USGS
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Earthquake Shaking — Orange Alert

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PAGER
Version 5

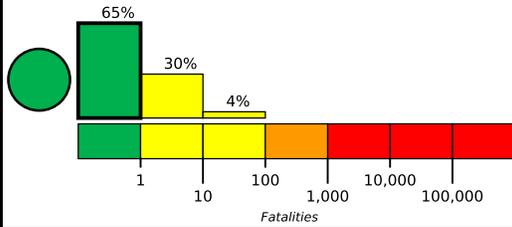# M 7.1, 17km NNE of Ridgecrest, CA

Origin Time: 2019-07-06 03:19:52 UTC (Fri 20:19:52 local)
Location: 35.7665° N 117.6048° W Depth: -0.9 km

Created: 2 hours, 9 minutes after earthquake

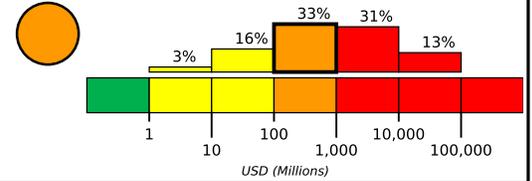## Estimated Fatalities

65%
30%
4%

1   10   100 1,000 10,000 100,000
Fatalities

Orange alert for economic losses. Significant damage is likely and the disaster is potentially widespread. Estimated economic losses are less than 1% of GDP of the United States. Past events with this alert level have required a regional or national level response.

Green alert for shaking-related fatalities. There is a low likelihood of casualties.
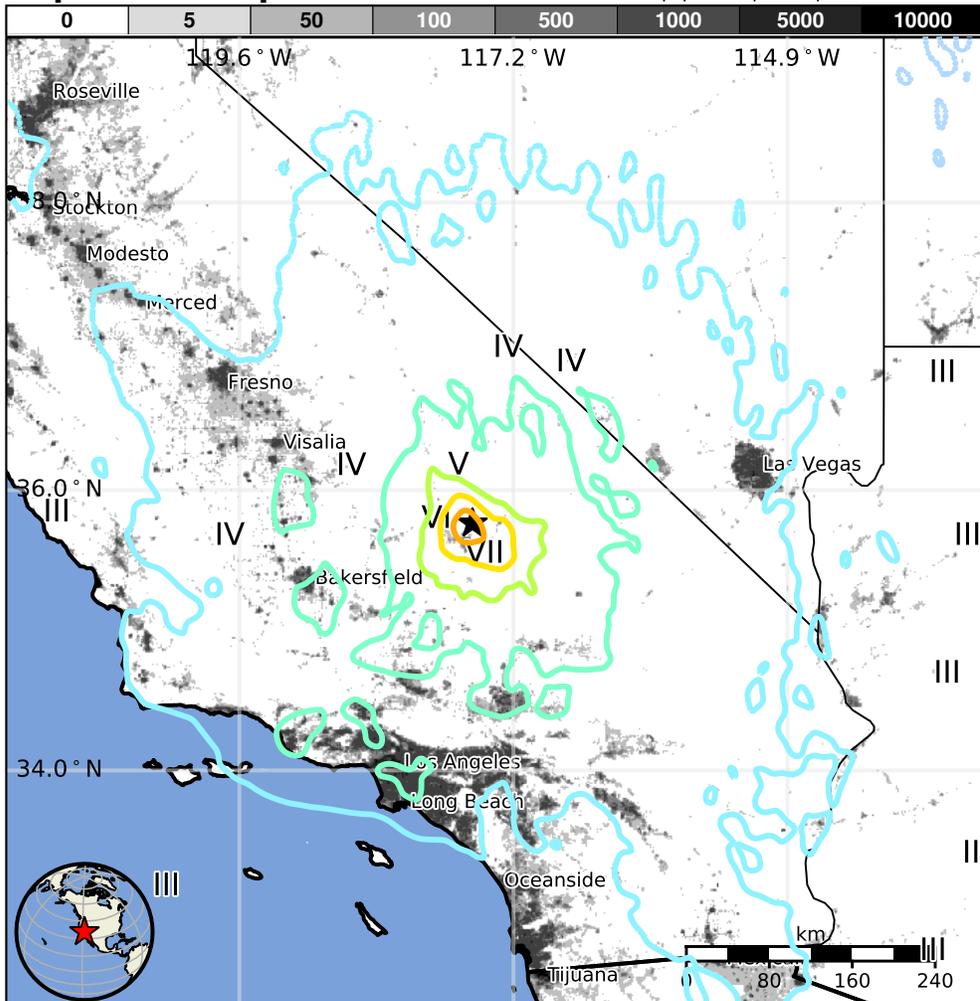
Estimated Economic Losses

3%
16%
33%
31%
13%

1   10   100 1,000 10,000 100,000
USD (Millions)

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	9,377k*	20,937k	5,824k	69k	16k	30k	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan

| 0 | 5 | 50 | 100 | 500 | 1000 | 5000 | 10000 |

Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1992-06-28	201	7.3	VIII(23k)	1
1987-10-01	195	5.9	VIII(47k)	8
1971-02-09	167	6.6	IX(21k)	65

Recent earthquakes in this area have caused secondary hazards such as tsunamis, landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
VIII	Ridgecrest	28k
VII	China Lake Acres	2k
VII	Inyokern	1k
VII	Searles Valley	2k
VI	El Rio	7k
V	Oxnard	198k
IV	**Los Angeles**	**3,793k**
IV	**Mexicali**	**597k**
IV	San Diego	1,307k
III	Sacramento	466k
III	**Tijuana**	**1,376k**

bold cities appear on map.   (k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.
http://earthquake.usgs.gov/data/pager/

Event ID: ci38457511