SENATE BILL No. 135

Introduced by Senator Padilla

January 28, 2013

An act to add Section 8587.8 to the Government Code, relating to earthquake safety.

LEGISLATIVE COUNSEL'S DIGEST

SB 135, as introduced, Padilla. Earthquake early warning system.

There is in state government, pursuant to the Governor's Reorganization Plan No. 2, operative July 1, 2013, the Office of Emergency Services. Existing law requires the office to develop and distribute an educational pamphlet for use by kindergarten, any of grades 1 to 12, inclusive, and community college personnel to identify and mitigate the risks posed by nonstructural earthquake hazards.

This bill would require the office, in collaboration with various entities, including the United States Geological Survey, to develop a comprehensive statewide earthquake early warning system in California.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares the following:

(a) According to the United States Geological Survey, California is one of the most seismically active states, second only to Alaska.

(b) California has experienced dozens of disastrous earthquakes, which have caused loss of life, injury, and economic loss. Some of the most significant earthquakes in California's history include:

(1) The 1906 San Francisco earthquake, which, at a magnitude of 7.8, resulted in an estimated 3,000 deaths and over $500 million in property losses.

(2) The 1971 San Fernando earthquake, which, at a magnitude of 6.7, resulted in at least 65 deaths and caused property damage of over $500 million.

(3) The 1989 Loma Prieta earthquake, which, at a magnitude of 6.9, rocked the bay area and caused 63 fatalities and over $6 billion in property damage.

(4) The 1994 Northridge earthquake, which, at a magnitude of 6.7, claimed the lives of 60 people and caused estimated property damage of between $13 and $32 billion.

(c) About 90 percent of the world's earthquakes and over 80 percent of the world's largest earthquakes occur along the Circum-Pacific Belt, also known as the Pacific Ring of Fire. The Pacific Ring of Fire includes the very active San Andreas Fault Zone in California.

(d) The Uniform California Earthquake Rupture Forecast (UCERF) released in 2008 predicted a 99.7 percent likelihood of a magnitude 6.7 or larger earthquake in California in the next 30 years.

(e) A 2013 study published by the Caltech and the Japan Agency for Marine-Earth Science and Technology discovered that a statewide California earthquake involving both the Los Angeles and San Francisco metropolitan areas may be possible.

(f) Japan, Taiwan, Mexico, Turkey, Romania, Italy, and China either have or are working on earthquake early warning systems that are capable of saving lives and helping to mitigate loss.

(g) The Office of Emergency Services, Caltech, California Geological Survey, University of California at Berkeley, United States Geological Survey, and others have been conducting earthquake early warning research and development in California. They operate the California Integrated Seismic Network, which has a demonstration earthquake early warning capability.

(h) By building upon the California Integrated Seismic Network and processing data from an array of sensors throughout the state, a fully developed earthquake early warning system would effectively detect some strength and progression of earthquakes and alert the public within seconds, sometimes up to 60 seconds, before potentially damaging ground shaking is felt.

(i) An earthquake early warning system should disseminate earthquake information in support of public safety, emergency response, and loss mitigation.

SEC. 2. Section 8587.8 is added to the Government Code, to read:

8587.8. The Office of Emergency Services, in collaboration with the California Institute of Technology (Caltech), the California Geological Survey, the University of California Berkeley, the United States Geological Survey, and others, shall develop a comprehensive statewide earthquake early warning system in California.

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