

# **TEDC “Don’t Mess With Texas” Resilience Workshop**

## **Exes, Texas Case Study**

Exes, Texas (apologies for the reference) is a mid-sized community with a population of 50,000. Though located over 100 miles from the Gulf Coast, it was ravaged by the remnants of Hurricane Ike in 2008 and suffered flooding from Hurricane Harvey in 2017. In addition, Exes suffered extensive damage from a EF 4 tornado in 2019, which although spared downtown, devastated its primary business park, causing several manufacturers to stop production for over three weeks, causing significant business interruption costs.

Now, a giant technology company is searching for a new location for its app developers. As Exes is home to a small but highly ranked university specializing in engineering and science, it has generated significant interest as a potential location. The facility would have 300,000 sq ft and generate 1,200 jobs with an average salary of \$80,000/yr. Obviously, this is a desirable prospect, and Exes has developed a complete package, including an ideal site, tax abatements, and both degree and non-degree workforce training programs.

The company has its own site location/asset management executives, who have been talking with the Exes Economic Development Council on various issues related to the community. In one conversation, the site executive threw a bit of a curve ball when he asked about Exes’ economic resilience efforts. Though the county emergency management agency had a disaster response plan, Exes had no concerted effort toward economic resilience.

Exes’ EDC Executive Director responded that the EDC was finalizing an economic resilience strategy and promised to provide it within the next three days. Of course, the Executive Director was being, well, an economic developer! So, the Executive Director approached you and begged you to assemble a team and develop a resilience strategy. Luckily, you just completed a TEDC workshop on economic resilience and had a resource guide to help with this daunting task.

The site location executive will be back in Exes, so the Executive Director asked you and your team to prepare and deliver a 5-minute presentation on its’ economic resilience strategy to the executive. Directions for this exercise are simple: break into groups, and develop resilience presentations, beginning now and working through lunch. Please keep the following in mind:

--The executive is aware of the weather-related incidents that befell Exes, and the damage to the industrial park.

--The proposed facility will be highly dependent on reliable power and a robust broadband infrastructure.

--Not only the facility, but also the workforce, are critical to avoid significant interruption costs.

The winning team will receive an original New Orleans treat compliments of the Texas Cajun.

# **Economic Resilience Guide for Texas Communities and Regions**

## **Prepared for the Texas Economic Development Council**

### **By the International Sustainable Resilience Center, Inc.**

#### **Introduction**

According to the Federal Emergency Management Agency, “Resilience is the capacity of individuals, communities, businesses, institutions, and governments to adapt to changing conditions and to prepare for, withstand, and rapidly recover from disruptions to everyday life, such as hazard events. Texas understands disruptions to everyday life more than most any location in the world, as a frequent victim of hurricanes, tornadoes, both drought and floods and the COVID-19 pandemic. Stakeholders recognize the need for more—more rapid response, more effort in recovery, and more hazard mitigation. To achieve more in all three categories of resilience, a bold action agenda is critical. Taking resilience into their own hands will allow communities and regions to control their own destiny regarding adverse events. Increasing resilience will rely on the following goals and action agendas. The following steps should be taken by communities, EDOs, and regions in Texas to increase economic resilience:

#### **A. Establish a Resilience Task Force and Create Action Plan with Four Components**

The first step in increasing resilience is to establish a regional economic resilience task force to guide the resilience-enhancing process. The task force should include representatives from each community, Texas and Federal government agencies, regional and local third sector nonprofits (NGOs), economic development organizations (EDOs), Communities and Local/Regional leadership, and industry representatives. The task force will serve as a central point of action, working with governments, municipalities, EDOs, NGOs, and industry to fund and implement resilience-enhancing actions. The resilience task force should be organized and begin working no later than December 31, 2021.

##### **1. Draft a regional economic resilience action plan, including resilience of Communities and Local/Regional EEOs**

Immediately on formation of the Task Force should begin development of a regional economic resilience action plan. The plan should focus on whole community resilience, with emphasis on helping businesses and institutions develop and implement continuity of operations plans and ensuring that essential services can be provided in the wake of a disaster. The Task Force may also consider contracting with subject matter expertise for development and implementation to ensure the plan is successful. The action plan should be a living document, able to change as circumstances merit. National and International best practices in resilience planning are readily available for guidance in drafting the plan. An implementation tracking system for action plan should be developed and administered by a cloud-based program such as Microsoft Teams. The action plan should be completed by June 30, 2022

##### **2. Establish a regional BEOC, alone or within existing emergency management (EM) centers.**

Regional Business Emergency Operations Centers (BEOCs) are gaining in popularity nationwide. While the primary function of BEOCs is emergency communications, many also provide ongoing information on response, recovery, and ongoing resilience for businesses in the region. Critical to BEOCs is the relationship with local emergency management offices, and some BEOCs are co-located at EM offices. The Resilience Task Force should explore these options, work to secure both initial and ongoing operational funding, and work with local EM officials to successfully implement regional BEOCs.

### **3. Create and curate a resilience information section on the EDO/Community website**

Information and resources for Communities and Local/Regional EDOs, including direction on how to integrate resilience into other local and regional resilience efforts, such as land use, economic development and redevelopment planning, should be placed on the Community and/or EDO website under “Community and Local/Regional Resilience Resources”. Highlighting this resource can help ensure engagement of community stakeholders including community organizations, nonprofits, workforce organizations, and private infrastructure providers such as broadband, cellular, and other owner/operators--nationally, 85% of infrastructure is private.

### **4. Utilize FEMA’s BCA tool and PPPs to leverage resilience investments.**

FEMA’s Benefit Cost Analysis (BCA) tool is designed document benefits of resilience investments and to apply for Hazard Mitigation Grant Program funding. Using the BCA, organizations can also develop public private partnerships, both hard (built environment) and soft (programmatic) ones. It can also be used as justification for providing incentives for business and industry to invest the time and effort necessary to develop continuity plans, and to justify dedication of resources to protect and restore essential services such as power, water, and telecom infrastructure. The task force should provide training to key staff in how to operate the BCA (a comprehensive, nine-part course including presentations and workbooks is available free from FEMA), and work with local governments and regional Councils of Government (COGs) to explore PPPs as a viable way to leverage infrastructure investments.

## **B. Initiate Initiatives to Enhance Small Business Resilience and Recovery**

Small businesses are especially vulnerable to disasters. Unlike large companies, they generally do not have reserve capital to withstand damage and/or interruption, and less than 30% have business continuity (resilience) plans, the following should be implemented:

### **1. Develop emergency funding sources for small businesses.**

FEMA states a sad statistic--after major disasters, 40% of businesses never reopen. One of the keys is funding to survive and reopen until federally backed funding (SBA Disaster Loans, CDBG-Disaster Recovery Business Loans) arrives. The most successful of these emergency funds have been originated by the third sector, who agreed in advance that when disaster strikes, they will immediately put funding in place for small (\$10,000-\$20,000) survival loans to keep businesses from closing forever. Using a triage system developed after 9-11, businesses that have been damaged but can still survive with help will be prioritized from those that unfortunately cannot be saved or those that can survive for the time being.

### **2. Provide information on types and importance of insurance protection by type of hazard.**

Many small business owners are unaware of specific insurance that is both affordable and critical to their survival after disaster. These include business interruption policies, the National Flood Insurance Program (NFIP), and Insurance-Linked Securities such as Catastrophe Bonds. These disaster-specific insurance products may be the difference between survival and failure for many businesses.

### **3. Implement education and awareness initiatives for small businesses**

Often, small businesses are unaware of many response and recovery operations/ resources. Often businesses are simply unaware of resources available for them in recovery. SBA disaster loans, CDBG-DR loan programs, Small Business Development Center advice and counseling, and aid to communities through Public Assistance to repair public infrastructure damage may help

businesses in recovery, but only if businesses know how to access them. Providing information (pre-recorded videos, guidebooks, etc.) can make a difference as businesses struggle to recover.

**4. Develop assistance for local businesses in securing response and recovery contracting** Often, local businesses who are struggling due to damage and/or interruption may miss the chance to obtain contracts and/or sell goods to recovery operations. This business may make the difference between survival and failure, but not without knowledge of potential opportunities flowing from recovery funding. A recovery contracting/sales opportunity portal should be implemented to ensure local businesses are aware of these opportunities.

**5. Have ready-to-implement buy local awareness campaigns to help businesses in recovery**

Often, disaster survivors are unsure or unaware of the status of businesses in their communities, and often go elsewhere to purchase (or increasingly, order goods and services online). A campaign to use local and social media to let the community know that businesses either escaped damage or are back up and running is critical to ensuring their customers do not go elsewhere. Preparing such a program for “plug and play” should be done as soon as possible.

**6. Develop a program to assist small and informal businesses in proper record-keeping**

To meet public recovery assistance requirements, small and/or informal businesses such as fishermen or roadside food vendors, plus many others must keep records in a format that is required for aid from FEMA and other federal agencies. An outreach program with simple tools to help businesses keep better records could yield positive results for small and/or informal businesses.

**7. Create resilience hubs and develop resilience networks for small business**

Communities and Local/Regional EDOs should apply to establish resilience hubs. Resilience hubs provide training before disasters and can serve as a shelter and source of information after disasters. In addition, small business resilience networks have shown to increase collaboration and cooperation in bringing them together to help each other in disaster, including sharing space, working together to keep local businesses, and in some cases even joint production. Both these initiatives can increase small business survival.

**8. Work with local and state agencies to streamline zoning/permitting after disasters**

To hasten small business recovery, communities affected by disaster, such as Branson Missouri that was devastated by a tornado in 2012, worked to temporarily ease restrictions on zoning and permitting. They gave small businesses a 60-day moratorium on having to meet some regulations (such as required parking spots) so they could resume operations quickly.

**C. Develop relationships between Communities and Local/Regional EDOs and critical infrastructure owners/operators/supply chains**

Critical infrastructure is defined by FEMA as those assets, systems, networks, and functions so vital to the United States that their incapacitation or destruction would have a debilitating impact on security, national economic security, public health or safety, or any combination of those matters. Owners and operators such as municipalities, EDOs, and public and private interests (nationally, 85% of all types of infrastructure is privately owned) are essential to economic resilience. Of particular concern is that debilitation of critical infrastructure will interrupt business supply chains, affecting both suppliers and end users. Communities and Local/Regional EDOs should work with organizations to ensure local businesses maintain access to supply chains through pre-incident contingency planning. Businesses, whether large or small, manufacturing or retail, rely on supplies of products and/or materials to continue operations.

Supply chain resilience has become a critical component of overall resilience, as amplified by the COVID19 pandemic. To support this effort, Communities and Local/Regional EDOs should provide a toolkit of resources to enable businesses to implement contingency plans for supply chain interruption.

#### **D. In EDO strategy, include diversification via key industry clusters to enhance economic resilience**

Economic resilience includes economic diversification, whether against natural disasters, man-made incidents, or most recently pandemics. COVID19 decimated economies very dependent on travel and tourism, while economies that included information technology, logistics and distribution, and production of essential goods often grew even in the worst of the pandemic. The following six steps can help diversify while accounting for vulnerabilities of the resident industry mix:

- 1. Identify specific vulnerabilities in key resident and targeted prospective industries, take action to mitigate those risks.**
- 2. Provide information on most likely hazards, and specific efforts underway to mitigate them, to EDOs in the region so they can in turn inform both existing industry clusters and prospects.**
- 3. Charted industry interdependencies and opportunities to enhance resilience via industry/government partnerships.**
- 4. Actively promote ongoing research, innovation, and actions to strengthen resilience, and recruit and/or grow a base of companies in the disaster recovery and resilience industries to both provide services quickly and diversify the economic base.**
- 5. Have a mechanism to provide live, updatable resource guides for industry clusters prior to and after incidents.**
- 6. Include training/information in individual resilience and strategies (transportation, childcare) so employees in industry clusters can better withstand incidents and return to work more quickly.**

#### **E. Pandemics**

As of the completion of this guide, the global COVID19 pandemic is not yet under control. Pandemics are particularly difficult to address, and the current affliction has forever changed both business and personal behavior. There are, however, actions that can be taken to mitigate some of the risks for this and future pandemics, as outlined in the following 3 steps.

- 1. Work with local/state government developed a detailed response effort to help adapt businesses and citizens to changes brought about by pandemics, including social distancing, digital business models, and similar measures.**
- 2. Create a contingency plan for infrastructure adaptation such as expanding healthcare and education facilities, caused by pandemics, using a combination of grants and public private partnerships.**
- 3. Have pre-registration programs for businesses, individuals and community organizations in advance of major disasters and pandemics so that they may return immediately after areas are declared safe.**

#### **F. Cyber Security**

Increasingly, cyber-related incidents are plaguing both industry and government. Recent high-profile attacks on the U.S. government and tech giants like IBM have dominated the headlines, but small-to-medium sized businesses, and even self-employed and gig workers have been subject to information theft and ransomware. Consensus by several organizations in the field is that in 2021 Cyber-attacks will inflict damages totaling \$6 Trillion nationally, and over \$10 Trillion globally. To increase resilience of the regional economy to these incidents, Communities and Local/Regional EDOs should implement the following three actions to enhance Cyber Security resilience.

- 1. Serve as convener and coordinator of collaborative measures for critical cyber resilience**

Working with owners/operators of critical infrastructure and public services such as power and water, implement resilience measures such as joint purchases of cyber protection systems, communications between owners/operators on cyber incidents, and joint recovery operations in partnership with local and Texas government emergency management agencies.

## **2. Provide training and assistance programs for business to create their own cyber-security plans**

Numerous training programs, including FEMA's Emergency Management Institute, offer courses in Cyber Security are available for business and industry of all sizes. FEMA's EMI cyber training is here: (<https://training.fema.gov/is/courseoverview.aspx?code=IS-523>) Businesses, plus local government and nonprofit organizations can all receive training in how to develop and implement cyber security plans. Communities and Local/Regional EDOs can provide messaging on these resources and assist organizations in obtaining them.

## **3. Develop options for alternative sources of critical infrastructure**

Cyberattacks on infrastructure systems can create severe and long-lasting disruption. New technologies, such as water purification treatments, satellite-provided cell and broadband connections, and solar powered long-lasting battery power backup, can help businesses, government, and community organizations to survive and reopen.

## **G. Natural (Blue and Green) Resilience Infrastructure**

Valuing natural infrastructure such as coral reefs and mountainside trees increases resilience. New recognition of the contribution of these assets to protect the built environment, and their value to sustainable development such as ecotourism and carbon credits is becoming fully recognized. As Texas is rich in natural infrastructure, Communities and Local/Regional EDOs should support an effort to value and sustainably develop it. This initiative would focus on blue infrastructure, including coastal and ocean, and green infrastructure inland, while integrating federal and philanthropic grants, facilitating establishment of value through parametric insurance, and leveraging that value for both preservation and resilience, based on reduction of risk to public and private built environment.

## **H. Terrorism, Geopolitical, and Industrial Incidents**

Adverse incidents are not at all limited to natural disasters and pandemics. Ask the people of Oklahoma City and New York, both of which were severely impacted by terrorism. Or Baltimore Maryland, Minneapolis Minnesota, and other communities that are impacted by geopolitical unrest. Or states on the Gulf Coast impacted by the BP oil spill, and of course the town of West, that were all decimated by industrial incidents. Finally, disruptive technology can have severe negative impacts, ask travel agencies who have been severely impacted by online travel sites. To ensure elements of resilience are addressed for these incidents, Communities and EDOs can lead and/or support the following efforts.

- 1. Work with emergency management agencies to create a contingency plan for businesses in case of terrorist attacks.**
- 2. Have a plan to provide supplies of water in case of severe drought or terrorist-related water contamination.**
- 3. Create a program to incentivize/assist businesses to create a continuity plan specifically for terrorist attacks.**
- 4. Develop an economic response and recovery strategy for industrial incidents such as oil spills, explosions, etcetera.**
- 5. Create an initiative to help businesses respond to global geopolitical incidents such as conflicts over trade, external or internal conflict, and civil unrest.**
- 6. Create strategies for business adaptation to disruptive technology (energy sources, digitization, AI, robotics, etcetera).**

**I. Develop a public relations response plan for incidents of any type**

A critical, but often overlooked resilience initiative is to develop a public relations plan to enable united, solid response in case of local and/or widespread press coverage. Clear, consistent messaging should be developed and agreed to by all six municipalities, designed to inform and reassure businesses and citizens, in the community while providing a clear, consistent message of resilience to the outside world. Communities and/or EDOs should work with stakeholders to develop a PR response plan that can be activated .

**By following these steps and implementing these strategies, Texas communities and regions can better withstand, and more quickly recover from, adverse events of all types.**