

North Central Texas Council of Governments

May 25, 2016







NCTCOG Economic Resilience Project

 Goal: To assist local businesses, economic development organizations, and local jurisdictions to improve their ability to quickly recover from disasters.





Workshop Organization



Module One: Resilience and Critical Business Functions



Module Two: Managing Economic Resilience



Open Discussion of Issues



Module 1: Small Businesses and Critical Business Functions



Economic Resilience and the Region

Overview of risks and issues



What's at Stake?



Approximately 7 million residents



4th largest MSA (by population)



Key financial center



6th largest concentration of high tech jobs



3rd busiest airport in the world



National distribution hub



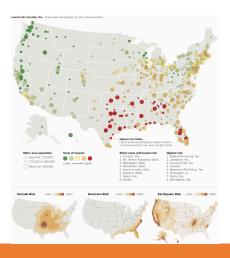
21 Fortune 500 companies



If a country, 27th GDP in the world



North Central Texas Region at Risk for Natural Disasters



Date	Presidential Disaster Declarations Declared Counties
Dec 2015	Dallas, Ellis, Kaufman, Navarro, Rockwall
Oct 2015	Navarro
May 2015	Dallas, Denton, Ellis, Erath, Hood, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Somervell, Tarrant, Wise
Aug 2011	Hunt, Navarro, Wise
Apr 2011	Erath, Palo Pinto, Somervell
Apr 2007	Denton
Jan 2006	Erath, Hood, Palo Pinto, Tarrant, Wise, and all counties in the State



The Cost of Disasters in North Central Texas

- \$1.2 billion in the Dallas metropolitan area from December 2015 tornadoes.
- \$2 billion in the Dallas/Fort Worth area from tornadoes and hail storms in 2012.
- \$400 million dollars from 2009 "extraordinary windstorm" in the Dallas/Fort Worth area.
- \$1.1 billion in Tarrant County in 1995 due to hail, flash flooding, and high winds.
- Over \$347 million between 1955 and 2012 from hailstorms and tornadoes in Collin and Denton counties.
- Hail storm damage in the region resulted in 4 of the top 10 costliest disasters in Texas
 - May 1995 cost North Texas \$1.7 billion
 - April 1992 caused \$1.2 billion in damages to Ft. Worth/Waco
 - April 2003 caused \$1.2 billion in damages to North Texas
 - June 2012 caused \$917 million to Dallas/Fort Worth



What is Resilience?

The ability to adapt to changing conditions, and withstand and rapidly recover from disruption due to emergencies.





What is Economic Recovery and Why Do We Care?

- Business losses translate into the loss of resources for local residents as they try to recover, and the loss of taxes and services to local governments as they try to manage the recovery.
- Businesses employ workers, provide for community needs and services and generate revenue once again, allowing the community to provide for itself.
- 85% of our nations critical infrastructure (ag, food, telecommunications, energy, banking) is concentrated in the private sector.



How Prepared are Businesses for Disasters

- Only 26% of small to mid-sized businesses have a plan
- 40% to 60% of small businesses never reopen after a disaster
 - Of those that do, 25% will close within 2 years
- Less than 25% of Fortune 500 companies could be considered capable of successfully managing a corporate crisis
- Survey of 100 financial executives (\$1 billion in annual revenue) - fewer that 21% were concerned about negative impact of a financial disaster



John Sealy Hospital – UTMB



Economic Development = Economic Resilience

• Economic development and economic recovery share a common outcome: increasing the resiliency of local economies.



• Investing into resilience reaps profits regardless of a disaster.



✓ Check-In

- Have any of your businesses been affected by a disaster?
- What are you concerned about in terms of disasters or economic shocks?



Critical Business Functions

Overview of risks and



Critical Business Functions

- Most sensitive to downtime
- Fulfill legal or financial obligations to maintain cash flow
- Play a key role in maintaining the business' market share and reputation
- Safeguard an irreplaceable asset





Categories of Critical Functions



Structures and Equipment



Utilities and Information Technology



Transportation and Supply Chain



Employees/ Workforce



Customers, Markets, & Procurement



Finance & Financial Systems



Business Continuity Plan

- Essential Functions
- Delegation of Authority
- Order of Succession
- Alternate Operating Facilities
- Interoperable Communications
- Vital Records and Databases
- Human Capital Planning and Preparedness
- Test, Training, and Exercise Program
- Devolution of Control and Direction
- Reconstruction





Business Impact Assessment and Planning Tool North Central Texas Council of Government								
The Business Impact Assessment and Planning Tool can be used to identify critical business functions, and plan for their resilience. The assessment tool can be used for any particular threat (e.g., tornado, flood, terrorism, etc.) or for "All Hazards". Use drop-down menus in the digital version to mark the priority, vulnerability, and recovery timeline needed for each business function.								
Business Name	Date of Assessment		Type of Threat					
Arlington Printastic, Inc.	25-	25-May-16		All Hazards				
Business Function	Priority	Vulnerability	Recovery Need	Mitigation Plan				
Example: Payroll	Essential	Vulnerable	Medium-Term	Move to a 3rd party payroll system.				
Physical Capital/Facilities								
Access/stability of primary business site	Critical	Highly Vulnerable	Immediate					
Access/stability of other sites (e.g. warehouse)	Not-Essential	Not Vulnerable	Long-Term					
Availability/capacity of building owner(s)	Essential	Vulnerable	Medium-Term					
Security of sites (e.g. alarms/guards/etc.)	Essential	Vulnerable	Short-Term					
Working condition of equipment	Critical	Highly Vulnerable	Short-Term					
Operations								
Availability of inventory								
Availability of suppliers/vendors								





Mitigating Losses of Critical Business Functions

Tools and Ideas

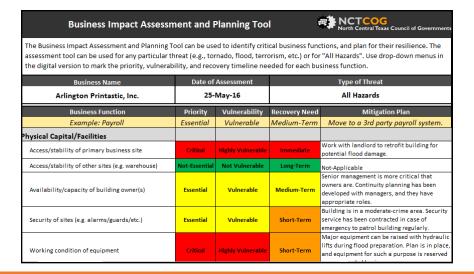


Mitigation: Structures/Operations/Utilities

- Develop an evacuation or shelter-in-place plan
- Have a plan in place to move or protect critical equipment and inventory that are likely to be compromised
- Develop a business continuity plan
- Have appropriate insurance and levels of coverage for the full range of losses associated with likely disasters
- Identify alternate spaces or potential colocation partners before a disaster strikes so there are fallback opportunities for siting business activity
- · Identify back-up utility sources
- Protect electronic data through appropriate backups and redundant access



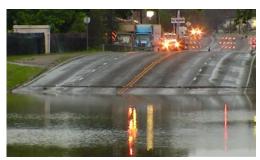
BIA Tool - Mitigation





Mitigation: Transportation and Workforce

- Plan for back-up modes and routes of transportation
- Diversify number and location of suppliers
- Prepare for surge or softening of demand
- Encourage employees to create their own continuity plans
- Establish good communication protocols for employees



2015 Flooding: Navarro County (Central Texas Conference)



Mitigation: Markets and Finance

- When possible, diversify consumers geographically
- Prepare for government contracting
- Keep cash reserves
- Protect and back-up all important business documents
- Keep good accounting records of post-disaster losses
- Do not rush into debt



Mineral Wells damage from May 2015 tomado (Mineral Wells Index)



BIA Tool - Planning

Business Name	Date of Assessment		Type of Threat					
Arlington Printastic, Inc.	5/25/2016		All Hazards					
Reporting Options								
Populate/Reset Sort by	Priority Sort by Vulnerability		y Vulnerability	Sort by Recovery Need				
Business Function	Priority	Vulnerability	Recovery Need	Mitigation Plan				
Example: Payroll	Essential	Vulnerable	Medium-Term	Move to a 3rd party payroll system.				
Access/stability of primary business site	Critical	Highly Vulnerable	Immediate	Work with landlord to retrofit building for potential flood damage.				
Working condition of equipment	Critical	Highly Vulnerable	Short-Term	Major equipment can be raised with hydraulic lifts during flood preparation. Plan is in place, and equipment for such a purpose is reserved on a as-needed basis.				
Availability/capacity of building owner(s)	Essential	Vulnerable	Medium-Term	Senior management is more critical that owners are. Continuity planning has been developed with managers, and they have appropriate roles.				
Security of sites (e.g. alarms/guards/etc.)	Essential	Vulnerable	Short-Term	Building is in a moderate-crime area. Security service has been contracted in case of emergency to patrol building regularly.				
Access/stability of other sites (e.g. warehouse)	Not-Essential	Not Vulnerable	Long-Term	Not-Applicable				



Post-Disaster Activities for Businesses

- Short -Term
 - Implement the business continuity plan
 - Contact utilities /set-up back up power
 - Gather paperwork
- Mid-Term
 - Access site and determine physical damage
 - Communicate with employees
 - Contact insurance carriers and bank
 - Communicate with customers
- Long-Term
 - Seek technical assistance
 - Collaborate with other businesses
 - Provide services for employees
 - Seize opportunities after a disaster



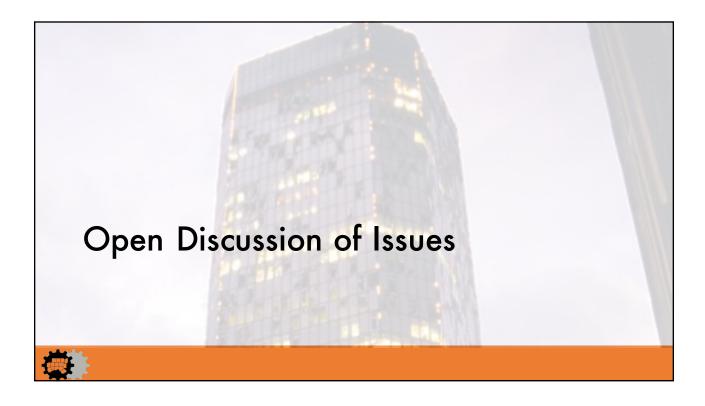
Preliminary damage assessment at West High School (FEMA)



Case Study: Munro Workforce Support

- Prior to Hurricane Rita, Munro Inc. had a rudimentary emergency plan in place. It did not, however, account for power outages or food shortages.
- When employees were allowed to return to the area, schools remained closed, causing an issue with day care. The company solved this problem by allowing employees to bring their children to work with them.
- Based on lessons learned from the disaster, the company expanded its business continuity plan.
 - Steps for securing facilities prior to an evacuation
 - Implementing strategies for improving post-disaster employee communication.
 - Stockpiling materials and supplies to support up to fifteen key employees for three days
 - Working closely with local authorities to obtain clearance for key employees to return to impacted areas early.





Investing in Resilience is an Investment in the Health of the Community

- Good economic resilience depends on good economic development
- Resilient economic development can be a profitable investment, not just an expense.
- Not all kinds of economic resilience are the same.
- Not every business will, or should, survive a disaster
- The costs of economic resilience should be a shared endeavor



Questions and Closing Remarks



