

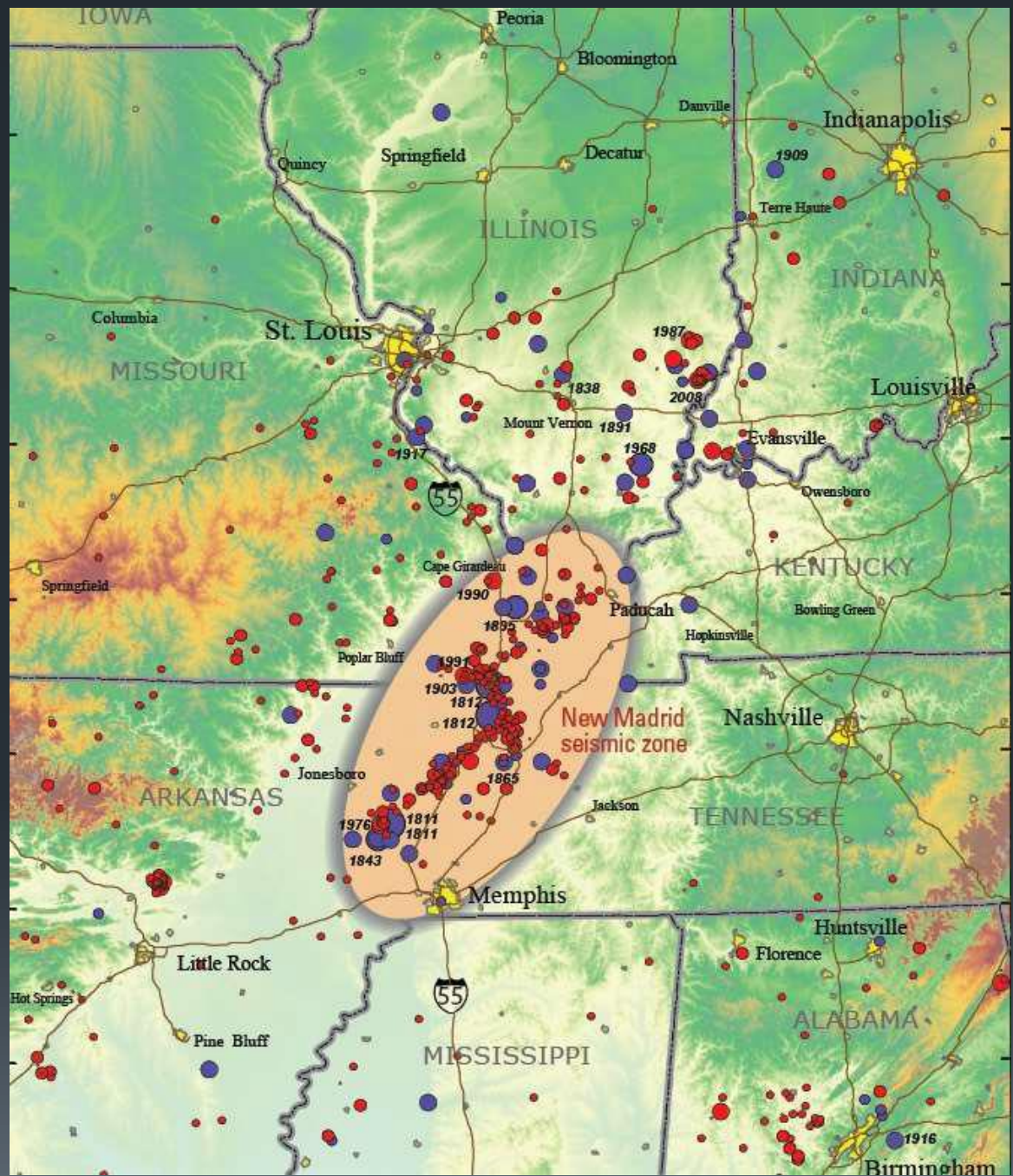
SHOW ME MASS CARE
AUGUST 22-26, 2016

A decorative orange bar consisting of a vertical line on the left and a rectangular block on the right, located in the top right corner of the slide.

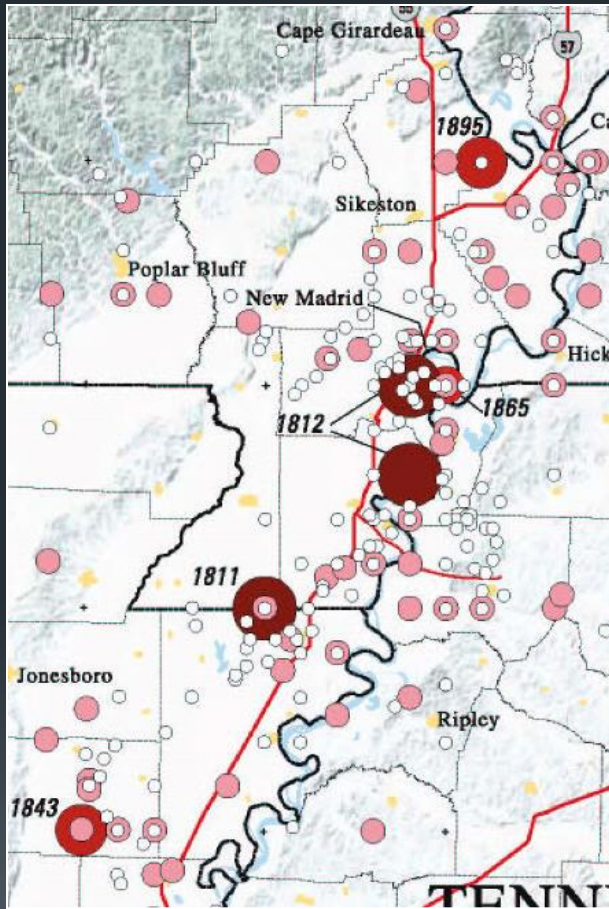
**2016 National
Mass Care
Exercise**

New Madrid Seismic Zone

About 200 earthquakes per year



Danger in the Central U.S.: New Madrid Seismic Zone



Winter of 1811-12

New Madrid area shaken by a series of the strongest earthquakes in U.S. history (estimated to have been magnitude 7 to 8)

- Damage reported as far away as Charleston, South Carolina, and Washington, D.C.
- Shaking was felt over 5,000,000 square kilometers.



What are the odds?

- 25-40% chance of 6M or larger in 50 years
- 7-10% chance of 7M or larger in 50 years



Impacts of Earthquake

- Collapse of structures
- Collapse of infrastructure
- Liquefaction

What is Liquefaction?

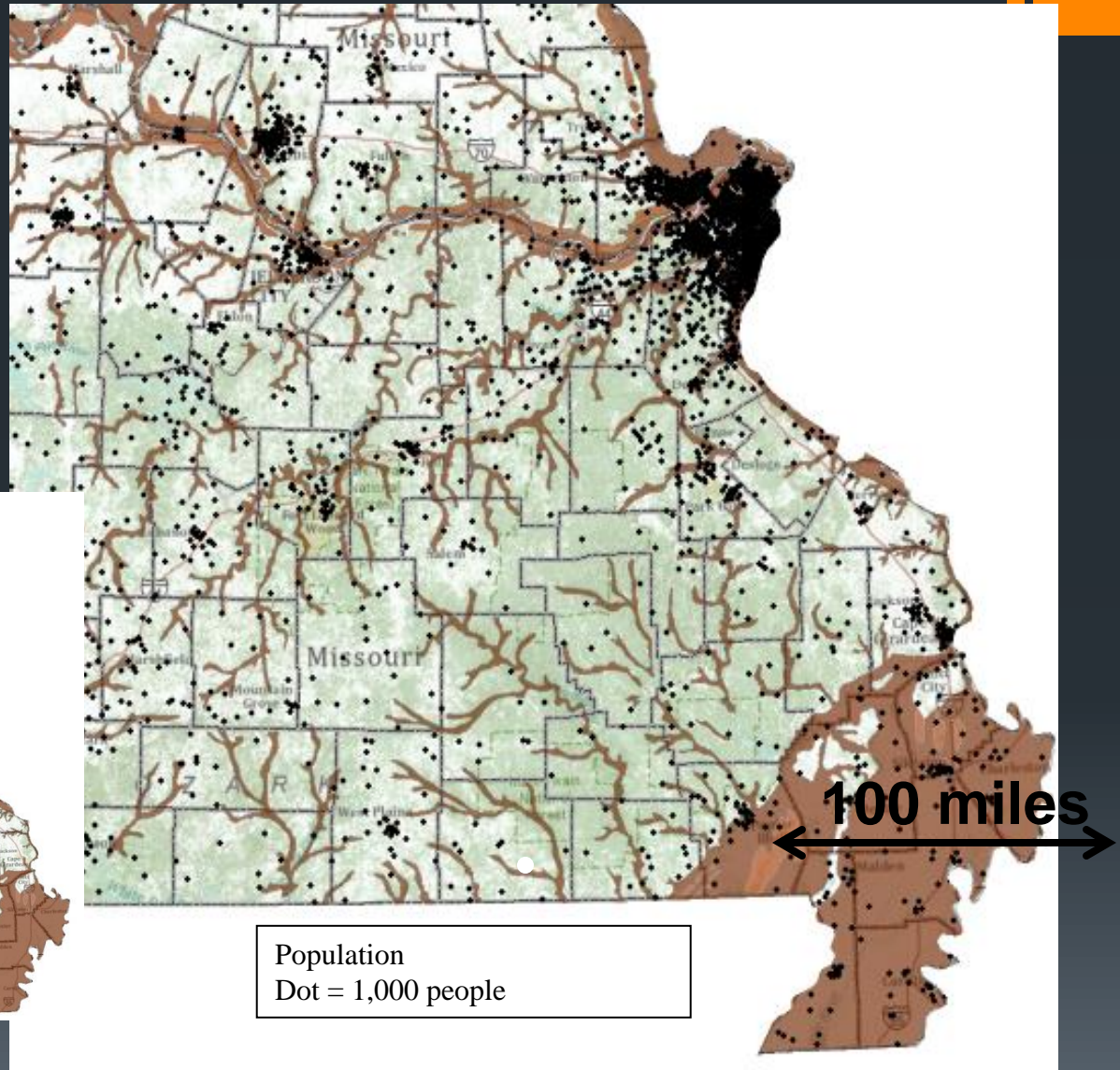
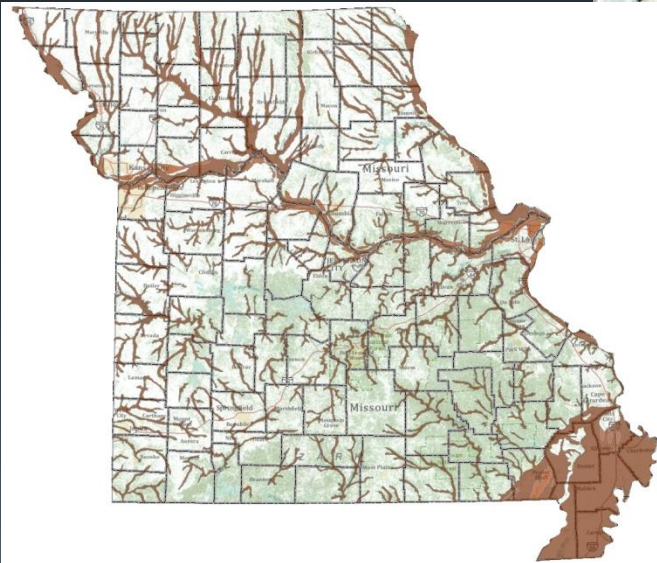


https://www.youtube.com/watch?v=tvYKcCS_J7Y



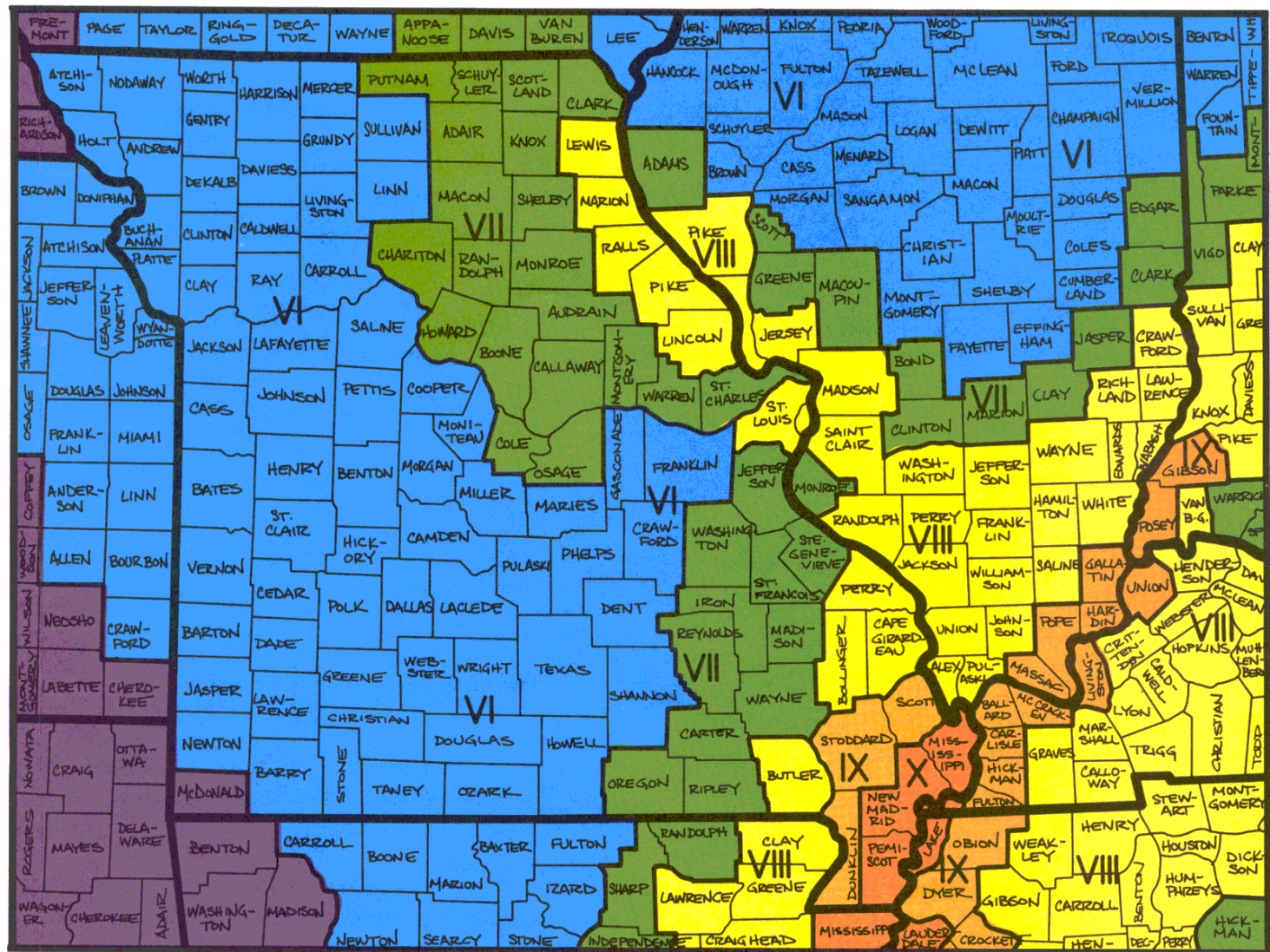
Liquefaction Map

Displaced population may far exceed MAE Center Estimate of 842,000



Population
Dot = 1,000 people

PROJECTED EARTHQUAKE INTENSITIES



This map shows the highest projected Modified Mercalli intensities by county from a potential magnitude - 7.6 earthquake whose epicenter could be anywhere along the length of the New Madrid seismic zone.



Planning Assumptions:

New Madrid Seismic Zone Earthquake Joint State of Missouri & Region VII Response Operations Plan, 2011

- Of the 2,288,445 (2000 Census) individuals residing within the impacted area, 842,002 are expected to be “at risk” by day 3 post-impact.
- Significant impacts to power generation, transmission, and distribution are expected
 - Areas are likely to be without power for up to 6 months
- Older structures that house key businesses or government offices in many communities likely are impacted, slowing the recovery process.

Will They Evacuate???

- According to the MAE Center data, it is anticipated that within the first 72 hours nearly 1 million individuals will attempt to evacuate the impacted area.
- Evacuation will be severely restrained due to the collapse of a significant number of bridges and infrastructure.
- Without implementation of contra-flow, it will take approximately 122 hours (5 days) for this population to evacuate the area using ground assets and personal vehicles.

Remember that since earthquakes are no-notice events, there is little history of large evacuations.

SOURCE: "Impact of Earthquakes on the Central USA" Volume II, Mid-America Earthquake Center, 2009

Situation Overview – Missouri only



- 842,002 displaced individuals (assuming an average of 2.7 persons per household)
- Number of people requiring emergency shelter:
 - Day 3: 237,991
 - 129,191 pets (dogs and cats) requiring shelter
- Potable water service needed (liters):
 - 3 Day Total: 2,706,450
- Food service needed (shelf stable meals):
 - 3 Day Total: 1,804,300
- Ice needed (pounds):
 - 3 Day Total: 7,217,200

MAE Center vs. DHSS Data

Raw Data			
Element	MAE Center	MDHSS	Notes
Counties Impacted	23	23	MAE Center Data
Impacted Population	2,288,445	2,288,445	MAE Center Data
"At Risk" Population	842,002	842,002	MAE Center Data
Number of Persons Seeking Shelter	237,991	237,991	MAE Center Data
Percent Vulnerable Age	23	23	Average of All Counties
Percent Disabled	23	23	Average of All Counties
Injuries	13,434	92,719	Region C and E
Level 3 Injuries	10,177	70,240	Require Medical Aid
Level 2 Injuries	2,897	19,995	Require Hospital Care
Level 1 Injuries	360	2,485	Life-Threatening
Fatalities	686	4,735	Region C and E
Total Hospital Facilities	208	164	Source: MAE Center/MDHSS
Total Hospital Beds	27,343	22,031	Source: MAE Center/MDHSS
Hospitals Lost in Regions C and E	7	61	Source: MAE Center/MDHSS
Hospital Beds Lost in Regions C and E	846	10,715	Source: MAE Center/MDHSS



Mass Care – Shelter Required Numbers

- 476 500-person shelters
- 237,991 Cots, Blankets
- 4,559 Toilets
- 17,142 General Shelter Staff (10/1)
- 5,471 Supervisor (33/1)
- 3,974 Medical Trained (100/1)
- Daily Baby Food: 1.8 million jars*
- Total # of diapers (Preemie to 5T): 4.2 million*
- Diaper Wipe Boxes: 15,528 (200 count)*
 - Total Pallets: 3,470*
 - Total Daily Truck Loads = 157*

*Source: National Commission on Children in Disasters



General Concepts – Evacuation

- Localized evacuation will be the responsibility of the local jurisdiction
- Large-scale evacuations will be overseen by the Evacuation Management Team (EMT) from the SEOC
- The EMT is a multidisciplinary team which can support the evacuation efforts, make recommendations to the Unified Command (UC), and coordinate with local jurisdictions

Evacuation Management Team

Agency Represented	ESF-#
Department of Public Safety (Lead)	ESF-13 Law Enforcement
Public Information Officer	ESF-15 Public Information
State Emergency Management Agency	ESF-5/ ESF-7 EM/Logistics
Department of Natural Resources	ESF-10 Hazardous Materials
Missouri Department of Transportation	ESF-1 Transportation
Voluntary Organizations Active in Disaster	ESF-6 Mass Care
Department of Social Services	ESF-6 Mass Care
Department of Health and Senior Services	ESF-8 Health and Medical
Missouri State Highway Patrol	ESF-13 Law Enforcement
Department of Mental Health	ESF-6 Mass Care
Missouri Information Analysis Center	ESF-13 Law Enforcement



Overview of the NMCE

- Relatively new event
 - 2016 is 5th exercise
 - Missouri is 3rd host state
- Designed around catastrophic scenarios
 - Plans to overwhelm/break the systems
- All 4 FEMA Region VII states will play

Missouri's Exercise Design

- Major event on the NMSZ
- Scenario begins 3 days post-disaster
 - Ensures focus on mass care/evacuation



Missouri's NMCE Design: Multiple Levels of Play

- Local play in independent exercises
 - “Rolling Play”
 - Day 1 – Regions C & E
 - Day 2 – Regions I, F & G
 - Day 3 – Regions A, D & H
 - Range of play from tabletop to full-scale
 - Testing evacuation concepts
- ESF-6 and SimCell on SEOC floor
- ESF-8 play
- Task Force play



Missouri's Exercise Goals

- Testing evacuation concepts
 - Evacuation is not a given, but needs practice
 - Concepts are part of the NMSZ plan
 - Plan is being updated
 - Exercise lessons learned will influence the update
- Testing National Mass Care Task Force concepts
 - Akin to EMAC/Mutual Aid
 - Planning forward for overwhelmed resources



Task Forces

- Include Missouri and national mass care SMEs
- Planning forward for future resources
- Can be back-up for Missouri ESF-6
- Task forces are:
 - Feeding
 - Sheltering
 - Distribution
 - Reunification
- Missouri Evacuation Management Team
 - Also likely to be exercised

Task Force Concept

- Provides a flexible, scalable planning and operational structure to mass care/emergency assistance areas of operation
- Task forces provide structure in large events for SMEs to organize and respond from other areas
- Support planning for 48 hours from NOW and beyond
- Once activated, task force operates per the direction of the State Mass Care Coordinator

Whole Community Support

▶ *NGO Sector:*

- ▶ Voluntary organizations
- ▶ Faith-based organizations
- ▶ Community organizations
- ▶ Charities
- ▶ Foundations
- ▶ Professional associations
- ▶ Academic institutions

▶ *Private Sector:*

- ▶ Chambers of Commerce
- ▶ Businesses
- ▶ Other for-profit organizations

▶ *Public Sector:*

- ▶ Community members

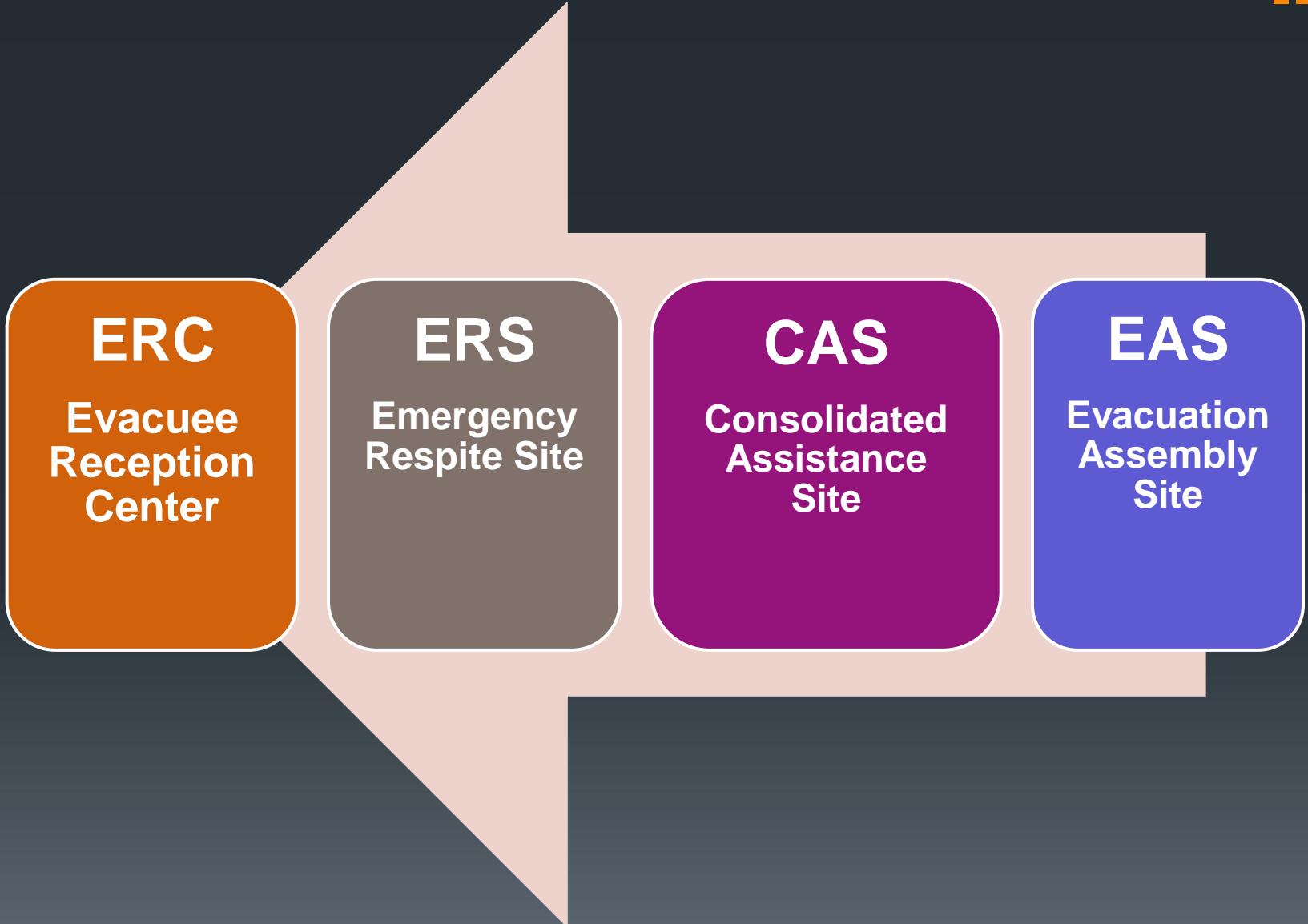
▶ *Government:*

- ▶ Local
- ▶ State
- ▶ Federal



Evacuation Concepts

- Evacuation Assembly Sites
 - Regions C & E
- Consolidated Assistance Sites
 - Regions C & E
- Emergency Respite Sites
 - Regions F, G, & I
- Evacuee Reception Centers
 - Regions A & D
- Complex shelters
 - Regions A & D



ERC

**Evacuee
Reception
Center**

ERS

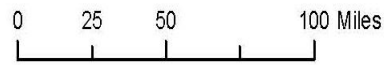
**Emergency
Respite Site**

CAS

**Consolidated
Assistance
Site**

EAS

**Evacuation
Assembly
Site**





Evacuation Assembly Site

- An EAS is a pre-identified assembly site that is locally operated and used during the initial stages of evacuation
 - Provide temporary assistance to meet basic human needs of evacuees
 - Initiate tracking
 - Move evacuees to the next step in the process
 - Move evacuees to alternate care if required
 - May also serve as a Casualty Collection Site (CCS) where survivors are assembled from ESF #9 US&R operations



Evacuation Assembly Site

- Local evacuations are the responsibility of the local jurisdiction
- EAS will be activated upon determination that evacuation is necessary
- Scope and severity determines the level of activation

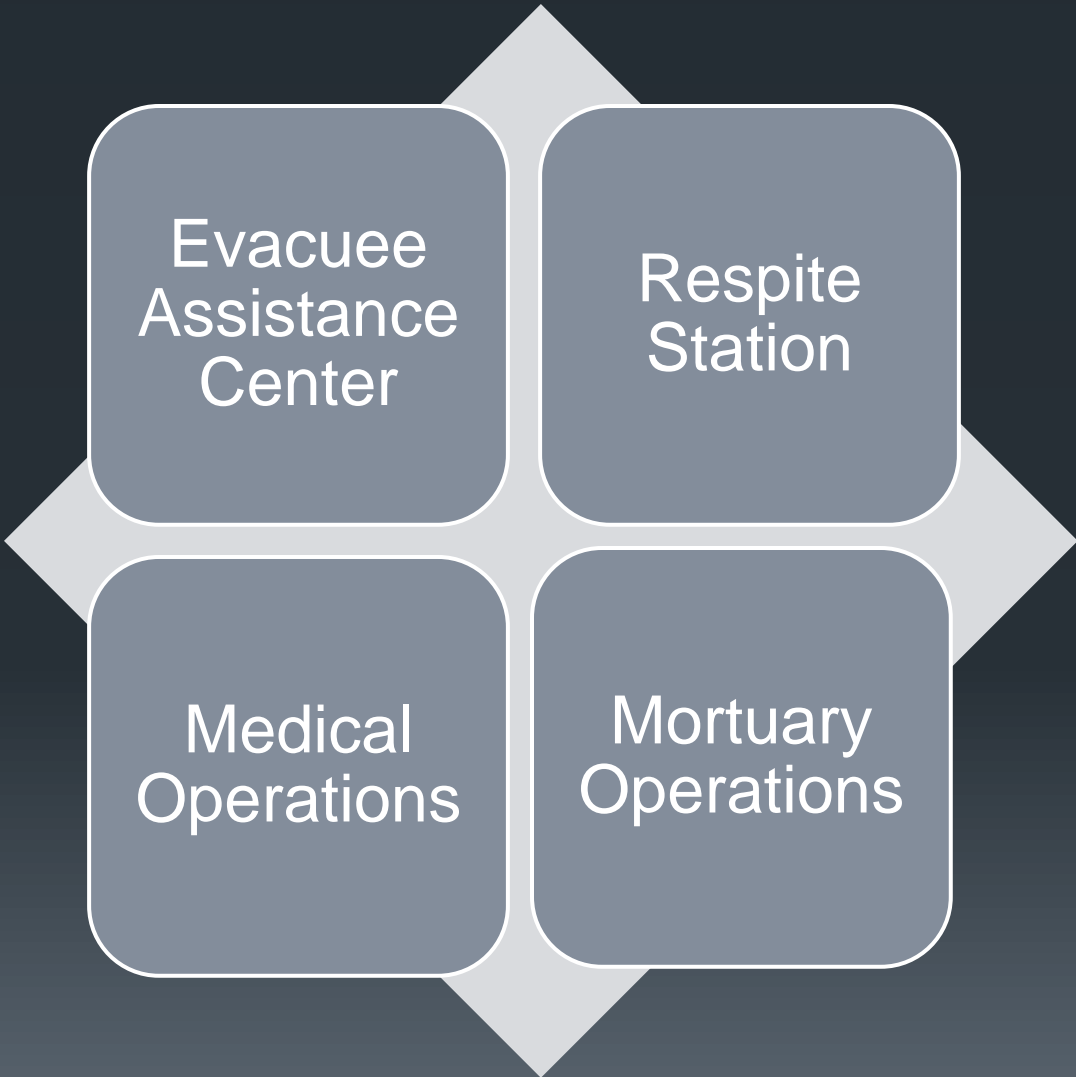
EAS Services

- Registration of evacuees, service animals and pets
- Evacuee information collection for family/pet reunification
- Management of unaccompanied minors
- Transportation assistance
- Tracking of transportation assisted evacuees
- Basic first aid
- Food and water
- Basic assistance to self-evacuees who do not require transportation assistance



Consolidated Assistance Sites

- Closest location to impact zone where services will be available
 - “Where the stuff meets the people”
- Consolidates evacuees and services along priority routes
- State and federally supported location
- Evacuees directed and assembled prior to significant evacuation and relocation
- Assessment site for needs of evacuees
- Formal evacuation initiated



Concept of Operations

- Provide the following services:
 - Evacuee processing and family assistance (to include household animals)
 - Respite (food, water, personal hygiene and short-term rest)
 - Medical Operations
 - Mortuary Operations



Evacuee processing and family assistance

- Begin formal tracking
- Create manifest for buses or other transport
- Initiate formal tracking and transportation for household animals
- Begin reunification services
- Assess and refer evacuees for additional needs:
 - Medical treatment
 - Behavioral health/trauma services
 - Items to accommodate access and functional needs

Respite

- Includes:
 - Food
 - Likely snack foods or shelf-stable meals
 - Water
 - Personal hygiene
 - Ensure accessibility of facilities
 - Short-term rest



Mortuary Services

- Morgue will not be located on-site at CAS
 - Will likely be within the same community
- Victim Information Center may be on-site at CAS
- Begins process of reunifying survivors with deceased loved ones
- May require sheltering at VIC



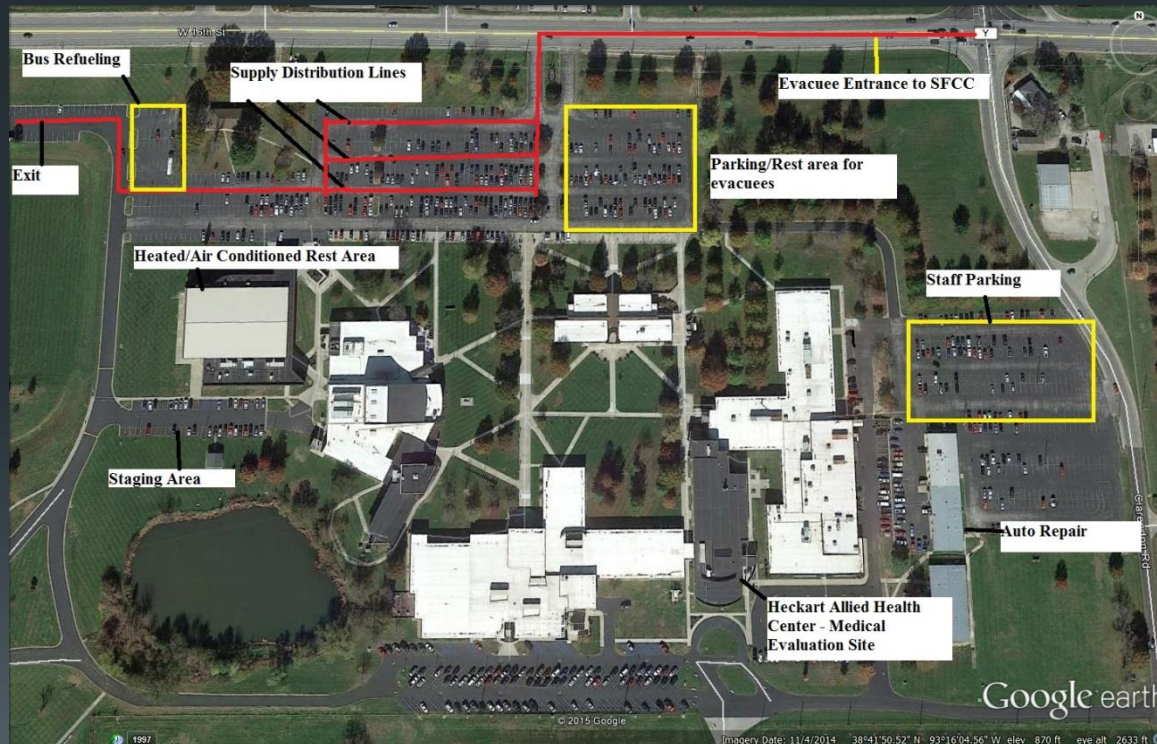
Medical Operations

- Assessment and triaging of medical conditions
- Determination of next phase of evacuation, based on condition
 - Emergency transport to hospital
 - Treatment on-site
 - Medical Reserve Corps
 - Local medical services

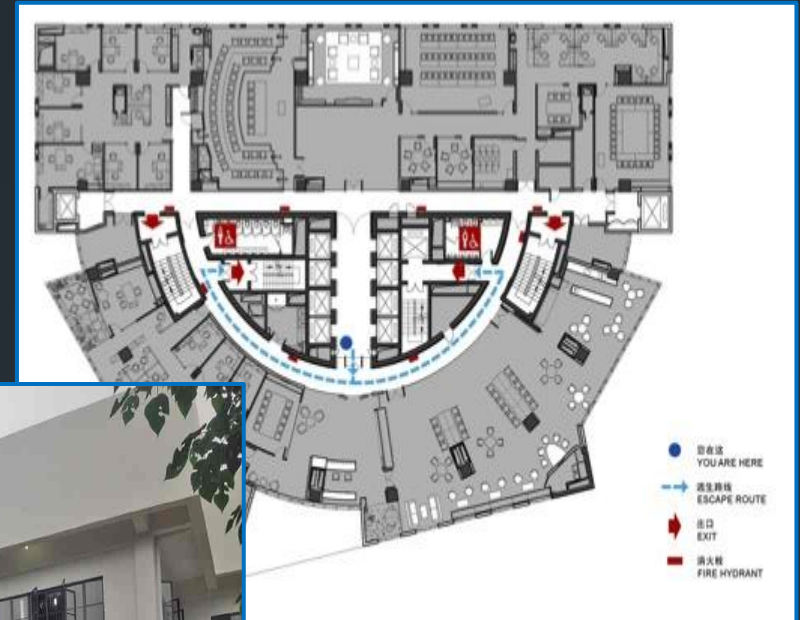
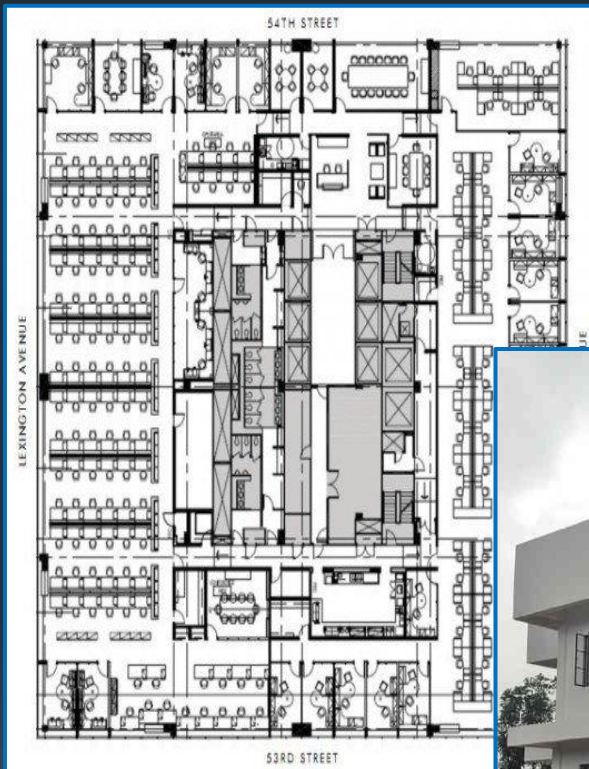
Emergency Respite Site

- Located along primary evacuation routes
- Evacuees may arrive by bus, car, on foot, on bikes or any other mode of egress
- Provides comfort items and supplies to continue evacuation
 - Nutrition – Snacks and water
 - May be delivered in a drive-thru configuration
 - Basic medical care
 - Fuel
 - Basic vehicle repair
 - Short-term rest
 - Care for service animals
- Scope determined by number of evacuees

State Fair Community College Diagram



Evacuee Reception Center



Evacuee Reception Center

- Receive evacuees and direct them to locations for short-term shelter
- Two locations:
 - Kansas City Metro
 - Springfield
- Distribute shelter seeking throughout state, out-of-state

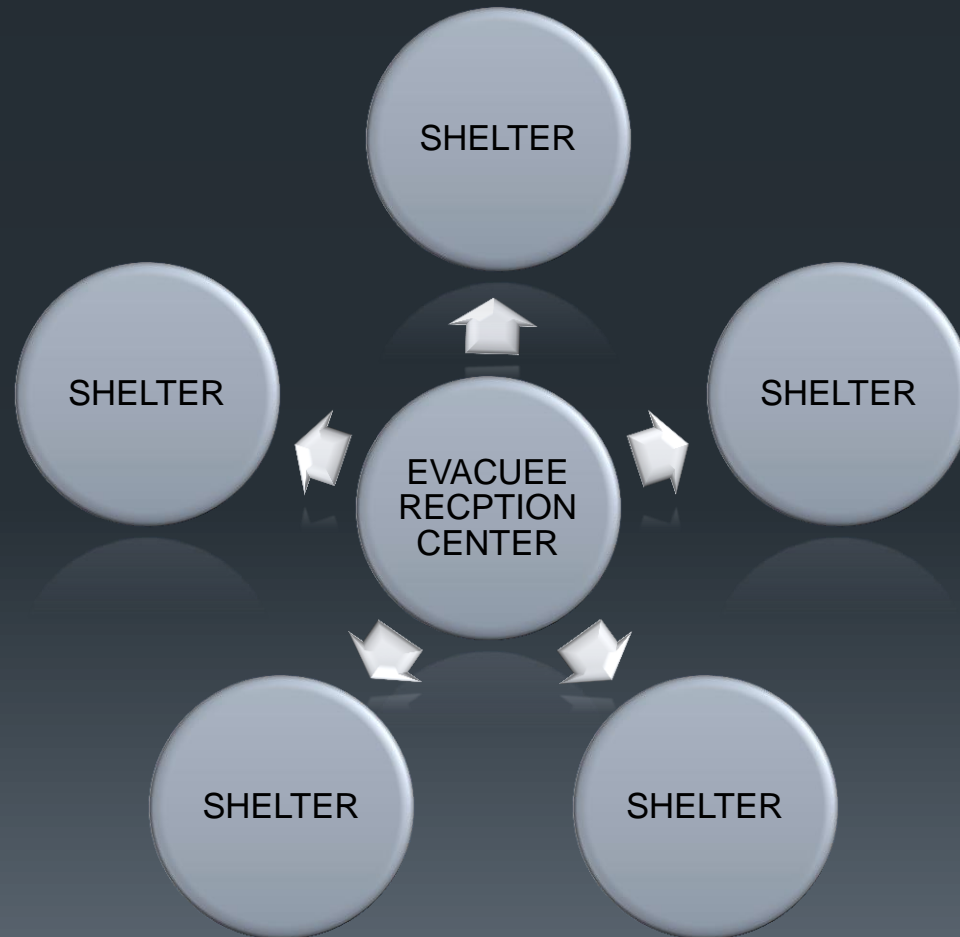
Evacuee Reception Center

- Designed to provide quick response mass care and emergency assistance
- Evacuee needs assessed and appropriate shelter locations identified
- Also provides a central location to leverage government, NGO and private sector resources
- More comprehensive support is available:
 - Hot meals, shelter, medical and behavioral care, psychological, pet sheltering, reunification

ERC Services

- Shelter Assignment
- Transportation
- Accommodation of Pets
- Recreation and Dormitory Services
- Registration
- Confidentiality
- Health Services
- Psychological First Aid (PFA)
- Feeding

Hub and Spoke Concept for Evacuee Reception Center and Shelters





Access and Functional Needs

- All sites must comply with ADA standards
- Must prepare to accommodate:
 - Adults and children with disabilities
 - Residents with behavioral health issues
 - Children
 - Elderly
 - Service animals
- FAST resource can be requested



Questions?