disasters and focused on the specific challenges that would make the redevelopment and recovery of each industry/ cluster difficult. It analyzed factors that are often beyond the control of economic development stakeholders but still have a profound impact on the economic vitality of the community, such as educational attainment, transportation, etc.

An additional analysis that examined Polk County within the broader Central Florida region was conducted in order to understand the interdependencies between the industries/clusters in Polk County and the surrounding counties.

⁴⁷Sheely, S. (2005, October). *Regional Industry-Driven Centres of Excellence as a Vehicle for Investment in Innovation*. [PowerPoint Presentation]. Lancaster County Workforce Investment Board. Lancaster, PA

⁴⁸Porter, M. (2007, November). Clusters and Economic Policy: Aligning Public Policy with the New Economics of Competition, pp. 2-3

⁴⁹Plosila, W.H. (2004). State science- and technology-based economic development policy: History, trends and developments, and future directions. *Economic Development Quarterly*, 18.

⁵⁰Porter, M. E. (1998). Clusters and the New Economics of Competition. *Harvard Business Review*, November-December, pp. 77-90.

Strengthen Clusters From Existing Alignments And Areas Of Under-Capacity

Engage existing and partially-developed clusters to identify their needs and seek out solutions to address them (e.g. workforce training, marketing, etc.). One method of doing this is to create a business satisfaction survey for businesses within a targeted cluster. Structure questions around local amenities and their importance to business success. How do the businesses rate the current amenities? This information can be used to address specific business needs and increase the region's competitiveness. In Portland, Oregon, their cluster organization framework is a culmination of best practices for the planning and implementation process needed for developing clusters from existing or emerging alignments.⁵¹

Once the analyses and planning stages have been completed, a community can decide what interventions need to be made. For complete details, please visit their website: <http://www.pdxeconomicdevelopment.com/industries.html>

Facilitate Start-Ups of Related Businesses

To strengthen emerging clusters, create an environment that supports spin-offs and supports small businesses and entrepreneurs. The athletic and outdoor (A&O) apparel cluster in Portland, Oregon is an example of encouraging cluster-related start-ups. Anchored by large, established firms such as Nike, Adidas, and Columbia Sportswear, the A&O cluster has encouraged entrepreneurship in the region. As the large anchors grew, employees established spin off businesses, and entrepreneurs opened hundreds of smaller firms that offer services to larger employers.⁵² Similar to an entrepreneurship strategy, make sure there are resources such as financing and counseling programs available to facilitate emerging start-ups.

Utilize Anchor Institutions

Technology clusters are often targeted as part of a larger technology-based economic development strategy. Technology clusters benefit from support firms such as technicians, consultants and lawyers and a financial network of financial institutions and venture capitalists. A university or core institution can support a technology cluster through research and workforce training. They also provide specific infrastructure.

Ponca City, Oklahoma built a cluster around a

technology lab after the departure of their major employer, Conoco Oil Company. Ponca City had discovered a potential niche in sensor technology through a study done by Oklahoma State University and the Ponca City Development Authority. The city, university, development authority and ConocoPhillips partnered to develop a national sensor testing and evaluation centre that would allow military, commercial, and university researchers to work on sensor technology in a single location at the University Multispectral Lab (UML). This lab has attracted more businesses in the technology and professional services industry. Companies work with the UML to develop propriety products or utilize the lab space and other infrastructure for research.⁵³

Create Cluster-Based Workforce Training Improvements

Workforce training strengthens cluster development by relating the incumbent workforce to the value chain. Cluster analysis sheds light on the skill sets that are needed or and need to be upgraded. For example:

- What knowledge and competencies are applicable across different industries?
- What knowledge and competencies are transferable across segments of the workforce?
- What institutions are best suited to promote and instill new types of knowledge or produce patents?
- How can we measure and validate the existence or growth of a new cluster in our region?⁵⁴

It is important to work with workforce development organizations, universities and training centres to update workforce skills needed for new industries. Once a desired cluster is targeted, skills and competitiveness of the incumbent workforce will be important in attracting related competing and complementary industries to the cluster.

⁵¹Portland Economic Development Strategy Overview. (n.d.). *Portland Economic Development Strategy*. Retrieved from: <http://www.pdxeconomicdevelopment.com/industries.html>

⁵²Muro, M. (2010, November 29). This is What a Cluster Looks Like. Brookings Institute. Retrieved from <http://www.brookings.edu/blogs/the-avenue/posts/2010/11/29-clusters-muro>.

⁵³Economic Diversification into Knowledge-based Industries in Ponca City, Oklahoma (n.d.). *RestoreYourEconomy*. Retrieved from <http://>

⁵⁴Workforce Development Manual (2011). International Economic Development Council. Washington, DC.

Case Study: St. Louis, MS

St. Louis was struck by multiple economic and natural disasters throughout the 1990s and 2000s. In response to defense cutbacks, floods, and major plant closures, St. Louis began to diversify its economy as a resiliency and recovery strategy. St. Louis County has built several incubators and four enterprise centres to encourage small business, including the Centre for Emerging Technologies located near and funded by the University of Missouri.

In 2010, the St. Louis County Economic Council and the Donald Danforth Plant Science Centre received a \$4.6 million grant from EDA to target and expand the plant and life science industries. This money went towards an incubator called the Helix centre, which supports entrepreneurs in early stage plant and life science companies. The incubator includes wet lab spaces and its own seed capital fund to assist in the commercialization of technologies.

More detail on St. Louis' incubators and their role in the diversification strategy can be found in the [Case Study Appendix 10](#).

Utilize Federal and Provincial/Territorial Trade Programs

You can also take advantage of some federal and regional trade programs. The following list highlights a few federal programs. For information on provincial/territorial programs, you should contact the ministry responsible for trade and export.

- Global Affairs Canada: Manages Canada's diplomatic development and humanitarian assistance.
- International Development Research Centre: Provides funding to researchers and students pursuing international development research at a university in Canada or in a developing country.
- Invest Canada-Community Initiatives (ICCI): Provides financial support for Canadian communities to attract, retain and expand foreign direct investment (FDI).
- Canadian International Innovation Program (CIIP): Works with foreign partners to develop, adapt or validate technologies.
- Innovation, Science and Economic Development Canada: Provides tools, information and network contacts. Works to improve conditions for investment, improve Canada's innovation performance, increase Canada's share of global trade and build a fair, efficient and competitive marketplace.
- Eureka international research and development network: Accesses industrial technology, expertise, funding and markets in Europe and beyond.
- Global Opportunities for Associations: Provides funding for Canadian industry associations to pursue international business-development activities.
- Canadian Commercial Corporation (CCC): A federal Crown corporation mandated to promote and facilitate international trade on behalf of Canadian industry particularly within government markets.
- Going Global Innovation: Commercializes new innovative technology with the help of partnerships in foreign markets.

Strategy 4: Increase Export Activity

The final economic diversification strategy is to increase export activity within the region. Increasing export activity enhances a region's economic resilience. If a region is struck by disaster and experiences shifts in demand, exporting industries are less likely to be affected since their customer base is more diverse. Export strategies should:

- Help companies that are already exporting reach new markets (if appropriate)
- Help companies looking to export enter the export market

The first step for this strategy is to create a regional export plan. A regional assessment should include the role of exports in the overall economy and list its top exporting industries. Then it is important to determine what foreign markets should be targeted, and to reach out to them. It may also be useful to begin including export metrics when determining overall indicators of economic performance.

- AAFC - AgriMarketing program: Provides funding for Canadian small and medium-sized enterprises in the agriculture sector to help implement international export plans.
- Export Development Canada (EDC): Provides insurance and financial services, bonding products and small business solutions to Canadian exporters and investors and their international buyers.
- CanExport: Provide financial support to help your business develop and access new export opportunities.
- BDC business loans: Help companies expand production, purchase new equipment or access financing for a special project.
- Innovation Canada: Provides a tailored list of grants, expert advice, connections and more.⁵⁵

⁵⁵ https://www.tradecommissioner.gc.ca/trade_commissioners-delegues_commerciaux/funding_support_programs-programmes_de_financement_de_soutien.aspx?lang=eng

Summary

Economic diversification requires a regional planning perspective, numerous partnerships, and long-term strategies. Different communities will have different timeframes and varying access to information. It is important to be cognizant that more rural areas may take longer to diversify than urban areas. Similarly, no community has unlimited resources to implement all the strategies at the same time, and it is important to prioritize based on local and regional considerations. Organizational capacity, resources available, timelines and how the strategies interact with each other are all relevant considerations for prioritization.

Regional stability and resiliency is an ongoing process and can be encouraged through the strategies presented in this chapter. Although presented separately, these strategies can and are encouraged to be interwoven and utilized comprehensively. Diversification is a long-term strategy and it may be impossible to see results until 15-20 years; however, the end goal of resiliency and stability will better prepare the region for future natural disasters.



Case Study Appendix

Case Study 1: Joplin, MO: Setting Economic Development Priorities Pre- and Post-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 Wal-Mart, 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 businesses 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 province 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) non-profit, 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 centre at its offices, where the Small Business Technology Development Centre 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 centre 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 provincial 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 provincial 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 Alberta

The Economic Disaster Recovery Program was launched by Economic Developers Alberta (EDA) in partnership with the British Columbia Economic Development Association (BCEDA) to provide flood-impacted communities in the Calgary region with a series of practical economic recovery resources. The program received the support of volunteer teams of economic development professionals from across Canada and the United States.

EDA engaged 10 impacted areas in the Calgary region for the EDRP, including the four that were documented in this case. These communities were responsible for selecting leads that invited key stakeholders to participate in the consultation process. EDRP teams then completed reports for each community with recommendations based upon focus group and business walk discussions. Discussions with businesses were intended to focus on a five minute survey but transformed into emotional, hour-long discussions in heavily impacted areas.

The program benefited these communities with limited implementation capacity by providing expert and realistic recommendations. Recommendations emphasized the importance of gathering the right business contact information, building cross-sector relationships, and conducting economic disaster recovery planning. The summary EDRP report can be downloaded at <http://www.edaalberta.ca/EDRP-Summary-Report>.

Case Study 3: Addressing Full Spectrum of Economic Recovery - 2008 Cedar Rapids 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 124,515⁵⁶ and reached an all-time high of 126,498 in 2010 – a 1.6 percent increase.⁵⁷

The railroad, built through Cedar Rapids in the mid-19th 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 19th 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.⁵⁸ Cedar Rapids has historically boasted a "higher percentage of exported products, per capita, than anywhere else in the U.S."⁵⁹

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 2010.⁶⁰ 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.⁶¹

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.⁶² 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."⁶³ Citizens living in the flood impact zone had mere hours of notice to evacuate.⁶⁴

⁵⁶ US Census Bureau, American Community Survey Three-Year Estimates 2005-2007: Cedar Rapids city, Iowa. Accessed August 3, 2012. <http://www.socialexplorer.com.ezproxy.lib.utexas.edu/pub/reportdata/home.aspx>

⁵⁷ US Census Bureau. America Community Survey 1-Year Estimates Demographic and Housing Estimates 2010: Cedar Rapids city, IA.

⁵⁸ Merta, A. (2012, June 21). *Phone interview by author*, Washington DC.

⁵⁹ Cedar Rapids Area Convention & Visitors Bureau. Cedar Rapids History, last modified 2011, <http://www.cedar-rapids.com/about/history/>.

⁶⁰ US Census Bureau. American Community Survey 1-Year Estimates 2010: Selected Economic Characteristics: Cedar Rapids, IA.

⁶¹ US Census Bureau. American Community Survey 1-Year Estimates 2008: US Selected Economic Characteristics.

⁶² City of Cedar Rapids, Iowa. Flood Recovery Process, last modified 2012. Retrieved from <http://www.cedar-rapids.org/city-news/flood-recovery-progress/Pages/default.aspx>.

⁶³ 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

⁶⁴ 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.⁶⁵ 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 5th largest disaster in the U.S.,⁶⁶ leaving "more than 700 businesses with estimated flood recovery [needs of] as much as \$1.5 billion."⁶⁷ Across Cedar Rapids, 602 businesses reported losses in the sum of \$210 million.⁶⁸ ⁶⁹ Of these businesses, 96 incurred losses of over \$500,000 and 49 reported losses of over \$1 million.⁷⁰ 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.⁷¹

Many businesses carried only basic business insurance, which does not protect against floods.⁷² 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.⁷³

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 non-profit 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 Centre (EOC). Representatives from the city, provincial, and federal government and local and regional non-profits utilized this centre by dividing up tasks and collaborating to solve 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

⁶⁵ Neumann, D. (2012, June 25). *Phone interview by author, Washington DC*

⁶⁶ Cedar Rapids Chamber, *First Business*.

⁶⁷ City of Cedar Rapids, *Flood Recovery Process*.

⁶⁸ The Chamber's report excludes larger employers such as Quaker, Cargill, etc.

⁶⁹ The average loss is \$349,000 when excluding larger employers.

⁷⁰ Cedar Rapids Chamber, *First Business*.

⁷¹ *Ibid.*

⁷² Ficken, G. (2012, June 29). *Phone interview by author, Washington DC*

⁷³ Cedar Rapids Chamber, *First Business*.

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.⁷⁴ This real time information flow alerted the EOC to emergencies and critical situations in the field.⁷⁵

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 non-profits, arts and cultural groups, schools, organized labour, landlords, the Downtown District, local government, and neighbourhoods.

The RRCT met daily in the first eight weeks engaging businesses and neighbourhoods, 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 non-profit 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, provincial, 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.⁷⁶

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.⁷⁷

⁷⁴ 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.

⁷⁵ Merta, *phone interview*.

⁷⁶ Merta, *phone interview*.

⁷⁷ Butterfield, C. & Pratt, J. (2012, August 3). *Phone interview by author*, Washington DC.

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, was up two days after the flood and collected information from on-the-ground-sources, the provincial, 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.⁷⁸

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.⁷⁹

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 non-profit organizations, and the city, provincial, and federal government. To date, more than \$68 million has flowed into Cedar Rapids to assist in business recovery efforts.⁸⁰

Helping Businesses to Keep Doors Open through Financial and Technical Assistance

Funding to assist businesses sprang up from both the local and provincial 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.

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."⁸¹ In total, 411 businesses accessed these \$25,000 zero-interest forgivable loans through an application process run by the Chamber.⁸² 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.⁸³ The chamber, city, and Business Case Management team worked with federal programs to ensure that businesses could access the federal funding.⁸⁴

⁷⁸ Neumann, *phone interview*.

⁷⁹ Butterfield and Pratt, *phone interview*.

⁸⁰ 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>

⁸¹ Cedar Rapids Chamber, *First Business*.

⁸² 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>

⁸³ 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

⁸⁴ Cedar Rapids Chamber, *First Business*.

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.⁸⁵ By 2009, the CRSBRG helped generate enough support to pass a five-year one percent local option sales and services tax (LOST) with estimated revenue of \$78 million.⁸⁶ As of February 2012, the City had “invested \$42.2 million into 16 acquisition, rehabilitation, and flood recovery programs.”⁸⁷ 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 labour [and] construction materials.”⁸⁸ This program distributed resources in a way that allowed businesses to become operational more quickly.⁸⁹ 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.

Assisting Local Businesses through a Case Management Approach

The national average survival rate for businesses three years after a disaster hovers around 45 percent.⁹⁰ Cedar Rapids’ business survival rate was almost double the national average, with 82 percent of businesses still in existence.⁹¹ 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 Centre (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

⁸⁵Ficken, *phone interview*.

⁸⁶The City of Cedar Rapids. Local Option Sales & Service Tax (LOST) Information, last modified 2012. Retrieved from: <http://www.iowa.gov/tax/educate/78601.html>

⁸⁷Cedar Rapids Chamber, *First Business*; City of Cedar Rapids, *LOST*.

⁸⁸Cedar Rapids Chamber, *First Business*.

⁸⁹Neumann, *phone interview*.

⁹⁰Cedar Rapids Chamber, *First Business*.

⁹¹*Ibid*.

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.⁹²

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.”⁹³ 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.⁹⁴ 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.⁹⁵

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.⁹⁶ 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.⁹⁷ 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.⁹⁸

⁹²Full, *phone interview*, June 28

⁹³Cedar Rapids Chamber, *First Business*.

⁹⁴Full, *phone interview*, June 22.

⁹⁵Scott Swenson, *phone interview by author*, June 26, 2012.

⁹⁶Full, *phone interview*, June 22.

⁹⁷Cedar Rapids Chamber, *First Business*.

⁹⁸Butterfield and Pratt, *phone interview*

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.⁹⁹ 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.

Providing Community 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.¹⁰⁰ 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.¹⁰¹

Developing Capacity for Economic Recovery and Redevelopment

Another non-profit 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.

⁹⁹Neumann, *phone interview*.

¹⁰⁰Ibid.

¹⁰¹Ibid.

Advocating for Federal Assistance

When the disaster hit, there were “astronomical” costs of getting businesses back up and running.¹⁰² 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.¹⁰³

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.¹⁰⁴ The FEMA funding scenarios were difficult to understand and more importantly, they seemed highly inconsistent, frustrating business owners’ attempts at funding their recovery.¹⁰⁵ The auditing process that businesses were required to go through to get federal 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.¹⁰⁶

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.”¹⁰⁷ 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.¹⁰⁸ 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.¹⁰⁹ 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.¹¹⁰

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.¹¹¹

¹⁰²Merta, *phone interview*.

¹⁰³Full, *phone interview*, June 28.

¹⁰⁴Ibid.

¹⁰⁵Neumann, *phone interview*.

¹⁰⁶Full, *phone interview*, June 22.

¹⁰⁷Cedar Rapids Chamber, *First Business*.

¹⁰⁸Full, *phone interview*, June 22.

¹⁰⁹Swenson, *phone interview*.

¹¹⁰Merta, *phone interview*.

¹¹¹Full, *phone interview*, June 22.

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.

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 population¹¹² 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 tornado¹¹³ 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 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.

¹¹²An 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.

¹¹³E-5 refers to hurricanes at the top of the Fujita Scale, with winds of 261 mph (420 km/h) or more.

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.¹¹⁴ 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 Centre
- 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.

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 19th, 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.

¹¹⁴Long-Term Community Recovery Plan, Greensburg + Kiowa County Kansas (2007, August) Page 4.

Assisting Local Businesses with Financial and Technical Assistance Services

Establishing a Business Recovery Centre

Immediately after the disaster, then-Governor Kathleen Sebelius established a Disaster Recovery Centre in a school gymnasium in nearby Haviland. A distinct Business Recovery Centre 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 Centre 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 Centre (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 Provincial 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 Labour 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 Centre, 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 labour, 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 'green' industrial park vision

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, provincial 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'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 - Charleston, SC after Hurricane Hugo (1989)¹¹⁵

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

¹¹⁵Copyright 2010 International Economic Development Council

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.”¹¹⁶ 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 neighbourhoods overall.

¹¹⁶[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>

Summary

Prior to the storm, Charleston had been experiencing gentrification of its poorer neighbourhoods, 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- After 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. 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 became an increasingly important centre 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 labour 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 was 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 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 Short- And Long-Term Economic Capacity

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 labour 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 Labour 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 labour 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 labour force in town, and eventually, with the improving infrastructure and available labour, 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 centre 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 that 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: Neighbourhood Revitalization Post-Disaster, Czech Village/New Bohemia, Cedar Rapids, IA

Community 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 neighbourhood and on the West bank is the Czech Village neighbourhood. 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.

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 neighbourhood 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.

Neighbourhood Recovery and Revitalization

Recovery from a disaster for any neighbourhood is challenging, but recovery for a neighbourhood 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 neighbourhood. 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 neighbourhoods. 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 neighbourhood 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 Neighbourhoods

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 neighbourhoods, prompting an exception to the rule.

Marketing Vacant Space 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 neighbourhood. 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 neighbourhood 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 neighbourhood 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".¹¹⁷

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 neighbourhood 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 neighbourhood 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.¹¹⁸

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 neighbourhood to a thriving arts and cultural district.

¹¹⁷NewBo 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>

¹¹⁸Revitalization 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.T0IrME9S.dpuf>

Case Study 8: Beacon of Hope (BOH) Resource Centre

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 neighbourhood revitalization and recovery has emerged as a model of success. Beacon of Hope, since starting in one neighbourhood, is now operated in 25 neighbourhoods throughout New Orleans. Beacon of Hope (BOH) Resource Centre formed as a non-profit 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 neighbourhoods with the structure and skills needed to revitalize their own communities.

Residential Engagement as a Model for Success

Beacon of Hope's model for neighbourhood 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 neighbourhoods, 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 neighbourhood 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 neighbourhoods and community together.

BOH started in one neighbourhood, Lakewood, but by the end of the year Beacon had established 8 neighbourhood Beacons, providing support to more than 7,000 households. This increase continued as neighbourhoods noticed critical mass being achieved in communities where BOH was involved. These struggling neighbourhoods would then seek out BOH to assist them in their neighbourhoods' recovery. BOH rarely has sought out neighbourhoods since neighbourhoods would come to them by word of mouth. When a neighbourhood 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 neighbourhood association in the absence of one and implement the M.O.D.E.L.

The Need for a Strong Neighbourhood Association

The first neighbourhood of Lakewood, which had a strong neighbourhood 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 neighbourhood association didn't exist in the neighbourhood, BOH would hold informational public events on recovery while simultaneously building the structure of a neighbourhood 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 neighbourhood 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 neighbourhoods through:

Mapping: collecting, mapping, and analyzing neighbourhood 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 neighbourhoods. This mapping differed from other condition surveys in that it engaged neighbourhood residents to conduct the survey and ensure the quality of responses. BOH would train and deploy a volunteer survey team, led by a survey captain, to go out and identify each parcel in the neighbourhood and the progress of redevelopment (vacant, slab-vacant, non-gutted, gutted, renovating, and recovered). The 2006 neighbourhood property condition surveys and maps were produced by hand, and results were discussed during community meetings to give residents an immediate picture of their neighbourhoods' 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.¹¹⁹ 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 neighbourhood associations. Neighbourhood 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 neighbourhood is a viable candidate for FEMA water mitigation measures. Commercial developers also use this data to track neighbourhood recovery as a basis for reinvestment, and have empowered residents through these community networks. The numbers could either attract businesses or resources depending on the need and how they were presented.

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 non-profit "Tech Soup".

Mapping

The mapping of the neighbourhoods isn't the only tool Beacon uses to fight blight or redevelop a neighbourhood. 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 neighbourhoods along with spaces that served as green spaces before and need assistance in

¹¹⁹The Beacon of Hope Resource Centre Maps the "New" New Orleans (2010, Spring). *ArcNews Online*. Retrieved from <http://www.esri.com/news/arcnews/spring10/articles/the-beacon-of-hope.html>

recovery. Identifying potential vacant lots next to each other, these green space volunteer teams report this to the neighbourhood 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 non-profits 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 neighbourhood 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 neighbourhood centres.

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 Centre empowers and trains residents to become advocates for their neighbourhoods. By mobilizing residents to facilitate their own recovery, they feel a sense of pride and ownership in their neighbourhood and can facilitate their individual community needs.

Leadership

By working with neighbourhood 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 non-profit organizations and governmental agencies to address neighbourhood and citywide issues.

Summary

BOH now operates 25 neighbourhood "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:

"Neighbourhoods 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 neighbourhood 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. Neighbourhood residents are a viable tool in disaster recovery, and with a framework to help in recovering their own neighbourhood, 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 - San Fernando Valley 1994 Northridge Earthquake¹²⁰

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 epicentre 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 Centre, 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

¹²⁰Copyright 2010 International Economic Development Council

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 business environment: 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 neighbourhood watch programs, marketing the Valley's positive image regarding safety, and organizing a coalition to influence safety and crime laws.

Facilitate service accessibility: The Valley is home to a high proportion of entrepreneurs. The VEA set up a Valley Government Business Centre, 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 programs to grow core industry sectors: The plan advocated setting up a Small Business Assistance Centre 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 Centre to serve as a business incubator, demonstration centre, and after-school centre 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 non-profit 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 centre 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 centre 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 U.S. 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% 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 U.S. Economic Development Administration (EDA) and the U.S. 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 Centre
- Create the Centre 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, and 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 re-entry 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 U.S. 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 Centre for Emerging Technologies was created and funded by a grant from EDA. It was decided to locate the Centre for Emerging Technologies near the University of Missouri, St. Louis. The Centre for Emerging Technologies is now located within the CORTEX district, a life science community supporting young and mature life science ventures. Currently, the Centre 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 Centre opened in 1997 in the City of Chesterfield. South County Enterprise Centre was delayed in opening due to contamination on the site that needed to be addressed. In 2000, the South County Enterprise Centre opened.

Three other Enterprise Centres exist in St. Louis County. The Midtown Enterprise Centre 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 Centre 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 Centre 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 Centre and an incubator called the Helix Centre. The Helix Centre opened in 2004 and also used funds from a county bond. The Helix Centre 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 Centre 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 Centre 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 U.S. 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 membership 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

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 Centre. This new park will be a three building initiative focused on the plant and life sciences. The Nidus Centre, a non-profit 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 Centre 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) Centre in Wellston, MO. This training centre 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 Centre was established through a partnership of public, private and non-profit organizations to train workers to enter in advanced manufacturing, biotech, healthcare and digital technologies. The centre 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 centre 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 Centre. 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 centre 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.

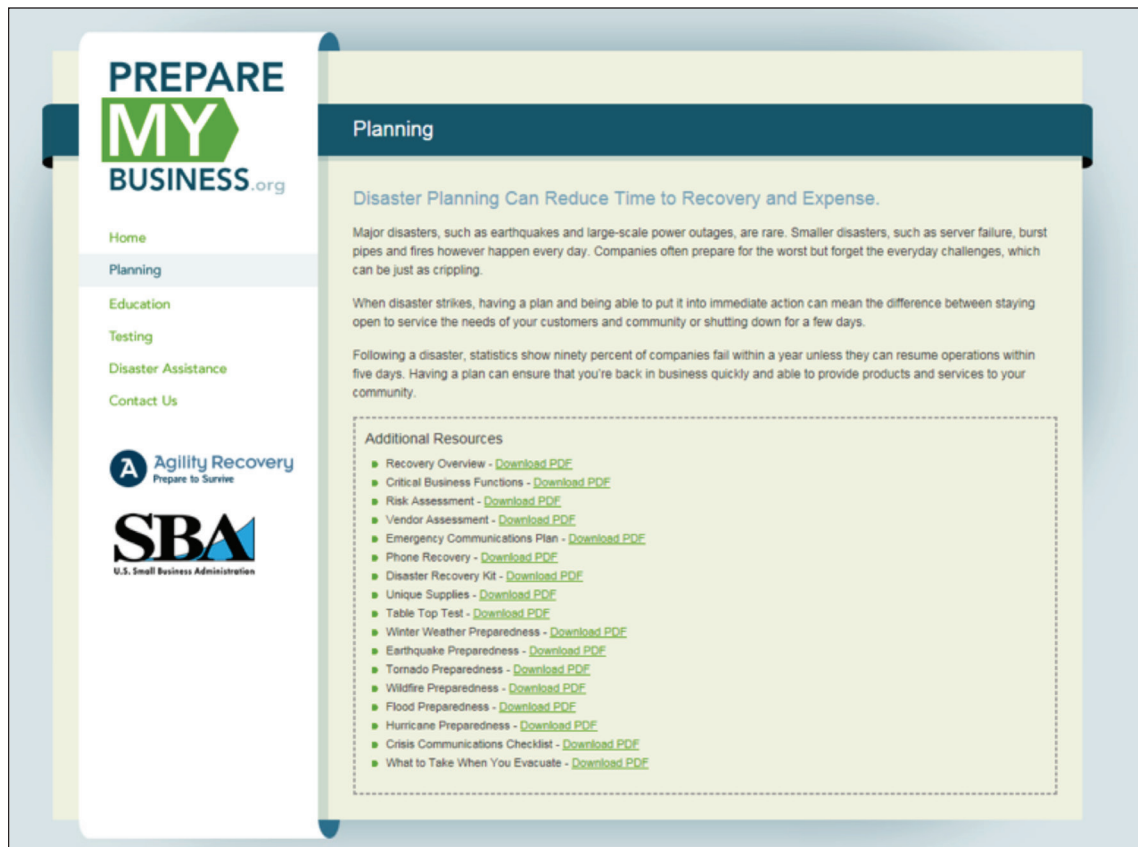
Summary

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 remain active in economic development initiatives.

Entrepreneurship continues to be a strong focus for St. Louis County and the region. The four enterprise centre's 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 Centre, 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

Resource Appendix

Resource 1: www.preparemybusiness.org



Resource 2: www.restoreyoureconomy.org



RestoreYourEconomy.org provides resources and best practice information for public and private stakeholders seeking to rebuild their local economies after a disaster as well as assisting the business community in preparing for a disaster.

It is a one-stop shop of disaster preparedness and post-disaster economic recovery resources, tools, event announcements as well as opportunities to connect with peers through social media groups. The site exposes readers to the critical issues and challenges, highlights lessons learned in the response and recovery process, as well as suggests resources and best practices to use in restoring the local economy after a disaster. This includes articles, whitepapers, presentations, briefings, documents, website links, and other relevant resources to assist your community in the disaster preparedness or recovery process.

URL: www.restoreyoureconomy.org

Resource 3: Business Emergency Hotline

On May 30, 2016, Economic Developers Alberta (EDA) opened the Wood Buffalo Business Recovery Hotline in Calgary, Alberta as a resource for businesses affected by the wildfires. Solely funded by the Canadian Red Cross, the Hotline was developed and operated by EDA, in close collaboration with the Red Cross and the Regional Municipality of Wood Buffalo Economic Development Department as their office at the time was inhabitable.

The goals and objectives were to:

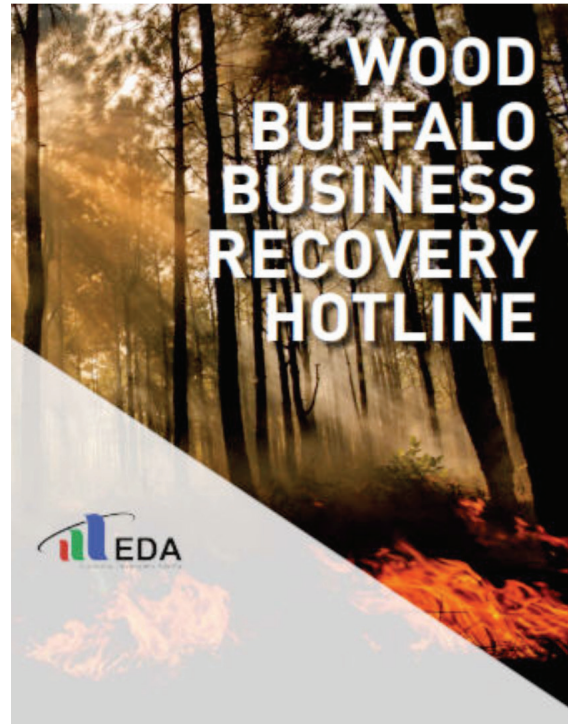
- Contact approximately 4,000 companies with current RMWB business licenses;
- Update contact information on these companies;
- Collect information on their specific and immediate needs after the wildfire;
- Provide resources to help with their identified needs;
- Assess their eligibility for Red Cross Small Business Emergency Financial Assistance in the amount of \$1,000; and
- Advise of the eligibility status and provide further instructions as needed.

The Hotline was marketed through Facebook, Twitter, LinkedIn, newspaper ads, billboards, radio spots, and the rmwb.ca, choosewoodbuffalo.com, and redcross.ca websites.

Operators handled both incoming and outgoing calls, and were provided with a:

- Script;
- Map of the affected areas, including the restricted zones;
- Resource Guide, with details on all aspects of the recovery efforts and resources available to both business owners and individuals (updated as needed); and
- Call-out lists pulled from the current RMWB business license database.
- Frequently Asked Questions (FAQ's)

To download the full report: <http://edaalberta.ca/resources/Pictures/FINAL%20Hotline%20Report.pdf>



Resource 4: Business Recovery Centre Model

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

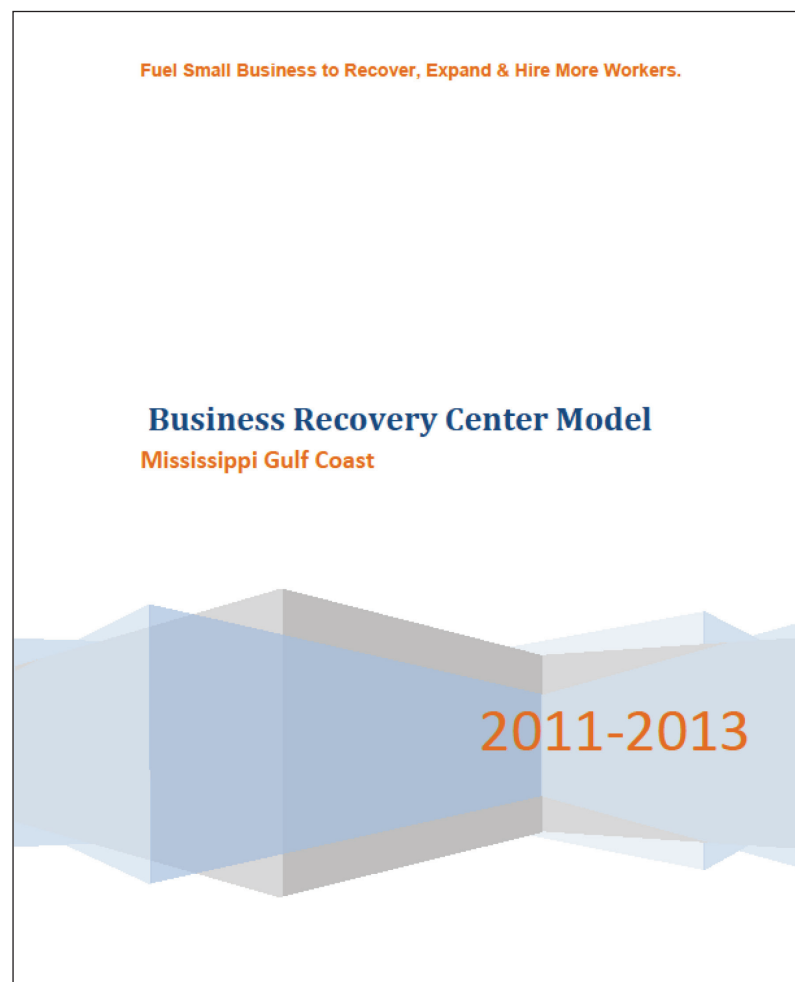
To complete this goal it was decided to develop a Pilot Model for a County Business Recovery Task Force & Centre in Hancock County that can be replicated across the Mississippi Coast in two other counties: Harrison and Jackson.

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 centre 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-Centre.pdf>



Resource 5: NYC Restoration Business Acceleration



The City of New York 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 built upon the expertise of the New Business Acceleration Team (NBAT) which 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. 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 6: Jefferson Parish Evacuation Re-Entry Plan

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.

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:
 - 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.
 - 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.
 - Implement a credentialing application and distribution process for other qualified businesses, groups, and individuals, as described herein.
 - Coordinate with municipalities, regional and business partners, and law enforcement agencies to ensure effective plan implementation.

Re-Entry Tiers

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.

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.
 - 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.
 - Credentialed damage assessment/stabilization teams from businesses and industries in

Jefferson Parish whose facilities pose a public safety concern, environmental threat, or substantial danger.

- 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.

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 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.

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,
 - (b) 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.

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.

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.
 - 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.

Direction and Control

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


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.

Plan Development and Maintenance

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

Resource 7: ExecutivePulse Disaster Survey

 ECONOMIC DISASTER RECOVERY

Disaster Questionnaire Survey

SURVEY INFORMATION

Interview date*

Interviewer 1*

Interviewer 2

Company contact*

Survey information notes

DISASTER QUESTIONNAIRE

I. Background\$QuestionHeader

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?

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ECONOMIC DISASTER RECOVERY

Disaster Questionnaire Survey

How many employees do you currently have?

Generally, how has this disaster impacted your business? Tell us your story.

Did your business have an emergency response plan?

☐ Yes ☐ No

If Yes, did you use it?

Does your business have a Business Disaster Plan?

☐ Yes ☐ No

If Yes, did you use it?

What measures did your business take to assist with your employees personal recovery?

What critical work processes were impacted?



ECONOMIC DISASTER RECOVERY

Disaster Questionnaire Survey

What were the quickest ones to recover?

What took the longest to recover?

Was your company's reputation enhanced, degraded or not impacted by the disaster?

☐ Enhanced ☐ Degraded ☐ Not Impacted

Please explain.

II. Impacts\$QuestionHeader

To your physical property

	Impact level	Dollars	Percent of total
Site	<hr/>	<hr/>	<hr/>
Facility	<hr/>	<hr/>	<hr/>
Machinery/Equipment	<hr/>	<hr/>	<hr/>
Raw materials	<hr/>	<hr/>	<hr/>
Contents	<hr/>	<hr/>	<hr/>
Other	<hr/>	<hr/>	<hr/>



ECONOMIC DISASTER RECOVERY

Disaster Questionnaire Survey

If Other, please explain

To your bottom line


	Impact level	Dollars	Percent of total
Productivity loss	<hr/>	<hr/>	<hr/>
Sales loss	<hr/>	<hr/>	<hr/>
Income loss	<hr/>	<hr/>	<hr/>
Payroll loss	<hr/>	<hr/>	<hr/>
Supplier loss	<hr/>	<hr/>	<hr/>
Other	<hr/>	<hr/>	<hr/>

If Other, please explain

To municipal and related services

	Impact level	Company name
Electricity	<hr/>	<hr/>
Gas	<hr/>	<hr/>
Water	<hr/>	<hr/>
Sewer	<hr/>	<hr/>
Trash removal	<hr/>	<hr/>
Cellular phone	<hr/>	<hr/>
Landline phone	<hr/>	<hr/>
Broadband/internet	<hr/>	<hr/>
Road transit	<hr/>	<hr/>
Rail transit	<hr/>	<hr/>
Air transit	<hr/>	<hr/>
Water transit	<hr/>	<hr/>

III. Insurance\$QuestionHeader

 ECONOMIC DISASTER RECOVERY

Disaster Questionnaire Survey

Please tell us about your insurance policies

Name of carrier

Type of policy

☐ Property
☐ Business interruption
☐ Natural disaster
☐ Business owner's policy
☐ Worker's compensation

Name of representative

Address

Phone number

_____ x _____

E-mail

Have you notified this insurance carrier about the disaster?

☐ Yes ☐ No

If Yes, has this insurance carrier done an on-site assessment of the situation

☐ Yes ☐ No

IV. Government and disaster agency response\$QuestionHeader

Please rate the following

Fair warning

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

Evacuation

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

Emergency shelter

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

Trauma care

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

General public security

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

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ECONOMIC DISASTER RECOVERY

Disaster Questionnaire Survey

Security of property

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

Restoration of municipal services

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

Timely communication

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

Provincial/state business financing support


☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

Federal financing support

☐ Not applicable ☐ Poor ☐ Fair ☐ Good ☐ Excellent

Please provide any additional details

Resource 8: EDRP Emergency Communications Checklist




ECONOMIC DISASTER RECOVERY


EMERGENCY COMMUNICATIONS

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.

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



Source: PrepareMyBusiness.org





ECONOMIC DISASTER RECOVERY

EMERGENCY COMMUNICATIONS

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



Source: PrepareMyBusiness.org



Resource 9: List of Federal Departments/Agencies- Economic Development Related Programs

Business Link (The) - The Business Link is a not-for-profit organization supported by the Government of Canada and the Government of Alberta that provides services and information to small and medium sized businesses in Alberta. <http://www.canadabusiness.ab.ca/>

Community Futures - Network of Canada - Operates 268 non-profit offices across Canada that provide small business services to people living in rural communities. Each office delivers small business loans, tools, training and events for people wanting to start, expand, franchise or sell a business. According to the CFNC Bylaws, the class of CFNC Members are divided into five groups of Members:

- the "Atlantic Group" composed of Associations from Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland and Labrador;
- the "Quebec Group" composed of the Association from Quebec;
- the "Ontario Group" composed of the Association from Ontario;
- the "Western Group" composed of Associations from Manitoba, Saskatchewan, Alberta and British Columbia; and
- the "Territories Group" composed of Associations from Yukon, Northwest Territories and Nunavut

<https://communityfuturescanada.ca/>

Regional Development Agencies - Regional Development Agencies across Canada help to address key economic challenges by providing regionally-tailored programs, services, knowledge and expertise that:

- Build on regional and local economic assets and strengths;
- Support business growth, productivity and innovation;
- Help small- and medium-sized businesses effectively compete in the global marketplace;
- Provide adjustment assistance in response to economic downturns and crises; and
- Support communities.

Each Regional Development Agency brings a regional policy perspective in support of the national agenda through: regional economic intelligence to support national decision-making; contributing to federal regional coordination and cooperative relationships with other levels of government, community and research institutions, and other stakeholders; and supporting national priorities in regions. By working collaboratively, the Regional Development Agencies ensure national coordination and maximized efficiencies, representing Canada on territorial development matters, and developing or renewing national programs or services delivered regionally.

- Western Economic Diversification Canada (www.wd-deo.gc.ca)
- Canada Economic Development for Quebec Regions (www.dec-ced.gc.ca)
- FedDev Ontario (www.feddevontario.gc.ca)
- FedNor (www.fednor.gc.ca)
- Canadian Northern Economic Development Agency (www.cannor.gc.ca)
- Atlantic Canada Opportunities Agency (www.acoa-apec.gc.ca)

Global Affairs Canada - Global Affairs Canada manages Canada's diplomatic and consular relations, promotes the country's international trade and leads Canada's international development and humanitarian assistance. The priorities of Global Affairs Canada include:

- Contributing to international peace, security and humanitarian assistance, through renewed leadership and constructive international engagement;
- Reinforcing Canada's relations with the United States and other key bilateral partners to advance Canadian interests;
- Strengthening Canada's contribution to a more just, inclusive and sustainable world; and
- Contributing to inclusive Canadian and global prosperity through increased and diversified international trade, and foreign direct investment.

Government of Canada has trade promotion officials throughout the world. www.international.gc.ca.

Resource 10: Personal Emergency Preparedness

CANADIAN
RED CROSS

BE
READY

January 2014
ISBN 978-1-55104-600-6

Be Ready
Disasters can happen any time, anywhere. You and your family can be ready by following these three simple steps: know the risks, make a plan, and get a kit. You should be prepared to take care of yourself and your family for at least 72 hours following a disaster.

Step 1: Know the risks
Find out what types of disasters are most likely to happen in your community. Disasters that commonly affect Canadians include floods, power outages, forest fires, tornadoes, hurricanes, and many more. To find out more about the risks where you live:

- Call your local municipality and ask what types of risks are common in your area
- Visit the 'Know the risks' section at redcross.ca/ready

Step 2: Make a plan
Your emergency plan will help you and your family know what to do in the event of a disaster or emergency, and it only takes 20 minutes. Here are some things to think about when making your plan:

- The best ways to evacuate from inside your home in case of an emergency, like a house fire
- The location of your emergency kit and water supply
- A safe place for your family to meet if you are not together when the emergency happens
- An out-of-town contact person for each family member to call or e-mail in case of an emergency
- A plan for any family members with special needs
- A plan for evacuating your pets
- Visit the 'Make a plan' section at redcross.ca/ready

In addition you should practice your evacuation plan frequently and find out your community's evacuation plan.

Step 3: Get a kit
Your disaster preparedness kit should be able to sustain you and your family for 72 hours following a disaster or an emergency.

You can make your own kit, or you can **buy** a disaster preparedness kit through the Canadian Red Cross. Please visit shop.redcross.ca for more details.

To **make** your own kit, you need:

- A sturdy and easy-to-carry bag, like a backpack
- **Water:** Store two litres of drinking water and two litres of water for washing per person, per day. Don't forget about your pets!
- **Food:** Store at least a 72 hour supply of non-perishable food for each person. Include food for your pets
- Manual can opener
- Crank or battery-operated flashlight, with extra batteries
- Crank or battery-operated radio, with extra batteries
- Extra keys, for house and car
- First aid kit
- Cash in small bills
- Special needs items (medications, infant formula)
- Personal hygiene items
- Important family documents (copies of birth and marriage certificates, passports, licences, wills, insurance)
- Copy of your emergency plan

**BE
READY**

Canadian Red Cross

The Canadian Red Cross has a Be Ready app to help individuals prepare. It features practical, useful preparedness information for a range of disasters and emergencies; access to in-app information anytime, anywhere even without reception or an internet connection; interactive quizzes allow you to earn badges that you can share with your friends and colleagues; and a toolkit with additional features e.g. flashlight, strobe, and alarm.

Ready Campaign

The U.S. Department of Homeland Security's www.ready.gov website is a valuable resource for individuals as well. Launched in February 2003, the Ready Campaign is a National public service campaign designed to educate and empower Americans to people to prepare for, respond to and mitigate emergencies, including natural and man-made disasters. The goal of the campaign is to promote preparedness through public involvement.

Ready and its Spanish language version Listo ask individuals to do four key things: (1) stay informed about the different types of emergencies that could occur and their appropriate responses (2) make a family emergency plan and (3) build an emergency supply kit, and (4) get involved in your community by taking action to prepare for emergencies.

Resource 11: Business Continuity Resources

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/>

Master Your Disaster (Business Edition)

Author Leann Hackman-Carty includes a Stand APART© Business Continuity template at the back of the Master Your Disaster (Business Edition). The Family Edition includes plans for individuals, and the Community Edition includes valuable community preparedness templates. All templates are available in the books, or in a downloadable online format for ease of use at www.masteryourdisaster.ca.

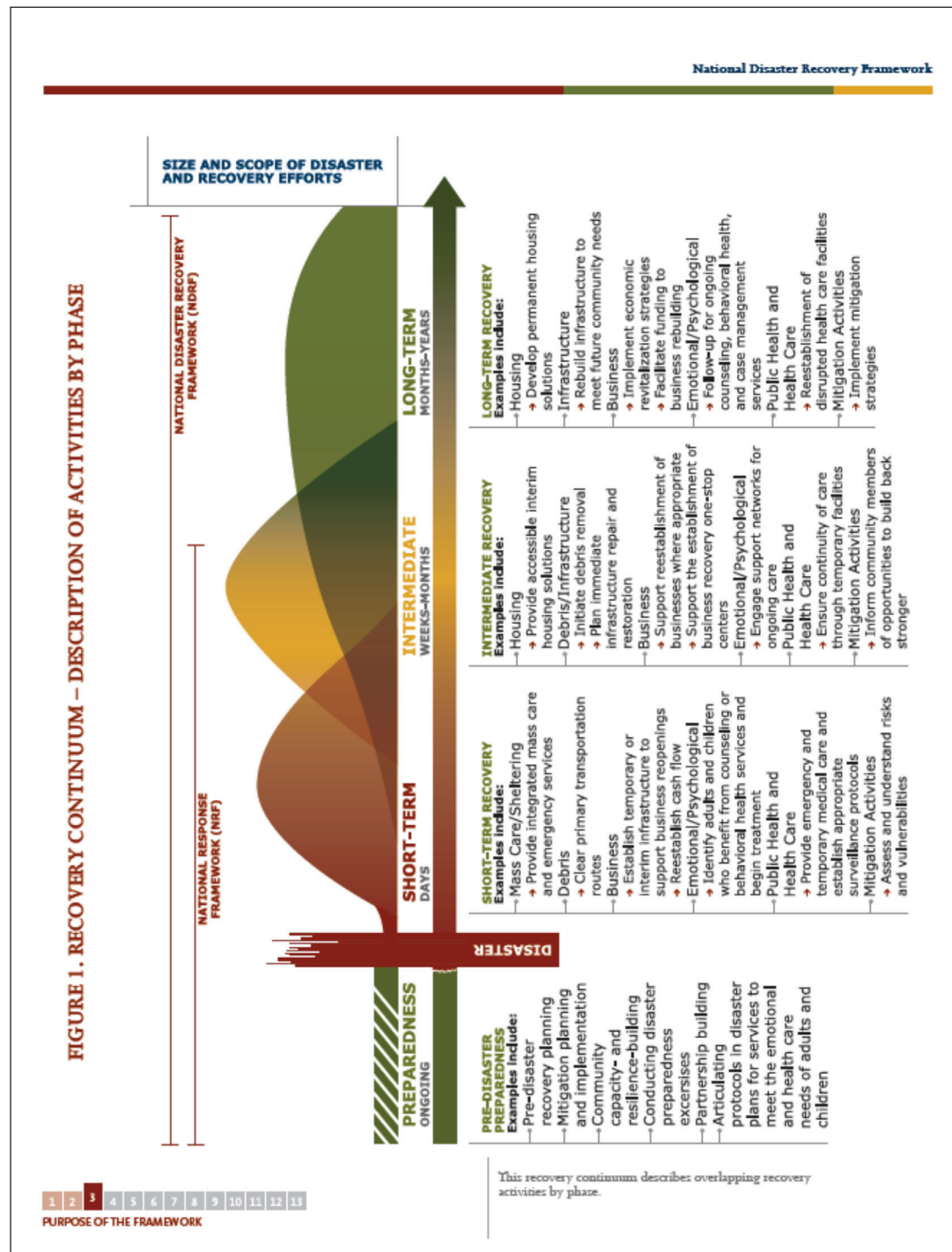
Business Continuity Plan and Templates for Entrepreneurs

Business Development Canada has a business continuity exercise that helps mitigate potential effects of an emergency. <https://www.bdc.ca/en/articles-tools/entrepreneur-toolkit/templates-business-guides/pages/business-continuity-guide-templates-entrepreneurs.aspx>

Business Continuity Institute

The Business Continuity Institute (BCI) has over 8,000 members in more than 100 countries. Its network of business continuity and resilience professionals help to keep the world's organizations on track, no matter what happens. They set guidelines, train professionals, gather research, and spread knowledge. www.thebci.org

Resource 12: FEMA National Disaster Recovery Framework Recovery Continuum- Description of Activities By Phase



Chapter Resource Appendix

Resources for Chapter III

Business Continuity Information Network is a web-based service where local businesses, county emergency management, and organizations that assist businesses can gather to share critical information and support continuity efforts before, during, and after a disaster. <http://www.bizrecovery.org/>

Business Development Canada (www.bdc.ca) provides online business continuity plan templates for entrepreneurs in order to help them minimize risks that an emergency poses to employees, clients and suppliers.

Canadian Red Cross (redcross.ca) - the Canadian Red Cross helps vulnerable communities in Canada affected by emergencies and disaster.

Community Resilience and Rapid Recovery of the Business Sector (<http://labrr.org/assets/docs/147.pdf>), by the Charleston Metro Chamber of Commerce, provides practical ideas for how business stakeholders should play a more active role in disaster recovery planning.

Disaster Recovery Institute Canada (www.dri.ca) provides education, based on continuity management professional practices, to individuals and organizations in Canada. They also provide a certification system based on professional practices attesting to the knowledge and experience of continuity management professionals, and promote the credibility and professionalism of its members.

FEMA PS-Prep (<http://www.fema.gov/privatesector/preparedness>) is being launched by the U.S. Department of Homeland Security as a voluntary private-sector preparedness accreditation and certification program.

National Federal of Independent Businesses (NFIB) hired the Gallup Organization in 2004 to poll small-business owners about whether specified types of natural disasters impacted their business operations in the last few years. Findings concluded that at least 30 percent of the 750 surveyed businesses had been closed 24 hours or longer at least once within the last three years. Almost 25 percent of those that had closed their doors were due to tornadoes, hurricanes, wind storms or floods, while 20 percent were due to blizzard or extreme cold conditions. For survey results <http://www.411sbfacts.com/index.html>.

New York University's International Centre for Enterprise Preparedness White Paper (<http://www.nyu.edu/intercep/Insurance%20Incentives%20for%20Corporate%20Preparedness%2017%20Oct%2006.pdf>) is on business preparedness and insurance incentives.

Open for Business (<https://www.disastersafety.org/open-for-business/>) is a business continuity planning guide published by the Insurance Institute for Business and Home Safety.

Prepare My Business (www.preparemybusiness.org) is a website that provides small business resources for disaster and business continuity planning.

Preparing Your Small Business for a Disaster (www.bomasf.org/pdf/news/smallbizdisaster.pdf) is a resource that lists effective emergency planning activities and provides a list of resources.

Public Safety Canada (publicsafety.gc.ca) - Public Safety Canada works in collaboration with other federal departments and provincial and territorial governments, academia, national associations and non-governmental organizations to strengthen national emergency preparedness including planning, training, exercises and sharing lessons learned.

Ready Business (<http://www.ready.gov/business-continuity-planning-suite>) was created to educate individuals, small businesses, and interested parties on business preparedness.

Sungard Knowledge Centre (www.sungardas.com/knowledgecentre) has free resources on continuity planning, cloud computing, and data management.

The Association of Contingency Planners (www.acp-international.com) is dedicated to protecting lives, safeguarding businesses and fostering community resiliency. It has become a unifying force in defining and leading the continuously evolving fields of business continuity, disaster recovery and emergency response.

The Business Continuity Institute (www.thebci.org) is the world's leading institute for business continuity. Established in 1994, the BCI has established itself as the leading membership and certifying organization for Business Continuity (BC) professionals worldwide. It has a Canadian chapter with active members across Canada and various regional forums.

The Centre for Excellence in Emergency Preparedness (www.ceep.ca) - CEEP's mission is to facilitate and maintain optimal Canadian health emergency preparedness by providing expert consensus based on evidence and best practice.

The Department of Homeland Security provides information on developing an IT disaster recovery plan for business <https://www.ready.gov/business/implementation/IT>

The Florida Business Disaster Survival Kit (www.fldisasterkit.org) assists local businesses in business continuity planning, hazards analysis and response, and preparedness resources.

The State of Florida's Business Disaster Planning Website (www.floridadisaster.org/business) will better prepare a business for future disasters by assisting them in creating a Business Disaster Plan.

The Preparing Businesses for a Pandemic course (www.eden.lsu.edu/EDENCourses/Pandemic) will assist small and medium-sized businesses in surviving a potential pandemic.

The State of Florida's Business Disaster Planning website (www.floridadisaster.org/business) will better prepare a business for future disasters by assisting them in creating a Business Disaster Plan.

Resources for Chapter V

"Assessing Community Impacts of Natural Disasters." Lindell, Michael and Carla Prater http://www.tc.umn.edu/~blume013/Lindell_Prater2003.pdf

"Economics of Natural Disasters: A Critical Review. Okuyama, Yasuhide. <http://www.ibcperu.org/doc/isis/14698.pdf>

"The Role of Business in Disaster Response." US Chamber of Commerce. <http://bclcl.uschamber.com/sites/default/files/documents/files/Role%20of%20Business%20in%20Disaster%20Response.pdf>

"Natural Hazards, Unnatural Disasters- The Economics of Effective Prevention." World Bank and United Nations. <http://issuu.com/world.bank.publications/docs/9780821380505?mode=embed&layout=http://skin.issuu.com/v/light/layout.xml&showFlipBtn=true>

"A Framework for Analyzing the Total Economic Impacts of Terrorist Attacks and Natural Disasters." Rose, Adam Z., Journal of Homeland Security and Emergency Management, Vol 6, Issue 1, Article 9, 2009, http://research.create.usc.edu/cgi/viewcontent.cgi?article=1012&context=published_papers

"Economic applications in disaster research, mitigation, and planning." Clower, Terry L. PhD, Centre for Economic Development and Research, University of North Texas, <http://www.training.fema.gov/>

"Economic Impact of Natural Disasters on Development in the Pacific." McKenzie, Emily; Prasad, Dr. Biman, Kaloumaria, Atu, Australian Agency for International Development (AusAID), 2006. http://aid.dfat.gov.au/Publications/Pages/9988_7222_3332_5331_7333.aspx

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"Indicators of Progress: Guidance on Measuring the Reduction of Disaster Risks and the Implementation of the Hyogo Framework for Action." United Nations, 2008. <http://www.unisdr.org/we/inform/publications/2259>

"Disaster Impact and Unmet Needs Assessment Kit." CDBG-DR Toolkits, Department of Housing and Urban Development, March, 2013. <https://www.hudexchange.info/resource/2870/disaster-impact-and-unmet-needs-assessment-kit/>

"Tight Coupling, Open Systems, and Losses from Extreme Events." Alesch, Daniel J. PhD, Holly, James N. PhD, Public Entity Risk Institute, 1999, http://www.riskinstitute.org/peri/images/file/Alesch_Tight_Coupling_Open_Systems_and_Losses_From_Extreme_Events.pdf

"The Northridge Earthquake, USA and its Economic and Social Impacts." Petak, William J., Elahi, Shirin, EuroConference on Global Change and Catastrophe Risk Management, 2000. <http://resilience.abag.ca.gov/wp-content/documents/resilience/toolkit/The%20Northridge%20Earthquake%20and%20its%20Economic%20and%20Social%20Impacts.pdf>

"Conducting a Community Audit: Assessing the Workforce Development Needs and Resources of Your Community." US Department of Labor, Employment and Training Administration, Office of Adult Services, August 2000. http://www.doleta.gov/layoff/pdf/conducting_a_community_audit.pdf

"Winners and Losers: Predicting Business Disaster Recovery Outcomes Following the Northridge Earthquake." Dahlhamer, James M., Tierney, Kathleen J., University of Delaware Disaster Research Centre, 1996. <http://dspace.udel.edu/handle/19716/651>

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"Galveston Island Tourism Economic Impact Analysis." AngelouEconomics, 2008. <http://www.cityofgalveston.org/DocumentCentre/Home/View/215>

"Community Economic Analysis: A How To Manual." Hustedde, Ronald J., Shaffer, Ron, Pulver, Glen. 1984. <http://www.epa.gov/greenkit/pdfs/howto.pdf>

Resources for Chapter VI

Crisis Communications and Social Media: A best practice guide to communicating in an emergency. IATA, 2014. <http://www.iata.org/publications/Documents/social-media-crisis-guidelines.pdf>

Social Media use during Disasters: A Review of the Knowledge Base and Gaps. https://www.start.umd.edu/sites/default/files/publications/START_SocialMediaUseduringDisasters_LitReview.pdf

Resources for Chapter VIII

A group of eight Florida counties participated in a pilot program to develop disaster preparedness plans through rigorous planning. These Post-Disaster Redevelopment Plans (PDRPs) identify policies, operational strategies, and roles and responsibilities to guide decisions that affect long-term recovery and redevelopment of the community after a disaster. Issues include housing recovery, financial administration, environmental restoration, health and social services, and economic redevelopment. Pilot communities that have developed the plan include: Hillsborough County, Manatee County, Nassau County, Panama City, Polk County, and Sarasota County. The guidebook developed by Florida to help communities prepare their own PDRPs can be accessed at: <http://www.floridadisaster.org/Recovery/IndividualAssistance/pdredevelopmentplan/Index.htm>

Master Your Disaster (Community Version), Leann Hackman-Carty, 2017.

Post-Disaster Recovery Planning Forum: How-To Guide (2007)—The Partnership for Disaster Resilience's guide provides a process for communities to start pre-planning for catastrophic events by engaging partners in identifying the critical issues the community will face in a post-disaster environment. The guide is available for download at: http://www.crew.org/sites/default/files/Post-Disaster-Recovery-Planning-Forum_UO-CSC.pdf

Disaster Recovery: Experiences from Past Disasters Offer Insights for Effective Collaboration after Catastrophic Events (July 2009)—Published by the Government Accounting Office (GAO), this report reviews five catastrophic disasters—the Loma Prieta earthquake (1989), Hurricane Andrew (1992), the Northridge earthquake (1994), the Kobe earthquake (1995), and the Grand Forks flood (1997)—to identify recovery lessons and make some recommendations to the federal government. The report is available at: <http://www.gao.gov/new.items/d09811.pdf>.

Louisiana Speaks: Long-term Community Recovery Planning—This tool provides pre- and post-disaster planning resources for the citizens of southern Louisiana and beyond. The tool is available at: <http://www.lra.louisiana.gov/assets/docs/searchable/LA%20Speaks/Section%201%20-%20Executive%20Summary.pdf>

Grand Forks, ND's Flood Disaster Recovery and Lessons Learned (2011) - Prepared by the City of Grand Forks, ND and regularly updated every year since the 1997 floods, this material introduces you to the Grand Forks community, provides a brief overview of the 1997 flood and recovery process, introduces the strategies and action steps deployed, and identifies lessons learned for the community. The document can be downloaded at: <http://www.grandforksgov.com/home/showdocument?id=528>

Association of Bay Area Governments' Resilience Program—This program supports recovery and mitigation research, planning and action for a resilient Bay Area. These resources are available at: <http://quake.abag.ca.gov/>

Policies for Guiding Planning for Post-Disaster Recovery and Reconstruction—This is a discussion on factors that should be considered as part of planning for post-disaster recovery and reconstruction, including: enabling legislations at the provincial and local level, economic recovery, hazard mitigation, and strategies that have worked in post-disaster recovery. Its section on economic recovery provides useful information on economic impact analysis as well as how to build a more resilient/sustainable economy. The paper is available at: <http://>

www.fema.gov/pdf/rebuild/ltrc/fema_apr_ch3.pdf

RestoreYourEconomy.org- With funding from the U.S. Economic Development Administration, IEDC has developed a website, www.restoreyoureconomy.org, devoted to disaster preparedness and post-disaster economic recovery. The website's purpose is to disseminate economic recovery information such as best practice knowledge, training resources, events, and news items to economic development practitioners. The site presents critical issues and challenges, highlights lessons learned in response and recovery processes, and suggests resources and best practices to use in restoring the local economy after a disaster. The site also provides an opportunity to network with other communities.

Town of Lyons, Colorado, Recovery Action Plan (2014) – Shortly after the flood waters hit Lyons, Colorado, hundreds of citizens engaged in the recovery planning process. Three months later, stakeholder created a recovery plan to address sectors such as economic and business development, infrastructure, and housing. In addition to charting the recovery process, this plan shows how the Lyons community developed a framework for recovery and resilience. It is available at: <http://www.lyonsrecovery.com/uploads/8/3/4/9/8349039/lyonsrecoveryactionplan.pdf>

Toward a Resilient Seattle: Post-Disaster Recovery Plan Framework (2013)–Developed from community and stakeholder input, this framework outlines core planning priorities and lays a foundation for the next phase of Seattle’s recovery planning process. This resource is available at: <http://www.seattle.gov/emergency/publications/documents/SeattleDisasterRecoveryPlanFrameworkJan2013final.pdf>

Grand Forks, ND’s Flood Disaster Recovery and Lessons Learned (2011) - Prepared by the City of Grand Forks, ND and regularly updated every year since the 1997 floods, this material introduces you to the Grand Forks community, provides a brief overview of the 1997 flood and recovery process, introduces the strategies and action steps deployed, and identifies lessons learned for the community. The document can be downloaded at: <http://www.grandforksgov.com/Reports/lessonslearned.pdf>

City of Oakland Long-Term Disaster Recovery Plan (2010)-- The plan serves as a model action plan for the City of Oakland and other cities and counties in the San Francisco Bay Area. Prepared by the Association of Bay Area Government (ABAG), this plan covers eight issues identified by ABAG as critical to recovery: financing recovery issues, recovery of government facilities and services, long-term housing recovery, long-term recovery of business, long-term recovery of health care, schools and education, utilities and transportation, and land use change. Download the plan at: <http://resilience.abag.ca.gov/wp-content/documents/resilience/toolkit/Oakland%20Long%20Term%20Disaster%20Recovery%20Plan.pdf>

State Disaster Recovery Planning Guide (2012)–Developed by the Coastal Hazards Centre at the University of North Carolina at Chapel Hill, this publication is intended to serve as an evaluative guidebook. The guide presents the how-tos in the planning processes and informative best practices. It also includes questions that encourage thorough reflection and assessment as well as suggested actions to target identified issues. This guide is available at: http://coastalhazardscentre.org/dev/wp-content/uploads/2012/05/State-Disaster-Recovery-Planning-Guide_2012.pdf

FEMA’s Emergency Support Function #14’s Long-Term Recovery Annex–This document identifies and facilitates the use of recovery funding and provides technical assistance (such as impact analyses) for community recovery and recovery planning support. The document is available at: <http://www.fema.gov/pdf/emergency/nrf/nrf-esf-14.pdf>.

Long-Term Community Recovery ToolBox (March 2012) - FEMA funded the creation of this toolbox to assist local community leaders with communication, decision-making, identification and development of projects and the creation of funding strategies critical to long-term community recovery. The toolbox supports the work of local communities and recovery professionals involved with long-term disaster recovery. Download the toolbox at: <http://www.fema.gov/national-disaster-recovery-framework/community-recovery-management-toolkit>

Community Economic Recovery Guidebook (2011)–The Wisconsin Economic Development Corporation (WEDC) developed this guidebook to assist economic development organizations, businesses and community leaders better prepare for post-disaster economic recovery. In addition to providing real situations and national best practices, this guide also connects disaster management functions with economic development principles to identify strategies and suggests action steps pre- and post-disaster. The guidebook is available for download at: http://emergencymanagement.wi.gov/resources/docs/CERG_11aug5%20FINAL.pdf

Policies for Guiding Planning for Post-Disaster Recovery and Reconstruction–This is a discussion on factors that should be considered as part of planning for post-disaster recovery and reconstruction, including: enabling legislations at the state and local level, economic recovery, hazard mitigation, and strategies that have worked in post-disaster recovery. Its section on economic recovery provides useful information on economic impact analysis as well as how to build a more resilient/sustainable economy. The paper is available at: http://www.fema.gov/pdf/rebuild/ltrc/fema_apr_ch3.pdf

Post-Disaster Redevelopment Plans (PDRPs) in Florida - These plans have been created to identify policies, operational strategies, and roles and responsibilities to guide decisions that affect long-term recovery and redevelopment of the community after a disaster. Issues include housing recovery, financial administration, environmental restoration, health and social services, and economic redevelopment. The following pilot communities initially developed the first set of plans: Hillsborough County, Manatee County, Nassau County, Panama City, Polk County, and Sarasota County. The state of Florida developed a guidebook to help communities prepare a PDRP: <http://www.floridadisaster.org/Recovery/IndividualAssistance/pdredevelopmentplan/Index.htm>

Post-Disaster Recovery Planning Forum: How-To Guide (2007)–The Partnership for Disaster Resilience’s guide provides a process for communities to start pre-planning for catastrophic events by engaging partners in identifying the critical issues the community will face in a post-disaster environment. The guide is available for download at: http://www.crew.org/sites/default/files/Post-Disaster-Recovery-Planning-Forum_UO-CSC.pdf.

Regional Resilience: RUPRI Rural Futures Lab Research and Policy Brief (2012) - This brief provides a framework for assessing current policy and practice related to regional resilience. It was prepared by the Rural Policy Research Institute’s (RUPRI) Rural Futures Lab at the request of the National Association of Development Organizations (NADO) Research Foundation and is available for download at: <http://www.nado.org/wp-content/uploads/2012/04/RUPRI-Regional-Resilience-Research-Policy-Brief.pdf>

Resilient Regions: Integrating Economic Development Strategies, Sustainability Principles and Hazard Mitigation Planning (2011) –This report, published by the National Associations of Development Organizations, provides an in-depth look at the roles that regional planning and development organizations assume to help local and regional economies re-build after natural disasters. As such, it offers examples of regional economic recovery initiatives after the catastrophic events of 2008 in Iowa, Florida, Oklahoma, Mississippi, and Wisconsin: <http://www.nado.org/wp-content/uploads/2011/07/NADOResilientReport.pdf>

Regional Disaster Resilience: A Guide for Developing an Action Plan (2011) – Developed by The Infrastructure Security Partnership (TISP), this guide is a roadmap that outlines the step-by-step process to develop a cross-sector, multi-jurisdiction strategy to build capacity to deal with crises. The guide also addresses the challenges facing action plan implementation along with practical ways to organize, maintain, and sustain continued stakeholder collaboration and interest on a regional level. Access this roadmap here: [http://www.tisp.org/tisp/file/Template_TISP%20Layout_v29\(2\).pdf](http://www.tisp.org/tisp/file/Template_TISP%20Layout_v29(2).pdf)

Resources for Chapter IX

Vibrant Communities Canada (www.vibrantcanada.ca)

The Canadian CED Network (www.ccednet-rcedc.ca)

Neighbourhood Revitalization Planning and Implementation Tips and Strategies:
<http://www.blueprintcommunities.com/wv/pdfs/newberg%20presentation.pdf>

Main Street Canada <https://www.nationaltrustcanada.ca/resources/regeneration/main-street>

Resources for Chapter X

Potential analyses:

- Cluster analysis: identify both existing (or established) clusters and emerging clusters.
- Retail Leakage and Capture Analysis: identify leakage (when consumers spend dollars outside of the community) and capture (retail sectors are receiving more dollars than what the local community can supply)
- Input-output models: Determine regional multipliers
- Shift share: determine regional competitive advantages
- Location Quotient (LQ): identify exporting industries
Federal Resources for Creating Assessments (Statistics Canada):
- Consumer Price Index
- Current employment and occupational statistics
- Estimates of gross provincial product
- Data on foreign direct investment
- Demographic and workforce data
- Five-year economic census (for years ending in 1 and 6)
- Annual survey of manufacturers for Canada and the provinces
- Business patterns for provinces, metropolitan areas, regions

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