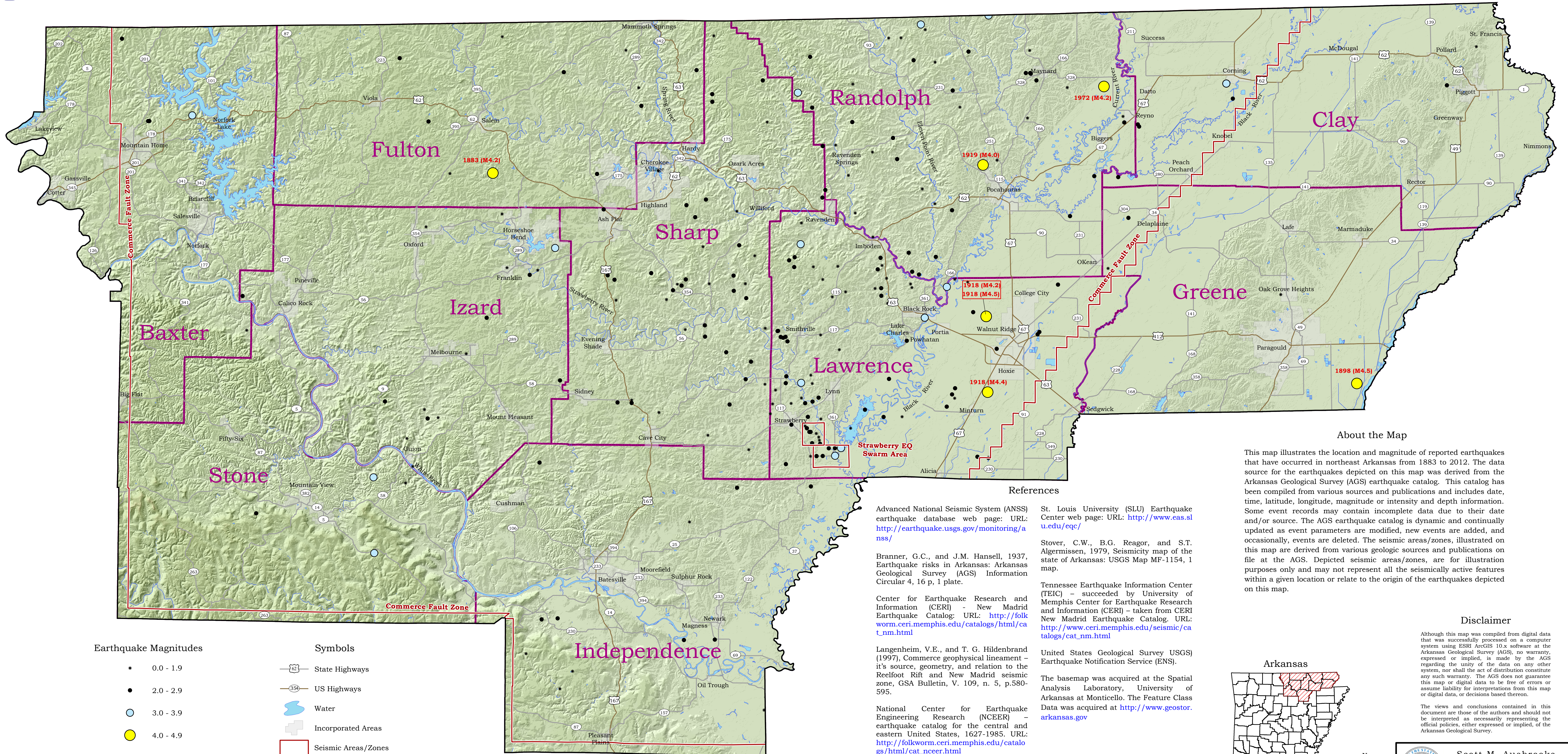


# Seismicity of Northeast Arkansas



### About the Map

This map illustrates the location and magnitude of reported earthquakes that have occurred in northeast Arkansas from 1883 to 2012. The data source for the earthquakes depicted on this map was derived from the Arkansas Geological Survey (AGS) earthquake catalog. This catalog has been compiled from various sources and publications and includes date, time, latitude, longitude, magnitude or intensity and depth information. Some event records may contain incomplete data due to their date and/or source. The AGS earthquake catalog is dynamic and continually updated as event parameters are modified, new events are added, and occasionally, events are deleted. The seismic areas/zones, illustrated on this map are derived from various geologic sources and publications on file at the AGS. Depicted seismic areas/zones, are for illustration purposes only and may not represent all the seismically active features within a given location or relate to the origin of the earthquakes depicted on this map.

### Disclaimer

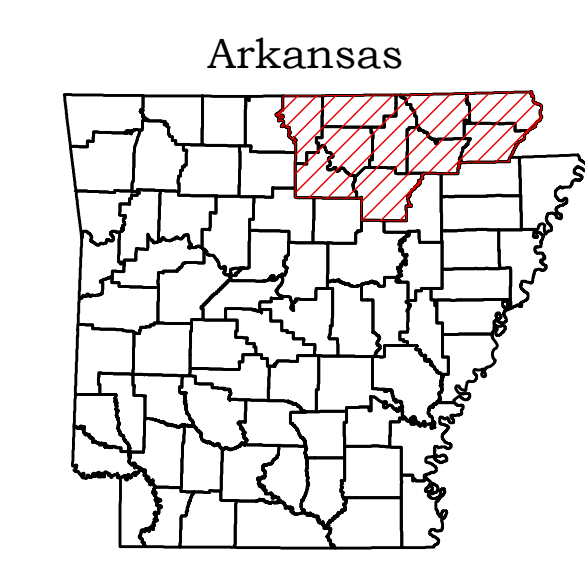
Although this map was compiled from digital data that was successfully processed on a computer system using ESRI ArcGIS 10.x software at the Arkansas Geological Survey (AGS), no warranty, expressed or implied, is made by the AGS regarding the unity of the data on any other system, nor shall the act of distribution constitute any such warranty. The AGS does not guarantee this map or digital data to be free of errors or assume liability for interpretations from this map or digital data, or decisions based thereon.

The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the Arkansas Geological Survey.

### References

- Advanced National Seismic System (ANSS) earthquake database web page: URL: [http://earthquake.usgs.gov/monitoring/a\\_nss/](http://earthquake.usgs.gov/monitoring/a_nss/)
- Branner, G.C., and J.M. Hansell, 1937, Earthquake risks in Arkansas: Arkansas Geological Survey (AGS) Information Circular 4, 16 p, 1 plate.
- Center for Earthquake Research and Information (CERI) - New Madrid Earthquake Catalog: URL: [http://folk.worm.ceri.memphis.edu/catalogs/html/cat\\_nm.html](http://folk.worm.ceri.memphis.edu/catalogs/html/cat_nm.html)
- Langenheim, V.E., and T. G. Hildenbrand (1997), Commerce geophysical lineament – it's source, geometry, and relation to the Reelfoot Rift and New Madrid seismic zone, GSA Bulletin, V. 109, n. 5, p.580-595.
- National Center for Earthquake Engineering Research (NCEER) – earthquake catalog for the central and eastern United States, 1627-1985. URL: [http://folkworm.ceri.memphis.edu/catalogs/html/cat\\_nceer.html](http://folkworm.ceri.memphis.edu/catalogs/html/cat_nceer.html)
- Nuttli, O.W., 1979, The seismicity of the central United States, in geology in the siting of nuclear power plants: Geological Society of America, Reviews in Engineering Geology, Volume 4, p. 67-93.
- St. Louis University (SLU) Earthquake Center web page: URL: <http://www.eas.slu.edu/eqc/>
- Stover, C.W., B.G. Reagor, and S.T. Algermissen, 1979, Seismicity map of the state of Arkansas: USGS Map MF-1154, 1 map.
- Tennessee Earthquake Information Center (TEIC) – succeeded by University of Memphis Center for Earthquake Research and Information (CERI) – taken from CERI New Madrid Earthquake Catalog: URL: [http://www.ceri.memphis.edu/seismic/catalogs/cat\\_nm.html](http://www.ceri.memphis.edu/seismic/catalogs/cat_nm.html)
- United States Geological Survey (USGS) Earthquake Notification Service (ENS).

The basemap was acquired at the Spatial Analysis Laboratory, University of Arkansas at Monticello. The Feature Class Data was acquired at <http://www.geostor.arkansas.gov>



**Earthquake Magnitudes**

- 0.0 - 1.9
- 2.0 - 2.9
- 3.0 - 3.9
- 4.0 - 4.9

**Symbols**

- 62 — State Highways
- 354 — US Highways
- Water
- Incorporated Areas
- Seismic Areas/Zones



Scott M. Ausbrooks  
David H. Johnston  
William L. Prior  
2012

Revised Date: 30 May 2017  
Scale: 1 : 250,000  
Digital compilation: Jerry W. Clark