

M 4.1, 14km ESE of Alum Rock, California

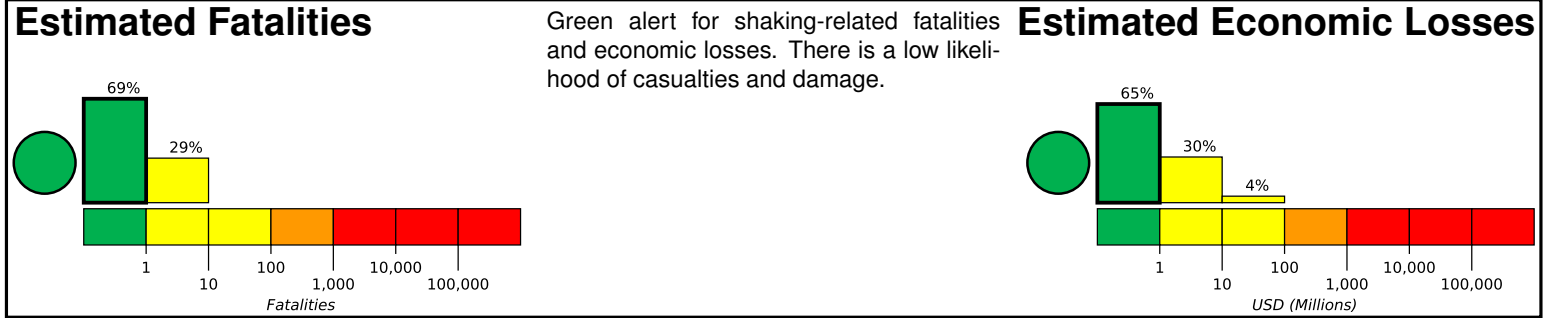
Origin Time: 2017-10-10 00:53:18 UTC (Mon 17:53:18 local)

Location: 37.3135° N 121.6720° W Depth: 9.7 km

FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Created: 18 hours, 33 minutes after earthquake

PAGER
Version 7

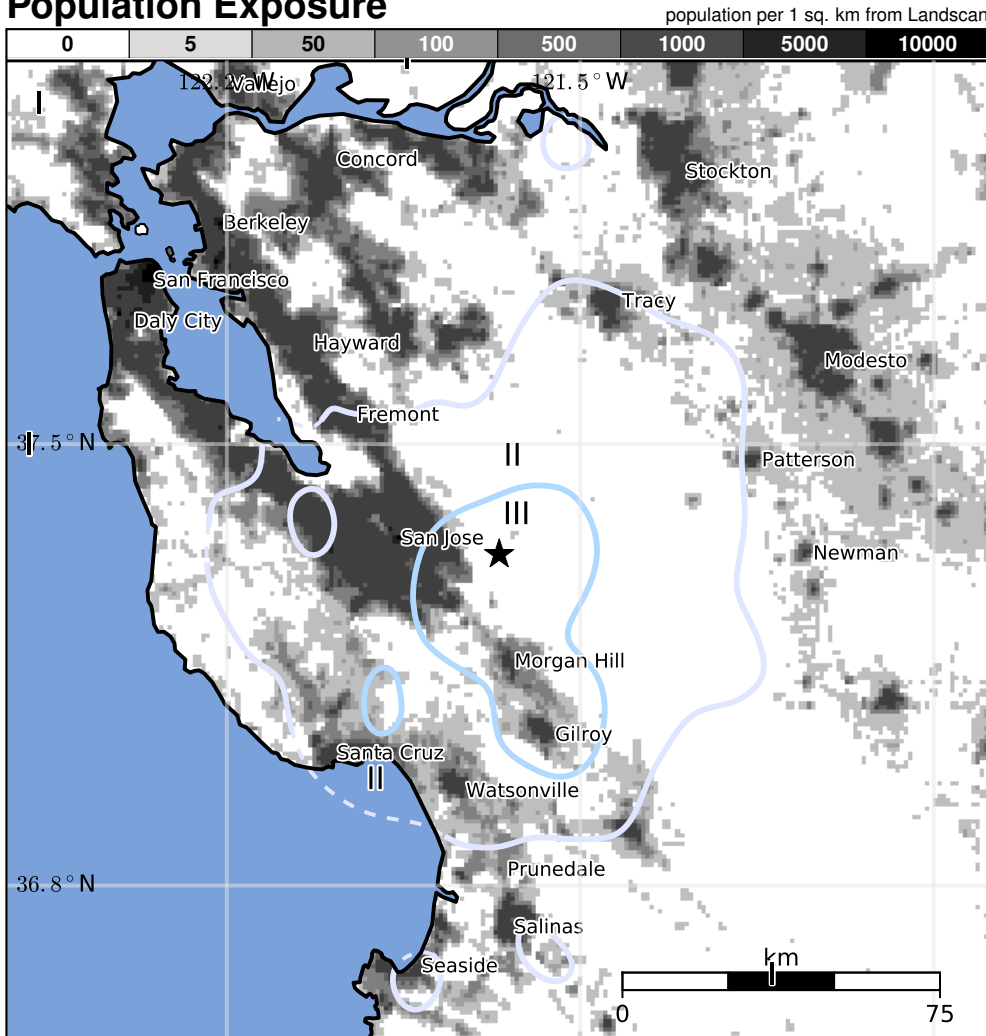


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		5,484k*	3,437k	0	0	0	0	0	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



Structures

Overall, the population in this region resides in structures that are highly resistant to earthquake shaking, though some 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
2003-12-22	195	6.6	VI(8k)	2
1980-01-24	44	5.8	VII(35k)	1
1989-10-18	24	6.9	VIII(109k)	62

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

Selected City Exposure

from GeoNames.org

MMI	City	Population
III	Gilroy	49k
III	Seven Trees	2k
III	Morgan Hill	38k
III	San Martin	7k
III	Scotts Valley	12k
III	Soquel	10k
II	San Jose	946k
II	Fremont	214k
II	San Francisco	805k
I	Oakland	391k
I	Stockton	292k

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.

<https://earthquake.usgs.gov/earthquakes/eventpage/nc72906781#pager>

Event ID: nc72906781