Co-Chair Senator Chris Gorsek Co-Chair Representative Susan McLain\* Co-Vice Chair Senator Bruce Starr Co-Vice Chair Representative Shelly Boshart Davis Senator Susan Weber\* Members of the Committee



10 June 2025

\*District includes Washington County

Total Support for HB 2025, with amendments. \$M solution to \$B problem.

# **Oregon Transportation Insecurity from Fuel Loss – Cascadia megaquake return is inevitable; not acknowledged in proposed bill**

It would not hurt to consider Oregon transportation insecurity in Reinvestment. Washington County and CD1 look to be "islanded" for fuel on Day 1

- Rail crossings to Washington County cannot survive
- CEI Hub compromised, Puget Sound refineries/pipeline offline for a year The proposed Chief Engineer will inherit transportation infrastructure that is not survivable, considering both transport fuel and road/highway infrastructure



Total Support for HB 2025, with amendments

10 June 2025

If Oregon had an Energy Transition Plan to end dependency on threatened and nonsurvivable commodity fuel energy infrastructure, HB 2025 would prioritize projects that would assure Washington County and CD1 fuel security:

- 1. Commodity fuel infrastructure investment
- Willamette heavy duty rail crossings
   NOTE Burnside Bridge and Tilikum Crossing are light rail tracks
- 3. Expanded capacity from power transmission lines delivering more secure alternative energy

This bill must establish an upper bound for Cascadia risk of infrastructure loss

- A. OSSPAC math does not acknowledge the Cascadia risk was 50% in 1946.
- B. No plan to reconsider their current too low 37% risk estimate.
- C. Over 80% of historic recurrence intervals have been exceeded since last event in 1700



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## BNSF Railway Bridge 5.1



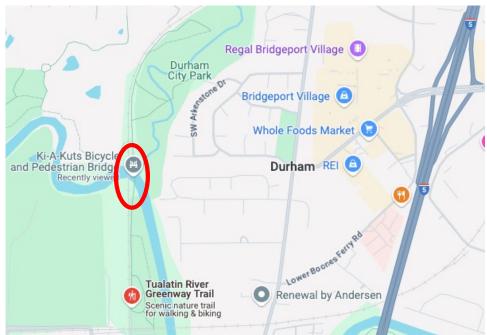
Silver spans - 1908 Weathered rust - 1989 Cascadia threat discovered 2010 No plan to upgrade or replace



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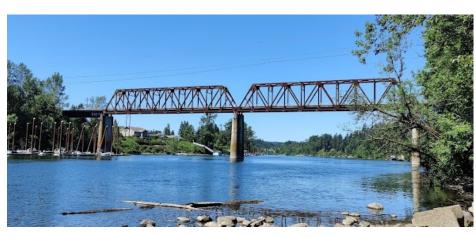
# Tualatin Railroad Bridge – Milepost 35.3



Prior to 1968
Garden Home to Wilsonville Bridge
Tualatin River
Cascadia threat discovered 2010
No plan to upgrade or replace



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## Willamette Rail Bridge - Wilsonville



#### 1975

Portland and Western Railroad Cascadia threat discovered 2010 No plan to upgrade or replace



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## Oak Grove – Lake Oswego Railroad Bridge



#### 1910

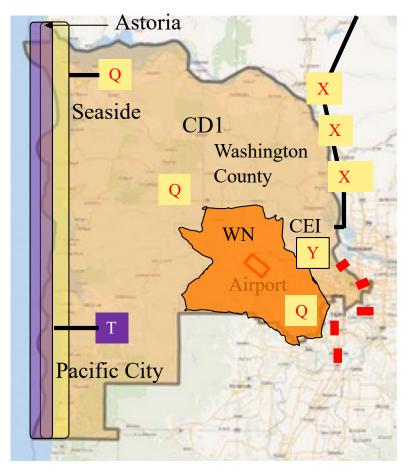
Portland and Western Railroad Cascadia threat discovered 2010 No plan to upgrade or replace

No one is arguing that Washington County is not THE most threatened in Oregon for fuel insecurity. Population 598,000



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## First Congressional District on Seismic Day Zero – and all at the same time



 Failed rail bridges preclude fuel delivery
 X Olympic Pipeline failure Strands Oregon
 Y CEI Hub collapse Ends tanker truck logistics to CD1

Q Quake collapse

Closes Columbia at Astoria Bridge Damages coastal infrastructure Extensive coastal road/bridge loss Extensive utility damage Damages Wash Co infrastructure Damages bridges, maybe utilities

T Tsunami

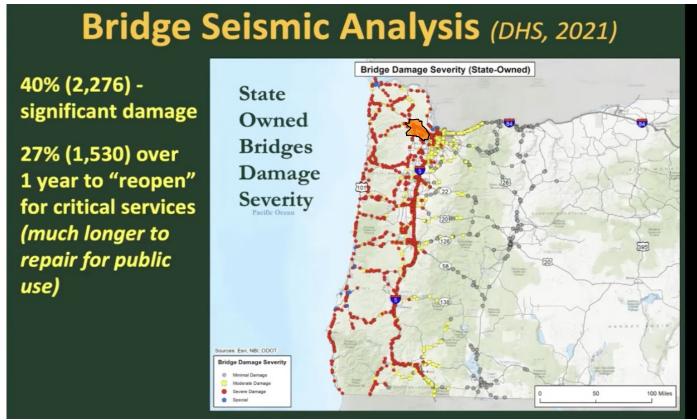
Re-damages coastal infrastructure More coastal road/bridge loss More utility loss



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DHS CISA has predicted the coastal conditions and consequences for Washington County highway bridge and overpass damage.

Argonne National Lab (CISA), Modeled 9.0



https://publications.anl.gov/anlpubs/2021/09/170001.pdf



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#### Alternate Fuel Sources to Oregon

Priority for Salem Ways and Means

- Infrastructure rebuild costs after the fact are at least 10x the cost of mitigation
- Waiting for post-event investment is a known inflation driver

/)	National Institute of BUILDING SCIENCES <sup>®</sup> Overall Benefit-Cost Ratio Cost (\$ billion) Benefit (\$ billion)	ADOPT CODE 11:1 \$1/year \$13/year	ABOVE CODE 4:1 \$4/year \$16/year	BUILDING RETROFIT \$520 \$2200	LIFELINE RETROFIT \$0.6 \$2.5	FEDERAL GRANTS 6:1 \$27 \$160
Ē	Riverine Flood	6:1	5:1	6:1	8:1	7:1
Ø	Hurricane Surge	not applicable	7:1	not applicable	not applicable	not applicable
ဂျို	Wind	10:1	5:1	6:1	7:1	5:1
<u>م</u>	Earthquake	12:1	4:1	13:1	3:1	3:1
3	Wildland-Urban Interface Fire	not applicable	4:1	2:1	not applicable	3:1
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**TABLE 1.** Nationwide average benefit-cost ratio by hazard and mitigation measure. BCRs can vary geographically and can be much higher

 <u>https://www.nibs.org/files/pdfs/ms\_v3\_adopts\_earthquake.pdf</u>

Post-Cascadia megaquake chaos m	x10	
North Portland Egress Bridges		
PBOT Columbia Overpasses:	\$58M	\$580M
BNSF Fessenden Steel:	\$37M	\$370M
BNSF Lombard Steel:	\$37M	\$370M
BNSF Willamette Steel:	\$37M	\$370M
CD1 Fuel Security Bridges		
Portland "Steel Bridge" est*	\$900M	\$9,000M
BNSF Bridge 5.1 est*	\$900M	\$9,000M
PNWR Tualatin	\$40M	\$400M
PNWR Willamette	\$40M	\$400M
PNWR Oak Grove-Oswego	_\$40M	_\$400M
	\$2,089M	\$20,890M
	\$2.1B	\$21B
Annual Federal petro subsidies	\$20.0B	



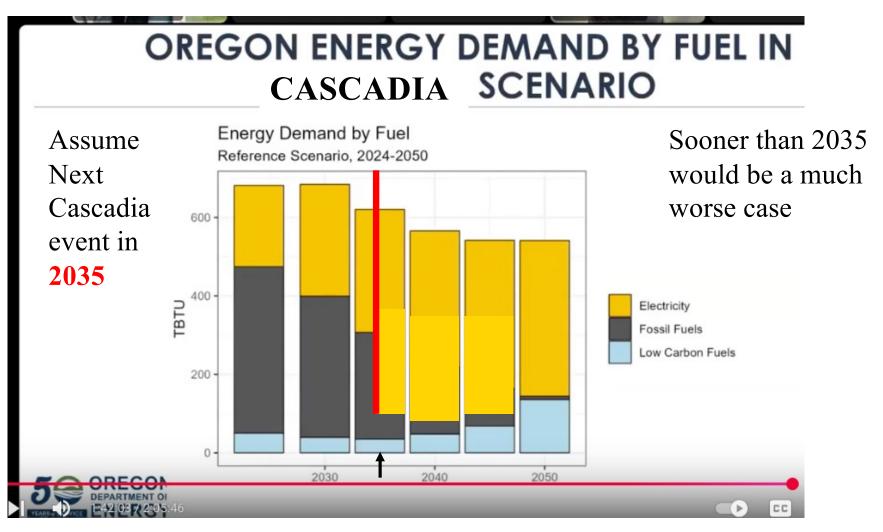
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\* Burnside Mechanical Bridge replacement estimate is \$900M, 5 years

Factoring Cascadia would look like this, with a collapse of fossil fuel infrastructure.



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Oregon's undeclared emergency

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T-Admin illegally cutoff mandated infrastructure funds: EO 14154

Oregon lawsuit response: <u>https://rhodeislandcurrent.com/2025/05/13/20-state-ags-sue-feds-for-tying-transportation-and-disaster-funding-to-immigration-enforcement/</u>

May see attempt at recission. No access for years, waiting for court dispositions

Oregon's infrastructure deficit has been understated by ASCE for both Bridges and Energy: <u>https://infrastructurereportcard.org/state-item/oregon/</u>

Cascadia math interpretation of raw data understates current chances of 43<sup>rd</sup> return. Inescapable wild card.

No Federal help. Where is Idaho when you need 'em?



Amendments needed

10 June 2025

Immanent fuel stranding of Washington County must be acknowledged

• Priority for Washington County Reinvestment is way overdue

Given the cutoff of Federal Infrastructure funding, industry will see the effects sooner and worse than the COVID scenario

- Industry, economy and public safety depend on energy security, for which inevitable Cascadia collapse is not now acknowledged
- Simple math reveals 80% chance since 1700
- Time for industry to voluntarily invest in the state infrastructure they need

States must balance their budgets, suddenly without paid-for Federal disbursements.

• End of business as usual

Respectfully submitted, Tracy Farwell, Sustainability Desk, <u>Better Energy LLC</u>