



# **SB 311 Seismic Retrofit Property Tax Exemption**

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# Oregon Earthquake Risk

## CASCADIA MEGAQUAKE COUNTRY



About 70 miles off Oregon, the Juan de Fuca seafloor plate bends to form a trench, then sinks beneath the North American continent in a process called subduction.

Subduction zones like Cascadia store energy in areas of potential rupture along the continental margin. If an earthquake ruptures all 680 miles of the Cascadia fault from California to Vancouver Island, a magnitude [M] 9 earthquake will shake western Oregon and Washington for several minutes.

M9 Cascadia earthquakes have happened every 400 to 600 years, on average. Additional M8-8.6 earthquakes in the southern part of the zone increase the frequency there to about every 240 years. The most recent full rupture of the fault occurred in January 1700.

Crustal faults close to the ground surface also pose hazards. The M5.6 Scotts Mills earthquake in 1993 destroyed Molalla High School and damaged the State Capitol dome in Salem.



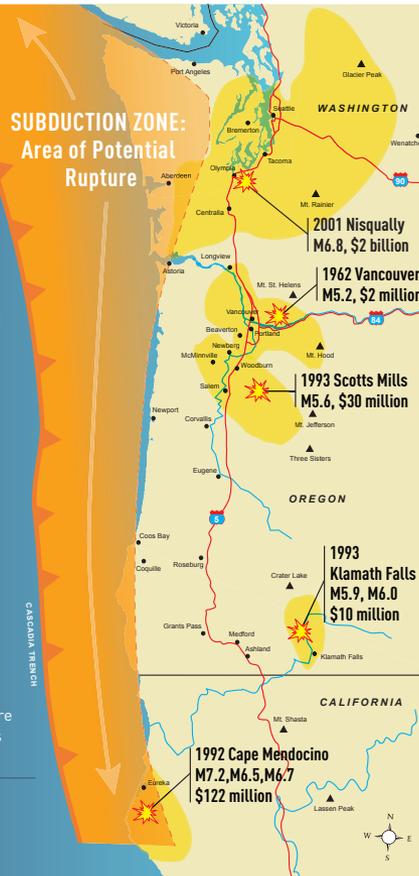
Mercy Corps • Oregon Red Cross • Portland Bureau of Emergency Management • U.S. Geological Survey

A damaging earthquake could strike western Oregon at any time.

The Cascadia Subduction Zone along Oregon's coast can generate earthquakes as powerful as any on earth. Forty-one great earthquakes have struck along this fault during the past 10,000 years.

Moderate earthquakes have damaged Portland twice in the past 50 years.

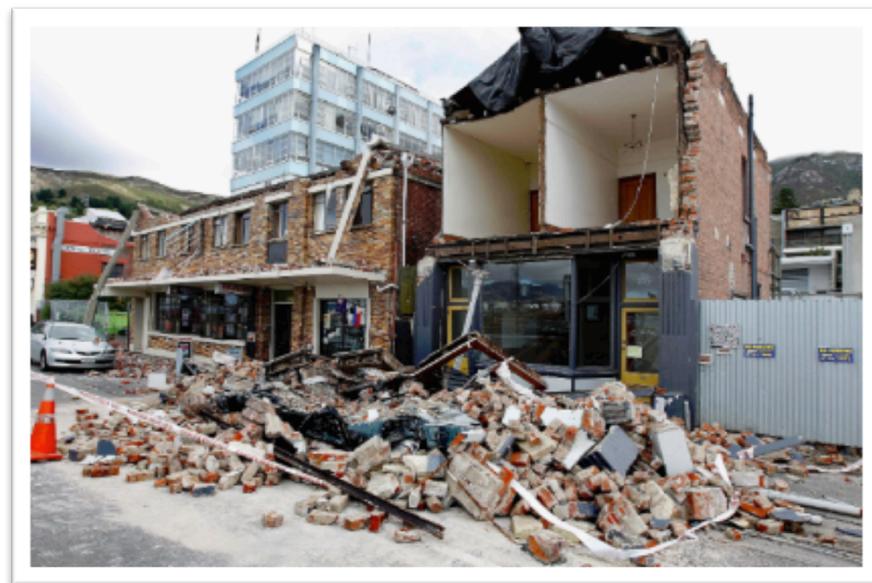
The shaking is inevitable. We can reduce the hazard by investing to strengthen buildings and infrastructure and preparing our families and ourselves.



- 22% chance of magnitude 9.0 earthquake in next 50 years.
- 37% chance in next 50 years for southern portion.
- Many other active faults across the state.

# Earthquake Damage: Buildings

- State Building Code did not address major seismic risks until 1993.
- Loss of life is overwhelming concern in older buildings.
- Widespread displacement of residents and businesses also cripple recovery.



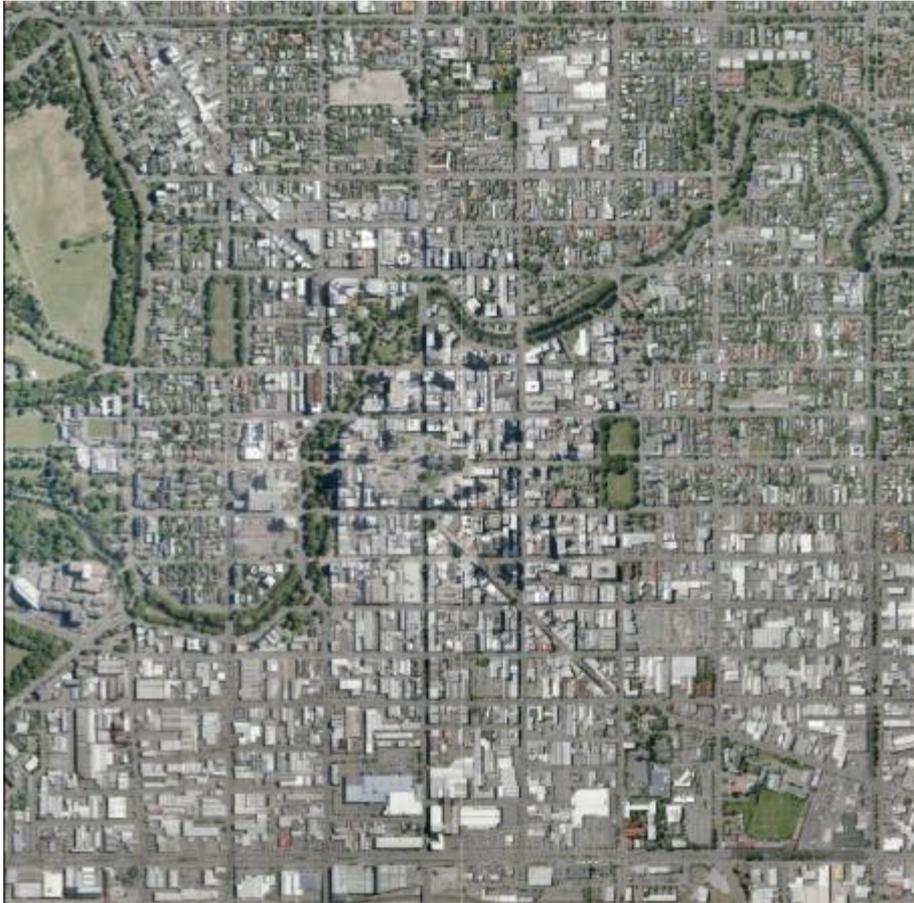
# Vulnerable Buildings



- Soft-story.
- Unreinforced masonry (URM).
- Non-ductile concrete.



# Christchurch – Before & After



# Retrofits Work



- Save lives and dollars.
- Costly (\$25–\$70/SF) to perform.
- Often hard to finance.

# SB 311 Eligible Costs & Standards

- Seismic retrofit plan must:
  - Be stamped by licensed engineer or architect.
  - Meet national standards, or locally established standards.
- Eligible costs: structural retrofitting, engineering, design.
- Ineligible costs: remodeling, relocation, abatement of hazardous materials.

# Example: Ace Hotel

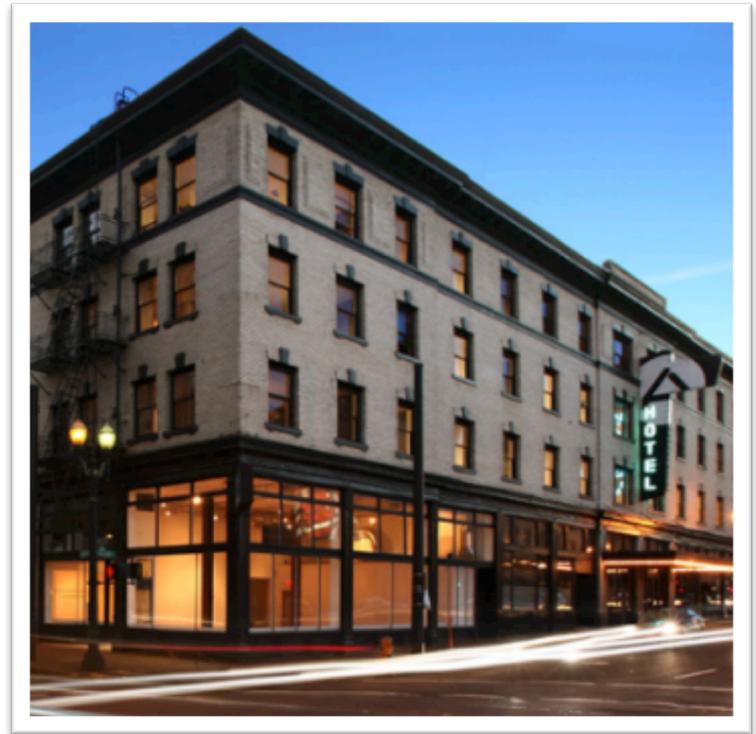
38,536 SF downtown hotel | constructed in 1912

Real market value \$18,541,730

2016 property taxes \$99,948  
\$16,441 for land - \$83,507 for improvements

Current value of 15-year  
limited exemption: \$1.1M

\$30/SF towards retrofit.



# Example: Lucretia Court

27,146 SF apartments | constructed in 1910

Real market value \$4,278,290

2016 property taxes \$35,543

\$5,263 land - \$30,280 improvements.

Current value of 15-year  
limited exemption: \$420,782

\$16/SF towards retrofit.



# Local Control & Accountability

- Accepted national standards for retrofit.
- Requirement to demonstrate progress.
- Requirement to complete project.
- Clawback provisions.
- Optional for cities and counties, with agreement from local jurisdictions representing 75% of property tax base.
- Local programs can be tailored to prioritize highest risk buildings.

# Thank You

