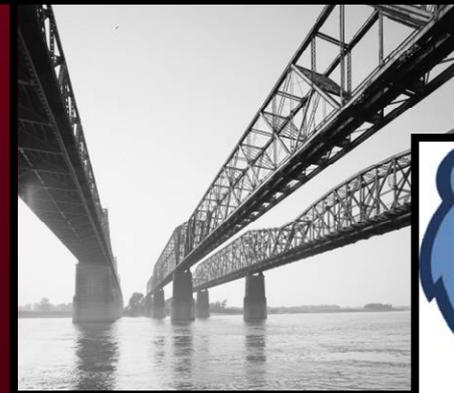




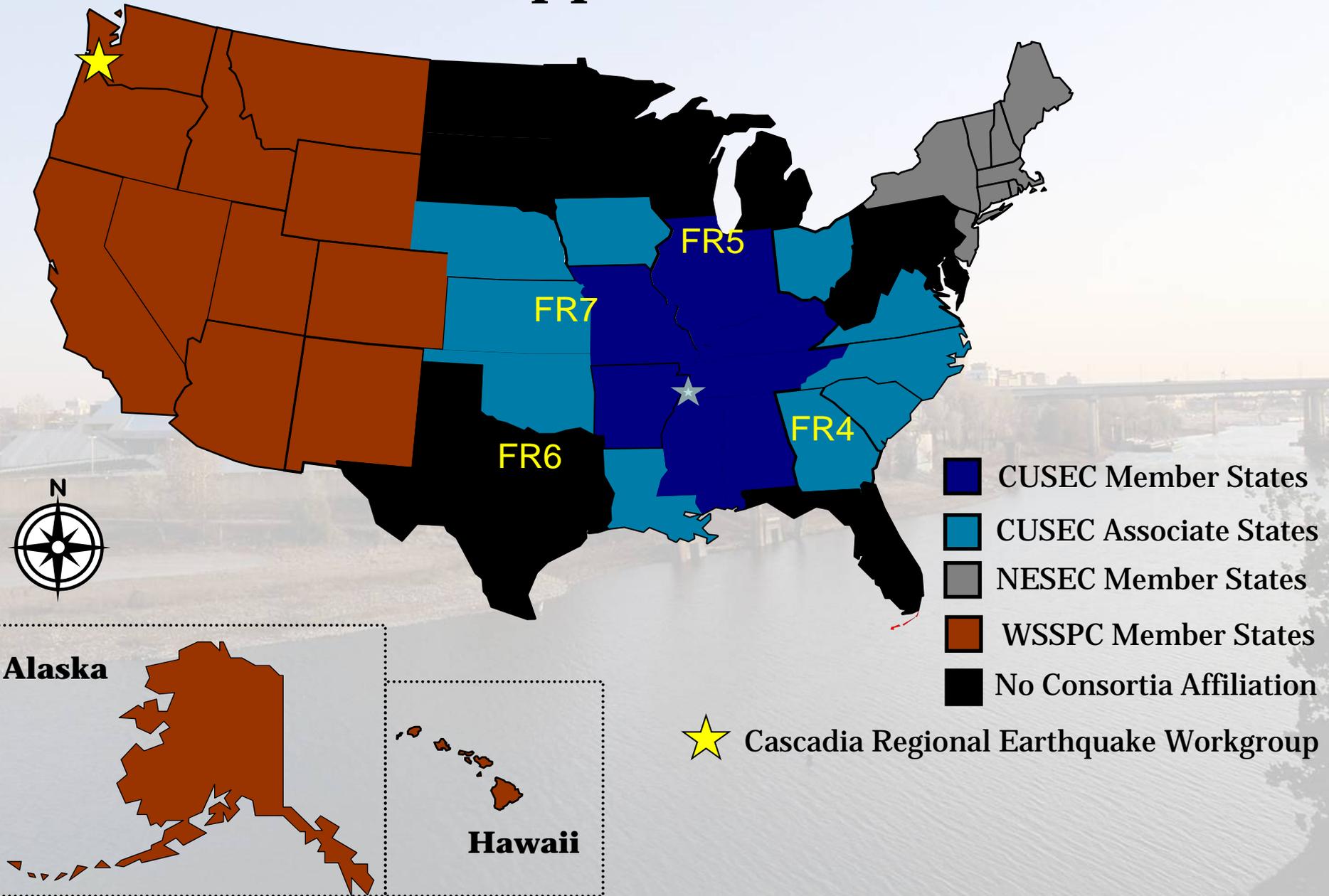
# Central United States Earthquake Consortium (CUSEC) Overview



Who's doing what and ways to improve the effort...



# FEMA Supported Consortia



# **Earthquake Program in the Central U.S. Built Around a Shared Hazard**

- **Small core of dedicated organizations and individuals within – Research, Engineering, and Emergency Management areas**
- **Weak to moderate relationship on a day to day basis in many cases – stove pipes, professional differences, lack leadership**
- **CUSEC - Emergency Management focused but works to foster closer collaboration among these and other interested parties**

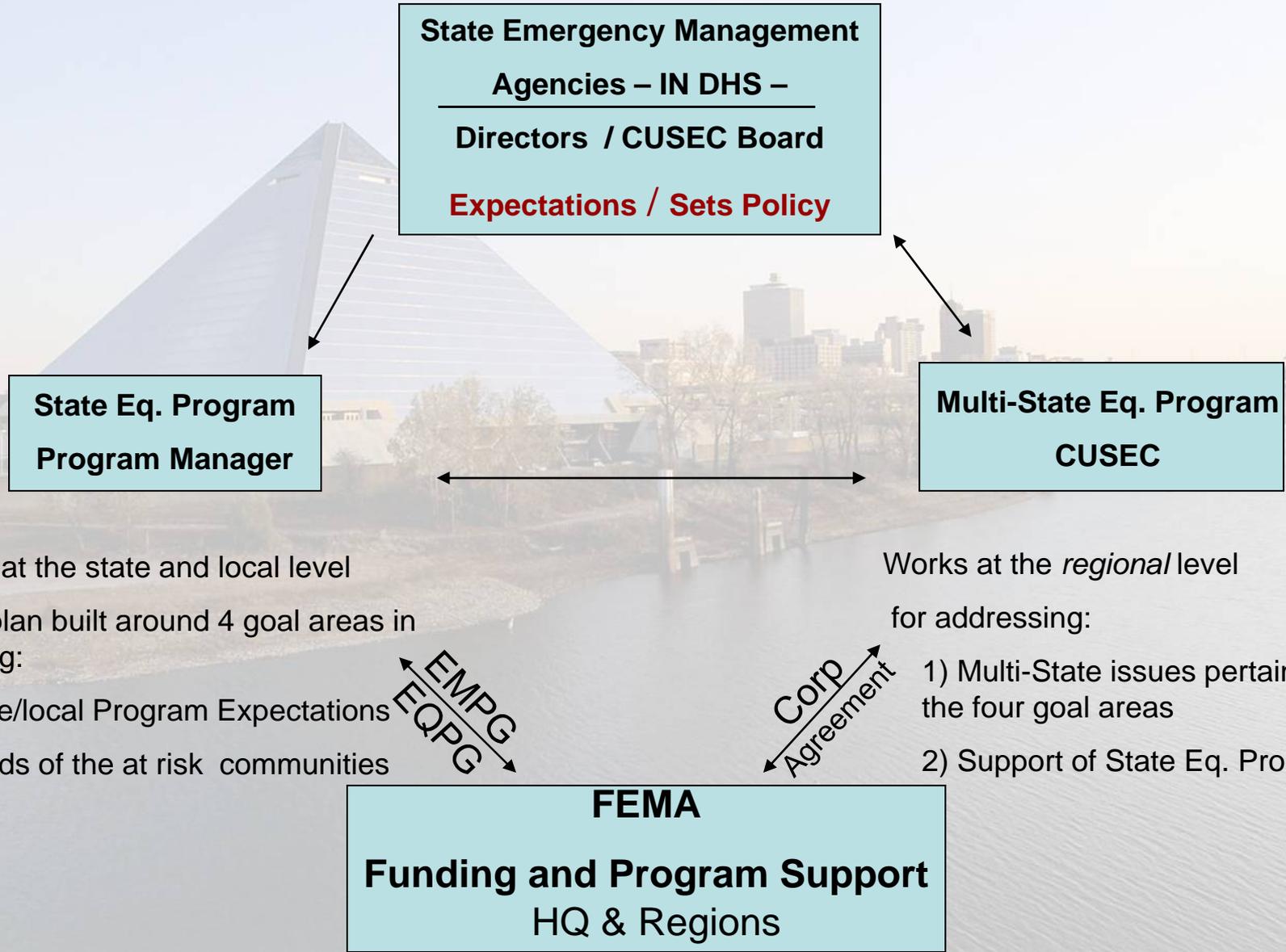


# Earthquake Program Built Around A Partnership Approach

- **International, Federal, State, Local partners**
  - Guatemala
  - Mexico
- **Earthquake Centers**
  - CERI/Smaller centers
  - Mid-America Earthquake Center
- **DHS components**
  - S&T
  - Infrastructure Protection
- **FEMA Hq and Regions IV, V, VI, VII – Response, Recovery, Preparedness & Mitigation Directorates**
- **Emergency Management Assistance Compact**
- **Private Sector**
  - Utilities
  - Various Vendor
- **Business, Industry, and Voluntary Organizations**
- **Institutions**
  - George Washington University/ Virginia Tech
  - Sandia & Argon National Labs

# Roles & Relationships

## Earthquake Program Within EM in the Central U.S.



# CUSEC State Earthquake Programs

- Each of the 8 CUSEC Member and 4 of the eligible 10 Associate states applied for NEHRP funding
- CUSEC Board Adopted a Common Program Structure
  - Public Awareness and Education
  - Mitigation
  - Response and Recovery Planning
  - Application of Research
- Earthquake Program serves as the hub for carrying out goals e.g. Interaction (Mitigation, Ops, PIO, Exercise, Donations,...), not the subject matter expert, but essential to promoting the NEHRP within other program areas.
- CUSEC Board adopted MAEC Catastrophic Risk Modeling results for use by all program areas

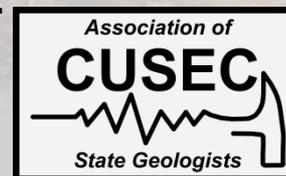
# **CUSEC State Earthquake Programs**

## **Sample Activities Within Adopted Goal Areas**

- **Earthquake Awareness Campaign**
- **Coordinate actions of the seismic advisory council**
- **Interact with at risk communities on a regular basis to develop needed programs**
- **Develop/maintain program identity within and outside of agency – “Institutionalizing the program”**
- **Work with other programs to facilitate/coordinate program activities, i.e. PIO’s, SHMO, Ops,...**
- **Foster/coordinate earthquake specific training. e.g. ATC-20/21 - Structural Assessment and Visual Evaluation (SAVE) programs, Pilot Projects**
- **Work within the CUSEC area to develop multi-state approaches**
- **Response and recovery planning under FEMA Cat**

# Central United States Earthquake Consortium

- **Non-profit organization formed in 1983 and headquartered in Memphis**
  - **Role:** Address the regional aspects of the seismic hazard while meeting the needs of its member states
  - **Mission:** "... the reduction of deaths, injuries, property damage and economic losses resulting from earthquakes in the Central United States."
- **Board of Directors - State EMA Directors**
- **Eight Member States -AL, AR, KY, IL, IN, MO, MS, & TN**
  - **Ten Associate**
- **State Earthquake Program Managers**
  - **Working Groups:** State EMA -PIO's, Ops Chiefs, State Hazard Mitigation Officers, Donations/Volunteer planners, Exercise Officers,...
- **Organizational Associations**
  - **Association of CUSEC State Geologists**
  - **CUSEC State Transportation Task Force**
  - **State Insurance Commissioners Working Group**
- **Corporate Sponsors**
  - [International Paper, Murray State University - Center for Telecommunications Systems Management, Ridg-U-Rack Storage Systems, Simpson Strong Tie, Worksafe Technologies](#)
- **Cover Four FEMA Regions**



# CUSEC Goals

- To raise the level of **public awareness** of the earthquake hazard in the central U.S.
- To promote the adoption of **mitigation programs, tools, and techniques** to reduce vulnerability
- To foster **multi-state planning for response and recovery** to a damaging earthquake
- To promote the **application of research and lessons learned** to improve the level of preparedness

# **Projects / Activities carried out by the CUSEC at the local, state, and regional level**

- **Awareness & Education**
  - Brochures, newsletters, pamphlets...
  - Earthquake Awareness Week
  - Work with states & local gov.'s to encourage adoption / enforcement of building codes
  - 1811/12 Bicentennial / Great New Madrid ShakeOut
- **Mitigation**
  - Non-structural pilot projects for schools, hospitals, child care facilities...
  - Training in Rapid Visual Screening of Buildings for Potential Seismic - ATC 21
  - Promote the adoption of seismic standards as a key method of risk reduction
- **Research Application**
  - Workshops / seminars
  - Integrate new information into the earthquake program
  - Post Earthquake Clearinghouse
- **Multi-State Response & Recovery Coordination**
  - Development of trained volunteers to assist in building assessment - ATC-20
  - Work with other agencies to develop better response & recovery plans
  - New Madrid Catastrophic Planning / Exercise - 2011

# Sampling of Outreach between May and October 2010

**Approximate Number of  
Publications Distributed**

**7368**

Date	Title of Publication	Type	Quantity	Distributed To	Organization	State	Audience Type
04/21/10	Yes, You Can Survive an Earthquake	Pamphlet	200	Participants	at Health Fair in MO	MO	General Public
05/15/10	Central US Earthquake Guide	Brochure	50	Myra Biggers	Arkansas Emergency Management	AR	Government
05/15/10	Central US Earthquake Guide	Brochure	50	Charlisa Ussery	Alabama EMA	AL	Government
05/15/10	Central US Earthquake Guide	Brochure	50	Cecil Whaley	Tennessee EMA	TN	Government
05/15/10	Central US Earthquake Guide	Brochure	50	Steve Oglesby	Kentucky EMA	KY	Government
05/15/10	Central US Earthquake Guide	Brochure	50	Joe Romero	Indiana DHS	IN	Government
05/15/10	Central US Earthquake Guide	Brochure	50	Steve Besemer	Missouri SEMA	MO	Government
05/15/10	Central US Earthquake Guide	Brochure	50	Jana Fairow	Illinois EMA	IL	Government
05/15/10	Central US Earthquake Guide	Brochure	50	Suzanne Lewis	Mississippi EMA	AR	Government
06/04/10	Preparing for Earthquakes is Everybody's Business	Flyer	100	Ed Pearce	Federal Reserve	MO	Government
06/04/10	Yes, You Can Survive an Earthquake	Pamphlet	100	Ed Pearce	Federal Reserve	MO	Government
06/15/10	300 Years of Central US Earthquakes	Map	5	William Johnston	Lincoln University	MO	Academia
06/15/10	Central US Earthquake Guide	Brochure	5	William Johnston	Lincoln University	MO	Academia
06/15/10	Central US Earthquake Guide	Brochure	4	John Steel	Indiana DHS	IN	Government
06/15/10	Central US Map Catalog	Brochure	2	William Johnston	Lincoln University	MO	Academia
06/15/10	CUSEC Prospectus: A Partnership Effort	Brochure	5	William Johnston	Lincoln University	MO	Academia
06/15/10	CUSEC States Liquefaction Map	Map	5	William Johnston	Lincoln University	MO	Academia
06/22/10	HAZUS MH MR4 DVD Set	Software	1	Nish Powers	PHD Memphis Engineers	TN	Private Sector
06/22/10	HAZUS MH MR4 DVD Set	Software	1	Joel Johnson	Burrcole Engineers	TN	Private Sector
06/28/10	Central US Earthquake Guide	Brochure	50	Brenda Franklin	Wyman Group	IL	Private Sector
06/28/10	Central US Earthquake Guide	Brochure	350	Vanessa Henson	Reelfoot Lake Tourism Council	TN	Private Sector
06/28/10	Earthquakes: A Guide to Risk Reduction	Pamphlet	50	Brenda Franklin	Wyman Group	IL	Private Sector
06/28/10	Preparing for Earthquakes is Everybody's Business	Flyer	50	Brenda Franklin	Wyman Group	IL	Private Sector
06/29/10	Central US Earthquake Guide	Brochure	50	Workshop Attendees	at Hospital Mitigation Workshop	TN	Mixture
06/29/10	FEMA 396 Incremental Seismic Rehabilitation of Hospital Buildings	Manual	50	Workshop Attendees	at Hospital Mitigation Workshop	TN	Mixture
06/29/10	FEMA 577 Mitigation Considerations for Hospitals	Software	50	Workshop Attendees	at Hospital Mitigation Workshop	TN	Mixture
07/06/10	Central US Earthquake Guide	Brochure	150	Ann Copeland	New Madrid Historical Museum	MO	Nonprofit
07/06/10	Central US Earthquake Guide	Brochure	250	Rick Burgess	FEMA Mitigation (TN Flood Outreach)	TN	Government
07/06/10	Earthquakes: A Guide to Risk Reduction	Pamphlet	250	Rick Burgess	FEMA Mitigation (TN Flood Outreach)	TN	Government
07/13/10	Central US Earthquake Guide	Brochure	2075	Joe Wainscott	Indiana DHS	IN	Government
<b>Total Publications Distributed (***)</b>		<b>#REF!</b>					



FEMA



EARTHQUAKES OF THE PAST  
SCIENCE OF THE PRESENT  
UNDERSTANDING IN THE FUTURE

NIST

<http://newmadrid2011.org/>



THE UNIVERSITY OF  
**MEMPHIS**  
Center for Earthquake Research  
and Information



Welcome to the Great Central U.S. ShakeOut!

SEARCH:  **GO**

Be a Part of the ShakeOut  
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### GET READY TO SHAKEOUT!

[Register](#) now for the 2011 ShakeOut on April 28 at 10:15 a.m.!

[Participate](#) in the Great Central U.S. ShakeOut to practice [how to protect yourself](#) during earthquakes, and to get prepared.

Learn [how](#) to participate below.

*\*(Indiana will ShakeOut on April 19.)*



**Time to 2011 ShakeOut:**  
7 months, 16 days 4:37:43

### PARTICIPANTS

[Who is Participating?](#)

[ShakeOut Resources:](#)  
ShakeOut Drill Manuals, flyers, movies, and much more

[Why Drop, Cover, and Hold On?](#)

### QUICK LINKS

How to plan your drill and get prepared:

Select your category...

Earthquake hazards in your state:

Select your state...

[FAQ: Frequently Asked Questions](#)

### INTERACTIVE MAP

**Over 80,000**  
Participants and Counting!

Click the map for details about each state



### LEARN & PLAY

**PLAY BEAT THE QUAKE**



**QUAKE QUIZ**



# Earthquake Mitigation Activity

- **Earthquake Mitigation in the Central U.S. Remains Low**
  - **Disconnect between state Mitigation Program and the Earthquake Program**
  - **Difficulties in benefit cost**
  - **Limited visibility of NEHRP – People are not talking up the program**
- **Spattering of Public Sector Mitigation**
  - **MLG&W**
  - **Schools in Arkansas & Illinois**
  - **Hospital – Public area in Indiana**

# **Earthquake “Program” Challenges in the Central U.S.**

- **Definition of Earthquake “Program” varies**
  - **Many components of a program – basically those found within the NEHRP Agencies**
    - **Research**
    - **Engineering**
    - **Emergency Management**
- **Program Differences Create Unintentional Challenges**
  - **State Programs are not aligned with FEMA Mitigation**
  - **CUSEC and State Earthquake Programs reflect a balance of Public Awareness and Education (in support of all program areas), Mitigation, Response and Recovery Planning, Application of Research.**
    - **Not in alignment with FEMA NEHRP Funding stream**
  - **Earthquake mitigation program focus has had limited exposure to local, state, regional, and national earthquake planning efforts**
- **Need to eliminate the “Why is Mitigation here” in earthquake meetings and workshops**
- **Disconnect between overall NEHRP and Emergency Management at the state and local level – Little to no visibility beyond FEMA**

# Questions

The image features a large, modern glass pyramid building, the Pyramid of Light, as the central focus. It is set against a backdrop of a city skyline and a wide river. The word "Questions" is overlaid in a large, bold, black font across the middle of the image. The overall scene is captured in a soft, slightly hazy light, possibly during dawn or dusk.