

Earthquake risk identified in apartments, but not released to residents

Lisa M. Krieger, Bay Area News Group, 1-24-11

Eight years after a survey counted 2,630 earthquake-vulnerable "soft story" apartments in Santa Clara County, little progress has been made in publicly identifying, inspecting and fixing these buildings.

The pancake collapse of an apartment complex during the 1994 Northridge earthquake that killed 16 people exposed the dangers of buildings with weak first floors, called soft stories. The recent flurry of moderate earthquakes in the South Bay is a further reminder of the risk.

To identify the scope of Santa Clara County's problem, San Jose State engineers estimated that about 90,000 residents live in these apartments -- but their findings, published in 2003, have languished.

The exact addresses of these buildings have not been disclosed. "Density maps," showing general locations, have been released to city officials in Santa Clara County, but not residents.

Report author and SJSU engineering professor Guna Selvaduray said the survey was inspired by the Santa Clara County Emergency Managers' Association and partially funded by the Santa Clara County Emergency Preparedness Council -- but that his team's executive board feared they would be exposed to litigation if the list caused property values to fall.

Additionally, because the inventory is a field survey based on visual observations, rather than detailed structural engineering inspections, some of the buildings may have been retrofitted to be safe, he added.

Mitigating liability

As a result, little progress has been made. Although toughened building codes mean that newer structures tend to be safe, no city in Santa Clara County has an ordinance requiring retrofitting of older soft story buildings.

Even an educational risk-assessment brochure was stalled.

"The intent was to send it out to all of the property owners, but that too ran into a roadblock," Selvaduray said. "If you send it, that could imply they're at risk."

"There is very little scope for taking proactive steps," he said. "There is no means of motivating or convincing the owners to undertake retrofitting of their buildings. We sit here and churn out data and hope someone takes notice. Hopefully somebody else can make policy decisions. The ultimate purpose is to save lives."

The city of San Jose is beginning to negotiate with the SJSU team to gain access to the list while building in legal protections, said Chris Godley, director of emergency services at San Jose's Office of Emergency Services.

Joining with other Santa Clara County cities, San Jose also is participating in an informal subcommittee that meets once every two month to address the soft story problem as part of the county's upcoming Hazard Mitigation Plan.

"The city is interested in moving ahead. It is clearly the most immediate hazard we are now seeing," Godley said. Although the list is flawed, "it does give us a starting point."

Some other cities already have found ways to tackle the problem. Fremont, which straddles the Hayward Fault, has made the most progress by not only identifying buildings, but also mandating retrofits. However, Fremont had relatively few of these buildings.

The cities of Berkeley and Alameda have identified soft story buildings, released the lists to city residents, and now are discussing ways to make them safer. In Alameda, all tenants are notified when they sign a lease. Oakland has sent letters to 1,459 soft story building owners and soon will release its list of buildings to the public.

Seismic experts have been worried about soft story buildings for a long time. In the 1980s, building codes were toughened to require greater support on all new construction. So the big concern now is the safety of apartments built before 1980.

These buildings tend to house people with fewer resources than homeowners -- and thus are most likely to need emergency shelter for the longest period of time. Knowing their locations also helps firefighters, who can rush to the sites after a disaster.

The problem goes beyond just identifying risky buildings, said some experts.

"To get an engineer, submit a report, get a permit, hire a contractor -- it is very expensive, both in money and time. If there are gold-plated standards, it could cost tens or hundreds of thousands of dollars," said Eric Weigers of the California Apartment Association.

Unanswered questions

In San Jose, director of planning Joe Horwedel said he worries that landlords "may not be able to justify the rents to pay the costs." And if they retrofit, "where do we move people to, while the work is done? Do we have enough housing capacity?"

"It's easy to just drive around and look for anything with spider legs -- but what do we do when we find them?" asked Horwedel. "It needs to get done. But nobody has come up with a good way."

But releasing a list is an important first step, said Danielle Hutchings, Earthquake and Hazards Program Coordinator of the Association of Bay Area Governments.

"Addresses are important because the buildings themselves need to be retrofitted," she said. "It's been a very long time. Tenants deserve to know they live in risk."