Earthquake Education and Mitigation

presented by

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New Madrid Earthquakes 1811-1812

December 16, 1811 at 02:30 AM (Mag. 7.6 M)

January 23, 1812 at 09:00 AM (Mag. 7.5 M)

February 07, 1812 at 03:15 AM (Mag. 7.8 M)

Source: Bakun and Hopper, 2004
Reelfoot Rift

Earthquakes
**Stage 1**
- Continental Crust
- Lithosphere
- Volcanoes

**Stage 2**
- Rift Valley
- Southern Illinois 525 million yrs ago

**Stage 3**
- Linear Sea

**Stage 4**
- Mid Ocean Ridge
- Continental Crust
- Oceanic Crust
Earthquake Probabilities for Next 50 Years

7-10%  7.5-8.0 M
25-40%  6.0 M or larger

(source: USGS FS-131-02)
Earthquake Resources