



MIKE HAGAR
SECRETARY

STATE OF ARKANSAS
GOVERNOR SARAH HUCKABEE SANDERS

DEPARTMENT OF PUBLIC SAFETY
DIVISION OF EMERGENCY MANAGEMENT



A.J. GARY
DIRECTOR

October 27, 2025

The Honorable Ben Gilmore, Senator
The Honorable Les D. Eaves, Representative
Co-Chairs, Arkansas Legislative Council
c/o Bureau of Legislative Research
Room 315, State Capitol Building
Little Rock, AR 72201

Gentlemen,

Enclosed is the annual Arkansas Earthquake Program report as required per A.C.A. § 12-77-107. We are providing this report in an electronic version and can provide a printed version upon request.

Please do not hesitate to contact me if I, or my staff, may be of further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "A.J. Gary", is written over a blue horizontal line.

A.J. Gary
Director and State Homeland Security Advisor

Co-chairs of the Legislative Council:

In accordance with the House Bill 2032 amending Act 711, the Arkansas Division of Emergency Management (ADEM) hereby reports the following activities of the Arkansas Earthquake Program from November 1, 2024, to October 31, 2025, as they relate to specific requirements of the bill:

A. Continued assessment from proper scientific authorities of the seismic risk to the state:

In 2024 and 2025, ADEM maintained its relationship with the Arkansas Department of Energy and Environment (E&E), Office of the State Geologist (OSG), and the State Fire Marshal through meetings, email correspondence, phone calls, and educational events.

- ADEM and OSG share responsibilities for the Arkansas Governor's Earthquake Advisory Council (GEAC) meetings.
- ADEM Earthquake Program Manager coordinates with the State Fire Marshal as the subject matter expertise on the Arkansas Building Codes.
- ADEM and OSG continue to interact frequently with activities involving INSPECT ARKANSAS (INSPARK) trainings, educational/ STEM events, and regular discussions of possible projects that might be undertaken with funding available from the National Earthquake Hazard Reduction Program (NEHRP). ADEM and OSG collaborate to promote earthquake awareness and mitigation throughout the state, jointly staffing outreach booths at preparedness events. (A list of conference calls, presentations, and meetings begin on page 5.)

Office of the State Geologist (OSG), Research Activity

- *Paleo seismology* – A publication will be coming out this fall in the Seismological Research Letters on the findings from fieldwork. OSG staff assisted Dr. Tuttle and Dr. Al-Shukri in paleo seismology fieldwork this fall, as part of a USGS National Earthquake Hazards Reduction Program (NEHRP) grant awarded to them. The fieldwork was conducted in three trenches containing sand blows near Marianna, Arkansas. It involved identifying and logging geologic sediments and rocks for signs of ancient earthquakes.
- *Raspberry Shake* – OSG has installed the Raspberry Shake in the hall outside their office, just in time for the Great ShakeOut on October 16. This is a high-precision professional seismometer sensor. It measures ground motion activity and will be installed in the OSG office with a monitor to observe any ground motion. The software will allow access to Raspberry Shakes worldwide. It will be used for educational and instructional purposes.
- *Great ShakeOut* – OSG participated in the Great ShakeOut on Thursday, October 16. Posters, flyers, emails, communication blasts to employees, a rolling video on earthquake information, and an informational booth on the New Madrid Seismic Zone were featured during this event.
- *Seismometer Stations* – OSG is working with the University of Memphis, Center for Earthquake Research and Information (CERI), to maintain nine stations across the state. OSG is considering installing one additional permanent seismic station just west of the Mississippi Embayment area near Batesville. This station will be designed to provide enhanced seismicity monitoring in the vicinity of the New Madrid Seismic Zone.
- *Bull Shoals Seismicity* – Ongoing research into seismicity surrounding Bull Shoals Lake. In 2017, an earthquake of M3.6 occurred, followed by 35 aftershocks. The investigation focuses on post-impoundment seismic activity in the area and related phenomena known

as reservoir-induced seismicity. Only one earthquake with a magnitude of 2.1 occurred this year.

- *Lawrence County Earthquake Events* – Ongoing research into seismicity in the area referred to as the eastern Ozarks has identified diffused seismicity. This area has seen numerous small earthquakes over the years. Western Lawrence County has seen 11 low-magnitude earthquakes since June 2022. In 2025, eleven earthquakes have been recorded between Lawrence and Sharp Counties. OSG installed a temporary seismic station just south of Ravenden (XA02) to better evaluate the seismicity, along with three other temporary stations in the northern half of Arkansas, which will help augment the data from the nine permanent stations of the Arkansas Seismic Network (ASN) for better control of the earthquake depth and epicentral location.
- *Sharp Focus Array* – The OSG has deployed seismic nodes at the Blytheville, Arkansas, airport as a beta test to better detect and locate small earthquakes. If successful, this array will be deployed in southern Arkansas to determine if earthquakes are occurring and to locate them in relation to known faults and areas of potential development. The study is supported by a Department of Energy (DOE) Geothermal Grant in collaboration with the University of Texas and the University of Memphis-CERI.

B. Training and education of the state and local government officials, employees, and citizens of Arkansas regarding preparation and protective measures that can be taken before, during, and after an earthquake.

During the period covered by this report, ADEM hosted courses to support earthquake response. Below is a list of classes offered by the state.

- December 11, 2024, FEMA P-2208 Webinar
- June 18, 2025, ATC-20, Rapid Visual Inspection Training, Little Rock, AR
- July 17, 2025, NETAP, FEMA 2055 Post Disaster Building Safety Evaluation Guidance
- September 10, 2025, Cal OES Safety Assessment Program (SAP) Training, Rogers, AR

C. Planning coordination, guidance, and assistance to all state and local government officials in preparation for, response to, and recovery from earthquakes.

INSPECT ARKANSAS (INSPARK)

Arkansas has had a training program for building inspections for over twenty years. The INSPARK website (inspectarkansas.org) enables members to access information, take reassessment tests, and learn more about mitigating earthquake damage in the state. The ArcGIS Survey123 App, the primary means of data collection during training and real-life events, has been successfully integrated into the INSPARK Program. Survey123 App information can be conveyed to the State Emergency Operations Center (SEOC) in real-time during a disaster.

INSPARK leaders have continued to work on building a stronger relationship with the American Institute of Architects Arkansas Chapter (AIAAR). AIAAR has established a Disaster Assistance Committee (DAC) whose role will be to support ADEM and the INSPARK program. The committee will explore ways to support members and member firms that suffer a loss due to a disaster. DAC will also work toward recruiting architects to join INSPARK and educating the architecture profession about natural and man-made hazards, as well as the steps these architects can take to protect themselves,

their families, and their offices from risks.

Did You Feel It (DYFI)

After an earthquake, the Earthquake Program Manager communicates with the affected county's Emergency Manager to encourage them to remind their citizens of the United States Geological Survey (USGS) DYFI website. The website collects information from people who felt an earthquake and creates maps that show what people experienced and the extent of the damage.

Arkansas updates the New Madrid Seismic Zone Earthquake Plan

ADEM Operations continues to hold monthly meetings with key partners. This includes the Emergency Service Functions (ESFs) and the Arkansas National Guard. ADEM hosted a New Madrid Seismic Zone planning workshop on May 22, 2025. The purpose of this workshop was to raise awareness of the plan and discuss our progress with the updates. After this workshop, the ESFs were tasked with updating their Lifeline portion of the plan. On June 19, 2025, ADEM hosted a one-day functional exercise to test the State Emergency Operations Center processes. Currently, the ESFs have completed their lifelines. ADEM Operations and Planning are reviewing the updated information and looking to format that information into the new NMSZ plan.

ADEM is coordinating with the Local Emergency Management Coordinators to determine staging locations in various counties. ADEM is working closely with the Arkansas National Guard to synchronize plans and understand how they will be functioning with other states in the event of a catastrophic event. ADEM participated in their 2025 Wargame Exercise. After our review is completed with the Emergency Support Functions (ESFs) and the Lifelines working groups, we will plan an exercise in 2026 involving State, Local, Federal, and Private Sector Partners. Our monthly meetings are scheduled for the second Tuesday of each month.

D. Coordination of earthquake program activities with comparable agencies of the federal government and other states.

Arkansas Governor's Earthquake Advisory Council

The Arkansas Governor's Earthquake Advisory Council (GEAC) meets biannually. Detailed notes are submitted to the Governor and are available from the State's Earthquake Program Manager (EPM).

Sixty-six people attended the March 7, 2025, GEAC meeting held at the University of Central Arkansas (UCA). Panel discussion on Bono-LZ Operation included:

- Joseph P. Geaney, Colonel, ARAN
- Michael Wood, ARDOT
- Shelby Richey, ARDOT
- Scott Bass, ADEM

The OSG and ADEM gave briefs on the NMSZ plan updates and the recent earthquakes in the State. The USGS National Seismic Hazard Model Workshop followed the GEAC meeting.

Forty-five people attended the September 12, 2025, GEAC meeting held at the Arkansas State University Midsouth in West Memphis, AR.

Keynote speakers were:

- Jake Norris, ARDOT, Bridge Inspection Earthquake Response Plan
- Brian Blake, Central United States Earthquake Consortium (CUSEC)
- Andy Traffanstedt, Pulaski County EM, Arkansas Task Force One

Panel Discussion: Arkansas Air Coordination Group

- Eric Ekhoﬀ, ADEM
- Thomas L. Edwards, Colonel, ARAN
- Shawn Keeter, ARAN
- Robert Murphy, ADA, ESF4
- Jerry Chism, AR Division of Aeronautics
- Stacy Hoggard, Director of Walnut Ridge Airport

Emergency Management Assistance Compact

ADEM Operations attended the annual All Hazards Resource Allocation Workshop with the National Guard. This workshop brought together Guard representatives from every state to discuss their most catastrophic events and to allocate resources in the event of an earthquake. Arkansas EMAC has assisted our neighboring states with three missions this year, which provided good practices for similar missions that may need to be undertaken in an earthquake event.

ShakeOut

The Arkansas Earthquake Program continues to actively promote the Central United States ShakeOut. This yearly drill encourages people in homes, schools, businesses, and other organizations to practice what to do during an earthquake and improve preparedness using the “Drop, Cover, and Hold On” methodology. A ShakeOut Social Media campaign has been developed, utilizing NEHRP funds to encourage people to register for this international drill. The PSAs, which can be used across various platforms, are specifically NMSZ-oriented and can be used indefinitely.

ShakeOut was held on October 16, 2025, at 10:16 am. There were 58,967 registered participants in Arkansas. ShakeOut.org offered many innovative ideas and approaches for participating in the drill and adapting it to a pandemic. Participation across different groups was as follows.

Category	Participants
Individuals/Families	107
Childcare and Pre-Schools	23
K-12 Schools and Districts	30,969
Colleges and Universities	20,087
Local Government	756
State Government	1,563
Federal/National Government (Including Military)	78
Tribes/Indigenous Peoples	0

Businesses	35
Hotels and Other Lodgings	0
Healthcare	2,812
Senior Facilities/Communities	100
Disability/AFN Organizations	2,220
Non-Profit Organizations	80
Neighborhood Groups	0
Preparedness Organizations	0
Faith-based Organizations	20
Museums, Libraries, Parks, etc.	10
Volunteer/Service Clubs	15
Youth Organizations	0
Animal Shelter/Service Providers	0
Agriculture/Livestock Sector	0
Volunteer Radio Groups	4
Science/Engineering Organizations	0
Media Organizations	0
Other	88

Conference calls, meetings, and training

- November 1, 2024, CERT Training, Hot Springs, AR
- November 6, 2024 (and continuing the 1st Wednesday of each month): National Earthquake Program Managers Meeting (NEPM)
- November 13, 2024, ATU Board Meeting
- November 19, 2024, FEMA Region 6 Community Preparedness Working Group
- December 12, 2024, Entergy EAP Annual Seminar
- December 2, 2025, EQ Summit Planning Committee (monthly through March 2025)
- December 3, 2024, CERT Training, Arkansas Tech University (ATU)
- December 4-5, 2024, Seismic Safety Council Meeting
- December 9, 2024, Nevada County CERT Meeting
- December 12, 2024, Jacksonville School District CERT Meeting
- December 17, 2024, Russellville Jr. High School comic book distribution
- December 17, 2024, CERT Meeting Sebastian County OEM
- December 18, 2024, Resiliency Initiative Meeting
- January 7, 2025, AR STEM Ecosystem Monthly Meeting (and continuing the first Tue of the month through December 2025)
- January 13, 2025, GEAC Planning Meeting (and continuing monthly throughout 2025)
- January 13, 2025, Paris, AR School District CERT meeting
- January 14, 2025 (and continuing the second Tuesday of the month) NMSZ Meeting
- January 15-17, 2025, Mt View/Timbo High School CERT Training
- January 17, 2025, Faulkner County OEM Meeting
- January 21, 2025, Little Rock Chamber of Commerce Meeting
- January 23, 2025, Howard County CERT Training
- January 28, 2025, Washington County Local Emergency Planning Committee (LEPC) Meeting
- January 29-31, 2025, Mt. View/Timbo CERT Hands-on Training
- February 1, 2025, Park Plaza Mall Preparedness Fair
- February 4-5, 2025, NE Arkansas ATU/FEMA R6 Higher Education Collaborative

- February 24, 2025, Izard County Middle School STEM Fair
- February 26, 2025, Stuttgart Preparedness Fair
- February 27, 2025, Mississippi County LEPC Meeting
- March 4, 2025, Cleburne County, AR CERT Meeting
- March 8, 2025, STEM at ATU
- March 10, 2025, Rapid Visual Screening (RVS) Meeting
- March 12, 2025, Corning, AR Preparedness Presentation
- March 17, 2025, Missouri Seismic Safety Commission Meeting
- March 24, 2025, Mississippi County RVS Meeting
- March 28, 2025, Hazen Health and Senior Wellness Center Meeting
- April 3, 2025, UCA Explore Your Career Field Day
- April 3, 2025, New Life Church, Conway, AR CERT Meeting
- April 3, 2025, Conway Public School District's April STEM Night
- April 8-10, 2025, Future Fest Hot Springs
- April 16, 2025, Weather Day Faulkner County
- April 17, 2025, Perryville, AR CERT Meeting
- April 22, 2025, Howard County, AR CERT Meeting
- April 25, 2025, Newton County Preparedness Fair
- April 29, 2025, UMPIRE School CERT Training
- May 8m 2025, Mississippi County, Arkansas Department of Health (ADH) Meeting
- May 9, 2025, Bigelow High School CERT Meeting
- May 12, 2025, 2025 CUSEC Regional Resiliency Workshop
- May 17, 2025, Lonoke County Preparedness Fair
- May 30, 2025, QuakeSmart Workshop Coordination Call
- June 4, 2026, ASU EM Video Project Meeting
- June 7, 2025, Child Safety Fair, Conway, AR
- June 10, 2025, QuakeSmart Workshop, Jonesboro, AR
- June 17, 2025, Earth Expo Live Meeting
- July 22, 2025, LEPC Meeting, Fayetteville, AR
- July 23, 2025, Life Quest Emergency Management Presentation, Little Rock, AR
- July 24, 2025, Newton County, AR CERT and Preparedness Training
- July 28, 2025, Mass Violence Incident Response Community Meeting, Russellville, AR
- July 31, 2025, FY25 National Earthquake Hazard Reduction Planning Review Meeting
- August 6, 2025, FEMA R6 Community Preparedness Working Group Meeting
- August 7-9, 2025, CERT National Conference, Indianapolis, IN
- August 13, 2025, LEPC, Little Rock, AR
- August 22, 2025, GEAC Planning Meeting, West Memphis, AR
- September 2, 2025, Air Coordination Planning Meeting
- September 8, 2025, Izard County STEM Night
- September 9, 2025, Jasper, AR OEM Meeting
- September 11, 2025, Senior Preparedness Fair, Little Rock
- September 12, 2025, GEAC, ASU Midsouth, Memphis, TN
- September 18, 2025, RVS Project with OEM
- September 19, 2025, EQ Awareness ASU, Jonesboro, AR
- September 23, 2025, Paragould, AR, EQ presentation
- October 6, 2025, ASU Daycare ShakeOut Presentation

- October 7, 2025, Brockwell, AR High School STEM Fair
- October 9, 2025, Joint Meeting, Bigelow and Perryville, AR, CERT
- October 16, 2025, ATU ShakeOut Drill Exercise, Russellville, AR
- October 17, 2025, Green County, AR, Public Library Earthquake Awareness
- October 25, 2025, Park Plaza Mall Safety Fair

E. The dissemination of information to the public about earthquake hazards, especially to Arkansans living near the New Madrid Fault, protective measures, seismic resistance in building construction, and appropriate actions to be taken before, during, and after an earthquake. Along with other matters, the Arkansas Division of Emergency Management shall determine whether it is necessary or appropriate to educate, inform, and equip citizens in this state to deal with an earthquake.

Presentations:

- December 10, 2024: Water Heater Strap distribution, Lawrence County, AR
- December 14, 2025, Lisa Academy Science Fair Judge
- January 29, 2025. KAUF Earthquake Preparedness Interview
- February 11, 2025, KAIT8 Earthquake Preparedness Interview
- March 25, 2025, Community Lifeline Status System Data & Decision-Making Panel
- June 19-21, 2025, Diaz, Arkansas, Survivor Assistance Location (SAL)
- June 25-28, 2025, Cave City SAL
- September 29, 2025, Channel 11, ShakeOut Promo
- September 30, 2025, New Madrid Tabletop Exercise, American Red Cross

Recommendations for Improvement

Efforts of the Arkansas Earthquake Program, in coordination with the CUSEC and FEMA, many Arkansas citizens have become aware of the potential threat posed by the New Madrid Seismic Zone (NMSZ). Below are additional areas of improvement.

- Increased citizen involvement with personal mitigation efforts.
- Continue leveraging the availability of grants to build and maintain interest in preparedness and mitigation activities.
- Invitations to GEAC are sent to various stakeholders. An increase in the council participation has the potential to increase its impact and benefit more citizens.