

AMENDED IN ASSEMBLY SEPTEMBER 11, 2013

AMENDED IN ASSEMBLY SEPTEMBER 6, 2013

AMENDED IN ASSEMBLY SEPTEMBER 3, 2013

AMENDED IN ASSEMBLY AUGUST 14, 2013

AMENDED IN SENATE MAY 24, 2013

AMENDED IN SENATE APRIL 2, 2013

**SENATE BILL**

**No. 135**

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**Introduced by Senator Padilla**

**(Coauthors: Senators Hancock, Hill, Lieu, and Liu)**

(Coauthors: Assembly Members Bloom, Blumenfield, Cooley, Gordon,  
Jones-Sawyer, Mullin, and Skinner)

January 28, 2013

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

LEGISLATIVE COUNSEL'S DIGEST

SB 135, as amended, 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

through a public-private partnership and would require the system to include certain features, including the installation of field sensors. The bill would require the office to develop an approval mechanism, as provided, to review compliance with earthquake early warning standards as they are developed. The bill would require the office to identify funding sources ~~and for the system. The bill~~ would prohibit the office from identifying ~~as a funding source, or expending, any state funds the General Fund as a funding source~~ to establish the system, *beyond those components or programs that are currently funded*. The bill would make these provisions contingent upon the office identifying funding sources for the system, as provided. If no funding sources are identified by January 1, 2016, the bill would repeal these provisions.

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

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

1 SECTION 1. (a) The Legislature finds and declares all of the  
2 following:  
3 (1) According to the United States Geological Survey, California  
4 is one of the most seismically active states, second only to Alaska.  
5 (2) California has experienced dozens of disastrous earthquakes,  
6 which have caused loss of life, injury, and economic loss. Some  
7 of the most significant earthquakes in California's history include:  
8 (A) The 1906 San Francisco earthquake, which, at a magnitude  
9 of 7.8, resulted in an estimated 3,000 deaths and over \$500 million  
10 in property losses.  
11 (B) The 1971 San Fernando earthquake, which, at a magnitude  
12 of 6.7, resulted in at least 65 deaths and caused property damage  
13 of over \$500 million.  
14 (C) The 1989 Loma Prieta earthquake, which, at a magnitude  
15 of 6.9, caused 63 fatalities and over \$6 billion in property damage.  
16 (D) The 1994 Northridge earthquake, which, at a magnitude of  
17 6.7, claimed the lives of 60 people and caused estimated property  
18 damage of between \$13 and \$32 billion.  
19 (3) About 90 percent of the world's earthquakes and over 80  
20 percent of the world's largest earthquakes occur along the  
21 Circum-Pacific Belt, also known as the Pacific Ring of Fire. The  
22 Pacific Ring of Fire includes the very active San Andreas Fault  
23 Zone in California.

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

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

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

13 (7) The Office of Emergency Services, Caltech, California  
14 Geological Survey, University of California, United States  
15 Geological Survey, and others have been conducting earthquake  
16 early warning research and development in California. They operate  
17 the California Integrated Seismic Network, which has a  
18 demonstration earthquake early warning capability.

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

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

28 (b) It is the intent of the Legislature that the establishment of  
29 an earthquake early warning system pursuant to this act shall not  
30 result in any undue burden upon the General Fund and that, to the  
31 maximum extent possible, the Office of Emergency Services shall  
32 seek other sources for funding the implementation of Section  
33 8587.8 of the Government Code.

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

36 8587.8. (a) The Office of Emergency Services, in collaboration  
37 with the California Institute of Technology (Caltech), the California  
38 Geological Survey, the University of California, the United States  
39 Geological Survey, the Alfred E. Alquist Seismic Safety  
40 Commission, and other stakeholders, shall develop a

1 comprehensive statewide earthquake early warning system in  
2 California through a public-private partnership, which shall include,  
3 but not be limited to, the following features:

- 4 (1) Installation of field sensors.
- 5 (2) Improvement of field telemetry.
- 6 (3) Construction and testing of central processing and  
7 notification centers.
- 8 (4) Establishment of warning notification distribution paths to  
9 the public.
- 10 (5) Integration of earthquake early warning education with  
11 general earthquake preparedness efforts.

12 (b) In consultation with stakeholders, the Office of Emergency  
13 Services shall develop an approval mechanism to review  
14 compliance with earthquake early warning standards as they are  
15 developed. The development of the approval mechanism shall  
16 include input from a broad representation of earthquake early  
17 warning stakeholders. The approval mechanism shall accomplish  
18 all of the following:

- 19 (1) Ensure the standards are appropriate.
- 20 (2) Determine the degree to which the standards apply to  
21 providers and components of the system.
- 22 (3) Determine methods to ensure compliance with the standards.
- 23 (4) Determine requirements for participation in the system.

24 (c) The Office of Emergency Services shall identify funding  
25 for the system described in subdivision (a) through single or  
26 multiple sources of revenue that shall be limited to federal funds,  
27 funds from revenue bonds, local funds, and private grants. The  
28 Office of Emergency Services shall not identify *the General Fund*  
29 as a funding source ~~any state funds or expend state funds~~ for the  
30 purpose of establishing the system described in subdivision (a),  
31 *beyond the components or programs that are currently funded.*

32 (d) Subdivisions (a) and (b) shall not become operative until  
33 the Office of Emergency Services identifies funding pursuant to  
34 subdivision (c).

35 (e) (1) If funding is not identified pursuant to subdivision (c)  
36 by January 1, 2016, this section is repealed unless a later enacted  
37 statute, that is enacted before January 1, 2016, deletes or extends  
38 that date.

1 (2) The Office of Emergency Services shall file with the  
2 Secretary of State its determination that funding was not identified  
3 pursuant to subdivision (c) by January 1, 2016.

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