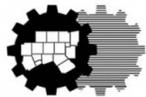


ECONOMIC RESILIENCE FOR EMERGENCY MANAGERS

North Central Texas Council of Governments
Arlington, TX
April 1, 2016



North Central Texas
Council of Governments



BCFS HEALTH AND HUMAN SERVICES
EMERGENCY MANAGEMENT

Workshop Organization



Module One: Background, Historical Perspective, Defining Recovery



Module Two: Resilience



Module Three: Business Perspective

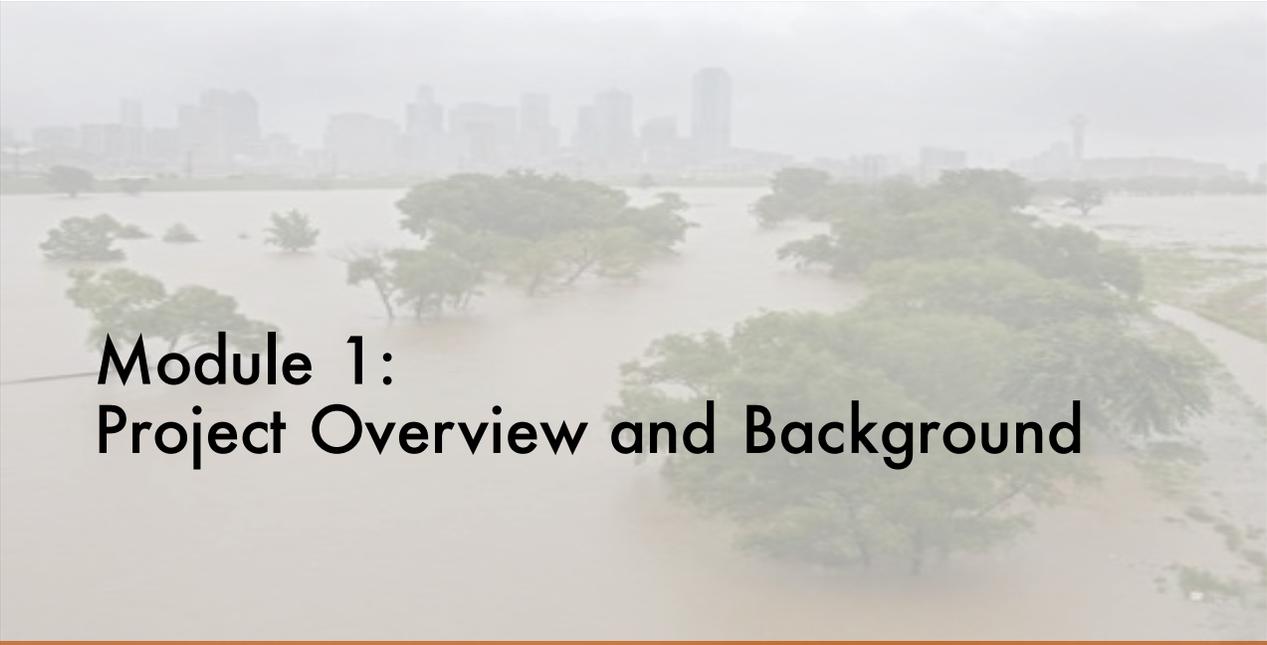


Module Four: Emergency Managers and Economic Recovery



Open Discussion of Issues





Module 1: Project Overview and Background



3

NCTCOG Economic Resilience Project

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



4

Characterizing the Risk

Module 1: Objectives and Framing the Training



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



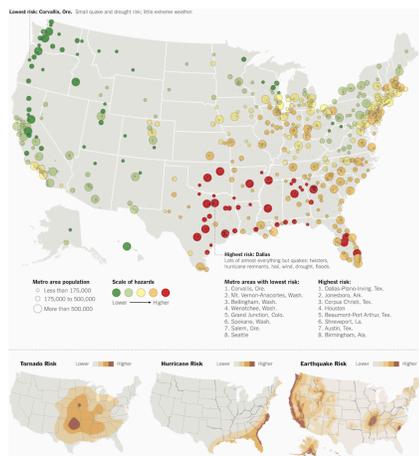
21 Fortune 500 companies



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



Historical Perspective

Module 1: Objectives and Framing the Training



Traditional Focus on Response

- Recovery was considered a subset of response activities
- After Hurricane Katrina, there was a recognition of the need to focus more on recovery efforts
 - National Disaster Recovery Framework

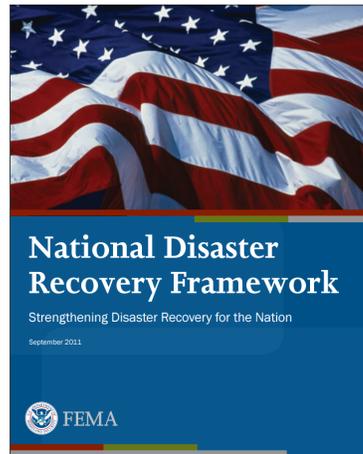


Photo: FEMA



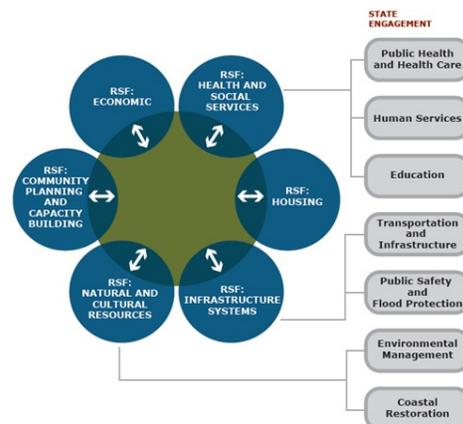
National Disaster Recovery Framework

- Provides a flexible structure that enables disaster recovery managers to operate in a unified and collaborative manner.
- Focuses on how best to restore, redevelop and revitalize the health, social, economic, natural and environmental fabric of the community and build a more resilient nation.



Recovery Support Functions

- NDRF organized around six Recovery Support Functions
 - Community Planning and Capacity-Building
 - **Economic**
 - Health and Social Services
 - Housing
 - Infrastructure
 - Natural and Cultural Resources



Economic Recovery Support Function

- Ability to return economic and business activities (including agricultural) to a state of health and develop new economic opportunities that result in a sustainable and economically viable community.
- Responsible for integrating the expertise of the federal government to assist local, state and tribal governments and the private sector in economic recovery efforts following a major disaster.



13

Examples of Economic RSF Outcomes

- Establishing workforce development initiatives.
- Establishing entrepreneurial and business development initiatives.
- Assisting in the development of community-wide economic development plans.
- Developing strategies for quickly adapting to changed market conditions.
- Pursuing business initiatives to employ workers and generate revenue.
- Developing management plans.
- Ensuring that private and public sector actors have needed information.



14

What is Economic Recovery

Module 1: Objectives and Background



15

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.



16

Economic Recovery vs. Disaster Recovery

Economic Recovery

- Sustain or rebuild businesses
- Develop economic opportunities
- Build economically resilient communities

Disaster Recovery

- Public safety
- Preservation of property
- Continuity of governmental operations
- Restoration of public services
- Coordinate assistance (local, state and federal)



17

Community Benefits of Economic Recovery Planning

- Reduces the impacts from disasters
- Adds value to the economy
- Makes communities more attractive



18



Module 2: Resilience

What is resilience and what does it mean to me?



19

What is Resilience?

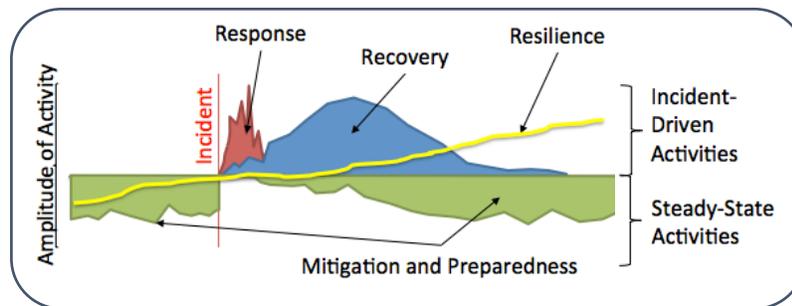
The ability to adapt to changing conditions, and withstand and rapidly recover from disruption due to emergencies.



20

Resilience and Emergency Management

Resilience is an ongoing process, and occurs throughout the emergency management cycle.



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



Most common excuse for not planning ...

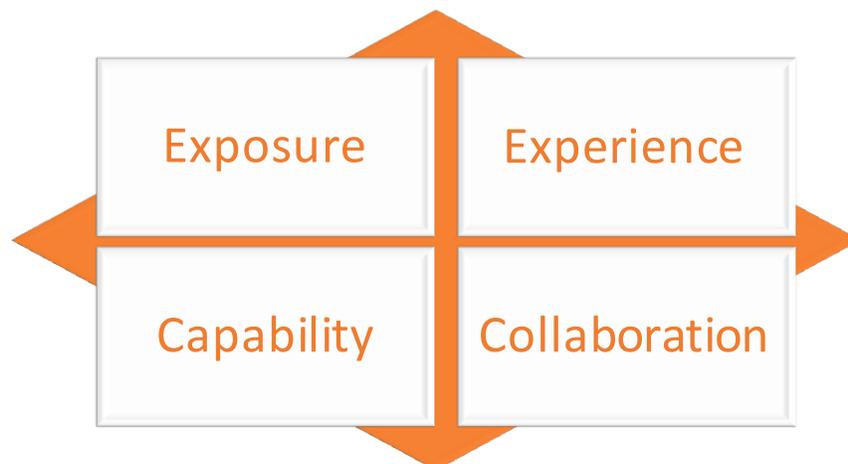


“There cannot be a crisis next week. My schedule is already full.”

U.S. Secretary of State Henry Kissinger, June 1969



Influencing Factors for Adopting Preparedness Culture



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



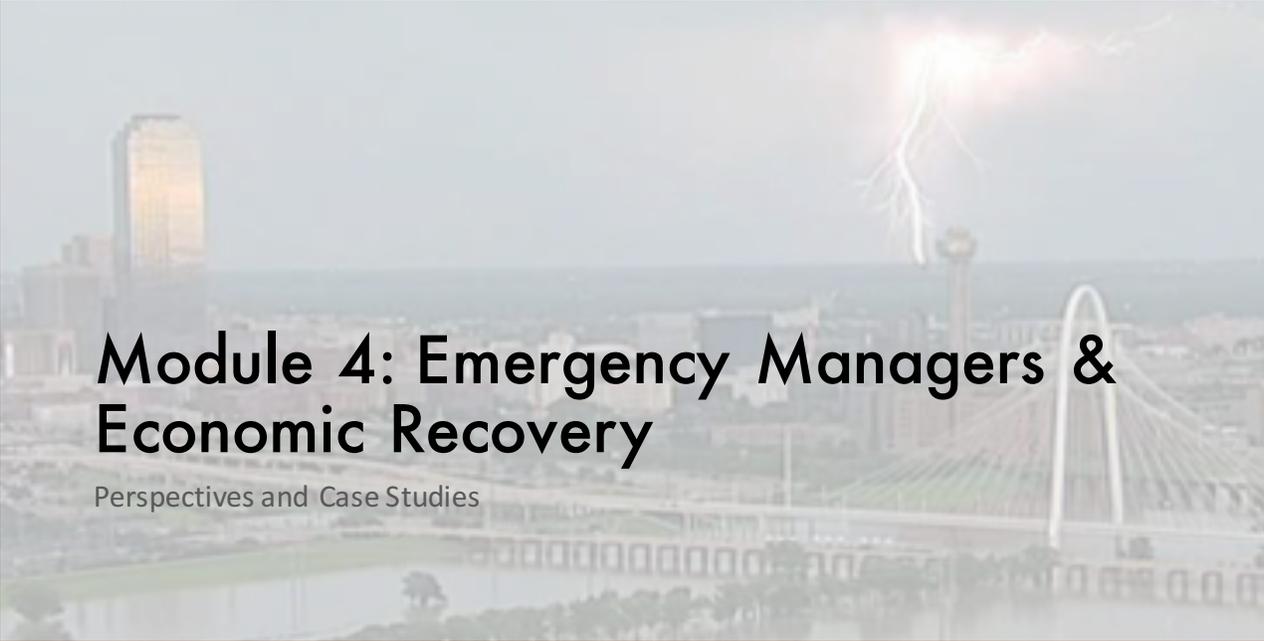


Module 3: Business Perspective

[RECOMMEND PRIVATE SECTOR GUEST SPEAKER]



27



Module 4: Emergency Managers & Economic Recovery

Perspectives and Case Studies



28

Private Public Partnerships

- Essential to building and maintaining a resilient economy
- Helps 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



Partnerships

Public Sector

- Emergency Management
- Economic developers
- Small business administrations
- State agencies
- Federal agencies

Private Sector

- Businesses
- Chambers of Commerce
- Economic Development Organizations
- Non-profits
- Banking Institutions
- Community Development Financial Institutions



Blue Bell Ice Cream

- During Hurricane Rita, Blue Bell along with an electric cooperative, provided fresh water to relieve stranded travelers during the evacuation and provided ice to people in their homes without electricity.
- During Hurricane Ike, Blue Bell provided dry freeze services to preserve court records from molding



31

Workforce Support: Northridge Earthquake

- 1994: Earthquake struck the San Fernando Valley, causing \$20 billion in damage
- Local leaders formed the Valley Economic Alliance (VEA)
 - Public-private partnership
 - Developed a strategic plan to guide economic recovery
 - Established a Business Education Partnership with schools and colleges to help align curriculum with business needs

 The Valley Economic Alliance



32

Pre-Disaster Activities

Module 4: Emergency Managers and Economic Recovery



33

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



34

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.



35

Partnerships

- 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
- Increase partnerships with workforce and labor organizations
- Explore partnerships with local non-profits for economic recovery
- Incentivize/invest in capacity building programs for local organizations



36

Case Study – Waffle House Index

- FEMA uses Waffle House as an unofficial indicator of disaster recovery.
- Waffle House uses tropical-storm-tracking software to help it predict—down to the minute—when any Waffle House will be affected and when it's safe to reopen.
- This allows the chain to pass its operational status to FEMA sooner, which in turn helps FEMA respond faster. It also helps Waffle House get hot meals and coffee to the victims and weary first responders.



37

Economic Recovery Plan

- Identify department roles and organizational charts for economic recovery
- Coordinate planning efforts for related plans and planning agencies and the NDRF
- Identify alternate transportation routes for businesses and workforce
- Plan for post-disaster rapid economic assessments
- Establish communication protocols, including use of a call center and resource guide



38

Economic Recovery Plan (cont)

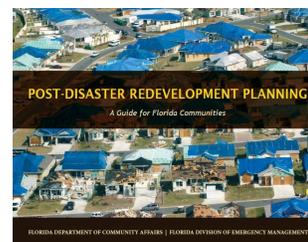
- Propose Business Recovery Center locations and back-ups
- Identify locations for “commercial triage” where small business can relocate
- Plan for local procurement set-asides
- Establish guidelines for relaxation of regulations concerning home-based businesses and commercial/industrial zoning
- Establish guidelines for reduced building inspections and code enforcement to get safe spaces approved



39

Florida Post-Disaster Redevelopment Planning

- 2004-2005: 8 major hurricanes hit Florida in a 14-month period
- State recognized the need to integrate post-disaster redevelopment (PDRP) concepts and activities in planning efforts.
- PDRP Pilot Program
 - Addressed economic redevelopment, housing and historic preservation, infrastructure, health and human services, land use and environmental impacts, and the application of government resources and support role for post-disaster recovery.
 - Developed through a public-private partnership.



40

Advance Recovery Preparation

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



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



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.



43

West Fertilizer Company Explosion

- Revealed serious gaps in insurance coverage of local businesses and regulations concerning minimum coverage amounts.
- Caused \$230 million dollars in damage
 - The fertilizer plant itself only carried \$1 million in liability
 - The school district did not have enough insurance to cover the cost of rebuilding the school, which is the area's largest employer.



Photo: Norman Lenburg/FEMA



44

Post-Disaster Economic Recovery

Module 4: Emergency Managers and Economic Recovery



45

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



46

Cooperation in Texas Agricultural Recovery - Hurricane Ike

- Storm surge caused more than ½ million acres 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



47

Post Disaster Economic Recovery

- Mid-Term
 - Secure verifiable information from reliable sources
 - Enable communication protocols
 - Establish BRC
 - Invite partners to co-locate for providing economic recovery services



48

Louisiana Business Emergency Operations Center

- Louisiana Business Emergency Operations Center (LA BEOC) provides a platform for private sector entities to communicate, collaborate, and coordinate with government before, during, and after a disaster.
 - Used during Hurricane Gustav to support mass feeding operations through local sources.
 - Served as one of the primary models for the National Business Emergency Operations Center.
- States that have developed virtual business emergency operations centers have found a significant increased ability to effectively.
 - Facilitate communications
 - Facilitate business case management
 - Encourage inter-firm collaboration



49

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



50

“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.



Open Discussion of Issues

Module 5



Key Emergency Management Roles

- Coordinate and integrate
- Find the “centers of gravity”
- Build relationships based on trust
- Anticipate where problems will develop



Photo credit: FEMA



53

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



54