



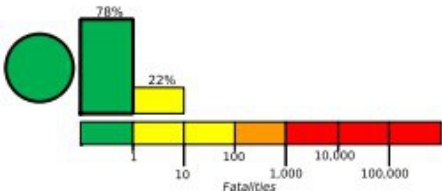
# Earthquake Shaking Orange Alert



Origin Time: Tue 2011-08-23 17:51:04 UTC (13:51:04 local)  
Location: 37.94oN 77.93oW Depth: 6 km

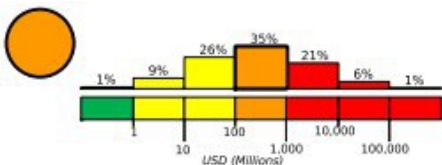
PAGER Version 1  
Created: 2 hours, 5 minutes after earthquake

## Estimated Fatalities



Orange alert level 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 level for shaking-related fatalities. There is a low likelihood of casualties.

## Estimated Economic Losses



Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)	- -*	19k*	9,627k*	2,285k	76k	23k	10k	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY	I	II-II	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
Resistant Structures	none	none	none	V. light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy

\*Estimated exposure only includes population within the map area

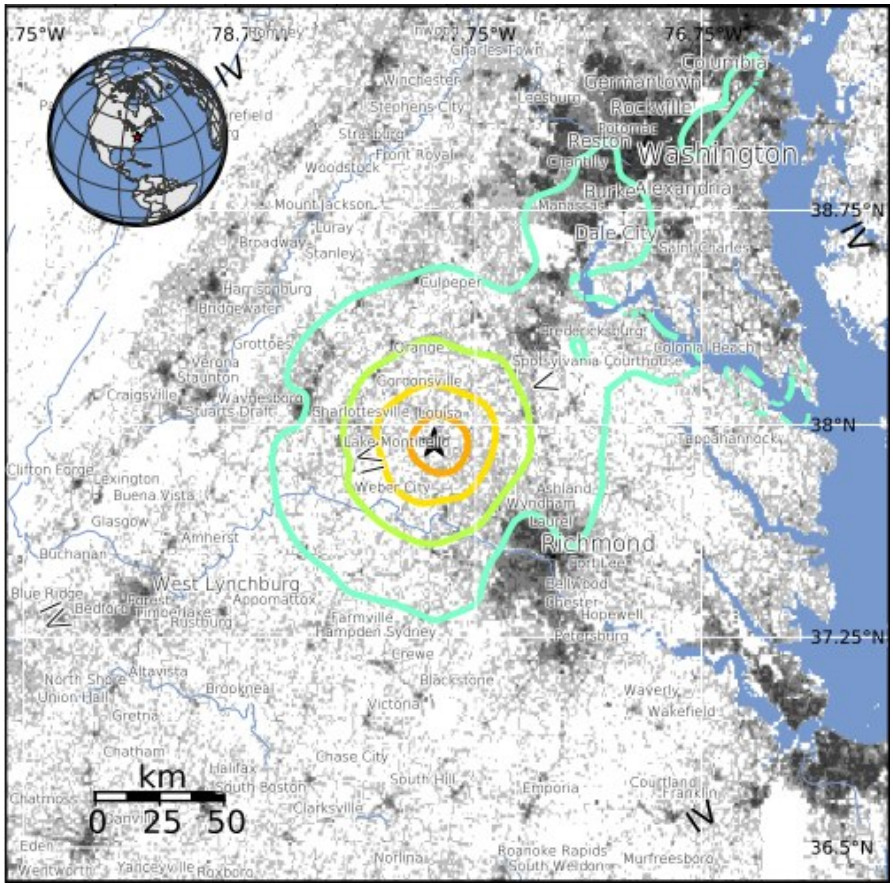
## Population Exposure

population per ~1 sq. km from Landscan



## Structures:

Overall, the population in this region resides in structures that are resistant to earthquake shaking,



though some vulnerable structures exist.

**Historical Earthquakes (with MMI levels):**

There were no earthquakes with significant population exposure to shaking within a 400 km radius of this event

**Selected City Exposure**

from GeoNames.org

MMI	City	Population
VII	Louisa	2k
VI	Gordonsville	2k
VI	Newington	21k
VI	Orange	4k
VI	Weber City	1k
VI	Lake Monticello	10k
V	Virginia Beach	425k
V	Washington	552k
IV	Richmond	191k
IV	Baltimore	611k
IV	Annapolis	36k

bold cities appear on map

(k = x1000)