

Date of Hearing: April 25, 2018

ASSEMBLY COMMITTEE ON LOCAL GOVERNMENT

Cecilia Aguiar-Curry, Chair

AB 2681 (Nazarian) – As Amended April 12, 2018

SUBJECT: Seismic safety: potentially vulnerable buildings.

SUMMARY: Requires each building department of a city or county to create an inventory of potentially seismically vulnerable buildings. Specifically, **this bill:**

- 1) Requires, on or before January 1, 2021, each building department to develop an inventory of potentially vulnerable buildings within its jurisdiction, based on the age of the building and other publicly available information, including, but not limited to, tax assessors' record surveys and online searches.
- 2) Requires, on or before January 1, 2021, each building department to notify all owners of any building identified as a potentially vulnerable building.
- 3) Requires, on or before January 1, 2022, an owner who has received a notification to submit a letter from a licensed professional engineer to the building department stating whether the building meets the definition of a potentially vulnerable building. If the letter states that the building does not meet the definition of a potentially vulnerable building according to the licensed professional engineer, then it will be removed from the inventory.
- 4) Requires, the Governor's Office of Emergency Services (Cal OES) to maintain a statewide inventory of potentially vulnerable buildings.
- 5) Requires, on or before June 1, 2022, each building department to provide Cal OES the inventory of buildings identified as potentially vulnerable buildings. Additionally, the building department shall notify Cal OES if a building on the inventory is seismically retrofitted or replaced and the office shall remove that building from the statewide inventory.
- 6) Requires, on or before January 1, 2021, Cal OES to develop a standard reporting form that addresses the expected seismic performance of the building in terms of safety, repair costs, and recovery time, when subjected to an earthquake consistent with the intensity prescribed in the most current edition of the California Building Code for new building design.
- 7) Requires, on or before June 1, 2022, each building department to provide the standard reporting form to the owner of any building that remains on the building department's list of potentially vulnerable buildings.
- 8) Requires, on or before January 1, 2025, the owner of a building identified by a building department as potentially vulnerable to retain a professional engineer to complete the standard reporting form and provide the completed standard reporting form to the building department. Requires this form be submitted to Cal OES on or before June 1, 2025.

- 9) Requires, on or before January 1, 2020, Cal OES to identify funding mechanisms to offset costs to building departments and building owners in compliance with this chapter. The funding shall be limited to federal funds, funds from the General Fund of the state, funds from the sale of revenue bonds, local funds, and private grants.
- 10) Provides that the enactment of the bill's provisions is contingent upon identification of funding pursuant to 9), above. Requires CalOES to report to the Secretary of State that the contingency has been met and to post notice on its website.
- 11) Provides immunity from liability for a city, county, employee of a city or county on the basis of any inventory, assessment, or evaluation performed, any ordinance adopted, or any other action taken pursuant to this bill, irrespective of whether that action complies with the terms of this chapter, or on the basis of failure to take any action authorized by this chapter.
- 12) Requires Cal OES to report annually to the Legislature on the compliance of building departments with the requirements of this bill. Requires the annual report to review and assess the effectiveness of building identification and evaluation standards adopted by these building departments.
- 13) Defines "Building Department" as the department, bureau, or officer of a city or county charged with the enforcement of laws or ordinances regulating the erection, construction, or alteration of buildings.
- 14) Defines "Potentially Vulnerable Building" as a building that meets the following:
 - a) The building is located in a region of the state with a peak ground acceleration equal to or exceeding 0.3g, as determined by the 2008 United States Geological Survey National Seismic Hazard Model gridded data, based on 10-percent-in-50-year probability of exceedance, or is located in the Counties of Monterey, San Diego, San Luis Obispo, or Santa Barbara; and,
 - b) The building has one or more of the design and construction characteristics defined in the bill.
- 15) Makes various other declarations and findings.
- 16) Provides that reimbursement to local agencies shall be made, should the commission on State Mandates determine that this act contains costs mandated by the state.

EXISTING LAW:

- 1) Defines "Potentially Hazardous Building" as any building constructed prior to the adoption of local building codes requiring earthquake resistant design of buildings and constructed of unreinforced masonry wall construction. "Potentially hazardous building" includes all buildings of this type, including, but not limited to, public and private schools, theaters, places of public assembly, apartment buildings, hotels, motels, fire stations, police stations, and buildings housing emergency services, equipment, or supplies, such as government buildings, disaster relief centers, communications facilities, hospitals, blood banks, pharmaceutical supply warehouses, plants, and retail outlets.

- 2) Defines “Local Building Department” as a department or agency of a city or county charged with the responsibility for the enforcement of local building codes.
- 3) Establishes a program within all cities, counties and portions located within seismic zone 4, as defined and illustrated in Chapter 2-23 of Part 2 of Title 24 of the California Administrative Code, to identify all potentially hazardous buildings and to establish a program for mitigation of identified potentially hazardous buildings.
- 4) Requires local building departments to do the following:
 - a) Identify and inventorying all potentially hazardous buildings on or before January 1, 1990. This identification shall include current building use and daily occupancy load;
 - b) Establish a mitigation program for potentially hazardous buildings to include notification to the legal owner that the building is considered to be one of a general type of structure that historically has exhibited little resistance to earthquake motion; and,
 - c) By January 1, 1990, all information regarding potentially hazardous buildings and all hazardous building mitigation programs shall be reported to the appropriate legislative body of a city or county and filed with the Seismic Safety Commission.
- 5) Establishes Cal OES by the Governor's Reorganization Plan No.2, operative July 1, 2013.
- 6) Requires Cal OES to perform a variety of duties with respect to specified emergency preparedness, mitigation, and response activities in the state, including emergency medical services.

FISCAL EFFECT: This bill is keyed fiscal and contains a state-mandated local program.

COMMENTS:

- 1) **Bill Summary.** This bill requires city and county building departments to submit to CalOES an inventory of buildings in their jurisdiction that are potentially vulnerable to seismic activity. CalOES must then maintain a statewide inventory of potentially vulnerable buildings, create a standard reporting form, prepare a report identifying possible funding mechanisms available to building departments and building owners in complying with these provisions, and report annually to the Legislature on the compliance of building departments. The owner of a building identified by a building department as potentially vulnerable must then get a licensed professional engineer to determine whether the building is potentially vulnerable, and if so, complete the standard reporting form. The enactment of the bill’s provisions is contingent upon identification of funding.

This bill requires Cal OES to identify funding to offset costs of the program prior to the law becoming operative. Once the funding source has been identified, CalOES will report to the Secretary of State that the contingency has been met and post notice on its website. This bill is sponsored by the Seismic Resilience Initiative.

- 2) **Author’s Statement.** According to the author, “The chronic labor and affordable housing shortages in most California cities already suffer would dramatically increase for years to come following a major seismic event. Protecting the state’s economy, affordable housing stock, and social fabric from the long-lasting turmoil of a large-scale earthquake is critical, and the failure to do so could impact Californians’ quality of life for decades. As the sixth largest economy in the world, the aftershocks of such an event in California would have national and even global impacts.

“While some cities have started identifying vulnerable buildings and implemented mandatory retrofits, large swaths of the state have not identified vulnerable buildings. An accurate statewide building vulnerability map is an essential first step in developing longer-term solutions to mitigate the effects of a large-scale earthquake and to protect our economy and limited affordable housing stock.

“AB 2681 doesn’t break new ground or implement an untried process, but simply extends an important law that identified unreinforced masonry buildings to other known vulnerable building types, and mirrors many local ordinances that have been adopted in cities statewide, which have already proven successful as test-beds for other communities.”

- 3) **Background.** California is a hotbed for earthquake activity. Ninety percent of the world's earthquakes and approximately eighty percent of the world's largest earthquakes occur along the Pacific Ring of Fire – a 25,000-mile horseshoe shaped area in the Pacific Ocean, which extends from the western coast of South and North America to Eastern Asia, Australia and New Zealand. The Pacific Ring of Fire includes the very active San Andreas Fault zone in California. More than 28 million Californians still live in areas of high seismic risk. While the state has some of the most modern and earthquake-resistant buildings in the world, it contains thousands of buildings that are known to present a heightened earthquake risk of death, injury, and damage based on their age, structural system, size, and location. According to the Seismic Safety Commission, most of the state’s older buildings could be damaged by severe shaking in a major earthquake, and a small percentage of them could partially or completely collapse. The most recent California ShakeOut study estimates that a major quake along the San Andreas Fault could cause more than \$200 billion in physical and economic damage, and could result in up to 1,800 or more deaths.

The Seismic Safety Commission’s 2017 report, “Guide to Identify & Manage Seismic Risks of Buildings for Local Governments,” states that the below buildings pose exceptionally high risks of collapse:

- a) Pre-1940’s Unreinforced Masonry (URM) - primarily brick buildings;
- b) Pre-1980’s concrete frame buildings;
- c) Pre-1980’s buildings with soft or open lower stories, unbraced crawl space walls below first floors, or irregular shapes, including those on steep hillsides; and,
- d) Pre-2000’s buildings with precast concrete tilt-up walls, and precast concrete parking structures.

- 4) **Unreinforced Masonry Building Law.** The Legislature passed the “URM Law,” SB 547, in 1986, which required 366 local governments in Seismic Zone 4 (highest danger) to inventory their potentially hazardous URM buildings, establish loss reduction/remediation programs within four years, and report progress to the California Seismic Safety Commission. Seismic Zone 4 includes the major metropolitan areas of San Francisco, Los Angeles, and San Diego, and includes nearly 75% of the state's population. Each local government was allowed to tailor the program to its own specifications. This bill takes a similar approach to the URM Law, but expands the seismic jurisdiction and vulnerable buildings it seeks to inventory.
- 5) **Potentially Vulnerable Buildings.** This bill captures buildings for inventory based on location, the year the building was erected in relation to the building codes in place at that time, and the type of structural system used in its construction:
 - a) **Building Codes.** Buildings that were approved by a city or county pursuant to the 1976 or earlier edition of the Uniform Building Code and buildings approved by a city or county pursuant to the 1995 or earlier edition of the California Building Codes, contains one of the structural systems below;
 - b) **Structural System.** Steel frame buildings with moment frame connections, soft, weak, or open front walls at the ground floor level of light framed buildings, concrete or masonry buildings with flexible diaphragms, and buildings with precast, pre-stressed, or post-tensioned concrete;
 - c) **Location.** Buildings must also be located in a region mapped out by the 2008 United States Geological Survey National Seismic Hazard Model. *Counties fully covered by the map:* Del Norte, Humboldt, Mendocino, Lake, Sonoma, Napa, Marin, Solano, Sonoma, San Francisco, Contra Costa, Alameda, San Mateo, Santa Clara, San Benito, Monterey, Santa Cruz, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego. *Counties with partial coverage:* Alpine, El Dorado, Fresno, Imperial, Inyo, Kern, Kings, Lassen, Merced, Mono, Nevada, Placer, Plumas, Riverside, San Bernardino, San Joaquin, Shasta, Sierra, Siskiyou, Stanislaus, and Trinity. *Counties with little to no coverage:* Amador, Butte, Calaveras, Glenn, Modoc, Madera, Mariposa, Sacramento, Sutter, Tehama, Tulare, Tuolumne, and Yuba).

This bill specifically exempts buildings designed and constructed for use exclusively as a dwelling by four or fewer families, hospitals, schools, buildings owned by the state or federal government, and buildings generally not intended for occupancy by humans.

- 6) **Policy Considerations.** The committee may wish to consider the following:
 - a) **Cities with Existing Seismic Ordinances.** The cities of Alameda, Berkeley, Beverly Hills, Burbank, Fremont, Long Beach, Los Angeles, Oakland, San Francisco, Santa Monica, and West Hollywood have already adopted a seismic ordinance, requiring the evaluation and retrofitting of specific building types proven to be vulnerable to seismic events. These ordinances outline minimum requirements for mandatory evaluation and structural improvements intended to reduce earthquake-induced damage to classes of buildings identified to be particularly vulnerable to earthquake damage.

In Los Angeles, for example, for soft-first story buildings built before 1980, building owners will have one year to submit to the City documentation establishing that an acceptable retrofit has already been conducted or that a retrofit is required, and an additional year to acquire necessary permits. Property owners will have seven years total to retrofit their buildings upon receipt of notice. For non-ductile reinforced concrete, building owners will have three years to submit documentation to the City to begin the inspection process, and 10 years to establish whether an acceptable retrofit has already been conducted or that a retrofit is required. Property owners would have 25 years total to complete the retrofit work, inclusive of the first 13.

Given that ordinances for seismic retrofitting already exist at the local level, the Committee may wish to consider whether these cities should be exempted from the language in this bill.

- 7) **Previous Legislation.** AB 1346 (Gray) of the 2015-2016 legislative session, would have discontinued the requirement that the funding sources for the system exclude the General Fund and be limited to federal funds, funds from revenue bonds, local funds, and funds from private sources. This bill died in the Senate.

SB 494 (Hill), Chapter 799, Statutes of 2015, created the California Earthquake Safety Fund to be used for seismic safety and earthquake-related programs, including the earthquake early warning system and required the identification of funding of the earthquake early warning system to occur by July 1, 2016.

SB 31 (Padilla), Chapter 342, Statutes of 2013, required OES, in collaboration with various entities, to develop a comprehensive statewide earthquake early warning system in California.

AB 928 (Blakeslee) of the 2009-2010 legislative session, would have required the High-Speed Rail Authority to develop an earthquake early warning system and coordinate development of that system with various state agencies. The bill was held in the Assembly Committee on Governmental Organization.

SB 547 (Alquist), Chapter 250, Statutes of 1986, enacted the “URM Law”, which required 366 local governments in Seismic Zone 4 (highest danger) to inventory their potentially hazardous URM buildings, established loss reduction/remediation programs within four years, and reported progress to the California Seismic Safety Commission.

- 8) **Arguments in Support.** The State Building and Construction Trades Council, in support, writes, “Recent natural disasters, such as last year’s devastating earthquakes in Mexico City, have highlighted the necessity of preparing adequately for volatile seismic activity. This necessity has also been tragically emphasized several times in our state’s history. The Northridge earthquake of 1994 resulted in 57 deaths, and with damages estimated as high as \$50 billion, is one of the costliest natural disasters in U.S. history. A harrowing new study from the U.S. Geological Survey warns that there is a 60 percent chance that another earthquake of this magnitude or larger will hit the Los Angeles area within the next 30 years. In order for the state to reduce the damages of an event such as this, it is essential that there is

an accurate and reliable database of all potentially vulnerable buildings in California so that steps can be taken to seismically retrofit them. AB 2681 will initiate this process by requiring the Office of Emergency Services to work with cities and counties to amass and maintain this database.”

- 9) **Arguments in Opposition.** The California Realtors Association, in opposition unless amended, writes, “C.A.R. will oppose AB 2681 unless it is amended to only apply to buildings with 16 units or more and provides sellers and brokers with the ability to inform buyers of “potentially vulnerable buildings” by delivering the Commercial Property Owner’s Guide to Earthquake Safety to them.
- 10) **Double-referral.** This bill was heard by the Governmental Organization Committee on April 18, 2018, and passed on a 12-3 vote.

REGISTERED SUPPORT / OPPOSITION:

Support

City of Los Angeles
Fair Housing Council Riverside
State Building and Construction Trades Council
United States Green Building Council

Opposition

California Realtors Association (unless amended)

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