

Tennessee Earthquake Preparedness Group (TEPG)

October 2020

TEPG is a quasi-governmental agency responsible for:

- Creating a plan to mitigate loss during an earthquake in the state of Tennessee
- Allocating funds to support the plan
 - updates to building codes
 - critical facilities placement rules
 - inspect and retrofit existing structures
 - database to track vulnerabilities

https://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema mitigation ideas final508.pdf



Why do we need to worry about this?



Between December 16, 1811 and February 7, 1812:

Four earthquakes ranging in magnitude from 7.0 to around 8.0 hit along the New Madrid Fault.

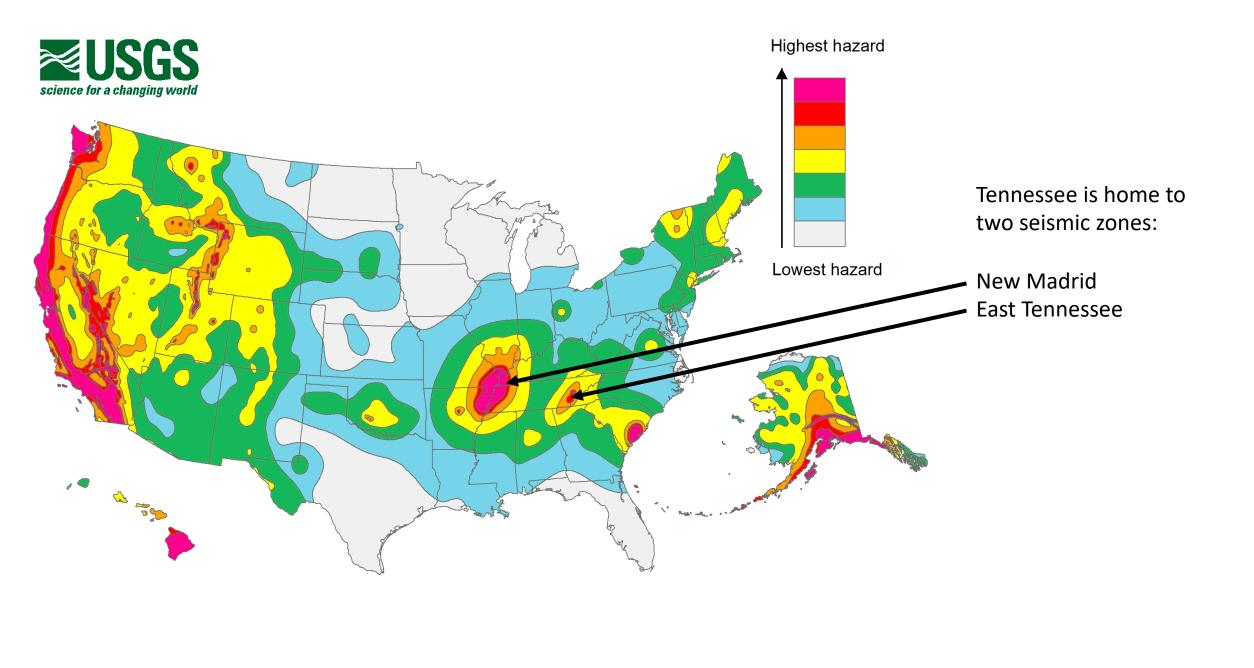
The Mississippi River ran backward and Reelfoot Lake was created.

These were the largest earthquakes in North American History.

Around 30 people died as a result (Memphis was not founded until 1819).



And there's more...



Scope of Analysis

- 1. Is it advisable to concentrate our resources in the four major metropolitan areas (Memphis, Nashville, Chattanooga, Knoxville)?
- 2. How should we allocate resources amongst these areas?
 - a. which area is likely to experience an earthquake?
 - b. which area is likely to suffer loss from an earthquake if one hits?