BEFORE OREGON HOUSE COMMITTEE ON EMERGENCY MANAGEMENT, GENERAL GOVERNMENT, AND VETRANS – HB 2581

30 January 2025

Chair Representative Thuy Tran
Vice-Chair Representative Dacia Graber
Vice-Chair Representative Rick Lewis
Members of the Committee

RE: HB 2581 Expands the Duties of the State Resilience Officer

This Bill seems too narrow in scope and non-responsive to known seismic risk, plus jeopardy from geoengineered environmental effects that are ongoing and worsening. This Bill cannot be supported as written, given gaps in preparedness discussed here.

Scope: Best science tells us the lack of small earthquakes in the Northwest is not a good sign for our near-term future, given a recently discovered 10,000-year history of very large ones that cause mass devastation. These pending events now threaten transportation infrastructure and transport fuel infrastructure laid well before these 2012 disclosures.

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Scope (Continued): It is beyond question that the cost of disaster recovery is at least 10x higher than the cost of prudent lifeline infrastructure investment when hazards can be known with certainty in advance. Huge costs to rebuild after the inevitable Cascadia M8 event are exorbitant and avoidable

- Earthquake mitigation cost savings are 12:1

For example significant investments have been committed to make infrastructure more durable against the Cascadia seismic natural hazard.

Example: Portland International Airport

Investments in Seismic Threat Management

North Runway ruggedization – currently underway

PDX Fuel Tank Total Rebuild – in 5 years

There are two geologic threats being considered:

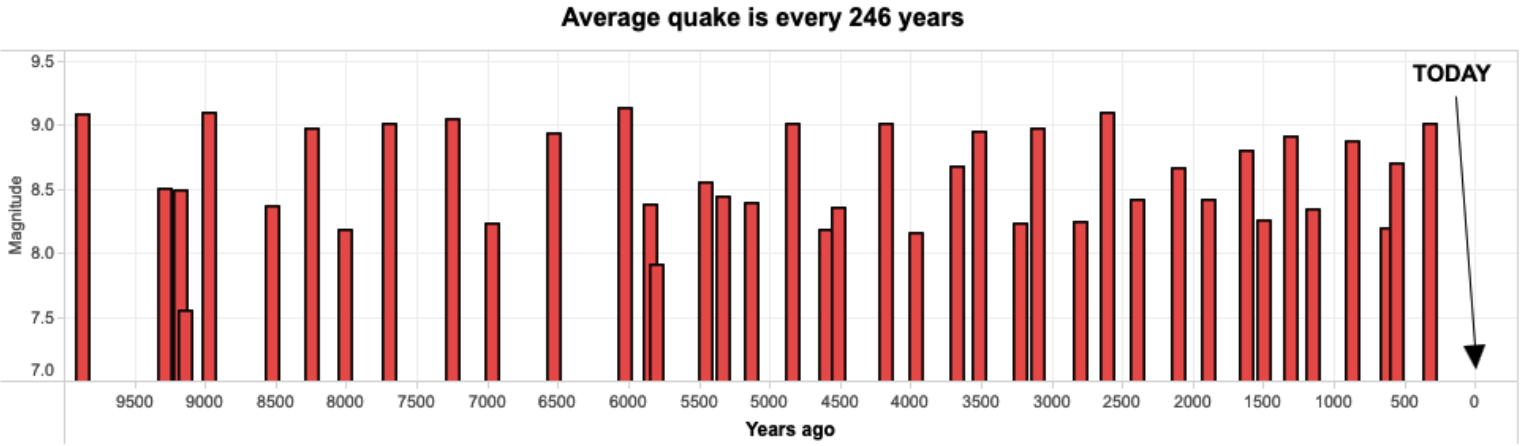
M9, includes M8 (We don't get M9 without M8)

M9 Events Only

Northwest history of M8 and M9 Events

10,000 years of Cascadia earthquakes

The chart shows all 40 major earthquakes in the Cascadia Subduction Zone that geologists estimate have occurred since 9845 B.C. Scientists estimated the magnitude and timing of each quake by examining soil samples at more than 50 undersea sites between Washington, Oregon and California.



Last event was 1700. Add average 246 = 1946, when chance was 50%.
https://projects.oregonlive.com/maps/earthquakes/timeline

How to dismiss near term risk: M9 Events Only

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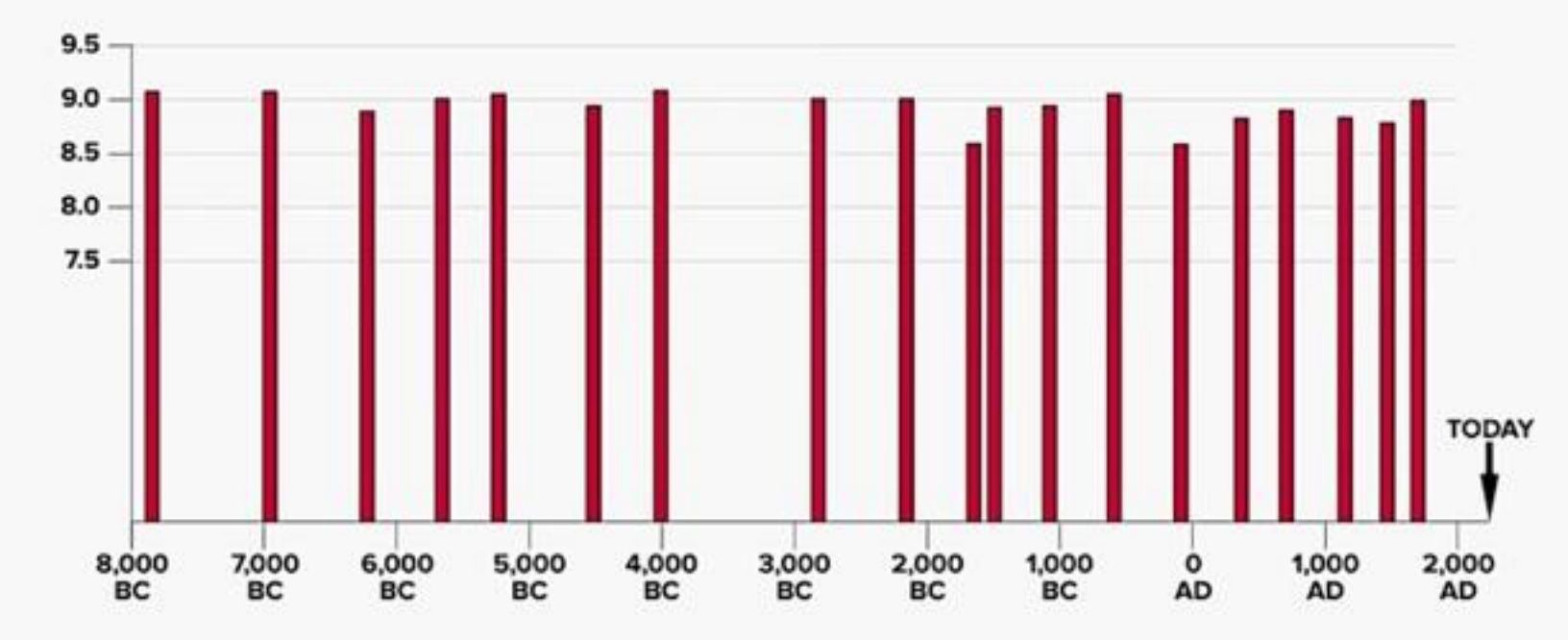

Screenshot 4 min 30 sec here:
https://www.youtube.com/watch?v=GP-vyAwiXCM

Says average interval 400 to 500 years.

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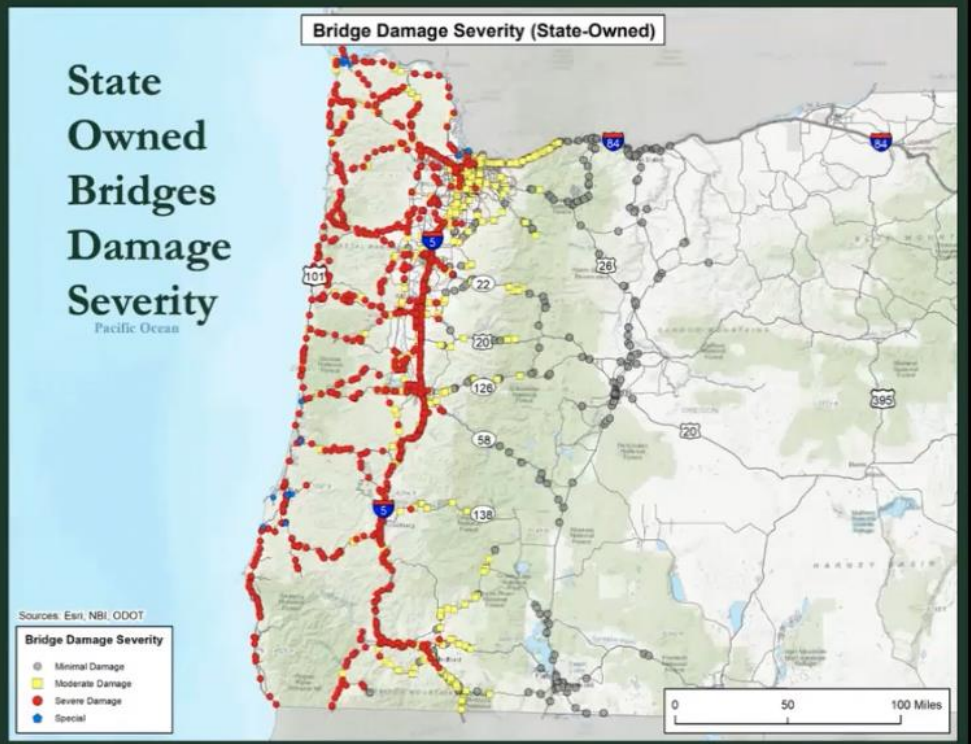
Bridge Seismic Analysis *(DHS, 2021)*

40% (2,276) - significant damage

27% (1,530) over 1 year to "reopen" for critical services *(much longer to repair for public use)*



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Seismic math probability of 37% for the pending Cascadia threat, as cited by the Oregon Seismic Safety Policy Advisory Commission (OSSPAC) is correct, because 37% is included in the known 50% chance, but that was over 70 years ago.

More responsive authority is urgently needed

Oregon State transport fuel logistics infrastructure is no less threatened. The single high pressure Washington State BP Olympic Pipeline laid in 1960 that supplies 90% of Oregon's liquid fuel demand is at least as vulnerable as the Portland CEI Hub, but no ruggedization projects are known today.

Puget Sound refineries, particularly the one located in Tacoma, are exposed to tsunami inundation following structural collapse from seismic induced liquefaction. Correspondence with Washington Commerce Department to discuss the stranding of Oregon's petro-fueled transport fleet is not going well. Washington's Fuel Infrastructure Regional Resilience Assessment Program (RRAP) does not seem to have been updated publicly in 2 years.

Washington Lifeline: Single 60-yr old pipeline

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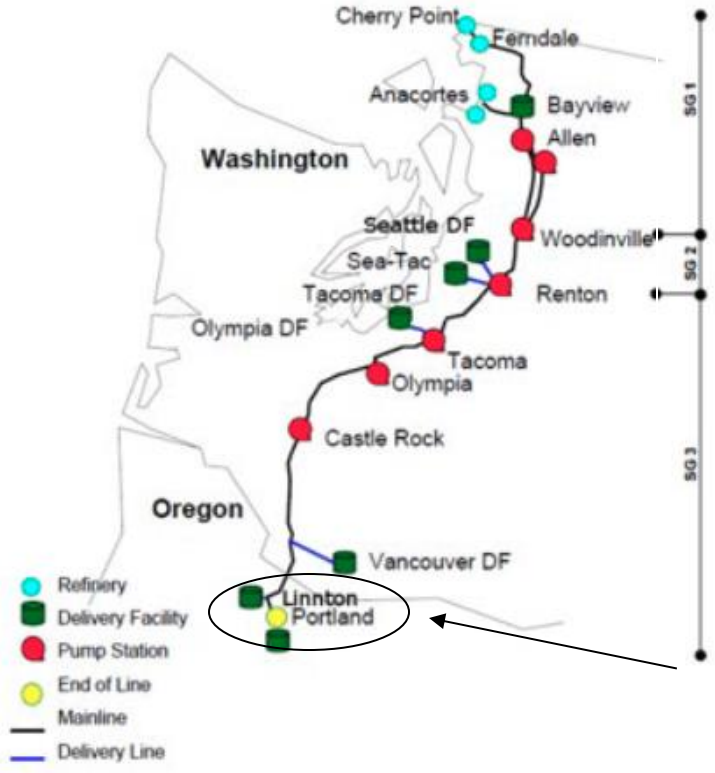
Transport fuel production and delivery from Washington Puget Sound refineries from a pressurized pipeline will not exist for a protracted period following the inevitable Cascadia disaster. Scarce fuel will be needed to fix itself.

Figure 2. Olympic Pipeline Map



[BP Operator Map]

Oregon's Multnomah County CEI Hub

[Multnomah County CEI Hub Report]

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Oregon's Responsive Action

Beyond natural events, we now know that since before 1970 the carbon fuel industry intentionally altered Earth's environment for reasons justified at the time: national defense mobility and interstate and international transport-dependent commerce. The consequence today is a geoengineered environment that no one wants. Those with genuine doubts need only consult insurers and reinsurers, climate refugees, shuttered businesses, suddenly homeless displaced families.

Advanced Clean Fuel trucks added to Oregon's growing Electric Vehicle fleet constitute a geoengineering solution to a geoengineered crisis. For example, the Rivian fleet employed by Amazon.

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Given the fact finding offered in this narrative. Oregon Resilience must be expanded well beyond current Emergency Preparedness to include,

1. Coordination with DHS Cyber and Infrastructure Security Agency to solve Washington's glaring fuel infrastructure vulnerabilities that leave our Oregon transportation-dependent economy at serious risk of near-term stranding.
2. Program an early transition from dependency on liquid fuel logistics infrastructure to the more robust and durable electricity grid for State transportation. If Portland's CEI Hub were made seismically robust today, Cascadia will still strand the Oregon economy due to Washingtons precarious refinery fuel distribution for far too long in the future.

Respectfully,
Tracy Farwell, Sustainability Desk
Better Energy LLC