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**OPINION // OPEN FORUM**

# California mastered earthquake safety. Will it do the same for wildfires?

By **Joseph Wartman**, Contributor

Nov 5, 2025



Firefighters defend a home against the Palisades Fire in the Mandeville Canyon area of Los Angeles on Jan. 11. The January wildfires are a wake-up call for the state.

Stephen Lam/S.F. Chronicle



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When my students at the University of Washington ask me where the safest place to be during an earthquake is, they expect me to say “under a desk” or “in a doorway.” Instead, I tell them California — and I mean it.

California’s half-century campaign against earthquakes is a story of sustained effort that has made the state an international leader in seismic safety. Buildings flex instead of crumble. Water systems have redundant connections. Children regularly practice “Drop, Cover, Hold On” in school.

But in January, as the Palisades and Eaton fires tore through Los Angeles County, many of those earthquake-resistant buildings were reduced to ashes. While California worked to enhance its seismic resilience — investments that will prove invaluable when the next major earthquake strikes — climate change was redrawing the state’s hazard map with a growing wildfire threat.

California’s earthquake preparedness achievements were born from disaster. The 1971 San Fernando earthquake in Los Angeles County was a wake-up call, demonstrating that existing seismic standards were insufficient when modern structures like Olive View Hospital collapsed. In response, California created the Seismic Safety Commission in 1975, enacted legislation regulating construction on active faults and mandated sweeping building retrofits.

Spurred by later quakes, the Bay Area invested an estimated \$80 billion in structural upgrades, largely funded by voter-approved bonds. While the work is

not finished, California has built the essential policy framework, funding mechanisms and public commitment to reduce its seismic risk. This success stemmed from bold, visionary political leadership committed to long-term safety over short-term costs. Plain-language seismic resilience objectives helped the public understand what they were voting for.

January's fires, however, laid bare the gap between that readiness and the state's wildfire response. A comprehensive after-action review released in September reveals a system marked by some of the same vulnerabilities California addressed for earthquakes decades ago.

The governance gap is foundational. For earthquakes, California created permanent oversight bodies like the Seismic Safety Commission to set policy and coordinate standards. For wildfires, the after-action review reveals fragmented authority, conflicting policies on evacuations and poorly defined roles for issuing alerts. Resource shortages compound the problem. Los Angeles County's Office of Emergency Management operates with just 37 staff for 10 million people, while the sheriff's department entered the crisis with more than 900 deputy vacancies — gaps that hampered coordination.

The shortfalls extend beyond governance to the buildings themselves. Following its seismic wake-up call, the state strengthened building codes and, crucially, required retrofits of thousands of older, non-ductile concrete buildings, often with financial assistance. For wildfires, no comparable program exists. While California has strict wildfire building codes for new construction, 700,000 to 1.3 million homes were built in fire-prone areas before those codes were enacted — a monumental legacy vulnerability that remains unaddressed. Moreover, wildfire mitigation differs from seismic retrofits in a critical way. A single fire-hardened home surrounded by vulnerable structures offers limited protection —

embers and radiant heat from neighboring burning homes can ignite even retrofitted properties, making community-wide action essential.

Beyond policy and infrastructure, the most profound gap may be cultural. Generations of Californians grew up practicing “Drop, Cover, Hold On,” creating a deep-seated instinct for preparedness and response. The state invested in advanced technology like ShakeAlert, giving residents precious seconds of warning before seismic waves arrive.

By contrast, many residents in January did not understand the difference between a routine “Red Flag Warning” and the rare “Particularly Dangerous Situation” alert. The after-action review calls for basic tools that should already exist, like unified situational awareness systems — revealing how wildfire preparedness lags behind the sophisticated early-warning systems in place for earthquakes.

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## About Opinion

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Creating permanent oversight bodies, mandating retrofits and building a culture of preparedness requires substantial and sustained funding — but seismic safety did, too. And the financial case for proactive investment is clear: For every dollar spent on seismic retrofits, studies have repeatedly shown savings of at least \$4 in future losses. For some homes, that return on investment can be as high as 16 to

1. Failing to make a similar investment in wildfire preparedness has already cost the state dearly, with losses from this January's fires estimated to exceed \$100 billion.

The urgency has only grown: California now faces accelerating wildfire risk and collapsing insurance markets — threats that were nowhere as severe as when it addressed earthquake safety. Mitigation requires confronting tough questions about where we build and sustain investment over decades. But California had those conversations about earthquake risk in the 1970s and chose to act. California's leaders now face the same choice they did 50 years ago: to accept catastrophic losses as inevitable or to take steps to prevent them. The state's earthquake history proves it can be done.

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Nov 5, 2025

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