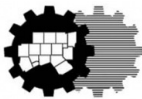


ECONOMIC RESILIENCE FOR THE PRIVATE SECTOR

North Central Texas Council of Governments

May 25/26, 2016



North Central Texas
Council of Governments



BCFS HEALTH AND HUMAN SERVICES
EMERGENCY MANAGEMENT

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

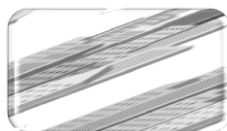
Overview of risks and issues



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



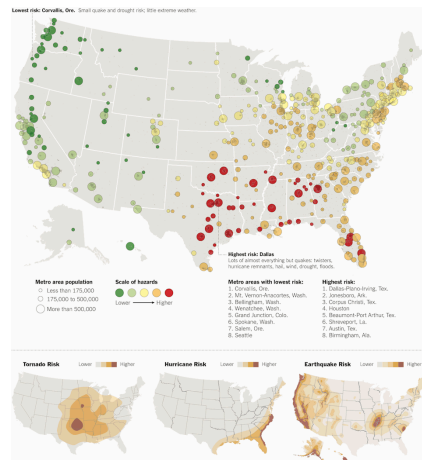
21 Fortune 500 companies



If a country, 27th GDP in the world



North Central Texas Region at Risk for Natural Disasters



<i>Presidential Disaster Declarations Declared Counties</i>	
Date	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.



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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.



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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 than 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?



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Critical Business Functions

Overview of risks and



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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



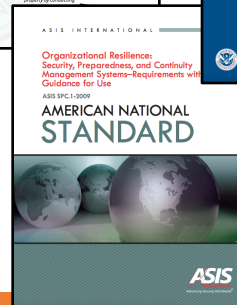
Categories of Critical Functions

-  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

Business Impact Assessment and Planning Tool				
<p>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.</p>				
Business Name	Date of Assessment		Type of Threat	
Arlington Printastic, Inc.	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				





Break

Drink some coffee!!



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Mitigating Losses of Critical Business Functions

Tools and Ideas




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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



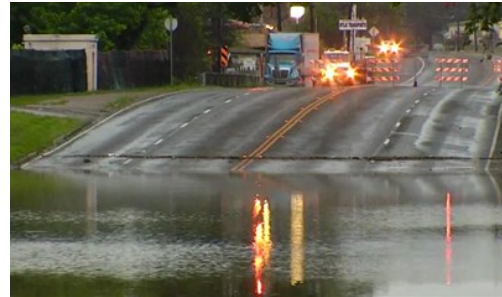
BIA Tool - Mitigation

Business Impact Assessment and Planning Tool				
 North Central Texas Council of Governments				
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Physical Capital/Facilities				
Access/stability of primary business site	Critical	Highly Vulnerable	Immediate	Work with landlord to retrofit building for potential flood damage.
Access/stability of other sites (e.g. warehouse)	Not-Essential	Not Vulnerable	Long-Term	Not-Applicable
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.
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.



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



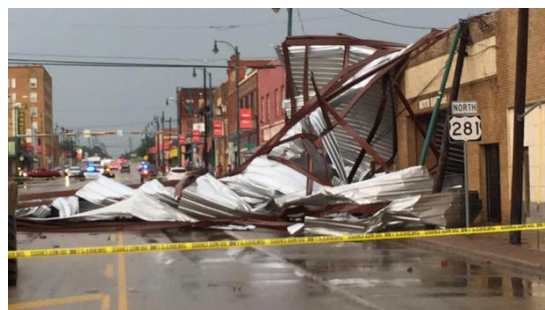
*2015 Flooding: Navarro County
(Central Texas Conference)*



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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 tornado
(Mineral Wells Index)*



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BIA Tool - Planning

Business Name	Date of Assessment		Type of Threat	
Arlington Printastatic, Inc.	5/25/2016		All Hazards	
Reporting Options				
Populate/Reset	Sort by Priority	Sort by Vulnerability	Sort by Recovery Need	
Business Function	Priority	Vulnerability	Recovery Need	Mitigation Plan
<i>Example: Payroll</i>	<i>Essential</i>	<i>Vulnerable</i>	<i>Medium-Term</i>	<i>Move to a 3rd party payroll system.</i>
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.



Break

Eat a snack!!






**Module 2:
Managing Economic Resilience**



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Economic Development = Economic Resilience

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



The diagram features a central dark blue circle with the word "Resilience" in white. Two curved arrows form a circle around it: a green arrow on the left pointing clockwise, and a red arrow on the right pointing counter-clockwise. The text "Economic Development" is positioned to the left of the green arrow, and "Economic Recovery" is to the right of the red arrow.

- Investing into resilience reaps profits regardless of a disaster.

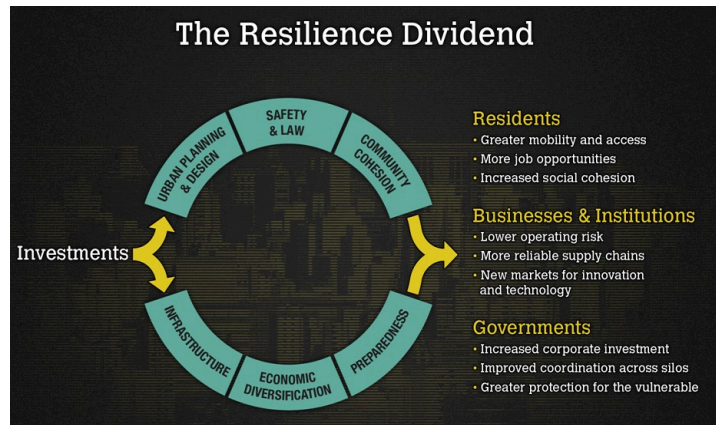


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Economic Benefits of Resilience

Investing in resilience:

- Reduces the financial impacts of disasters
- Improves economic profitability and performance
- Improves the climate for investment and site-location



Source: Rockefeller Foundation

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Coordination Activities

- Establish an economic resilience task force
- Increase partnerships between utility/transportation agencies and the economic development community
- Increase bank partnerships with CDFIs and non-profit financial institutions. Discuss economic recovery planning with them.
- Incentivize or invest in capacity building programs for local organizations.



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Public-Private Partnerships

- Essential to building and maintaining a resilient economy
- Help to overcome misinformation and lack of trust
- Build an understanding of unique issues each partner faces
- Identify ways in which the public and private sectors can assist each other



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Cooperation in Texas Agricultural Recovery – Hurricane Ike

- Storm surge caused more than half a million acres of farm and ranch land to be submerged and many animals were lost due to a lack of food and water
- A coalition of state government agencies and industry organizations supported the Texas Agrilife Extension Service to implement initial recovery activities to care for livestock - resulted in an estimated \$8.3 million in savings
- Six months after the storm, the Texas Department of Agriculture hosted “Operation New Fences” with a goal of donating supplies (fencing and feeding) to almost 100 ranchers in southeast Texas to assist recovering and rebuilding



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✓ Check-In

- Speaker from Emergency Management community
- Do you already have these partnerships in place?
- What has your experience been with these partnerships?



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Economic Recovery Planning

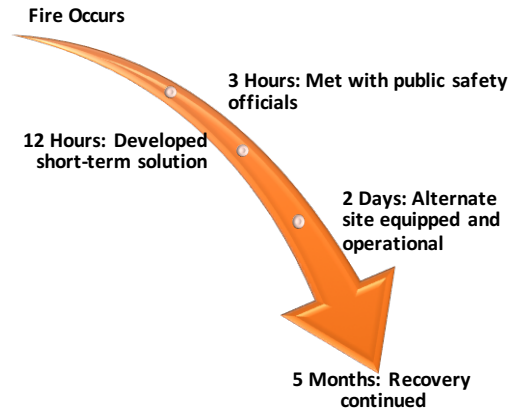
- Identify department roles and organizational charts for economic recovery planning
- Plan for Business Recovery Center
- Establish communication protocols, including use of a call center and resource guide for disaster preparation and recovery
- Work with local jurisdictions to plan for informal business locations and zoning after a disaster



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Pitney Bowes: Grand Prairie Fire Recovery

- February 2011 fire destroyed the Pitney Bowes facility in Grand Prairie, Texas.
- Just months prior to the event, the facility's business continuity plan had been updated and tested.
- During recovery efforts, the company retained 98 percent of its customers.



 Pitney Bowes



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Economic Assessment

- Develop economic profile with emphasis on risks and hazards
- Damage assessment must be compared to baseline of economic activity and assets pre-disaster
- Understand economic weakness and likely areas of failure
- Tools:
 - Economic asset mapping
 - Physical economic mapping
 - Economic SWOT analysis
 - Threat assessments



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SWAPDD: Promoting Resilience through Better Data

- 2008 series of storms (including Hurricane Gustav)
- Area lacked baseline data needed to identify and address needs
- Southwest Arkansas Planning and Development District received funding from EDA and developed a comprehensive database of employers and infrastructure in region
- Results
 - Laid foundation of integrating greater resilience in the region by supporting ability to recover from future disasters more effectively.
 - Established a baseline for the region that could be overlaid with geographic information about disaster impact to quickly estimate number of affected businesses/employees.
 - Assists communities in development of hazard mitigation plans.



✓ Check-In

- What economic recovery plans do you have in place?
- What could you do to better prepare for economic shocks?



Advance Recovery Preparation

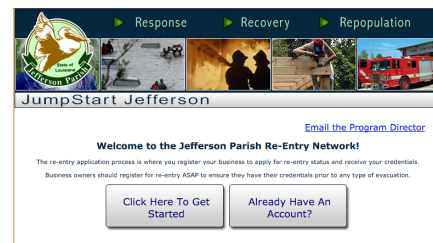
- Conduct floodplain management awareness forums
- Pre-register businesses for emergency services
- Pre-register local labor for emergency work
- Pre-register for post-disaster re-entry with businesses license
- Coordinate services to provide post-disaster “match making services”



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Jefferson Parish’s Re-entry Program

- Jefferson Parish, LA, suffered substantial damage to its commercial and industrial areas after Hurricanes Katrina
 - Developed an “on-the-fly” re-entry plan
- Based on lessons learned, established JumpStart Jefferson Re-Entry Application Process
 - Online system
 - Registers local businesses
 - Allows them to apply for re-entry status prior to any type of evacuation
 - Businesses are assigned to a tier that’s correlated to their importance in preparing for the public’s return



Source: The Recovery and Resiliency Roadmap: A Toolkit for Economic Preparedness

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✓ Check-In

- Do any of these elements exist in your area?
- What would be needed to encourage jurisdictions to prepare for issues such as these?



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Economic Development Activities for Resilience

- Incorporate resilience into economic development planning.
- Engage workforce organizations and low-income communities into economic development.
- Promote local businesses through buy-local campaigns.
- Encourage the growth of local enterprises with disaster-relevant expertise, goods, or services.
- Make the case for infrastructure investments to other agencies/governments.
- Promote pre-disaster household planning and financial programs.
- Promote adequate insurance and insurance oversight.



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“Shop Joplin”



- Category EF-5 tornado struck Joplin, Missouri area, damaged or destroyed 531 businesses.
- Joplin Area Chamber of Commerce immediately began promoting local businesses, eventually using the “Shop Joplin” label.
- Started a database tracking where businesses were locating and how far they had recovered.
- Used their phone line as a hotline to inform public on which businesses were open.
- Referred residents to local contractor agencies.
- “Open for Business” signs provided to open businesses to attract attention of customers.
- Mayor was tireless advocate for local businesses; encouraged residents to keep money local.
- 485 impacted businesses reopened; 250 new businesses open since tornado.



SE Louisiana Fisheries Assistance Center

- Established in response to the 2005 Hurricanes in Louisiana.
- Focused on centralizing technical assistance and financial services for the commercial fishing industry.
- Initially housed nine different agencies and non-profits including SBA, FEMA, the Louisiana SBDC, Wildlife and Fisheries, and Louisiana Spirit (a mental health provider).
- Funded by a mix of State, Federal, and foundation dollars.
- Became an official GCCF claims center following the BP oil spill.
- Served thousands of clients throughout the region.



✓ Check-In

- Do you have resilience woven into your economic development plans?
- What do you do that could be repurposed for resilience and disaster recovery?



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Post-Disaster Economic Recovery

Module 4: Emergency Managers and Economic Recovery



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Post Disaster Economic Recovery

- Short-Term
 - Mobilize task force and implement the plan
 - Connect with state and federal economic officials
 - Encourage utility providers to target commercial corridors or industrial districts
 - Perform rapid assessments/deploy assessment teams
 - Implement procurement plan
- Mid-Term
 - Secure verifiable information from reliable sources
 - Enable communication protocols
 - Establish BRC
 - Invite partners to co-locate for providing economic recovery services



Post Disaster Economic Recovery

- Long-Term
 - Use communication tools to increase community participation in recovery planning
 - Advocate for local economic needs
 - Promote economy externally
 - Roll out or re purpose “Buy Local” campaigns
 - Roll out business planning and technical assistance
 - Roll out post-disaster “match making” portal
 - Collaborate with local financial sector to design right programs and products
 - Allow relocation or encourage relocation funding
 - Invest in growth, not just recovery



✓ Check-In

- What partners could you rely on to make these recovery initiatives work?
- What, if any, reservations do you have for integrating resilience into how you do business?



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Open Discussion of Issues



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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



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Questions and Closing Remarks



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