



**Earthquake Annex
to the
Illinois Emergency Operations Plan**

January 2011

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A. INTRODUCTION

The State of Illinois has been faced with major emergencies and disasters in the past which have affected the health, safety and property of the people who live, work and visit the State. These disasters have primarily resulted from natural disasters such as floods, tornados, and winter storms, or from technological accidents that have occurred during the manufacture, use, storage and transport of chemical substances. However, the State is faced with a threat from a much larger disaster that will strike with no warning and with certain catastrophic force. This threat is the very real chance of a catastrophic earthquake occurring in the Central United States.

There has been a significant effort underway in Illinois to better prepare and respond if such a catastrophic earthquake should impact Illinois. The development of the Earthquake Annex to the Illinois Emergency Operations Plan was a collaborated effort between the Illinois Emergency Management Agency (IEMA) and State Emergency Operations Center (SEOC) Liaisons. Both IEMA and SEOC Liaisons participated in three catastrophic planning workshops and multiple workgroup meetings thereafter to discuss response and recovery issues as well as specific roles and responsibilities of agencies in the event of a catastrophic earthquake in Illinois.

Additionally, the Earthquake Annex to the Illinois Emergency Operations Plan has been developed in concert with the eight states of the Central United States Earthquake Consortium (CUSEC) and the Federal Emergency Management Agency (FEMA) in order to increase not only the State's readiness to a catastrophic earthquake event, but also to improve national readiness.

1. IEMA Mission

As directed by established authority under the Illinois Emergency Management Agency Act (20 ILCS 3305), the Illinois Emergency Management Agency (IEMA) will coordinate State operations to prepare for, respond to, and recover from a catastrophic earthquake affecting Illinois. IEMA shall respond by utilizing all available assets and State agencies in order to save lives, treat those who are injured, protect and/or restore public and private property and immediately begin the recovery process by rebuilding the State's economic and environmental foundation.

2. IEMA Vision

To successfully respond to a catastrophic earthquake in Illinois, the IEMA Director's vision will be to recognize and accomplish the following:

- IEMA must first realize that a catastrophic earthquake will occur with absolutely no warning with continuing aftershocks lasting possibly months after the initial earthquake. In order to save lives, treat those who are injured; protect and restore public and private property, IEMA must be prepared for such an event by not only

developing plans but training and exercising around plans at all levels of government to better respond and recover to a catastrophic earthquake.

- Earthquake planning must also be enhanced by appropriate Memorandums of Understanding (MOU's), Standard Operating Procedures (SOP's) and preparation for participation and support from the Emergency Management Assistance Compact (EMAC).
- IEMA must be prepared to respond immediately with all available State resources. Initial priorities will be life safety and include a rapid damage assessment, opening access routes into the impact areas, search and rescue operations, medical triage/treatment provisions and the establishment of mass care facilities.
- IEMA must continue to develop, expand and execute a comprehensive earthquake awareness program which meets the requirements set out in 20 ILCS 3305, Section 5, of Illinois Emergency Management Act.
- A successful awareness program will educate the citizens of Illinois on the best actions to take for protecting themselves both during and after a catastrophic earthquake event.
- An educational campaign will also include mitigation actions that individuals can do to reduce or even eliminate earthquake damage.
- With an educated public, especially on the expectations concerning government response to a catastrophic earthquake event, citizens will be better prepared to face the many challenges following such an event.
- The direct result of a successful awareness campaign will eliminate some of the anxiety, fear and chaos that will ultimately follow a catastrophic earthquake.

3. Purpose

The purpose of the Earthquake Annex to the Illinois Emergency Operations Plan is to provide operational command, coordination, communication, and control to State agencies and any field resources deployed by the State. Field staffs from responding agencies, organizations, and agreements are responsible for adhering to the operational policies established herein. The Earthquake Annex to the Illinois Emergency Operations Plan will be used in conjunction with the Illinois Emergency Operations Plan (IEOP) and serve as a guide for operational activities of State agencies responding to and recovering from the catastrophic effects of an earthquake in Illinois.

The Earthquake Annex to the Illinois Emergency Operations Plan will identify responsibilities of State agencies, volunteer organizations and mutual aid

organizations used to assist in the response and recovery of citizens, property and the environment in the event of a catastrophic earthquake.

All agencies required to perform response and recovery missions shall abide by the authorities identified through 20 ILCS 3305 Illinois Emergency Management Act, National Incident Management System (NIMS) and the IEOP. All agencies/ departments identified in the Earthquake Annex to the Illinois Emergency Operations Plan will be required to develop plans or procedures specific to their response efforts to a catastrophic earthquake. Agency plans and procedures will be reviewed periodically and copies will be provided to IEMA for reference and use by the SEOC and UAC staffs.

4. Structure

The Earthquake Annex is organized into two major elements: (1) Earthquake Annex to the Illinois Emergency Operations Plan for IEMA and State agencies and (2) Earthquake Annex -- Operational (Volume 2) developed for Unified Area Command, specifically, to aid the four primary Unified Area Command positions: Unified Area Commander, Operations Section Chief, Planning Section Chief and Logistics Section Chief.

5. Authorities and Plan Maintenance

Authorities and references used in the development of the Earthquake Annex to the Illinois Emergency Operations Plan are inclusive of those established at the State and Federal levels. Every effort has been made to incorporate the rules, regulations, policies, and processes of each authority and reference in the Earthquake Annex to the Illinois Emergency Operations Plan. Illinois Emergency Management Agency (IEMA) recognizes that changes can/will occur in the aforementioned documents. As such, Illinois will consider this plan as a living document and strive to review and revise Earthquake Annex to the Illinois Emergency Operations Plan documentation accordingly to provide vertical and horizontal integration of local, State, regional, Federal, and public/private sector response plans. Changes in rules, regulations, policies, and processes will be active regardless of revision to the plan. Should the changes significantly impinge on the ability of Illinois to respond and recover from the effects of a catastrophic earthquake, the enabling authorities of 20 ILCS 3305, Illinois Emergency Management Agency Act, will remain as the overarching authority. All activities of the State will be conducted in compliance with the National Incident Management System (NIMS).

The following authorities are active within the State of Illinois for the purposes of developing, incorporating, and implementing the Earthquake Annex to the Illinois Emergency Operations Plan. The plan will be used in conjunction with the Illinois Emergency Operations Plan (IEOP).

- a. Illinois Emergency Management Agency Act (20 ILCS 3305/)
- b. Illinois Administrative Code Title 29: Emergency Services, Disasters, and Civil Defense
- c. Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L.93-288), as amended
- d. Interstate Compacts, Emergency Management Assistance Compact Act, (45 ILCS 151/)

6. References

The following references are used within the State of Illinois for the purposes of developing, incorporating, and implementing the Earthquake Annex.

- a. National Response Framework (NRF), as amended
- b. National Incident Management System (NIMS), as amended
- c. National Oil and Hazardous Substances Pollution Contingency Plan
- d. Region V Oil and Hazardous Substances Pollution Contingency Plan (RCP) and Area Contingency Plan (RCP-ACP)
- e. Illinois Emergency Operations Plan (IEOP), as amended
- f. State of Illinois Natural Hazard Mitigation Plan, as amended
- g. Emergency Management Accreditation Program
- h. Modified Mercalli Intensity Scale (MMI), current
- i. Richter Scale, current
- j. Comprehensive Seismic Loss Modeling of the State of Illinois – Volumes I, II, and III, Mid-America Earthquake Center; June 2007
- k. Impact of Earthquakes on the Central USA; New Madrid Seismic Zone Catastrophic Earthquake Response Planning Project; Final Phase I Report; MAE Center Report No. 08-02; Mid-America Earthquake Center; September 2008
- l. Impact of New Madrid Seismic Zone Earthquakes on the Central USA – Volumes I and II; New Madrid Seismic Zone Catastrophic Earthquake Response Planning Project; MAE Center Report No. 09-03; Mid-America Earthquake Center; October 2009

- m. County Catastrophic Earthquake Annex – ESF Annex Format, Draft, December 2009
- n. County Catastrophic Earthquake Annex – Operational Annex Format, Draft, December 2009

7. Earthquake Impact Area

The most active earthquake impact area in Illinois is generally described as the southern portion of Illinois. Two seismic zones that have been identified in Southern Illinois include the New Madrid Seismic Zone (NMSZ) and the Wabash Valley Seismic Zone (WVSZ). An earthquake event in the southern Illinois area will cause damage, operational capabilities loss, and direct economic losses across the entire State of Illinois. However, the damage and losses will be most severe in the southern portion of Illinois.

The NMSZ consists of three fault segments: the northeast segment, the reelfoot thrust or central segment and the southwest segment. This fault line stretches from southwest Illinois to northeast Arkansas. The fault line crosses five states in the Central U.S.: Illinois, Missouri, Kentucky, Tennessee and Arkansas. The northern tip of the northeast segment is located in Alexander County in Illinois.

The WVSZ fault line stretches across three counties in the southeast portion of Illinois: Wabash, Edwards and White. Since the entire fault line is in Illinois, there is a much wider area of intense shaking within the State of Illinois compared to the NMSZ area.

However, as indicated on the “Earthquakes in Illinois” map, earthquakes can occur throughout Illinois.

8. Historical Overview of New Madrid Seismic Zone (NMSZ)

The New Madrid Seismic Zone (NMSZ) is a 150-mile long fault zone spanning four states in the Midwestern United States (see Figure 1). The NMSZ lies within the central Mississippi Valley, extending from northeast Arkansas, through southeast Missouri, western Tennessee, and western Kentucky to southern Illinois. Historic earthquakes in the region, such as the 1811–1812 earthquakes are believed to have had magnitudes (M) of approximately 8.0 or greater that were felt throughout the eastern United States as well as Canada. Hundreds of aftershocks also followed the 1811-1812 quakes over a period of several years. Other significant quakes were recorded in 1843 and 1895. The 1895 quake was the worst of the two and was determined to be 6.8 (M) causing immense damage. Since the Central United States geology is susceptible to soil liquefaction, earthquake damage is magnified over a potentially wider area and is the U.S. Region most vulnerable to a catastrophic earthquake.

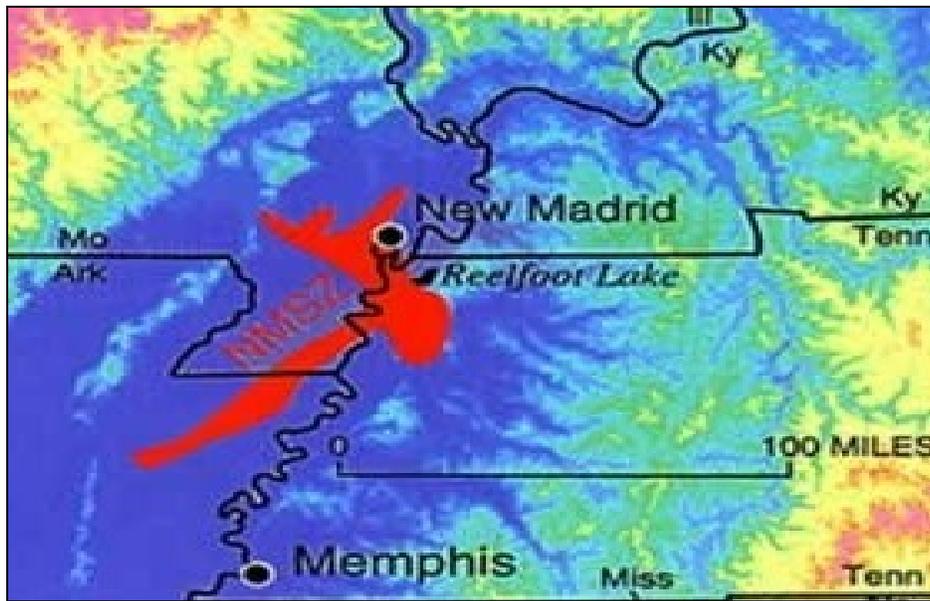


Figure 1: New Madrid Seismic Zone¹

An earthquake is a phenomenon that results from the sudden release of stored energy in the earth's crust that creates seismic waves. At the earth's surface, earthquakes may manifest themselves by a shaking or displacement of the ground, which may lead to loss of life and destruction of property. Earthquakes may occur naturally or as a result of human activities. In its most generic sense, the word earthquake is used to describe any seismic event, whether a natural phenomenon or an event caused by humans that generates seismic waves.

This sudden release results in ground shaking, surface faulting, and/or ground failures. Most earthquakes result in little or no damage. In fact, there are hundreds of earthquakes that occur every year along the NMSZ, and most are of magnitudes less than 2.0. However, an earthquake has the potential to be the most dangerous of all natural hazards that could impact the State of Illinois.

The NMSZ saw four of the largest North American earthquakes in recorded history, with magnitude estimates greater than 8.0 on the Modified Mercalli Scale. These earthquakes all occurred over a three-month period. Many of the published accounts describe the cumulative effects of all the earthquakes, known as the New Madrid Sequence; thus, finding the individual effects of each earthquake can be difficult.

The first earthquake occurred on December 16, 1811, at 2:15 a.m., and had a severity of magnitude 8.1 to 9.0. It caused only slight damage to man-made structures, mainly because of the sparse population in the epicenter area. However, landslides and

¹ United States Geological Survey. www.usgs.gov.

geological changes occurred along the Mississippi River, and large localized waves occurred due to fissures opening and closing below the earth's surface.

The second major earthquake occurred on January 23, 1812, at 8:15 a.m. with a magnitude 7.8 and another at 9:00 am. Although the intensity was slightly less, these earthquakes were just as violent as the earlier earthquakes.

The last of this series of earthquakes occurred on February 7, 1812, at 4:45 a.m. with an estimated magnitude of 8.0 to 11.0. As the epicenter for this quake was near New Madrid, Missouri, the town was destroyed. At St. Louis, many houses were severely damaged and their chimneys were toppled. The *meizoseismal*² area was characterized by general ground warping, ejections, fissuring, severe landslides, and caving of stream banks.

This three-month period of earthquakes caused permanent changes in the course of the Mississippi River, which flowed backwards temporarily. The effects of these earthquakes were felt as far away as New York City and Boston, Massachusetts, causing church bells to ring. Large areas sank into the earth, fissures opened, lakes permanently drained, new lakes were formed, and forests were destroyed over an area of 150,000 acres. Hundreds of aftershocks followed over a period of several years.

In terms of response, it has been reported that the probability of a repeat of the 1811–1812 earthquakes (magnitude 7.5–8.0) is from 7–10% and the probability of a magnitude 6.0 or larger is from 25–40%.³ However, it is understood that a large magnitude event grows more probable with each passing day. A catastrophic seismic event on the NMSZ could directly impact more than 50% of the state's population and could trigger a national response on a larger scale than any recorded earthquake event in modern United States history.

9. Historical Overview of Wabash Valley Seismic Zone (WVSZ)

Recent studies have indicated that the New Madrid Seismic Zone is not the only 'hot spot' for earthquakes in the Central United States. On June 18, 2002, a 5.0 magnitude earthquake struck Evansville, Indiana with an epicenter between Mt. Vernon and West Franklin in Posey County, in an area that is part of the Wabash Valley Seismic Zone (WVSZ). According to the Indiana University Indiana Geological Survey, while there was minor damage associated with the earthquake, the tremor was a warning to residents of the Wabash Valley Seismic Zone that earthquakes can, and do, strike close to home.

According to the USGS, this map of the New Madrid and Wabash Valley seismic zones shows earthquakes as circles. Red circles indicate earthquakes that occurred from 1974 to 2002 with magnitudes larger than 2.5 located using modern instruments.

² The *meizoseismal area* in an earthquake is the area of maximum damage.

³ United States Geological Survey Fact Sheet. <http://pubs.usgs.gov/fs/fs-131-02/fs-131-02.pdf>.

Green circles denote earthquakes that occurred prior to 1974. Larger earthquakes are represented by larger circles.

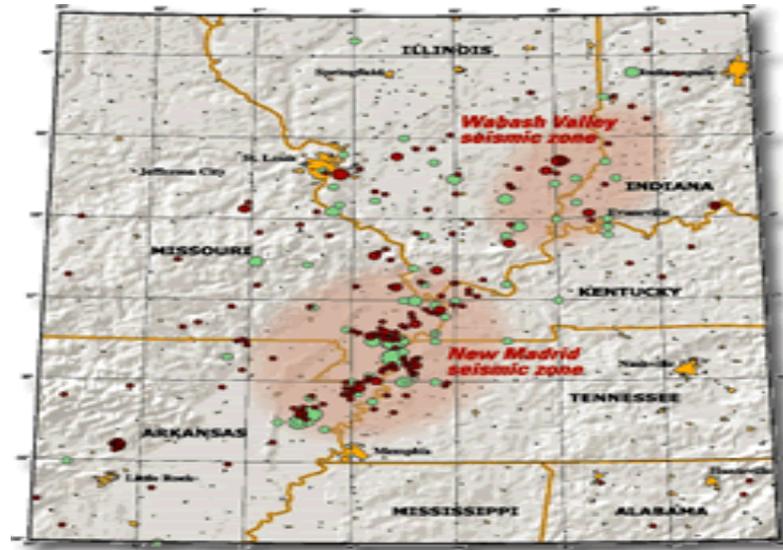


Figure 2: Map Source: USGS FS-131-02

On April 18, 2008, a 5.4 magnitude earthquake struck near Mt. Carmel, Illinois, further demonstrating that earthquakes are a topic that needs to be addressed. This earthquake was felt in at least 16 states, by more than 40,000 people, according to the USGS. Fortunately, there were no serious injuries or fatalities, but non-structural damage was reported in the states of Illinois, Indiana, & Kentucky.

The Wabash Valley Seismic Zone is located in Southeastern Illinois and Southwestern Indiana and it is capable of producing 'New Madrid' size earthquake events. Since the discovery of this seismic zone, earthquake awareness and preparedness have increased. Residents are seeing that moderate sized earthquakes are not just occurring to the south, but occur right at home and can affect Illinois, Indiana, and Kentucky.

Geologists in Indiana and Illinois have found liquefaction sites and sand dikes that shows the evidence of prehistoric earthquakes in the region. By examining the size of the dikes and sediment found within the sand dikes, geologists are able to estimate the size of the earthquake it took to create the formations. In the mid-1980's, geologist Steven Obermeier found a liquefaction formation that was estimated, through carbon dating, to be 6,100 years old. The earthquake that produced the site was estimated to be a magnitude 7.1, large enough to seriously disrupt the area known as the Wabash Valley Seismic Zone.⁴

⁴ Central United States Earthquake Consortium (CUSEC) website, January 2010

10. Plan Development Assumptions

The following general assumptions pertain to the overall development of the Earthquake Annex. The assumptions are overarching and are further supported by functional specific assumptions for each Emergency Support Function (ESF).

- The Earthquake Annex to the Illinois Emergency Operations Plan is based on a “no-notice” catastrophic earthquake. Modeling used for a Central U.S. event will be sufficiently representative of a worst-case scenario so that potential response shortfalls can be identified within the local and State levels of government.
- Aftershocks will occur following an earthquake and can potentially be as large if not larger than the initial quake. Aftershocks are known to occur for many months past the initial earthquake.
- The initial earthquake and/or aftershocks will trigger secondary disasters such as fires or dam/levee breaches that will cause significant damage and potentially compromise the safety of response and recovery personnel or degrade the response effort.
- Illinois counties expecting the most significant damage from a Central U.S. event include but are not limited to the following: Alexander, Bond, Calhoun, Clark, Clay, Clinton, Crawford, Edwards, Effingham, Fayette, Franklin, Gallatin, Greene, Hamilton, Hardin, Jackson, Jasper, Jefferson, Jersey, Johnson, Lawrence, Macoupin, Madison, Marion, Massac, Monroe, Montgomery, Perry, Pope, Pulaski, Randolph, Richland, Saint Clair, Saline, Union, Wabash, Washington, Wayne, White, Williamson.
- Local governments, although prepared, will most likely be overwhelmed in the aftermath of a catastrophic earthquake in the Central U.S. The result of such a quake will produce large numbers of casualties and damages to buildings, critical facilities, and critical infrastructure over a multi-county or even multi-state area.
- Neighboring states will suffer the same effects of a catastrophic earthquake in Illinois and resources will be scarce.
- Normal means of communication, transportation, and infrastructure capability will be severely disrupted in areas within and beyond the immediate affected area(s) of a catastrophic earthquake.
- Citizens of Illinois will require sheltering, evacuation, mass care, and medical assistance.
- State and Federal assistance will be required to carry out response and short term recovery efforts to save lives, reduce human suffering and reduce damage to

property. This will require mobilizing and deploying teams and commodities before they are requested.

- Mutual aid agreements and compacts will be activated to carry out response and recovery efforts.
- IEMA is the State agency responsible for working with local, State, and Federal agencies in the mitigation, preparation, response, and recovery from a catastrophic earthquake event occurring in Illinois.
- The President of the United States will declare a major disaster or emergency and Federal assistance may become available to supplement State and local efforts.

11. Emergency Support Function Crosswalk

Table 1 identifies ESF 1 – ESF 15 in the National Response Framework as well as those identified within the ESF structure of the Illinois Emergency Operations Plan. Since there are differences that exist with the lead agency responsibilities as compared to the Federal Government’s National Response Framework (NRF), the table may be utilized as a crosswalk to properly link State Emergency Support Functions to those outlined in the National Response Framework.

Table 1: Emergency Support Function Crosswalk between the Illinois Emergency Operations Plan and the National Response Framework

Emergency Support Function	Illinois Emergency Operations Plan⁵ Lead Agency/Agencies	National Response Framework⁶ Lead Agency/Agencies
ESF 1 – Transportation	Illinois Department of Transportation – Highways	Department of Transportation
ESF 1 – Disaster Aviation	Illinois Department of Transportation – Aeronautics	
ESF 2: Communications	Illinois Emergency Management Agency	Department of Homeland Security, National Protection and Programs Directorate, Cyber security and Communications, National Communications System
ESF 2: Notification and Activation	Illinois Emergency Management Agency	
ESF 3: Public Works and Engineering	Illinois Department of Transportation – Highways	Department of Defense U.S. Army Corps of Engineers
ESF 4: Firefighting	See page 57	Department of Agriculture, Forest Service
ESF 5: Emergency Management	Illinois Emergency Management Agency	Department of Homeland Security, Federal Emergency Management Agency

⁵ Illinois Emergency Operations Plan, January 2010

⁶ Overview: ESF and Support Annexes Coordinating Federal Assistance in Support of the National Response Framework, January 2008.

Emergency Support Function	Illinois Emergency Operations Plan⁵ Lead Agency/Agencies	National Response Framework⁶ Lead Agency/Agencies
ESF 6: Mass Care	American Red Cross	Department of Homeland Security, Federal Emergency Management Agency
ESF 6: Emergency Assistance, Housing, and Human Services	To be developed	
ESF 7: Logistic Management and Resource Support	Illinois Emergency Management Agency	General Services Administration Department of Homeland Security, Federal Emergency Management Agency
ESF 7: Deployment, Mobilization, and Demobilization	Illinois Emergency Management Agency	
ESF 8: Public Health and Medical Services	Illinois Department of Public Health	Department of Health and Human Services
ESF 9: Search and Rescue	Illinois Emergency Management Agency	Department of Homeland Security, Federal Emergency Management Agency
ESF 10: Oil and Hazardous Materials Response	Illinois Environmental Protection Agency	Environmental Protection Agency

Emergency Support Function	Illinois Emergency Operations Plan⁵ Lead Agency/Agencies	National Response Framework⁶ Lead Agency/Agencies
ESF 11: Agriculture and Natural Resources – Provision of Food	Illinois State Board of Education	Department of Agriculture
ESF 11: Agriculture and Natural Resources – Animal Welfare	Illinois Department of Agriculture	
ESF 11: Agriculture and Natural Resources – Natural, Cultural and Historical	To be developed	
ESF 12: Energy	Illinois Commerce Commission	Department of Energy
ESF 13: Public Safety and Security – Law Enforcement and Force Protection	Illinois State Police	Department of Justice (DOJ)
ESF 13: Public Safety and Security – Evacuation	Illinois State Police	
ESF 14: Long Term Community Recovery	Illinois Emergency Management Agency	Department of Homeland Security, Federal Emergency Management Agency
ESF 15: External Affairs – Warning	Illinois Emergency Management Agency	Department of Homeland Security
ESF 15: External Affairs – Media and Congressional Relations	Illinois Emergency Management Agency	

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B. CONCEPT OF OPERATIONS

The State of Illinois will prepare for, respond to, and recover from a catastrophic earthquake event by utilizing a phased approach (see Response and Recovery Phases). Throughout response operations, the Illinois Emergency Management Agency (IEMA) will serve as the State Coordinating Agency, with the agency Director serving as the State Coordinating Officer unless otherwise assigned.

Operational resources of the State will fall under the immediate direction and control of the State Emergency Operations Center (SEOC) or State Unified Area Command (UAC) upon activation and deployment. Upon activation and deployment of the UAC, all operational resources shall operate under the direction and control of the State Unified Commander and/or designee.

The Unified Area Commander and designated Unified Area Command Post staff will determine categorization and classification of operational priorities throughout a catastrophic earthquake event. Typically, the State considers these “response” and “short-term recovery” priorities. The following will outline these priorities.

1. Notification and Activation

a. United States Geological Survey Notifications

Information is received from the United States Geological Survey (USGS) via an e-mail in the IEMA Communications Center for all magnitudes.

Earthquakes measuring a 4.0 – 4.4 magnitudes in Illinois, Northern Kentucky, Western Indiana or Eastern Missouri will trigger a notification to the IEMA SEOC Manager and/or the Chief of Operations during normal duty hours or to the IEMA Duty Officer after normal duty hours.

Earthquakes measuring a 4.5 or higher magnitudes in Illinois, Northern Kentucky, Western Indiana, Eastern Missouri, Northeast Arkansas or Western Tennessee will trigger a notification to the IEMA SEOC Manager and/or the Chief of Operations during normal duty hours or to the IEMA Duty Officer after normal duty hours. Other staff will be contacted as directed by senior staff.

b. National News Notifications

For any earthquake in Illinois, Northern Kentucky, Western Indiana or Eastern Missouri (any magnitude) that is being reported on national news or via national news e-mail alerts, notify the IEMA SEOC Manager and/or the Chief of Operations during normal duty hours or to the IEMA Duty Officer after normal duty hours. Other senior staff will be notified via an e-mail with the specifics of the event.

c. SEOC Activation Levels

The SEOC activation levels are based on an all-hazards planning approach. The activation level of the SEOC will be based on: threat or presence of an actual disaster; level of destruction; casualties and/or fatalities; number of agencies needed to complete the identified missions; and/or the media interest. The Activation Levels are identified below (IEMA SOP 09-005).

Level 4 – Normal Operations: IEMA along with the SEOC Liaisons are conducting normal daily activities with incidents being handled with existing resources, policies and procedures. Current conditions are being monitored by appropriate agencies.

Level 3 – Monitoring Activation: Level 3 is typically a “monitoring” phase. A situation or threat has developed that requires increased public information and has the potential for agencies to take coordinated action. The SEOC will be activated by IEMA staff during regular business hours or additional hours as needed. Conditions are being monitored with information sharing networks activated. This level of activation may result from an approaching significant weather event, the potential for a public health situation, or a plausible threat of a terrorist event with an unspecified time or national location.

Level 2 – Partial Activation: A situation or threat has developed requiring a partial activation of the SEOC, which may extend beyond the regular workday and require round-the-clock monitoring. Staffing of the SEOC by IEMA staff will likely be supplemented by other agencies. A partial activation requires limited agency activation. All primary SEOC Liaisons are notified of the activation of the SEOC. The SEOC will be staffed by Emergency Management personnel and necessary SEOC Liaison Agencies needed to fulfill the missions presented to the SEOC and to provide expert knowledge.

Level 1 – Full Scale Activation: A situation or threat has developed requiring a full activation of the SEOC, potentially on a 24-hour rotational basis with all SEOC Liaisons participating or on call. A state declaration of disaster is being considered or has been issued. A major natural disaster, terrorist attack or public health event has occurred with significant property damage and threat to human life could trigger a level one activation. During a full scale activation, all primary SEOC Liaison Agencies and support agencies under the state plan are notified. The SEOC will be staffed by IEMA and all SEOC Liaisons.

Recovery Operations: Activities are shifting from SEOC response operations toward a recovery operation or a disaster field office (if declared) for implementation of recovery programs. While many SEOC Liaison agencies will still be involved in the event, the SEOC will be returning to normal operations.

Illinois Emergency Management Agency
 State Emergency Operations Center (SEOC)
 Activation Levels

Table 2

Level#	Name of Level	Description	Example
IV	Daily Ops/Limited Emergency Conditions	IEMA and its partner agencies are maintaining normal daily operations with all operations in a steady state.	Normal Activity up to weather warnings
III	Limited Activation	A situation has occurred requiring a minimal staffing of the SEOC to allow for the development of Situational Awareness. SEOC staffed by IEMA and tasked State Agency Partners	Tornado
II	Partial Activation	A significant event has occurred requiring IEMA staff and additional tasked state agency partners to be present in the SEOC for mission and resource assignments.	Prolonged Flooding
I	Full Activation	SEOC staffed with IEMA staff, representatives of all partner agencies and policy group. Activation may require 24/7 staffing for prolonged period.	No-Notice Event/ Large Earthquake

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2. Response and Short-Term Recovery Priorities

a. Life Safety, Search and Rescue

Life safety issues are the highest priority of the State of Illinois, for both citizens and responders, following a disaster. Upon request and/or notification of an incident resulting in loss of life or injury to civilian and/or responder population, the State of Illinois will implement the IEOP and Earthquake Annex as necessary. Activation of the IEOP, Earthquake Annex, SEOC, and UAC are determined by the scope and magnitude of the event. Consideration is given to the inability of the affected local governments to respond to the disaster area, the lack of available resources at the local government level, and the degree of catastrophic loss involved with the incident. This may include response without the request of a local government.

Each individual agency involved in response and short term recovery is independently responsible for life safety. Asset deployment and mission tasking is implemented in accordance with the Incident Action Plan approved by the Unified Area Commander. All activities will be conducted in accordance with the IEOP, Earthquake Annex, NIMS and applicable State and Federal regulation/guidance.

b. Debris Removal to effect higher priority missions (i.e. life, safety, evacuation)

- i. Main transportation and evacuation routes
- ii. Secondary transportation routes and staging areas
- iii. Tertiary transportation routes and staging areas

Debris removal is directly correlated to life safety and critical infrastructure. To effect life safety operations the removal of debris is crucial to maintain safe victim rescue and work conditions required by responders and citizens; necessary to maintain and repair critical infrastructure; an important role in how effective responders are in delivering unique capabilities for the restoration of essential services; and an understated benefit to the psychological impact of the disaster on citizens and responders.

c. Implementation and Maintenance of Site Security

Site security at an incident, reception or staging site promotes command order, site security, and personnel accountability. Sites should never be unmanned over the course of a response; personnel should maintain standard operating procedures (SOPs) and consistently enforce requirement for security validation codes. SOPs should include a secondary access plan for use in the event if security at primary access points has become compromised.

d. Temporary Restoration of Critical Infrastructure (Order of Priority)

- i. Power Restoration
- ii. Potable water
- iii. Waste water treatment facilities and equipment
- iv. Telecommunications

Critical infrastructure during short-term recovery predominately refers to the restoration of utilities including power, potable water and wastewater treatment, and telecommunications networks. The Illinois Commerce Commission (ICC), Illinois Department of Transportation (IDOT), Illinois Department of Public Health (IDPH), Illinois Environmental Protection Agency (IEPA), Illinois Department of Natural Resources (IDNR), and Illinois Department of Agriculture (IDA) all have regulatory authority or responsibility for critical infrastructure.

e. Debris Management not required for immediate Life, Safety, and Evacuation missions

The type of debris deposited (limbs, metal, construction materials, etc.) determines the need for and type of debris management principles utilized. Not all debris fits into one disposal category such as land filling, burning, recycling, or chipping. Debris must be classified into categories and estimated (amount) in order for proper segregation, storage, and disposal.

f. Temporary Health and Welfare

Depending on the scope and magnitude of the event, short-term strategic recovery can encompass health and welfare issues. Initial Damage Assessment teams provide valuable insight into health and welfare issues. Initial Damage Assessment teams expedite the process of establishing temporary shelter and medical facility needs, and the amount of resources and/or mutual aid agreements that may be required for specific health and welfare missions. Reception sites such as school gymnasiums, tents, and churches may be designated areas for those without shelter or having lost contact with family members. The American Red Cross (ARC) is the primary organization responsible for establishing secondary/ temporary shelter as well as providing food and applicable/approved medications.

g. Shelter, Food and Medical Assistance

Mass care services during the short-term recovery phase may be provided to victims and family members at established shelter sites. Services may include sheltering, feeding operations, emergency first aid, bulk distribution of emergency items, and collecting and providing information on victims to family members.

h. Permanent Debris Removal and Relocation

- i. Debris Categorization
- ii. Debris Estimation
- iii. Site Selection, Approval and Disposal

These activities begin immediately following an event and may continue into the long-term recovery phase. Public Assistance funding may be available to cover some of the costs of debris management. IEMA conducts briefings for State and local governments following a Public Assistance declaration. IEMA monitors Public Assistance projects and makes payments to applicants who are repairing or replacing public property. The Illinois Departments of Transportation, Natural Resources and Corrections provide personnel and equipment for debris removal. The Illinois Environmental Protection Agency is responsible for oversight during the removal of hazardous materials.

i. Preservation and securing of crime scene evidence or localized areas of interest

Potential crime scenes will be maintained and minimally disturbed during the short-term response phase. First responders will take actions that are necessary for the performance of their official duties in order to preserve critical evidence while performing life saving actions and implementing the necessary protective actions for people at risk.

j. Delivery of Critical Incident Stress Debriefing to responders and citizens

Critical incident stress management (CISM) is a comprehensive, organized approach for the reduction and control of the harmful aspects of stress in emergency situations. Critical incident stress debriefings (CISD) will be provided to responders and citizens in a timely manner based on the nature of the incident and the length of the response. This timeframe could be with 24 hours of the incident to several weeks after.

3. State Resources

All available State resources will be fully engaged in response and recovery operations to a catastrophic earthquake event and State agency liaisons will be immediately staffed to the SEOC. Response efforts will include several participating agencies and organizations. Below you will find State agencies as well as mutual aid and volunteer organizations that will have a significant role in the response to a catastrophic earthquake. Section 3 will describe the primary duties of each agency or organization in response to a catastrophic earthquake.

a. State Agencies

- Illinois Board of Higher Education (IBHE)
- Illinois Capital Development Board (CDB)
- Illinois Commerce Commission (ICC)
- Illinois Community College Board (ICCB)
- Illinois Deaf and Hard of Hearing Commission (IDHHC)
- Illinois Department on Aging (IDoA)
- Illinois Department of Agriculture (IDA)
- Illinois Department of Central Management Services (CMS)
- Illinois Department of Children and Family Services (DCFS)
- Illinois Department of Commerce & Economic Opportunity (DCEO)
- Illinois Department of Corrections (IDOC)
- Illinois Department of Human Services (IDHS)
- Illinois Department of Military Affairs (IDMA)
- Illinois Department of Natural Resources (IDNR)
- Illinois Department of Public Health (IDPH)
- Illinois Department of Transportation – Aeronautics (IDOT-A)
- Illinois Department of Transportation – Highway (IDOT-H)
- Illinois Department of Veterans’ Affairs (IDVA)
- Illinois Emergency Management Agency (IEMA)
- Illinois Environmental Protection Agency (IEPA)
- Illinois Historic Preservation Agency (IHPA)
- Illinois Secretary of State (SOS)
- Illinois State Board of Education (ISBE)
- Illinois State Police (ISP)
- Office of State Fire Marshal (OSFM)
- American Red Cross (ARC)

b. Mutual Aid Organizations

i. Mutual Aid Agreement between NEMA and State

- Emergency Management Assistance Compact (EMAC)

ii. Intergovernmental Agreement between IEMA and Organizations

- Combined Agency Response Team (CART)
- Illinois Coroners and Medical Examiners Association (ICMEA)
- Illinois Deaf and Hard of Hearing Commission (IDHHC)
- Illinois Law Enforcement Alarm System (ILEAS)
- Illinois Public Works Mutual Aid Network (IPWMAN)
- Mutual Aid Box Alarm System (MABAS)
- Mutual Aid Response/Resource Network (MAR²N)

iii. **Mutual Aid Agreement between other State Agency and Organizations**

- Illinois Public Health Mutual Aid System (IPHMAS)

iv. **Response Assets of IEMA and Other State Agencies**

- Illinois Medical Emergency Response Team (IMERT)
- Illinois Nurses Volunteer Emergency Needs Team (INVENT)
- Illinois Tele-communicator Emergency Response Taskforce (IL-TERT)
- Illinois Veterinary Emergency Response Team (IVERT)
- Incident Management Team (IMT)
- Illinois Emergency Services Management Association/Mobile Support Teams (IESMA/MST)
- Voluntary Organizations Active in Disasters (VOAD)

c. **Volunteer Organizations**

- Community Emergency Response Teams (CERT)

d. **Additional Organizations**

- Central United States Earthquake Consortium (CUSEC)
- Illinois State Geological Survey (ISGS)
- Mid-American Earthquake Center (MAE Center)
- National Weather Service (NWS)
- United States Geological Survey (USGS)

4. **State Agency Responsibilities**

a. Illinois Board of Higher Education (IBHE)

Provide assistance in the coordination of public university dormitories, kitchens and other facilities to serve as shelters and other mass care facilities. In addition the IBHE will assist in coordinating the assignment of personnel with specialized skills (food service, foreign language interpreters, mental health and health care) to assist in mass care relief operations. Coordination of facilities and personnel will occur throughout Illinois in order to support the impacted area.

b. Illinois Capital Development Board (CDB)

Provide technical engineering and architectural staff capable of evaluating damage to public facilities and conducting post earthquake safety inspections of buildings. Provide assistance in expedient identification of State owned or controlled buildings throughout Illinois that can be converted for emergency use in order to support the impacted area.

c. Illinois Commerce Commission (ICC)

Provide information to the IEMA Disaster Intelligence (DI) staff on the condition of railroad lines, pipelines, utilities, etc., in the impacted areas. In addition the ICC shall work with railroad companies on plans to re-establish rail service both into and through the impacted areas to facilitate the disbursement of needed commodities into and through the impacted areas, if railroad lines are not impacted or can be repaired quickly. Operate and maintain the Illinois Emergency Communications Network (IECN) through a Virtual Inter-Utility EOC connection as required. Maintain direct conduits to private industries in impact areas. Enact regulatory provisions to ensure compliance with existing or emergency rules concerning industries and commerce regulated through the ICC.

d. Illinois Community College Board (ICCB)

Coordinate use of community colleges as mass care facilities, staging areas, mobilization centers, and headquarters facilities. Assist in coordinating the assignment of personnel with specialized skills (i.e. food service staff, health care personnel, logistics staff) to assist in mass care relief operations. Coordination of facilities and personnel will occur throughout Illinois in order to support the impacted area.

e. Illinois Deaf and Hard of Hearing Commission (IDHHC)

Provide for the advancement of the interests of all Illinois citizens with a hearing loss by advocating for systemic improvements, promoting cooperation and coordination among entities serving people who are deaf and hard of hearing, and disseminating information to eliminate negative stereotypes surrounding hearing loss. In addition the IDHHC will assist in providing interpreters for the deaf and hard of hearing and translation of information into Braille for the visually impaired at shelters and other locations.

f. Illinois Department on Aging (IDoA)

Arrange for the use of Senior Citizen Centers as mass care shelters and food preparation sites. Assist in distribution of food. Provide Outreach workers to provide specialized assistance to senior citizens who are disaster victims. Assist in providing transportation of senior citizens to mass care facilities. Provide assistance with distribution of food and other mass care items to senior citizens who may not be able to reach mass care facilities.

g. Illinois Department of Agriculture (IDA)

Provide staff expertise on the care, disposal, and transport of animals in impact areas. Enact regulatory provisions to ensure compliance with existing or emergency rules concerning industries and commerce regulated through the IDA. Provide sampling and monitoring expertise in impact areas of regulated agricultural and farming industries. Provide and assist in the movement and activation of veterinary services to impact areas. Coordinate with the local animal control officer and Noah's Wish, which would be the non-governmental organization (NGO) of choice, for handling pets and service animals in an evacuation. Other volunteer animal welfare organizations would also be utilized if needed. Ensure all animal welfare issues are being properly addressed.

h. Illinois Department of Central Management Services (CMS)

Provide situational awareness and intelligence on state owned facilities, leased facilities, information technology/communications and vendor supplied services in impact areas. Provide contact and coordination of vendor supplied services to impact areas. Provide and coordinate resource requests through approved emergency vendor lists. Activate and mobilize state owned communications vehicles to assist response, short term recovery, and civilian aid efforts. Coordinate and monitor the purchase, acceptance, and delivery of resources purchased for response and short term recovery efforts. Provide assistance in expedient identification of State owned or controlled buildings that can be converted for emergency use throughout Illinois in order to support the impacted area. Utilize CMS staff from the Bureau of Communication and Computer Services, both in the impacted area and from the central and northern technical teams, to repair and bring up the State fiber optic network PoP sites. Utilize CMS staff from the Property Management section to assist with assessment of State facilities for use as possible shelter sites. Staffing includes qualified architects and engineers with various specialties (i.e., mechanical and electrical). Utilize CMS mechanics from the Division of Vehicles to deploy with IDOT road crews to maintain the operability of IDOT, ISP and IEMA vehicles. Additional staff from the Division of Vehicles will assist in the set-up and operation of temporary fuel depots for State emergency response vehicles. CMS media staff within the Illinois Office of Communication and Information may assist with public information functions and disaster intelligence activities either in the impacted area or at the SEOC. CMS staff within the Bureau of Benefits will coordinate access to health care benefits, to include mental health and crisis counseling, for all State responders deployed by the SEOC. Utilize CMS staff within the Bureau of Personnel to assist with recruiting special-skilled State employees who may be asked to volunteer their services (i.e., doctors, nurses, security personnel, lab technicians, etc.).

i. Illinois Department of Children and Family Services (DCFS)

Provide assistance in coordinating placement of children separated from their parents or guardians following a disaster. Coordinate the provision of financial assistance to wards of the State who are disaster victims. Provide assistance directly or through the assistance of agencies contracted to DCFS in the operation of mass care facilities.

j. Illinois Department of Commerce & Economic Opportunity (DCEO)

Provide information on the demographics and infrastructure of the municipalities in the affected areas to IEMA DI staff for use in forecasting the economic impact. Contact local officials inquiring about damage of and plans for restoration of vital services to the impacted area for forwarding to IEMA DI and recovery staffs. Arrange for the provision and analysis of census data of disaster affected areas. Assist in providing information about available housing in nearby communities.

k. Illinois Department of Corrections (IDOC)

Provide offender labor where debris removal is a high priority. Offenders work in coordination with IDOT crews, under close supervision, to remove debris. Provide supplies as needed through the Illinois Correctional Industries (i.e., bed rolls, milk, juice, water, food, laundry services, metal/wood fabrication, etc.). Provide meals, as needed, through its food services department. Provide law enforcement assets for force protection and convoy security.

l. Illinois Department of Human Services (IDHS)

Assist in locating specialized vehicles for transportation of the disabled. Take responsibility for wards and other dependents of the state relying on state assistance. Coordinate the placement of disaster victims with Alcohol and Other Drug Abuse (AODA) problems who may not be appropriate for general population disaster shelters. Coordinate the delivery of AODA prevention, outreach, intervention, and treatment services to disaster victims during the recovery period. Coordinate the provision of mental health services to disaster victims living in shelters or at other disaster relief centers. Coordinate the provision of mental health services to disaster workers as needed. Assist in placement of disabled individuals for whom congregate care living may not fully meet their special needs. Assist in providing interpreters for the deaf and hard of hearing and translation of emergency information in to Braille for disaster victims who are visually impaired.

m. Illinois Department of Military Affairs (IDMA)

Provide emergency communications equipment and personnel, limited emergency power generation, field hospitals and kitchens, and security. Provide logistical support in assigned areas supporting response and short term recovery efforts. Assist in evacuation of civilians from impact areas. Provide aerial platforms for damage assessment, team transport, and dignitary movement.

n. Illinois Department of Natural Resources (IDNR)

Provide specialized staff familiar with environmentally sensitive areas and/or species occupying potential debris management sites. Provide waterborne patrols for navigable waterways and ensure safety of state park recreational areas. Provide recovery support to organizations with heavy labor equipment and materials, law enforcement services and flood plain management. Conduct evacuation of State Parks and Recreational Areas to ensure public safety and for use as emergency response sites. Implement and enforce emergency hunting regulations or provisions. In addition, the Division of Water Resource Management can provide information on previously completed inundation mapping studies relative to various dams within the State when the information is not readily available at the local jurisdiction level.

o. Illinois Department of Public Health (IDPH)

Provide an assessment of the populations within nursing homes and hospitals and place those with functional needs within existing shelters, as appropriate. Monitor Regional Hospital Coordination Centers (RHCC) hospitals for situational awareness and intelligence on hospital overflow, transportation and hospital locations. Coordinate mobilization of volunteer medical emergency response teams to affected areas. Address questions on public health, food safety, private sewage disposal and private water supplies. Coordinate the purchase of potable water and sanitation systems. Provide for the regulation of construction of non-community, semi-private and private wells. In addition, provide for the regulation of non-potable wells (not used for drinking water) to include irrigation wells, monitoring wells and heat pump wells.

p. Illinois Department of Transportation – Aeronautics (IDOT-A)

Provide aircraft and pilots to move personnel, supplies and equipment into a disaster area. Arrange for space, as requested, at aviation facilities to serve as transportation equipment staging areas. Maintain a limited capability to communicate with other state agencies and organizations in all bands but high frequency. This limitation is based on the equipment configuration of each specific aircraft and is not standardized throughout the fleet. Maintain the capability of supporting DI activities including airplanes and pilots, and report

capabilities to the IEMA DI staff. Provide route conditions to IEMA DI staff based on aerial inspection. Provide contract to pre-qualified contractors. Coordinate Temporary Flight Restrictions (TFR) in the area of operations.

q. Illinois Department of Transportation – Highway (IDOT-H)

Provide heavy or specialized equipment and staff expertise for debris removal. Coordinate movement and placement of road barricading equipment to assist ISP in traffic control issues. Assess and identify damage to, or safety issues, on roadways and/or bridges in impact areas. Assist in evacuation of civilians from impact areas. Provide maps and routing information to deployed and mobilized assets throughout the area of operations. Provide emergency signage in impact areas. Maintain open primary, secondary, and tertiary routes to ensure the continuance of life safety missions.

r. Illinois Department of Veterans' Affairs (IDVA)

Arrange for limited use of State Veterans' home facilities, property services as may be reasonable or available, or as resources permit, through IEMA and the home administrator as approved by their respective supervisors. Assist in the coordination of the provision of assistance to veterans who are disaster victims. Provide staff as available to assist in the operation of mass care facilities including the provision of available medical staff from veterans' homes.

s. Illinois Emergency Management Agency (IEMA)

IEMA coordinates and manages all disaster response in the State of Illinois. To ensure that disaster response and short term recovery are conducted in a safe and efficient manner, Illinois utilizes the responsibilities, authorities, and expertise of other state boards, commissions, agencies and departments, mutual aid agreements, compacts, volunteer organizations, and private industries. All organizations activated or deployed by Illinois are required to adhere to policies, rules, and regulations of both State and Federal government as applicable. In addition, all organizations will operate in compliance with the National Incident Management System (NIMS), the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.

Each organization activated or deployed by the State of Illinois is responsible for ensuring adequate training, equipment, and plans or procedures are in place and provided to response forces. Organizations are required to develop and maintain operational and tactical plans in support of operations outlined in the IEOP and the Earthquake Annex.

t. Illinois Environmental Protection Agency (IEPA)

Establish specific regulatory disposal standards that apply to the debris. Issue specialized permits for burning debris associated with earthquake debris removal and disposal. Activate specialized response teams to identify any hazardous material spills and releases (to include petroleum pipeline breaks) and/or mitigate environmental impacts. Assign personnel to initiate sampling schedules for public water supplies to ensure potable water supplies are safe for consumption. IEPA is responsible for regulating and monitoring the quality of community water supplies. Provide staff to sample local water sources. Provide field staff to monitor and/or sample land and/or air to identify contamination from a variety of sources which may include leaking underground storage tanks (LUST), and particulates that have entered the air through debris cleanup.

u. Illinois Historic Preservation Agency (IHPA)

Provide technical cultural resources, architectural engineering and archaeological staff possessing the capabilities to identify, evaluate damage to and recommend prudent preservation approaches for affected historic resources. Provide legal clearance for emergency actions affecting historic resources. Maintain lists of architect/engineering firms and archaeological firms which could be contracted to perform damage assessment, design service or survey/excavation work on historic resources.

v. Illinois Secretary of State (SOS)

Provide personnel and equipment to assist with traffic and access control. Provide security and other duties as required and requested by the ISP. Maintain capability to communicate with ISP, IDNR, and IEMA.

w. Illinois State Board of Education (ISBE)

Provide information about school buildings and populations in the effected areas, as related to planning for search and rescue considerations. Provide information in locating emergency shelters, cooking sites, staging area, casualty collection points, etc. in affected areas, and whether or not commodities stored in schools could be used in mass feeding operations. Coordinate use of school facilities as shelters, feeding centers, headquarter facilities, staging areas, and relief centers throughout Illinois in order to support the impacted area.

x. Illinois State Police (ISP)

Provide force protection and convoy security, traffic control and expedited routing for supply missions or personnel movements. Assist IDOT-H with expedited oversize and overweight waivers for transportation of needed equipment. Assist IDOT-A on aircraft required to move essential personnel and

resources. Act as the Reception Area and/or Staging Area Manager as directed by UAC or the SEOC. Provide dignitary protection as required to impact areas.

y. Office of State Fire Marshal (OSFM)

Provide a liaison between local fire departments and IEMA. Maintain a Communication Van containing three telecommunicator positions capable of low/high/band telecommunications. Provide ATC-20 (Applied Technology Council) trained and certified inspector for conducting post-earthquake safety inspection of buildings. Provide qualified personnel to perform inspections of flammable liquid and LP-gas storage tanks and facilities. Provide additional expertise and manpower through the Fire Service. Provide information on regulated above and underground storage tanks, boilers and pressure vessels. Provide trained Post-Disaster Building Inspectors and other statewide specialized fire resources. Compile a list of available personnel and equipment which could be used in the DI function and report this information to the IEMA DI staff. Interact with local fire department to obtain information about fires and Haz-Mat emergencies and report this information to the IEMA DI staff. Provide responders to leaking underground storage tanks.

z. American Red Cross (ARC)

ARC provides for secondary/temporary shelter as well as food. ARC provides management and coordination of volunteer donations and efforts in agreement with the State of Illinois as well as coordinating the relief efforts associated with evacuation at ARC approved or supported shelter locations. ARC also coordinates with State agencies to ensure human needs are met throughout the impact areas.

5. Mutual Aid Organization Responsibilities

a. Mutual Aid Agreement between NEMA and State

i. Emergency Management Assistance Compact (EMAC)

EMAC offers state-to-state assistance during Governor declared state of emergencies. It offers a responsive and straightforward system for states to send personnel and equipment to help disaster relief efforts in other states. Once the conditions for providing assistance to a requesting state have been set, the terms constitute a legally binding contractual agreement that make affected states responsible for reimbursement. Responding states can rest assured that sending aid will not be a financial or legal burden and personnel sent are protected under worker's compensation and liability provisions. The EMAC legislation solves the problems of liability and responsibilities of cost and allows for credentials to be honored across state lines.

b. Intergovernmental Agreements between IEMA and Organizations

i. Combined Agency Response Team (CART)

The Combined Agency Response Team (CART) is an Illinois based division of specialized rescue. The team is composed of eight different teams. CART specializes in confined space and tactical rescue. CART will provide disaster response assistance to units of local government during declared disasters when local and regional resources are insufficient to meet the disaster response needs of the requesting unit of local government. Requests for CART assistance will be coordinated within the State EOC through the Office of State Fire Marshall (OSFM).

ii. Illinois Coroners and Medical Examiners Association (ICMEA)

The Illinois Coroners and Medical Examiners Association (ICMEA) will provide disaster response assistance to units of local government during declared disasters when local and regional resources are insufficient to meet the disaster response needs of the requesting unit of local government. Requests for ICMEA assistance will be coordinated within the State EOC through the Illinois State Police (ISP). Personnel dispatched under the IEMA/ICMEA agreement shall be members of Mobile Support Teams.

iii. Illinois Deaf and Hard of Hearing Commission (IDHHC)

See information under “State Agency Responsibilities”.

iv. Illinois Law Enforcement Alarm System (ILEAS)

The mission of the Illinois Law Enforcement Alarm System (ILEAS) is to meet the needs of law enforcement throughout the State of Illinois in matters of mutual aid, emergency response, and the combining of resources for their effective use during emergencies or periods of extraordinary circumstances. Additionally, the Law Enforcement Mutual Aid Committee provides the structure for researching, developing, and implementing common standards for handling such emergencies and circumstances through training, information dissemination, and other activities.

v. Illinois Public Works Mutual Aid Network (IPWMAN)

The Illinois Public Works Mutual Aid Network (IPWMAN) is established to provide a method where public works related agencies, including, but not limited to, local municipal public works departments, township road districts and county highway departments in need of assistance in both disaster and non-emergency situations may request aid and assistance in the form of

personnel, equipment, materials and/or other associated services as necessary from other public works agencies.

vi. Mutual Aid Box Alarm System (MABAS)

The mission of MABAS - Illinois (Mutual Aid Box Alarm System) is to meet the needs of the fire service throughout the State of Illinois in matters of mutual aid, emergency response and the combining of fire resources for effective use during emergencies or periods of extraordinary circumstances. MABAS can, in a response, provide specialized services and teams when authorized by local governmental entities for local assistance or by the State for regional and State assistance. This includes fire-based Rescue, Fire, EMS, Technical Rescue Teams (39 teams), Haz-Mat (includes 43 Level-A teams), and Water Rescue teams.

All IEMA approved requests for assistance to or from the fire service shall be coordinated within the SEOC through the Office of the State Fire Marshall (OSFM), with the exception of licensed emergency medical transport units under the jurisdiction of IDPH. The SEOC may request assistance from MABAS as the exclusive coordinator of Fire, EMS, Haz-Mat, Technical Rescue, Water Rescue/Recovery, USAR, and other associated related resources in Illinois.⁷

Through MABAS, 39 Technical Rescue Teams (TRT) have been established throughout the State, consisting of firefighters with extensive training and equipment to perform high-angle, trench, heavyweight and lightweight structure collapse and confined space rescue operations. This includes the sub-component of the Combined Area Rescue Teams (CART). In addition, MABAS provides the State of Illinois' Urban Search & Rescue (US&R) Task Force #1 (IL-TF1). This is a Type I US&R team which is modeled after the U.S. Department of Homeland Security (DHS) / Federal Emergency Management Agency (FEMA) US&R system. This team has completed the core team planning and training requirements and is awaiting FEMA certification. The IL-TF1 is trained, equipped and prepared to respond to all-hazard emergencies and disasters, both natural and man-made, which involve significant collapse of multiple, large and/or heavyweight constructed structures. Through EMAC, IL-TF1 is capable of responding to any location within the United States.

vii. Mutual Aid Response/Resource Network (MAR²N)

Illinois has formed the Mutual Aid Response/Resource Network (MAR²N) where critical components of government unite with the private sector for a deployment clearinghouse of resources needed during

⁷ Intergovernmental Agreement, State of Illinois, Illinois Emergency Management Agency and MABAS; January 1, 2006.

emergency response and recovery. MAR²N is designed to act as a force multiplier between the private sector and law enforcement/public safety to mitigate the impact of critical incidents, including natural disasters and acts of terrorism. The clearinghouse will contain resources available from the private sector through Memorandums of Understanding (MOUs), and include reimbursement and terms of use for equipment. The government will bring to bear those resources such as state responders, police powers, and certain types of sensitive information to strike a balance of equal yet contrasting roles in this partnership. The MAR²N program will emphasize proactive preparedness, safety, and security through this clearinghouse of existing resources for statewide response.

c. Mutual Aid Agreement between Other State Agency and Organizations

i. Illinois Public Health Mutual Aid System (IPHMAS)

The Illinois Public Health Mutual Aid System (IPHMAS) is a state-wide mutual aid and assistance system in which all IDPH certified local health departments are eligible to participate. This agreement allows local health departments in Illinois to share resources in the event of a public health emergency, which could include outbreaks, a bioterrorism release of contagious or infectious diseases, infectious agents, chemical agents or toxins, natural disasters, technological hazards, man-made disasters, civil emergencies and community disorders. The request and response process to activate mutual aid among local health department member entities was developed with IDPH and the IPHMAS Executive Board to assure consistent and timely staging of the system.

d. Response Assets of IEMA or Other State Agencies

i. Illinois Medical Emergency Response Team (IMERT)

The Illinois Medical Emergency Response Team (IMERT) will respond to and assist with emergency medical treatment at mass casualty incidents, including, but not limited to, chemical, biological, and radiological incidents. The team is activated by the Director of Public Health or designee in collaboration with the Illinois Emergency Management Agency.

ii. Illinois Nurses Volunteer Emergency Needs Team (INVENT)

The Illinois Nurses Volunteer Emergency Needs Team (INVENT) is a volunteer group of Registered Nurses (RNs) trained to provide nursing care during a state declared disaster or emergency situation. In the aftermath of a catastrophic earthquake, INVENT would be able to provide assistance in mass casualty incidents, mass immunization efforts, or local hospital surges following a catastrophic earthquake. The team is activated by the Director

of Public Health or designee in collaboration with the Illinois Emergency Management Agency.

iii. Illinois Telecommunicator Emergency Response Task Force (IL-TERT)

The Illinois Telecommunicator Emergency Response Task Force (IL-TERT) involves a comprehensive program that includes assistance to individual states in developing programs that would lead to the establishment of predetermined and selected trained teams of individuals who can be mobilized quickly and deployed to assist communications centers during disasters.

iv. Illinois Veterinary Emergency Response Team (IVERT)

The Illinois Veterinary Emergency Response Team (IVERT) was founded to activate local resources, expertise, and communities in the event of man-made or natural disasters involving animal issues. The goals of this volunteer group of veterinarians include: to diminish animal suffering, to protect agricultural livelihood, to safeguard public health, and to lessen the adverse impact of these incidents upon our agricultural economy and heritage. The IVERT organization also strives to provide public education about animal and disaster issues as well as serve other appropriate needs within the local community.

The vision of IVERT is to have a functional contingent of animal health professionals, emergency management personnel, allied health professionals, and volunteers in each county of the state. The IVERT organization will also oversee and coordinate regional response as necessary through eight regional teams. State and federal incident management will be orchestrated through the Illinois Department of Agriculture. The office of the State Veterinarian has the mandate to activate any team, as needed, for any incident.

Coordination of IVERT is through the Illinois Department of Agriculture in partnership with the Illinois Emergency Management Agency, with the College of Veterinary Medicine serving as one of the key support agencies.

v. Incident Management Teams (IMT)

The Incident Management Teams (IMT) available for activation are Type 3 teams. The Illinois Terrorism Task Force has developed the IMT which is capable of responding to a catastrophic earthquake. The IMT is to provide support to the incident command /unified command structure in the implementation of the incident command system and specifically in the formation and implementation of the Incident Action Plans (IAP). The mission of the IMT is to support the incident commander, not assume or

divide authority at the local jurisdictional level. The IMT can also be used for large-scale events that require pre-planning. In addition, the IMT can support the State of Illinois response during major emergencies.

- vi. Illinois Emergency Services Management Association – Mobile Support Teams (IESMA/MST)

The Illinois Emergency Services Management Association/Mobile Support Teams (IESMA/MST) can provide support to local government during a time of disaster or emergency. The teams consist of emergency managers organized to respond anywhere in the state, to provide emergency management skills and expertise to an affected jurisdiction. The team is requested through the State EOC and is deployed as a State asset through IEMA.

- vii. Voluntary Organizations Active in Disasters (VOAD)

The Illinois Voluntary Organizations Active in Disasters (VOAD) is a consortium of voluntary agencies which provide disaster relief and response, and facilitate coordinated response and planning among voluntary agencies.

6. Volunteer Organizations

- a. Community Emergency Response Teams (CERT)

The Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.

7. Additional Organizations

- a. Central United States Earthquake Consortium (CUSEC)

The primary mission for the Central United State Earthquake Consortium (CUSEC) is, "... the reduction of deaths, injuries, property damage and economic losses resulting from earthquakes in the Central United States." CUSEC's primary objective is to provide dynamic support to multi-state response and recovery planning, resource acquisition; public education and awareness; promotion; mitigation, and research associated with earthquake preparedness in the Central United States. CUSEC Member States are those most vulnerable to

the effects of earthquakes in the region and include Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee.

CUSEC serves as a "coordinating hub" for the region, performing the critical role of coordinating the multi-state efforts of the region. Its coordinating role is largely facilitative, and not as the primary implementer of emergency management functions, which is the responsibility of each Member State. The CUSEC Board of Directors has identified six organizational goals within the CUSEC Strategic Plan.

Outreach Goals

Multi-state planning
Public awareness and Education
Mitigation
Research

Foundation Goals

Resource development
Constituency building

The four outreach goals address the planning, preparation and knowledge processes. The two remaining foundation goals, resource development and constituency building provide the organization with the structure and influence to accomplish the four outreach goals.

b. Illinois State Geological Survey (ISGS)

The ISGS mission is “to provide the citizens and institutions of Illinois with earth science research and information that are accurate, objective, and relevant to our State’s environmental quality, economic prosperity, and public safety”.

The Illinois State Geological Survey (ISGS) is part of the Institute of Natural Resource Sustainability at the University of Illinois at Urbana-Champaign. The Survey is located in the Natural Resource Building on the University's 700-acre campus. This central Illinois location is just 130 miles south of Chicago. It is a cultural and educational center that is ranked as one of the top ten "high-tech" cities in the U.S. The area provides the attractive combination of small-city convenience and quality of life with ready access to world-class laboratory and academic facilities, Big Ten athletic events, and internationally acclaimed cultural opportunities.

The ISGS is a premier state Geological Survey serving the needs of Illinois with earth science information relevant to the State's environmental quality, economic vitality, and public safety. Some 200 scientists and technical support staff conduct basic and applied research in geology, compile geologic maps, and gather and manage the state's geological data to provide information to industry, governmental agencies and the public about the geology and mineral resources of Illinois.

Survey staff may conduct joint research projects, supervise graduate studies, and teach courses through joint appointments with the University.

c. Mid-American Earthquake Center (MAE Center)

The Mid-America Earthquake Center is one of three national earthquake engineering research centers established by the National Science Foundation (NSF) and its partner institutions.

The MAE Center, headquartered at the University of Illinois at Urbana-Champaign, consists of a consortium of nine core institutions, and is funded by NSF and each core university as well as through joint collaborative projects with industry and other affiliations.

Center projects fall under four general types: (a) core research, (b) stakeholder research, (c) education and (d) outreach.

Core research is separated into four thrust areas. The four thrust areas are (a) Consequence-based Risk Management Framework (b) Engineering Engines, (c) Social and Economic Sciences, and (d) Information Technology. A thrust leader for each of these four programs is responsible for the planning and execution of research and implementation projects.

Targeted stakeholder groups apply core research results to earthquake risk mitigation across the systems of interest to them. The targeted stakeholder groups include a diverse portfolio of interests such as state transportation departments, state emergency management agencies and utilities operators.

Projects in the Education Program integrate research and education for both undergraduate and graduate students, advance earthquake curricula and outreach to pre-college students, and enhance public awareness.

Annual project agendas are developed by a Leadership Team chaired by the Center Director and consisting of program thrust leaders and co-leaders. Overall direction and goals of the Center are set by the Executive Advisory Board, which also approves the annual project agenda as proposed by the Leadership Team. In addition, the Industrial/Stakeholder Advisory provides guidance on future direction and opportunities for the Center.

The MAE Center has completed three reports relative to earthquake impacts on Illinois using various scenarios. The reports provided statewide and county-specific data for various counties in southern Illinois. The “Comprehensive Seismic Loss Modeling of the State of Illinois” report (June 2007) provided data for 32 southern Illinois counties. The “Impact of Earthquakes on the Central USA - Final Phase I” report (September 2008) provided data for 40 southern Illinois counties and the “Impact of New Madrid Seismic Zone Earthquakes on the

Central USA – Volumes I and II” report (October 2009) provided data for 27 southern Illinois counties.

d. National Weather Service (NWS)

The NWS mission is to “provide weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.”

The NWS has about 4,700 employees in 122 weather forecast offices, 13 river forecast centers, 9 national centers and other support offices around the country. Our annual budget of approximately \$825 million in 2004 supports a national infrastructure to gather and process data worldwide from the land, sea, and air. This infrastructure includes collecting data from technology such as Doppler weather radars, satellites operated by the National Oceanic and Atmospheric Administration’s (NOAA) National Environmental Satellite, Data, and Information Service (NESDIS), data buoys for marine observations, surface observing systems, and instruments for monitoring space weather and air quality. These data feed sophisticated computer models running on high-speed supercomputers. Our highly trained and skilled workforce uses powerful workstations to analyze all of these data and issue forecasts and warnings. High-speed communications tie this information infrastructure together and disseminate forecasts and warnings to the public.

NWS staff also use trained community volunteers to enhance weather service operations. Cooperative observers collect weather data that become part of the Nation’s climate records and citizen storm spotters provide us with visual confirmation of severe weather events. As environmental information becomes more sophisticated, complete, and available to all, the environmental literacy of the public becomes more important. Our outreach and education activities are aimed at making sure the public understands the information we provide and can use it effectively in the decisions they make.

The Nation’s weather, water, and climate enterprise is conducted by many parties whose contributions complement and at times overlap. These parties are typically grouped into three sectors – government, private, and academic and research – and include non-governmental organizations, private citizens, and others. This three-sector system has led to an extensive and flourishing set of services of great benefit to the public and the economy. We work closely with our partners in all aspects of the forecast process – from research, to observation collection, to forecast dissemination, to warning the public when hazards threaten. Partners count on us for reliable delivery of high-quality information and access to our databases is essential to the roles they play in the enterprise. We rely on these

effective partnerships to better understand and apply technology and science, continue our record of forecast improvements, and meet expanding needs for high quality weather, water, and climate services. We are committed to foster the growth of this complex and diverse enterprise as a whole to serve the public interest.

e. United States Geological Survey (USGS)

The mission of the USGS is to “serve the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.”

As the Nation's largest water, earth, and biological science and civilian mapping agency, the U.S. Geological Survey (USGS) collects, monitors, analyzes, and provides scientific understanding about natural resource conditions, issues, and problems. The diversity of our scientific expertise enables us to carry out large-scale, multi-disciplinary investigations and provide impartial scientific information to resource managers, planners, and other customers.

The USGS is organized with a Headquarters and Eastern Region facility in Reston, Virginia. Central Region and Western Region offices are located in Denver, Colorado, and Menlo Park, California, respectively. Thousands of other USGS employees are working in every State in the Nation.

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C. RESPONSE AND RECOVERY PHASES

Response and recovery operations will consist of three phases, (1) Activation Phase, (2) Response and Short Term Recovery Phase and (3) Long Term Recovery Operations Phase. The majority of response operations will occur in Phase II. It is important to note a catastrophic earthquake will pose a unique set of challenges in any phase; plans and strategies must be flexible enough to address such challenges accordingly. Because of these unique challenges, overlaps in response times will exist and must be accepted when one is trying to identify or estimate specific response and recovery times. The following table contains a snapshot of all three phases with estimated timelines:

1. Phase I – Activation (Event + 4 Hours)

The Activation phase consists of two elements (1) Initial Response and (2) SEOC Activation. Phase I operations will begin immediately upon notification of the event. Due to the fact the SEOC is not in the projected impact area, the SEOC will be operational within hours of initial notification that a catastrophic earthquake event has occurred. Possible delays will be with regional staff in the affected areas communicating with the SEOC.

Phase I operations will include the following:

- Notification of event occurrence
- Local response actions begin to include regional staff from the affected areas and support field staff within areas of operation
- State Emergency Operations Center (SEOC) activated
- Notification of State Agency Liaisons

	0 HOUR	TIME OF EVENT	
Activation (Phase I)	1 – 4 HR	INITIAL RESPONSE	Regional staff from affected area and support/field staff within area of operations
	< 4 HR	SEOC ACTIVATION	SEOC Activation and notification of liaisons

2. Phase II – Response & Short Term Recovery (+ 1 Hour – 72+ Hours)

The Response and Short Term Recovery phase, will include the majority of response efforts for the State. The table illustrates the fact that there will be time overlaps from Phase I operations into Phase II.

Short term strategic recovery is initiated as soon as practical in order for communities to begin efforts necessary to recover and rebuild after a catastrophic earthquake. Following a defined process, short term recovery typically begins with local responders. However, in the event of a catastrophic earthquake, IEMA Regional Coordinators, State officials/representatives, and/or other Damage Assessment Teams will be activated.

During a catastrophic event, all critical information such as damage assessment information will be reported back to the UAC which will drive response efforts and the short term recovery process following the initial quake.

Life safety issues will be the highest priority following a catastrophic earthquake. The State must be prepared to assist local governments in response operations since most will be unable to respond due to a lack of available resources and personnel immediately following a catastrophic earthquake.

Phase II will include the following response elements:

- Communications
- Direction and Control
- Deployment and Mobilization
- Mutual Aid
- Briefing and Incident Action Plan Development
- Disaster Intelligence and Damage Assessment
- Transportation
- Firefighting
- Public Safety
- External Affairs
- Debris Removal
- Search and Rescue
- Safety
- Resource Management and Logistics
- Reception and Staging
- Force Protection
- Mass Care
- Emergency Medical Services
- Demobilization

Response and Short-Term Recovery (Phase II)	0 HOUR	TIME OF EVENT	
	+ 1 HR	DISASTER INTELLIGENCE	IDOT Routes and Priorities
	+ 2 - 8 HR	UCP	Helicopter to area of operations to establish UCP (IEMA, IDOT, ISP)
	+ 4 - 8 HR	UAC	Establish communications with outlying areas. Scope and magnitude of event determine number of area commands and ability to respond
	+ 4 - 8 HR	MUTUAL AID	Notification and activation of Mutual Aid Agreements
	+ 4 - 8 HR	LIFE SAFETY	EMS Support, activation of hospital system, assessment
	+ 6 - 12 HR	DEBRIS REMOVAL	Debris Removal for immediate life safety
	+ 6 - 8 HR	SEARCH & RESCUE	Initiate Search and Rescue efforts for immediate life safety
	+ 4 - 8 HR	RESOURCE & LOGISTICS	Establish reception and staging areas for essential equipment and resources
	+ 12 HR	COOP/COG	Initiate and establish COOP/COG effort
	+ 12 -72 HR	CRITICAL INFRASTRUCTURE RESTORATION	Temporary restoration of critical infrastructure
	+ 12 -72 HR	MASS CARE	Management and coordination of Mass Care actions required by the scope and magnitude of the event
	+ 48 HR	DEBRIS REMOVAL	Critical infrastructure (govt. buildings, jails, hospitals, etc.)
	+ 24-72 HR	SHELTER	Management and coordination of Shelter actions required by the scope and magnitude of the event
	+ 72 HR	ESSENTIAL SERVICES	Prioritize essential services required by scope and magnitude of event. (Food, Water, Sanitation, etc.)
	+ 72 HR	ESSENTIAL SERVICES 2nd	Prioritize secondary essential services by scope and magnitude of event. (Electric, Gas, etc.)
	+ TBD	MORTUARY SERVICES	Activation and mobilization of mortuary services required by the scope and magnitude of the event
	+ 1 HR - TBD	RESPONSE & SHORT-TERM RECOVERY	Defined by scope and magnitude of event

3. Phase III – Long Term Recovery (+ 10 days - TBD)

Phase III will be focused on the long term recovery effort. Initial planning for this may begin at anytime following the initial quake. The State will focus on and initiate actions necessary for disaster declarations, both State and federal, long-term housing; return of essential services to areas to pre-event conditions and managing and coordinating relief programs.

<p>Long-Term Recovery Operations (Phase III)</p>	<p>10 days</p>	<p>LONG –TERM RECOVERY</p>	<p>Begin process for long-term recovery of affected area(s). Initiate actions necessary for disaster declarations, (State and federal), long-term housing, return of essential services and area to pre-event conditions, manage and coordinate relief programs</p>
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D. EMERGENCY SUPPORT FUNCTIONS

Activities conducted in the State include incident and support missions as well as specific tasks to implement both the response and short term recovery actions. Organizations activated and deployed by the State are responsible for actions identified in the Earthquake Annex to the Illinois Emergency Operations Plan. Primary responsibility will be assigned to a State agency, with supporting actions assigned to individual or multiple state and non-state assets. State agencies may have a primary function or multiple functions in response efforts, while some State agencies may only have a support role in response efforts. Other organizations activated or deployed may also be responsible for multiple supporting functions.

- The Earthquake Annex is used in conjunction with the Illinois Emergency Operations Plan (IEOP) and Standard Operating Procedures (SOPs) developed and maintained by individual state agencies identified within.
- Each agency is required to develop and institutionalize abilities to direct, control, coordinate, and communicate with operational assets throughout response and recovery efforts in accordance with the Illinois Disaster Management System (IDMS).
- Each agency is required to develop and maintain SOPs, equipment, commodities, capabilities and training programs to support the duties and responsibilities outlined in the Earthquake Annex.
- Each agency is responsible for coordinating with Illinois Emergency Management Agency (IEMA) for development or enhancement of documents developed in support of responsibilities and duties assigned through the Earthquake Annex.
- Each agency is responsible for maintaining telephone notification rosters, pager and fax numbers for 24-hour use in areas impacted by potential effects of a catastrophic earthquake in Illinois.
- Each agency must maintain a Continuity of Operations Plan (COOP) for facilities in areas impacted by the potential effects of a catastrophic earthquake impacting Illinois to include, but not be limited to the following:
 1. Critical processes that must be restored within 12 hours
 2. Time sensitive applications or processes that must be restored within 30 days
 3. Vital records
 4. Vital processes necessary to support identified critical processes
 5. Personnel rosters including lines of succession and delegations of authority
 6. Essential equipment, technologies and supporting elements required by critical processes
 7. Alternate operating facilities
 8. Redundancy in equipment, capability, materials and personnel

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ESF 1 – Transportation

Primary Agency **Illinois Department of Transportation – Highways (IDOT-H)**

Support Agencies Illinois Department of Central Management Services (CMS)
Illinois Commerce Commission – Transportation (ICC-T)
Illinois Commerce Commission – Utility (ICC-U)
Illinois Department of Corrections (IDOC)
Illinois Department of Human Services (IDHS)
Illinois Department of Military Affairs (IDMA)
Illinois Department of Natural Resources (IDNR)
Illinois State Police (ISP)
Illinois Department of Transportation – Aeronautics (IDOT-A)

Mutual Aid Agencies Illinois Public Works Mutual Aid Network (IPWMAN)

I. Introduction

A. Assumptions

1. There is a chance that an earthquake could strike during school or business hours, endangering the lives of many. In this situation, there will be a great need to open transportation routes as quickly as possible following an earthquake. The ability to maintain viable transportation routes for incoming assistance or for evacuation will be a critical need in just hours following a catastrophic earthquake.
2. Damage from the initial earthquake will impede response efforts. Transportation models show that bridges within the impact area are expected to experience at least moderate damage such as cracking to abutments or some settlement of supports or bridge approaches while other bridges are expected to experience complete damage.
3. Estimates indicate some airports and ferry systems will experience complete damage while other ports and additional airports will experience moderate damage.
4. Damages to the transportation infrastructure will hinder the means and accessibility for relief services and supplies.

II. Concept of Operations

A. General

1. Communication and coordination necessary for transportation functions in response and short term recovery will be provided by all State agencies and

organizations included in the Illinois Emergency Operations Plan (IEOP) and Earthquake Annex.

2. Agencies will utilize transportation assets to meet incident needs, in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. Transportation functions may include inspection of roads and bridges, clearing of debris, transportation of people and resources, construction and aeronautics.
4. As reports of damages are received, officials will follow established procedures. If serious damage occurs in an area between jurisdictions, the first emergency response team to arrive is responsible for initial emergency actions.

ESF 1 – Attachment 1: Disaster Aviation

Primary Agency **Illinois Department of Transportation – Division of Aeronautics (IDOT-A)**

Support Agencies Illinois Department of Military Affairs (IDMA)
Illinois State Police (ISP)

I. Introduction

A. Assumptions

1. Following a catastrophic earthquake, disaster aviation services will be called upon to fly over the impact areas to quickly determine an initial damage assessment.
2. Key personnel such as key emergency response personnel, bridge inspectors, medical personnel, or any other personnel deemed essential may need to be flown into the impact areas to support emergency response efforts.
3. Disaster aviation services will be used to transport essential equipment, to include, but not limited to, medical supplies, survival equipment or any equipment necessary to manage emergency response efforts.

II. Concept of Operations

A. General

1. Communication and coordination necessary for aviation functions in response and short-term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and Earthquake Annex.
2. If the use of aviation resources is required due to the catastrophic earthquake, the Air Operations Manager will staff the SEOC or the UAC and will be the central point of contact for the coordination of the aviation support operations.
3. Resources for response will come from a wide variety of both government and private sector resources.

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ESF 2 – Communications

Primary Agency	Illinois Emergency Management Agency (IEMA)
Support Agencies	Illinois Department of Central Management Services (CMS) Illinois Department of Corrections (IDOC) Illinois Environmental Protection Agency (IEPA) Illinois Department of Military Affairs (IDMA) Illinois Department of Natural Resources (IDNR) Illinois Department of Public Health (IDPH) Illinois Secretary of State (SOS) Illinois State Police (ISP) Office of the State Fire Marshal (OSFM) Illinois Department of Transportation – Highway (IDOT-H) Illinois Department of Transportation – Aeronautics (IDOT-A) American Red Cross
Mutual Aid Agencies	Illinois Radio Amateur Civil Emergency Services (RACES) Illinois Telecommunicator Emergency Response Task Force (IL-TERT)

I. Introduction

A. Assumptions

1. Normal means of communication will be disrupted or completely unavailable in areas within and beyond the immediate affected areas following a catastrophic earthquake.
2. Communication and power systems in high impact areas will suffer a widespread loss of service. Since damages will vary by locations, the duration of outages will also vary.
3. Private sector infrastructure will also be damaged in a catastrophic earthquake which may result in a strain in any remaining communications systems.
4. Local and regional Emergency Operations Centers (EOC's) may be significantly damaged or completely destroyed in parts of the impact area. Damage to communications systems will prohibit the flow of information to the UAC or SEOC.
5. Overall State coordination and command of a catastrophic earthquake will be managed from the SEOC or UAC.

II. Concept of Operations

A. General

1. Coordination necessary to communicate during response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP), Earthquake Annex and the Statewide Communications Interoperability Plan (SCIP).
2. Agencies will utilize communication assets, in accordance with individual agency procedures, upon authorization and/or request of the UAC.
3. Utilize the *Illinois RACES Plan* to further the capabilities of the SCIP, which includes several layers of redundant communication systems, in order to provide an additional layer of emergency communications during disasters.

ESF 2 – Appendix 1: Notification and Activation

I. Concept of Operations

A. General

1. Communication and coordination necessary for notification and activation for response and short term recovery will be provided by all State agencies and organizations included on the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Agencies will notify and activate staff in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. Agencies retain the authority and responsibility to notify staff in accordance with existing agency specific standard operating procedures (SOPs) for routine, emergency and continuity of operations activations.
4. The State Unified Area Commander will determine the need for mutual aid assistance to the UAC areas based on initial disaster intelligence and damage assessment information. The SEOC will be tasked with initiating the notification to the requested mutual aid entities.

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ESF 3 – Public Works and Engineering: Debris Removal

Primary Agency **Illinois Department of Transportation – Highways (IDOT-H)**

Support Agencies Illinois Department of Central Management Services (CMS)
Illinois Commerce Commission (ICC)
Illinois Department of Corrections (IDOC)
Illinois Department of Military Affairs (IDMA)
Illinois Department of Natural Resources (IDNR)
Illinois Environmental Protection Agency (IEPA)
Illinois Capital Development Board (CDB)
Illinois Department of Transportation - Aeronautics (IDOT-A)
Office of the State Fire Marshall (OSFM)
Illinois Historic Preservation Agency (IHPA)
Illinois Department of Public Health (IDPH)
U.S. Army Corps of Engineers (USACE)

Mutual Aid Agencies Illinois Public Works Mutual Aid Network (IPWMAN)

I. Introduction

A. Assumptions

1. The earthquake models estimate that damage to the built environment will generate millions of tons of debris. The debris will consist of bricks, wood, building contents, steel and concrete.
2. A variety of debris can be expected following a catastrophic earthquake and some debris could pose a significant threat to public health and safety following a fire or hazardous material leak or spill.
3. Secondary events such as fires, flooding, and landslides can be anticipated, including the possibility of aftershocks, which would further hinder debris removal operations.
4. There will be a shortage of debris removal equipment, personnel and resources in both short and long term operations.
5. Emergency debris removal will begin with opening roadways and emergency priority routes identified by the Illinois Department of Transportation - Highways (IDOT-H).
6. Private contractors will play a significant role in the debris removal, collection, reduction, and disposal process.

7. A debris management plan will be required for situations where local or regional resources are unable to adequately manage disaster related debris.
8. The overall cost, time, collection, and disposal methods for debris removal operations will be dependent on the quantity and type of debris generated, its location, and overall size of the areas where the debris is dispersed.

II. Concept of Operations

A. General

1. The local government will initially handle debris removal based on the immediate need. Access to disaster areas and victims is the highest priority following a disaster.
2. A request for assistance will be made to the State if the local government determines that they do not have the resources needed to effectively handle debris removal.
3. The State Emergency Operations Center (SEOC) and Unified Area Command (UAC) will be staffed with liaisons from various State Agencies. These liaisons will assist in fulfilling requests for State debris removal assets.
4. Agencies will deploy and mobilize staff in accordance with individual agency procedures upon authorization and/or request of the State Emergency Operations Center (SEOC) or UAC.
5. Agencies retain the authority and responsibility to deploy staff in accordance with existing agency specific standard operating procedures (SOPs) for routine, emergency and continuity of operations activations.

ESF 4 – Firefighting

The Illinois Emergency Management Agency (IEMA) does not have an enabling authority to direct fire service response to an area affected by a disaster. IEMA will utilize the capabilities of the Mutual Aid Box Alarm System (MABAS) through an established intergovernmental agreement to provide the coordination of fire service support (Fire, Emergency Medical Service, Hazardous Materials, Technical Rescue, Water Rescue/Recovery, Urban Search and Rescue) with the exception of licensed emergency medical transport units under the jurisdiction of the Illinois Department of Public Health (IDPH).⁸ The additional support provided by MABAS will be used to supplement local emergency response following a major or catastrophic disaster.

Local units of government may activate MABAS agreements prior to requesting State assistance and/or activation in accordance with existing agreements.

Utilization of MABAS resources pursuant to the Illinois Emergency Management Agency Act will be based on established priorities for response and short-term recovery.

Mobilization of MABAS resources (as available) will occur when there is a request from the SEOC and the Illinois Emergency Operations Plan (IEOP) has been activated. Once the IEOP has been activated, MABAS resources can be activated as a Mobile Support Team (MST) asset under the Illinois Emergency Management Agency Act.

⁸ Intergovernmental Agreement, State of Illinois, Illinois Emergency Management Agency, MABAS; dated January 1, 2006

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ESF 5 – Emergency Management

Primary Agency	Illinois Emergency Management Agency (IEMA)
Support Agencies	Illinois Capital Development Board (CDB) Illinois Commerce Commission (ICC) Illinois Department of Commerce and Economic Opportunity (DCEO) Illinois Department of Corrections (IDOC) Illinois Environmental Protection Agency (IEPA) Illinois Department of Military Affairs (IDMA) Illinois Department of Natural Resources (IDNR) Illinois Department of Public Health (IDPH) Illinois State Board of Education (ISBE) Illinois State Police (ISP) Illinois Department of Transportation – Highways (IDOT-H) Illinois Department of Transportation – Aeronautics (IDOT-A) Office of the State Fire Marshall (OSFM) American Red Cross (ARC) Illinois Department of Central Management Services (CMS)
Mutual Aid Agencies	Illinois Emergency Services Management Association/Mobile Support Team (IESMA/MST) Incident Management Teams (IMT) Mutual Aid Response/Resource Network (MAR ² N)

I. Introduction

A. Assumptions

1. Rapid damage assessments will be critical in determining the extent of damage following a catastrophic earthquake. Damage assessments will be important in assisting emergency managers in matching response resources to the appropriate need.
2. The responsibility for providing damage assessments and inspection of buildings and facilities damaged in a catastrophic earthquake falls on the local government. However, it is anticipated that the local government's ability to perform damage assessment will be overwhelmed and will need to be supported.
3. In the immediate aftermath of a catastrophic earthquake, there may not be enough available, trained personnel, to conduct rapid damage assessments. The result could be damage assessments that are general, incomplete or possibly inaccurate. Rapid damage assessments will be necessary to determine critical response times or potential workloads and needed resources.

4. There will be a significant need for personnel with engineering and construction skills.
5. Previously inspected structures will require re-evaluation when aftershocks occur.
6. Transportation routes, such as highways and bridges, may be destroyed or damaged significantly. There is the possibility that roads may buckle or shift out of alignment and many areas will be reduced to rubble. Bridges that may appear to be sound may actually be in need of structural re-enforcement.
7. Additional modes of transportation such as rail, navigable waterways and ports or airport runways may sustain significant or complete damage that will render them unusable.
8. Critical public service facilities such as water treatment, wastewater, oil, gas, electric, and telecommunications facilities may sustain damage so great that it would jeopardize populations for a significant amount of time. Even areas not directly impacted could see outages in electric power, gas and oil for a sustained amount of time.
9. Access into heavily damaged areas will be dependent upon the re-establishment of ground and water routes. In many locations, debris clearance and emergency road repairs will be given the highest priority to support immediate lifesaving emergency response activities.
10. Wood frame construction is the most common type of building in the State of Illinois and will also generate the most cases of complete damage in the impacted areas according to damage estimates. Nearly half of all complete damage to buildings is experienced by wood frame structures.
11. Major water and sewer facilities will have at least moderate or complete damage, which will require significant repairs. Damage estimates indicate there will be waste water facilities experiencing moderate to severe damage while other facilities are expected to incur complete damage.
12. Damage estimates from the earthquake models indicate that potable water service is expected to be cut off to residences the day after the earthquake. It could take up to three months before water service is completely restored.
13. Information gathering to support planning and decision making at both the field operations and the State levels will be critical in the aftermath of a catastrophic earthquake.
14. A catastrophic earthquake will require extensive coordination of all activities relevant to the emergency response and recovery efforts.

15. Disaster Intelligence will collect and analyze a significant amount of information following a catastrophic earthquake to coordinate disaster operations.
16. Disaster Intelligence will collect information for formal and informal briefings throughout an earthquake event.
17. The SEOC will have the responsibility of fulfilling requests for assistance through the Illinois Disaster Management System for obtaining resources.

II. Concept of Operations

A. General

1. Communication and coordination necessary for damage assessment, disaster intelligence, and direction and control for response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Disaster Intelligence/Damage Assessment will be used to determine hazards to public safety and identify actions necessary for life saving and life sustaining operations during response to a catastrophic earthquake.
3. Agencies will deploy and mobilize staff in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
4. Agencies retain the authority and responsibility to provide direction and control to staff in accordance with existing agency specific standard operating procedures (SOPs) for routine, emergency and continuity of operations activations.
5. The State Unified Area Command directs, controls and coordinates all organizational elements and operational activities associated with the Incident Action Plan (IAP).

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ESF 6 – Mass Care

Primary Agency	American Red Cross (ARC)
Support Agencies	Illinois Deaf and Hard of Hearing Commission (IDHHC) Illinois Department on Aging (IDoA) Illinois Department of Agriculture (IDA) Illinois Board of Higher Education (IBHE) Illinois Capital Development Board (CDB) Illinois Department of Central Management Services (CMS) Illinois Department of Children and Family Services (DCFS) Illinois Commerce Commission (ICC) Illinois Community College Board (ICCB) Illinois Department of Commerce and Economic Opportunity (DCEO) Illinois Department of Corrections (IDOC) Illinois Department of Human Services (IDHS) Illinois Department of Military Affairs (IDMA) Illinois Department of Natural Resources (IDNR) Illinois Department of Public Health (IDPH) Illinois Department of Transportation – Highways (IDOT-H) Illinois Department of Transportation – Aeronautics (IDOT-A) Illinois Department of Veteran’s Affairs (IDVA) Illinois Emergency Management Agency (IEMA) Illinois State Board of Education (ISBE) Illinois Secretary of State (SOS)
Mutual Aid Agencies	Voluntary Organizations Active in Disasters (VOAD)

I. Introduction

A. Assumptions

1. The ability of State and local first responders to manage and provide mass care for those impacted by a catastrophic earthquake may become strained.
2. A preplanned, immediate and automatic response to a catastrophic earthquake is needed by all cooperating agencies.
3. Following a catastrophic earthquake, people will be displaced as their homes will be uninhabitable.
4. Some displaced individuals will seek shelter while others will find shelter with friends or relatives. It is believed that most victims will remain with or nearby their damaged homes unless circumstances will not allow it. Some displaced individuals may also choose to evacuate to a non-impacted area.

5. Coordination efforts will be critical in finding safe shelter sites and delivering food and water resources to individuals who are displaced.
6. Many pre-designated shelters might be destroyed or rendered inoperable following a catastrophic earthquake. There will be a great need for additional action planning to temporarily house displaced individuals.
7. Utility, water, and sewer systems may not be available at shelters for several days following a disaster. This will require alternative arrangements to ensure disaster victims are getting the care they need.
8. A catastrophic earthquake will cause significant mental and physical stress on many victims.
9. Shelter workers in affected areas may not be available to report for assignments, therefore, additional assistance may be required from outside the impacted area.
10. Shelter assistance may be needed for several months or years following a catastrophic event.

II. Concept of Operations

A. General

1. Communication and coordination necessary for mass care functions in response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Agencies will carefully utilize mass care assets to meet incident needs in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. To support efforts to meet the mass care needs of disaster victims, including delivering such services as supplying victims with shelter, feeding and emergency first aid, supplying bulk distribution of emergency relief supplies, and collecting information for a disaster welfare information system designed to report on victim status and assist in reuniting families.
4. Animal welfare issues will be handled by the Illinois Department of Agriculture in coordination with the local animal control officer and Noah's Wish, which would be the NGO of choice. In addition, other volunteer animal welfare organizations will be utilized if needed to assist with handling pets and service animals.

5. Mass care issues related to the care of senior citizens, children, and functional needs individuals will be addressed based on State agency functions identified in the IEOP.

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ESF 6 – Emergency Assistance, Housing and Human Services (To be deveoped)

Primary Agency

Support Agencies

Mutual Aid Agencies

I. Introduction

II. Concept of Operations

A. General

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ESF 7 -- Resource Support

Primary Agency	Illinois Emergency Management Agency (IEMA)
Support Agencies	Illinois Department of Central Management Services (CMS) Illinois Department on Aging (IDoA) Illinois Department of Agriculture (IDA) Illinois Capital Development Board (CDB) Illinois Department of Corrections (IDOC) Illinois Environmental Protection Agency (IEPA) Illinois Department of Human Services (IDHS) Illinois Department of Military Affairs (IDMA) Illinois Department of Natural Resources (IDNR) Illinois Department of Public Health (IDPH) Illinois State Board of Education (ISBE) Illinois State Police (ISP) Office of the State Fire Marshal (OSFM) Illinois Department of Transportation – Aeronautics (IDOT-A) Illinois Department of Transportation – Highway (IDOT-H)
Mutual Aid Agencies	Mutual Aid Response/Resource Network (MAR ² N)

I. Introduction

A. Assumptions

1. Immediately following a catastrophic earthquake, State agencies will need to respond quickly and efficiently. To succeed, they will need the necessary equipment, commodities or personnel to accomplish emergency response operations.
2. A catastrophic earthquake will cause major damage to transportation routes, which will create many problems in the delivery of supplies and services to the impacted areas.
3. Coordination will be critical following a catastrophic event. State agencies will be called upon to provide logistical needs with any resources they may have.
4. The State must pre-identify both staging and reception areas for resource management.
5. Affected counties will need to pre-identify reception area locations for replenishing depleted resources to further manage the incident.
6. Assistance from private companies, volunteer agencies or mutual aid organizations will be called upon to support emergency response operations.

II. Concept of Operations

A. General

1. Communication and coordination necessary for resource management for response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and Earthquake Annex.
2. Agencies will carefully utilize resource management to meet incident needs, in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. Efficient and effective deployment of resources requires that resource management concepts and principles be utilized in all phases of emergency management.
4. Resources may include personnel, teams, facilities, equipment and/or funding.
5. The State Emergency Operations Center will be responsible for acquiring resources from other jurisdictions including the Federal government, private sector, and/or other organizations assuming an emergency management/response role.
6. The *Emergency Fuel Plan* may be implemented based on the scope and magnitude of the event, and identified need.

ESF 7 – Appendix 1: Deployment, Mobilization and Demobilization

I. Concept of Operations

A. General

1. Communication and coordination necessary for deployment, mobilization, and demobilization for response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Agencies will deploy, mobilize and demobilize staff in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center (SEOC) or UAC.
3. Agencies retain the authority and responsibility to deploy, mobilize, and demobilize staff in accordance with existing agency specific standard operating procedures (SOPs) for routine, emergency and continuity of operations activations.
4. The State Unified Area Commander may deploy advance teams directly to the Area of Operations (AO) as necessary to establish viable staging areas and begin initial disaster intelligence efforts.
5. The State Unified Area Commander will demobilize UAC staff in coordination with the State Emergency Operations Center.

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ESF 8 – Public Health and Medical Services

Primary Agency	Illinois Department of Public Health (IDPH)
Support Agencies	American Red Cross (ARC) Illinois Department of Human Services (IDHS) Illinois Department of Military Affairs (IDMA) Illinois Emergency Management Agency (IEMA) Illinois Department of Natural Resources (IDNR) Illinois State Police (ISP) Illinois Department of Transportation – Aeronautics (IDOT-A) Illinois Department of Transportation – Highways (IDOT-H) Illinois Department of Central Management Services (CMS) Illinois Department of Veteran’s Affairs (IDVA) Illinois Environmental Protection Agency (IEPA) Illinois Department of Corrections (IDOC)
Mutual Aid Agencies	Illinois Coroners and Medical Examiners Association (ICMEA) Illinois Medical Emergency Response Team (IMERT) Illinois Nurses Volunteer Emergency Needs Team (INVENT) Illinois Public Health Mutual Aid System (IPHMAS) Mutual Aid Box Alarm System (MABAS)

I. Introduction

A. Assumptions

1. Local governments will quickly become overwhelmed following a catastrophic earthquake. The State will need to find additional resources to support emergency medical and health services in the impacted areas
2. It is estimated that numerous people will be injured or killed during the initial quake alone.
3. Quick triage and tagging of those injured will be necessary following a catastrophic event.
4. There may be a shortage of medical service personnel following a catastrophic earthquake.
5. Hospitals may be overwhelmed or damaged which will result in temporary hospital facilities where the necessary equipment and supplies will need to be transported into the AO.
6. Transportation routes, vehicles, and space may be diminished. Therefore, temporary facilities and equipment need to be pre-identified in local areas.

II. Concept of Operations

A. General

1. Communication and coordination necessary for health and medical service functions in response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Agencies will utilize health and medical service assets to meet incident needs, in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. Emergency health and medical functions and/or services will be coordinated through IDPH.
4. MABAS will coordinate the Emergency Medical Services (EMS) functions for affiliated fire departments that provide EMS and/or Basic Life Support (BLS) or Advanced Life Support (ALS) transport services.

ESF 9 -- Search and Rescue

Primary Agency	Illinois Emergency Management Agency (IEMA)
Support Agencies	Illinois Department of Transportation – Aeronautics (IDOT-A) Illinois Department of Transportation – Highways (IDOT-H) Illinois Department of Military Affairs (IDMA) Illinois State Police (ISP) Illinois Department of Central Management Services (CMS) Illinois Department of Natural Resources (IDNR) Illinois Department of Public Health (IDPH) Office of the State Fire Marshall (OSFM)
Mutual Aid Agencies	Combined Agency Response Team (CART) Mutual Aid Box Alarm System (MABAS)

I. Introduction

A. Assumptions

1. A catastrophic earthquake will result in the need for urban and rural Search & Rescue operations for missing or trapped individuals.
2. Response time for Search & Rescue efforts will be critical in the aftermath of a catastrophic earthquake.
3. Both Federal & Illinois Urban Search and Rescue (USAR) Teams will be called upon for Search & Rescue efforts.
4. Weather conditions such as temperature extremes, snow, rain, and high winds may pose additional hazards for disaster victims and rescue personnel.
5. Local residents, workers, and/or volunteers may initiate Search & Rescue efforts but will usually lack specialized equipment and training. Spontaneous volunteers will require coordination and direction within the local incident command structure.
6. Access to damaged areas will be limited.
7. Aftershocks will pose a significant threat to Search & Rescue personnel as well as disaster victims.

II. Concept of Operations

A. General

1. Communication and coordination necessary for Search & Rescue operations during response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Agencies will utilize Search & Rescue assets to meet incident needs in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center (SEOC) or UAC.
3. The SEOC serves as the State Search & Rescue Coordination Center.
4. The State will utilize qualified personnel to assist in the Search & Rescue initial situation assessment. In highly populated areas, a systematic damage assessment procedure will assist in determining the Search & Rescue requirement.

ESF 10 – Oil and Hazardous Materials

Primary Agency	Illinois Environmental Protection Agency (IEPA)
Support Agencies	Illinois Emergency Management Agency (IEMA) Illinois Department of Agriculture (IDA) Illinois Commerce Commission – Transportation (ICC-T) Illinois Commerce Commission – Utility (ICC-U) Illinois Department of Military Affairs (IDMA) Illinois Department of Natural Resources (IDNR) Illinois Department of Public Health (IDPH) Office of the State Fire Marshall (OSFM) Illinois State Police (ISP) Illinois Department of Transportation – Aeronautics (IDOT-A) Illinois Department of Transportation – Highways (IDOT-H) Illinois Secretary of State (SOS)
Mutual Aid Agencies	Mutual Aid Box Alarm System (MABAS)

I. Introduction

A. Assumptions

1. A catastrophic earthquake will result in the release of oil and hazardous materials.
2. Damage to underground storage tanks, refineries and petroleum product pipelines will further impede first responder response efforts.
3. Privately owned businesses will also experience hazardous material or chemical spills following a catastrophic earthquake.
4. Detailed information on all Hazardous Material facilities may not be readily available for first responders.
5. Natural gas and oil pipelines in Illinois are expected to have at least moderate damage.

II. Concept of Operations

A. General

1. Communication and coordination necessary for oil and hazardous materials functions in response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.

2. In a catastrophic earthquake, Illinois EPA will likely partner with USEPA in order to access the Oil and Hazardous Waste Fund that can provide additional resources including funding to facilitate a broad-based response effort.
3. Agencies will utilize oil and hazardous material assets to meet incident needs in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
4. MABAS will coordinate specialized hazardous materials teams for response activities.
5. Oil and hazardous materials response functions will be conducted in accordance with ESF 10 – Attachment 1, Incident Command Protocol (IEOP).

ESF 11 – Agriculture and Natural Resources: Provision of Food

Primary Agency **Illinois State Board of Education (ISBE)**

Support Agencies Illinois Department of Human Services (IDHS)
Illinois Department of Military Affairs (IDMA)
Illinois Department of Public Health (IDPH)
Illinois Department of Transportation – Highways (IDOT-H)
Illinois Emergency Management Agency (IEMA)
Illinois Environmental Protection Agency (IEPA)
American Red Cross (ARC)
Illinois Department of Agriculture (IDA)

I. Introduction

A. Assumptions

1. A catastrophic earthquake will deprive residents of the ability to secure and or prepare food and potable water through their normal processes.
2. Local food processing and distribution may be severely disrupted and be unable to support the supply chains.
3. A catastrophic earthquake will cause major damage to transportation routes which will create many problems in the delivery of food supplies and services to the impacted areas.
4. The initial earthquake may damage warehousing facilities where food is stored.
5. Large amounts of donated food and water may be sent to the disaster area without notice and without coordination through the SEOC.
6. Security will need to be provided and coordinated with law enforcement agencies for all points of distribution centers/sites or logistical staging and reception areas.

II. Concept of Operations

A. General

1. Communication and coordination necessary for the provision of food supplies in response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.

2. Agencies will utilize food supply assets to meet incident needs in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. Food procurement activity is anticipated to be operational on a 24-hour basis for the initial stage of the disaster response.

ESF 11 – Agriculture and Natural Resources: Animal Welfare

Primary Agency	Illinois Department of Agriculture (IDA)
Support Agencies	Illinois State Police (ISP) Illinois Environmental Protection Agency (IEPA) Illinois Emergency Management Agency (IEMA) Illinois Department of Military Affairs (IDMA) Illinois Department of Transportation – Aeronautics (IDOT-A) Illinois Department of Transportation – Highways (IDOT-H) Office of the State Fire Marshall (OSFM) Illinois Department of Public Health (IDPH) Illinois Department of Natural Resources (IDNR) Illinois Department of Corrections (IDOC) Illinois Department of Central Management Services (CMS) Illinois Commerce Commission – Transportation (ICC-T) Illinois Commerce Commission – Utility (ICC-U) University of Illinois (U of I) American Red Cross (ARC)
Mutual Aid Agencies	Illinois Veterinary Emergency Response Team (IVERT)

I. Introduction

A. Assumptions

1. The displaced population will seek extended care for their animals. Some owners may refuse to leave an area unless they can be assured their animals will be taken care of. Therefore, it may be necessary to arrange for pet shelters to be located near designated shelter sites.
2. Service animals must be accommodated in an animal friendly environment with their owners.
3. Pets and livestock may also become lost, separated from their owners or injured.
4. Deceased animals can pose a significant public health problem.
5. People will attempt to re-enter an impacted area to retrieve their animals/pets before an “all clear” is given.

II. Concept of Operations

A. General

1. Communication and coordination necessary for the provision of animal welfare in response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Agencies will utilize animal welfare assets to meet incident needs in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. In the event of animals being displaced in a natural or man-made disaster, the State Veterinarian, in cooperation with State and local authorities, will determine the appropriate response to protect animal health and welfare. The Department of Agriculture will coordinate with the local animal control officer and Noah's Wish to address the needs of pets and services animals in an evacuation and the proper placement of them when brought to shelter facilities.

ESF 11 – Agriculture and Natural Resources: Natural, Cultural and Historical Resources (To be deveoped)

Primary Agency

Support Agencies

Mutual Aid Agencies

I. Introduction

II. Concept of Operations

A. General

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ESF 12 – Energy

Primary Agency **Illinois Commerce Commission (ICC)**

Support Agencies Illinois Department of Central Management Services (CMS)
Illinois Department of Corrections (IDOC)
Illinois Department of Transportation – Highways (IDOT-H)
Illinois Emergency Management Agency (IEMA)

I. Introduction

A. Assumptions

1. Catastrophic earthquake damages to any of the energy systems or related components may have a cascading effect on supplies, distribution and/or other transmission systems.
2. The availability of appropriate resources (both equipment and personnel) for repairs may be limited after a catastrophic earthquake.
3. The loss of power will be a major challenge facing disaster response operations at all levels of the response and recovery missions.

II. Concept of Operations

A. General

1. Communication and coordination necessary for energy-related functions in response and short-term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and Earthquake Annex.
2. The Illinois Commerce Commission (ICC) will coordinate the preliminary damage assessments in the energy sector to determine the locations of the damages, extent of the damages and expected restoration times of the damages.
3. The ICC will coordinate with the Federal, State and local jurisdictions in prioritization plans and actions for the restoration of energy during response and recovery operations.
4. The ICC can activate the Illinois Emergency Communication Network (IECN) in response to a catastrophic earthquake. The IECN can also be activated by any participating company. Once activated, industry participants can directly engage each other from remote locations while having a direct link to the ICC desk in the SEOC.

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ESF 13 – Public Safety: Evacuation

Primary Agency	Illinois State Police (ISP)
Support Agencies	Illinois Department of Corrections (IDOC) Illinois Commerce Commission – Transportation (ICC-T) Illinois Department of Military Affairs (IDMA) Illinois Department of Natural Resources (IDNR) Illinois Department of Transportation – Aeronautics (IDOT-A) Illinois Department of Transportation – Highways (IDOT-H) Illinois Emergency Management Agency (IEMA) Illinois Environmental Protection Agency (IEPA)
Mutual Aid Agencies	Illinois Law Enforcement Alarm System (ILEAS)

I. Introduction

A. Assumptions

1. It is believed that most victims will remain with or nearby their damaged homes unless circumstances will not allow it. Some displaced individuals may also choose to evacuate to a non-impacted area.
2. Functional needs victims will need assistance evacuating to shelters that are equipped to handle their needs.
3. Pre-designated evacuation routes may be damaged or blocked.
4. Transportation to evacuate mass amounts of people may not be available.

II. Concept of Operations

A. General

1. Communication and coordination necessary for the provision of evacuation requirements in response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Agencies will utilize evacuation assets to meet incident needs in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. Upon determination of conditions favorable to re-enter the affected area, IEMA will establish priorities for the return of the evacuees.

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ESF 13 – Public Safety and Security: Law Enforcement/Force Security and Protection

Primary Agency **Illinois State Police (ISP)**

Support Agencies Illinois Department of Corrections (IDOC)
Illinois Department of Natural Resources (IDNR)
Illinois Department of Military Affairs (IDMA)
Illinois Department of Transportation – Aeronautics (IDOT-A)
Illinois Department of Transportation – Highways (IDOT-H)
Illinois Secretary of State (SOS)
Illinois Commerce Commission (ICC)

Mutual Aid Agencies Illinois Law Enforcement Alarm System (ILEAS)

I. Introduction

A. Assumptions

1. First responder staffing may be reduced due to the nature of the earthquake and how it has adversely affected them personally.
2. Accountability for personnel must be considered for response and recovery operations including a check-in process system for off-duty staff.
3. Prison populations in Illinois may pose a significant problem in the aftermath of a catastrophic earthquake.

II. Concept of Operations

A. General

1. Communication and coordination of information necessary for force protection will be provided by all State agencies and organizations assigned or reporting to UAC.
2. Agencies will adhere to force protection measures put in place and approved by ISP and UAC.
3. Information used in the development of force protection will be documented and submitted to UAC Planning for incorporation into disaster intelligence, preservation and situational awareness files.
4. Information, records and other UAC documentation related to force protection will be retained in secure files marked For Official Use Only (FOUO) and/or Law Enforcement Sensitive (LES) folders. Force protection information will not be

available for dissemination to non-UAC or non-agents without prior approval from ISP, State Unified Area Commander or SEOC ISP Liaisons.

5. Force protection documentation will be completed in accordance with ISP and State of Illinois policies.
6. Law enforcement functions will provide support to local officials in the provision of essential law enforcement services as well as continuing day-to-day services.
7. Once all local law enforcement assets have been committed then State assets can be made available.
8. The responsible local law enforcement official in the jurisdiction requesting disaster mutual aid shall remain in charge unless otherwise expressly provided or later agreed to by the parties.
9. Upon notification of a request by IEMA to provide force protection, ISP will develop a Force Protection Plan (FPP), in coordination with the State Unified Area Commander and other responding agencies. Force Protection will be provided in support of actions including deployment, mobilization, response and short-term recovery and demobilization. ISP will be supported in force protection missions through assets under the direction and control of Illinois' Department of Corrections, Natural Resources, Military Affairs, Transportation and Secretary of State and the Illinois Commerce Commission.
10. The ISP and supportive law enforcement agencies are responsible for ensuring operational and tactical communications are available for safe and efficient actions outlined in the FPP.
11. Traffic and access control of the disaster area is essential. Only official and necessary traffic will be allowed into the impacted area.

ESF 14 – Long-Term Community Recovery

Primary Agency **Illinois Emergency Management Agency (IEMA)**

I. Introduction

A. Assumptions

1. It is estimated that a catastrophic earthquake impacting Illinois will result in a substantial economic loss from damaged buildings, transportation and utility systems.
2. Long term and recurring aftershocks may severely impact recovery plans and operations.

II. Concept of Operations

A. General

1. The activities necessary to accomplish long-term community recovery are detailed in the State of Illinois Disaster Recovery Plan which contains an attachment entitled “Long-Term Recovery Strategy.
2. The Illinois Emergency Management Agency (IEMA) will utilize the Long-Term Recovery Strategy to address the needs of an affected area when the disaster warrants the initiation of a long-term recovery initiative.

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ESF 15 – External Affairs: Warning

Primary Agency	Illinois Emergency Management Agency
Support Agencies	Illinois State Police (ISP) Illinois Department of Natural Resources (IDNR) Illinois Department of Military Affairs (IDMA) National Weather Service (NWS)
Mutual Aid Agencies	Illinois Law Enforcement Alarm System (ILEAS)

I. Introduction

A. Assumptions

1. There will be no warning for a catastrophic earthquake or aftershocks that may follow.
2. Success in saving lives and property is dependent upon timely dissemination of warning and emergency information to persons in threatened areas.
3. Some people will not heed warnings.

II. Concept of Operations

A. General

1. Communication and coordination necessary for the provision of warnings and emergency information in response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. Agencies will utilize warnings and emergency information assets to meet incident needs in accordance with individual agency procedures, upon authorization and/or request of the State Emergency Operations Center or UAC.
3. Dependent upon the nature of the threat and the population group at risk, warnings and emergency information can originate at any level of government.
4. IEMA has delegated the operational functions of warning to the Illinois State Police (ISP). The ISP disseminates warning messages to the Sheriff of each county and to designated State officials.

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ESF 15 – External Affairs

Primary Agency **Illinois Emergency Management Agency (IEMA)**

Support Agencies Illinois Department of Central Management Services (CMS)
Illinois Department of Military Affairs/Illinois National Guard
(IDMA/ING)

I. Introduction

A. Assumptions

1. Working components of the region's and nation's electronic and print media will be converging on the impacted areas expecting complete access to the affected area and to information regarding the response efforts.
2. The severity of the earthquake and the area impacted may necessitate the use of multiple Unified Area Commands. As a result, a Joint Information Center (JIC) may be established in order to provide a central location for the coordination of external affairs activities.
3. Normal means of transmitting information to the public may be degraded to the point that they are unable to transmit emergency public information.

II. Concept of Operations

A. General

1. Coordination and communication necessary for the transmission of public information messages in response and short term recovery will be provided by all State agencies and organizations included in the Illinois Emergency Operations Plan (IEOP) and the Earthquake Annex.
2. The content of emergency messages after a catastrophic earthquake may include specific information regarding transportation, evacuation and sheltering locations, incident facts, health risk concerns, pre- and post-incident protective action recommendations and where to access information in a format or language that a diverse population, including those with functional needs, can access.
3. Coordinate site visits within the area of operations for government officials and other dignitaries.
4. Timely and effective communications during a catastrophic earthquake will be disseminated through a variety of communication mediums based on availability and operability in the area of operations to include television, radio, newspapers,

Ready Illinois website, Facebook, Twitter and other methods deemed appropriate at the time of the event.

E. ACRONYMS

AO	Area of Operations
AODA	Alcohol and Other Drug Abuse
ARC	American Red Cross
ATC	Applied Technology Council
CART	Combined Area Rescue Teams
CDB	Capital Development Board
CERT	Community Emergency Response Team
CISD	Critical Incident Stress Debriefing
CISM	Critical Incident Stress Management
CMS	Central Management Services
COOP	Continuity of Operations Plan
CUSEC	Central United States Earthquake Consortium
DCEO	Department of Commerce and Economic Opportunity
DCFS	Department of Children and Family Services
DI	Disaster Intelligence
EMA	Emergency Management Agency
EMAC	Emergency Management Assistance Compact
EOC	Emergency Operations Center
ESDA	Emergency Services and Disaster Agency
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
FOUO	For Official Use Only
FPP	Force Protection Plan
IBHE	Illinois Board of Higher Education
ICC	Illinois Commerce Commission
ICCB	Illinois Community College Board
ICMEA	Illinois Coroners and Medical Examiners Association
IDA	Illinois Department of Agriculture
IDHHC	Illinois Deaf and Hard of Hearing Commission
IDHS	Illinois Department of Human Services
IDMA	Illinois Department of Military Affairs
IDMS	Illinois Disaster Management System
IDNR	Illinois Department of Natural Resources
IDoA	Illinois Department on Aging
IDOC	Illinois Department of Corrections
IDOT-A	Illinois Department of Transportation – Aeronautics
IDOT-H	Illinois Department of Transportation – Highways
IDPH	Illinois Department of Public Health

IDVA	Illinois Department of Veterans Affairs
IECN	Illinois Emergency Communications Network
IEMA	Illinois Emergency Management Agency
IEMMAS	Illinois Emergency Management Mutual Aid System
IEOP	Illinois Emergency Operations Plan
IEPA	Illinois Environmental Protection Agency
IESMA	Illinois Emergency Services Management Association
IHPA	Illinois Historic Preservation Agency
ILEAS	Illinois Law Enforcement Alarm System
IL-TERT	Illinois Telecommunicator Emergency Response Taskforce
ILWARN	Illinois Water and Wastewater Agency Response Network
IMERT	Illinois Medical Emergency Response Team
IMT	Incident Management Team
INVENT	Illinois Nurses Volunteer Emergency Needs Team
IPHMAS	Illinois Public Health Mutual Aid System
IPWMAN	Illinois Public Works Mutual Aid Network
ISBE	Illinois State Board of Education
ISGS	Illinois State Geological Survey
ISP	Illinois State Police
IVERT	Illinois Veterinary Emergency Response Team
LES	Law Enforcement Sensitive
LUST	Leaking Underground Storage Tank
MABAS	Mutual Aid Box Alarm System
MAE Center	Mid-America Earthquake Center
MAR ² N	Mutual Aid Response/Resource Network
MMI	Modified Mercalli Intensity Scale
MOU	Memorandum of Understanding
MST	Mobile Support Team
NESDIS	National Environmental Satellite, Data, and Information Service
NGO	Non-governmental Organization
NIMS	National Incident Management System
NMSZ	New Madrid Seismic Zone
NOAA	National Oceanic and Atmospheric Administration
NRF	National Response Framework
NSF	National Science Foundation
NWS	National Weather Service
OSFM	Office of State Fire Marshall
POD	Point of Distribution
RHCC	Regional Hospital Coordination Center
RN	Registered Nurse

SA	Salvation Army
SCIP	Statewide Communications Interoperability Plan
SEOC	State Emergency Operations Center
SOP	Standard Operating Procedure
SOS	Secretary of State
TFR	Temporary Flight Restriction
TRT	Technical Rescue Team
UAC	Unified Area Command
USAR	Urban Search and Rescue
USGS	United States Geological Survey
VMST	Volunteer Management Support Team
VOAD	Voluntary Organizations Active in Disasters
WVSZ	Wabash Valley Seismic Zone

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F. MAPS

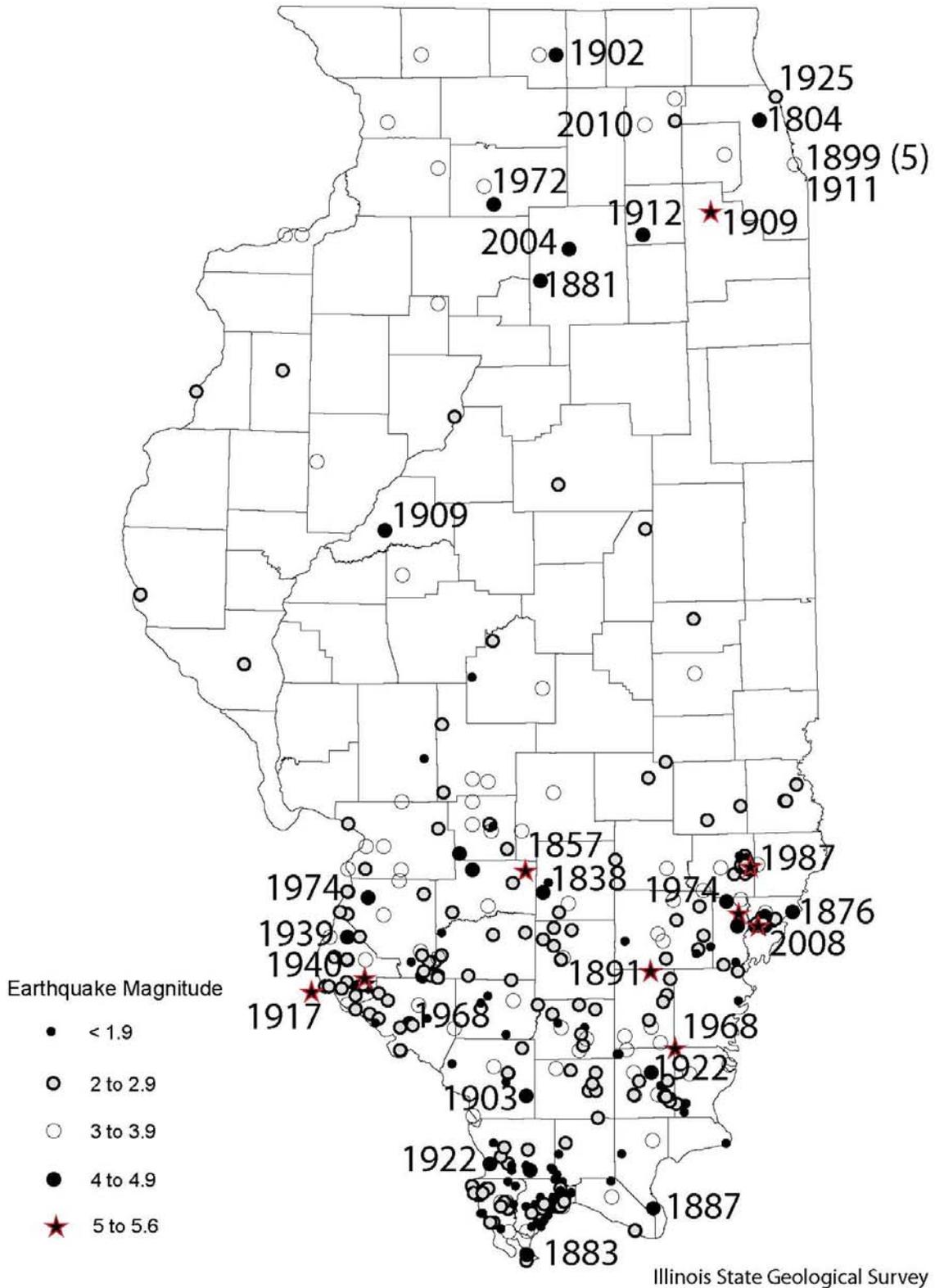
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Earthquakes In Illinois

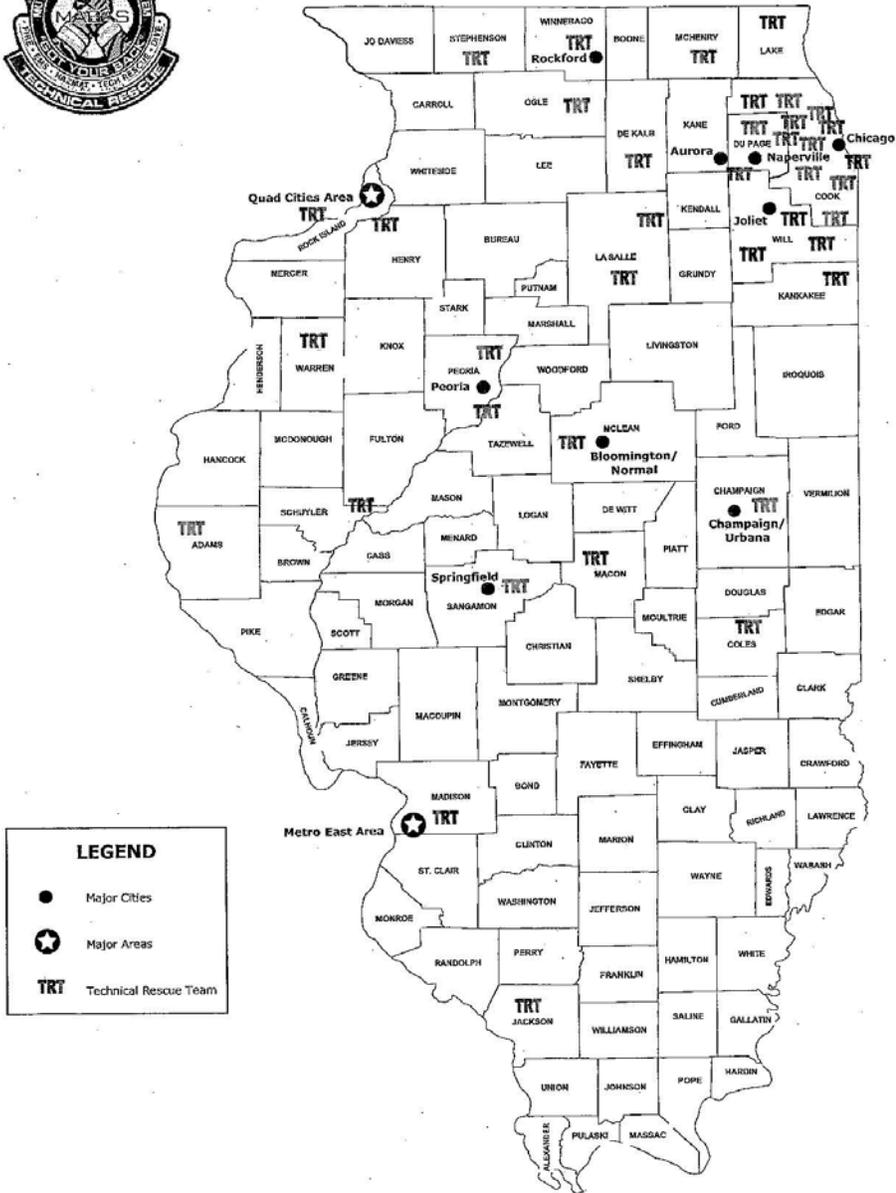
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Mutual Aid Box Alarm System (MABAS) Technical Rescue Teams (TRT)



LEGEND

- Major Cities
- ★ Major Areas
- TRT Technical Rescue Team

