Legal Action – Structural Engineer’s Perspective

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Legal Action - Owners

Many California municipalities have ordinances in place to reduce seismic hazards.

Most building departments have tight budgets and staff that are stretched to cover multiple priorities.

When owners willfully evade, delay, and avoid compliance, legal action may be justified.
Legal Action - Municipalities

Some municipalities have pushed forward seismic safety by passing ordinances to retrofit or reduce hazards in the most vulnerable building types (SF, LA, Berkeley, etc.)

Other municipalities have not yet addressed their most hazardous buildings.

Education, awareness, and potentially the threat of legal action could get more municipalities to take action.
Legal Action - Alternatives

While legal action has a place in calling attention to seismic hazards, there are other innovative approaches that are proving effective in bringing change.

- Past EQ case studies
- Mandatory evaluations instead of retrofits
- Seismic rating for insurance coverage
- Media engagement to spread awareness
- Owner education relating to legal risks
- Pro bono engineering evaluations
Past EQ Case Studies

Education of municipalities and policy makers of the risks of not addressing seismic hazards.

The Christchurch, NZ earthquake showed what can happen to a community that does not address seismic hazards with known dangerous buildings.
Mandatory Evaluations

Mandatory retrofit ordinances can be politically charged and lead to a long process of compromise that may result in watered-down seismic requirements.

By requiring evaluations of buildings and posting publically available reports, the pressure for retrofit can come from the building’s tenants instead of a local ordinance.

San Francisco has had good success with this approach for private schools.
Seismic Rating for Insurance

The US Resiliency Council and other entities have been pursuing adoption of a standard building seismic rating that can be used by insurance companies to compare relative risk in various buildings.

This approach has promise in that the insurance companies could require retrofits as a prerequisite of insurance coverage.
L.A. formally requests quake researchers' list of at-risk buildings

A professor says UC Berkeley is looking at the 'legal and ethical constraints' of releasing preliminary research data on the concrete structures.

October 24, 2013 | By Doug Smith, Rosanna Xia and Michael Finnegan

L.A. City Council Votes Unanimously in Favor of Earthquake Retrofit Requirements

Posted 11:24 AM, October 9, 2015, by Los Angeles Times and Karen Wynter, Updated at 07:26PM, October 9, 2015

Media Engagement

Media outlets can publicize the seismic hazards that are already known in the engineering community.

Recent media publication of a list of non-ductile concrete buildings in LA caused the implementation of a new retrofit program!
Owner Education

Recent legal decisions in California have increased the potential liability of building owners to retrofit their buildings to fix “known” seismic hazards.

Education of owners about this increased legal exposure could spur action in getting buildings retrofitted in a timely manner.
Pro Bono Evaluations

Low income owners have limited resources to increase seismic safety and may not elect to even understand their risk due to the cost of consulting engineering fees.

Pro bono engineering evaluations by the structural engineering community can allow low income owners to focus funds on the retrofit construction costs instead of fees.