

L.A. mayor calls for mandatory earthquake retrofitting for thousands of buildings

Rong-Gong Lin II and Rosanna Xia, Los Angeles Times, 12-8-14

Los Angeles Mayor Eric Garcetti on Monday proposed the most ambitious seismic safety regulations in California history that would require owners to retrofit thousands of building most at risk of collapse during a major earthquake.

Garcetti's recommendations target two of the riskiest types of buildings in Los Angeles built before 1980: concrete buildings and wooden structures built atop weak first floors, such as those on top of carports and garages and supported by slender columns.

Thousands live and work in these buildings every day, and seismic officials have warned of hundreds of deaths across Southern California if nothing is done to strengthen these buildings before a large earthquake hits again.

The mayor's plan calls for thousands of wood buildings to be retrofitted within five years, and hundreds of concrete buildings to be strengthened within 30.

No other city in California has gone as far as proposing mandatory retrofits for concrete buildings, which can cost from the tens of thousands of dollars to perhaps more than \$1 million for large office and residential buildings. The cost of retrofitting a modest wooden apartment building ranges from \$60,000 to \$130,000.

While the cost is high, the cost of doing nothing could hobble Los Angeles' economy for many years, Garcetti said. And a crippling of Los Angeles would have national consequences, damaging the home of the largest container and cargo port in the nation, according to a report released by the mayor and U.S. Geological Survey seismologist Lucy Jones, who has been acting as Garcetti's science advisor on this effort.

"The time for retrofit is now," the mayor said, adding that the retrofits target buildings "that are known killers."

"Complacency risks lives," Garcetti said. "One thing we can't afford to do is wait."

The mayor's move follows a Times report last year that found, by the most conservative estimate, that as many as 50 of the more than 1,000 old concrete buildings in the city would collapse in a major earthquake, exposing thousands to injury or death. Concrete buildings have collapsed or have been severely damaged in past earthquakes, such as the Olive View hospital in Sylmar in 1971 and a Kaiser Permanente building in 1994. More than 130 people died when two concrete buildings collapsed in the 6.3 magnitude earthquake that struck Christchurch, New Zealand, in 2011.

As many as 8,000 people could be in commercial concrete buildings that suffer partial or total collapse if a 7.8 earthquake strikes the San Andreas fault in Southern California during office hours.

Los Angeles officials have known about the dangers of these buildings for decades, but concerns about costs killed earlier efforts in L.A. to identify and order property owners to retrofit their buildings. Many owners have said they shouldn't have to pay for expensive fixes on their own. Some organized owner groups have been lobbying City Hall that if a mandatory ordinance is approved, that owners can be helped

by low-interest loans, tax breaks or other incentives. Tenant advocates have expressed concern that they would shoulder the cost, even those on rent control, despite already living in a high-cost city.

The mayor offered some suggestions, such as business tax breaks for those who retrofit buildings; a five-year exemption from the city's business tax for firms that move into newly-retrofitted buildings; and helping owners of wooden buildings get access to private lenders. The mayor also suggested discussion on whether there needs to be any additional measures to protect low-income tenants.

Garcetti is also proposing ambitious plans to ensure firefighters won't be left helpless by ruptured water pipes emptying hydrants as fires burn through neighborhoods, as occurred during the 1994 Northridge earthquake. The mayor is calling for the creation of a backup water delivery system for firefighters, modeled after the network San Francisco built after the 1906 earthquake and restored on the orders of then-Mayor Dianne Feinstein just before the 1989 Loma Prieta earthquake.

The mayor is also seeking to beef up the city's communications network, so Angelenos won't be left without phone or Internet connections after a quake. Parts of Japan were paralyzed during its recent 9.0 earthquake and tsunami. One of Garcetti's proposals includes creating solar-powered wireless Internet access that can be used by residents during emergencies, located at places such as schools, parks and recreation centers.

Los Angeles was once a leader in seismic safety. In the 1980s, it was one of the first cities in California to require retrofitting of brick buildings, a vulnerability discovered after the devastating 1933 Long Beach earthquake. Out of about 8,000 buildings, all but three have been retrofitted or demolished after a 1981 law. In some cases, Los Angeles officials had to go to court and threaten to label a building as unsafe, barring anyone from being inside.

Seismic experts lauded the success of the law. As a result of the retrofitting, no one died from brick building damage in the 1994 Northridge earthquake.

Other recommendations in the report include a voluntary rating system for earthquake safety of buildings. A one-star building means a structure would probably cause loss of life; a five-star building would be considered excellent. Another suggestion is a law that would require a faster retrofit if a smaller earthquake damages a building.