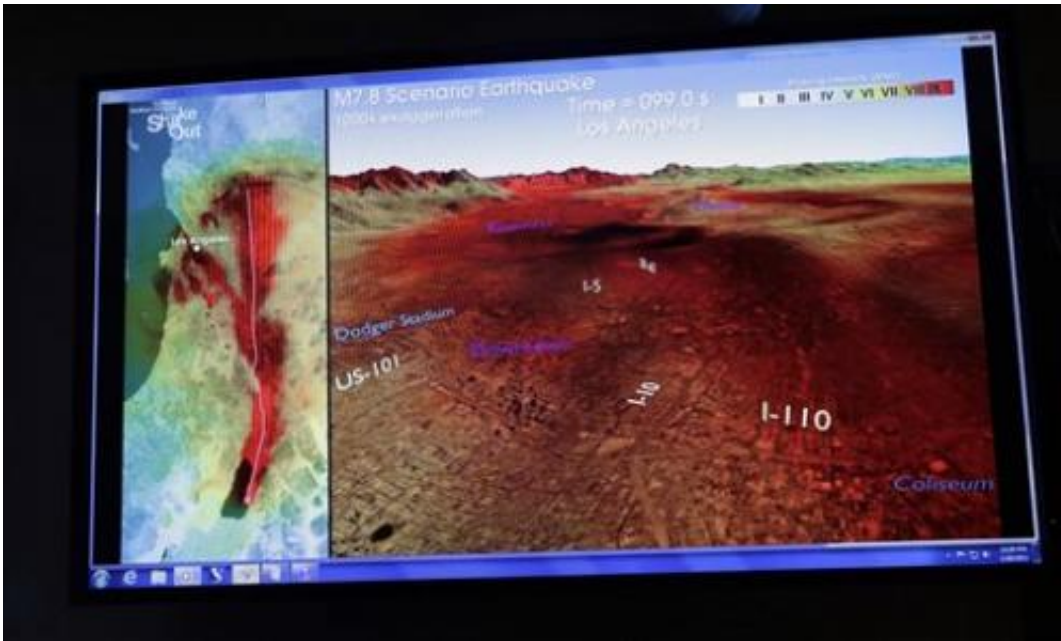


# Bill would create California quake warning system

September 13 2013, by Alicia Chang



In this Jan. 28, 2013, file photo, a computer-generated graphic that demonstrates an earthquake early warning system is displayed at a news conference at the California Institute of Technology Pasadena, Calif. Late Thursday, Sept. 12, 2013, the California Legislature sent Gov. Jerry Brown a bill that would require development of an earthquake early warning system. (AP Photo/Reed Saxon, File)

(AP)—California could join Japan, Mexico and other earthquake-prone countries that alert residents to the approach of powerful shaking under a bill awaiting approval from the governor.

The state Legislature advanced the bill that would create a quake warning system during Thursday's last hours of its session. Gov. Jerry Brown has until Oct. 13 to decide.

The U.S. lags behind other nations in developing a public alert system, which provides several seconds of warning after a fault ruptures—enough time for trains to brake, utilities to shut off gas lines or people to dive under a table until the shaking stops.

For the past several years, the U.S. Geological Survey and universities have tested a prototype that fires off messages to about two dozen groups in the state, mostly scientists and first responders.

The biggest challenge is finding steady funding to support and maintain a statewide network. The bill does not address where funding to create the alert system would come from, but it can't be built using general fund revenues. State emergency managers would have until 2016 to hash out the funding, estimated at \$80 million for the first five years of operation.

Seismic early warning systems are designed to detect the first shock waves from a large jolt, calculate the strength and alert people before the slower but damaging waves spread.

The systems can't predict quakes and are most useful during big events where it would be meaningful to warn people far away to expect strong shaking, scientists said. If the San Andreas Fault suddenly broke, people living close to the epicenter won't receive any warning. But those living farther away would receive notice.

During the 2011 Japanese disaster, millions of people received 5 to 40 seconds of warning depending on how far they were from the epicenter. The notices were sent to cellphones and broadcast over airwaves.

"This is doable" in California, said USGS seismologist Doug Given, who heads the testing.

So far, scientists have spent about \$15 million since 2002 developing the test system.

Before launching a quake alert system, scientists would need to upgrade old monitoring stations and add an extra 440 seismic sensors in vulnerable regions such as the northern tip of the San Andreas near San Francisco and the San Jacinto Fault in Southern California.

Sen. Alex Padilla, the bill's sponsor, said the warning system could be developed using federal grants, partnerships with the private sector or surcharges levied by the state.

Brown spokesman Jim Evans declined to say whether the governor would support the bill.

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