



Senate Committee on Veterans and Emergency Preparedness  
House Committee on Veterans' Services and Emergency Preparedness

**Oregon Highways Seismic Options Report**

**Paul Mather, ODOT Highway Division Administrator**

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# Oregon Highway Seismic Options Report

Identify strategic lifeline routes

Minimize long term economic damage



*Bridge Seismic Upgrade*



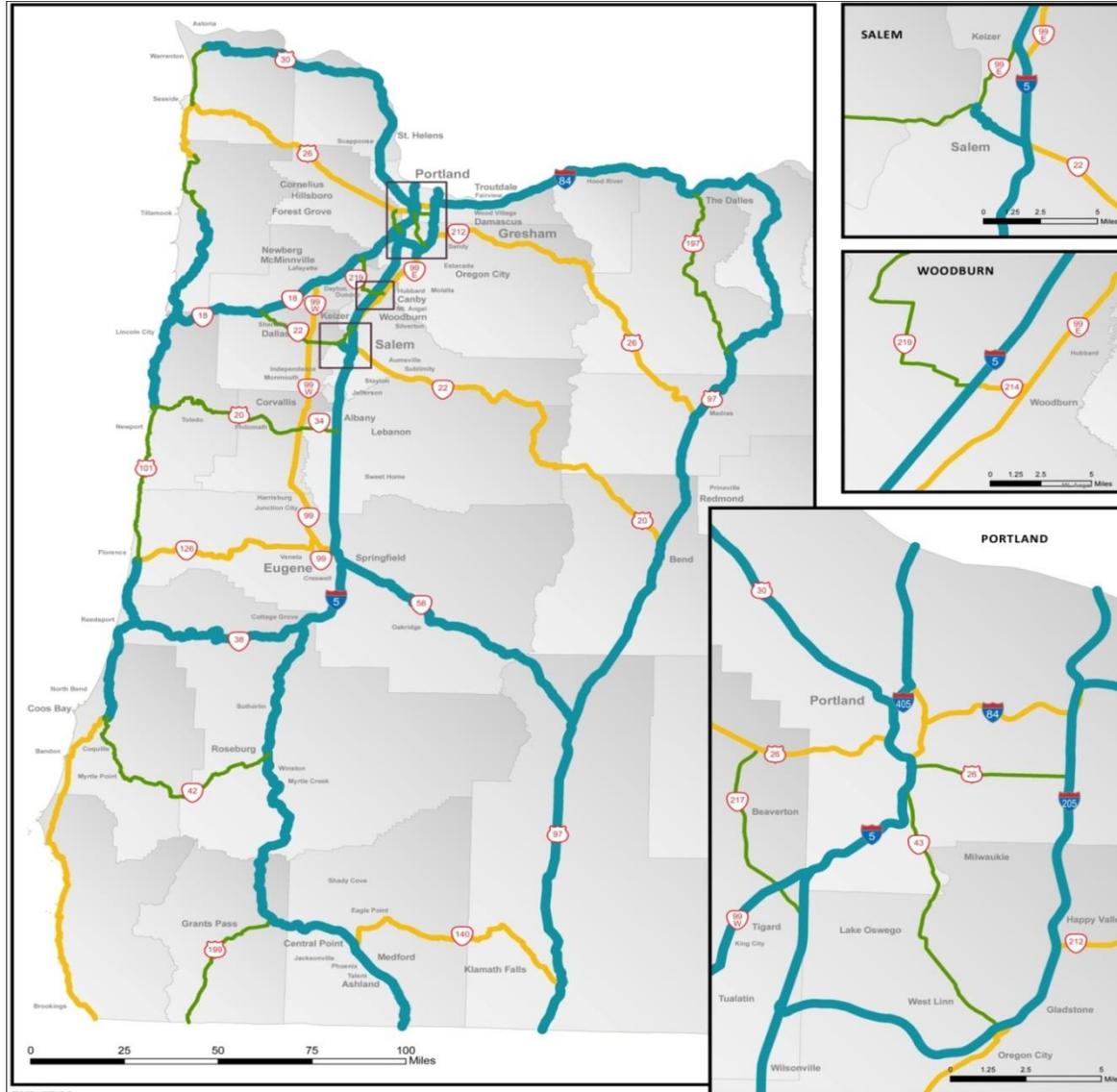
*Landslide Hwy 38*

# Route Selection

<b>Survivability</b>	<ul style="list-style-type: none"><li>• Emergency responders</li><li>• Critical care facilities</li></ul>
<b>Life Support</b>	<ul style="list-style-type: none"><li>• Critical care facilities</li><li>• Life support resources</li><li>• Evacuation routes</li></ul>
<b>Economic Recovery</b>	<ul style="list-style-type: none"><li>• Critical freight corridors</li><li>• Mobility into and out of the region</li><li>• Routes between large metro areas</li></ul>

# Recommended Lifeline Route

1<sup>st</sup> tier  
2<sup>nd</sup> tier  
3<sup>rd</sup> tier







# Economic Damage in Oregon

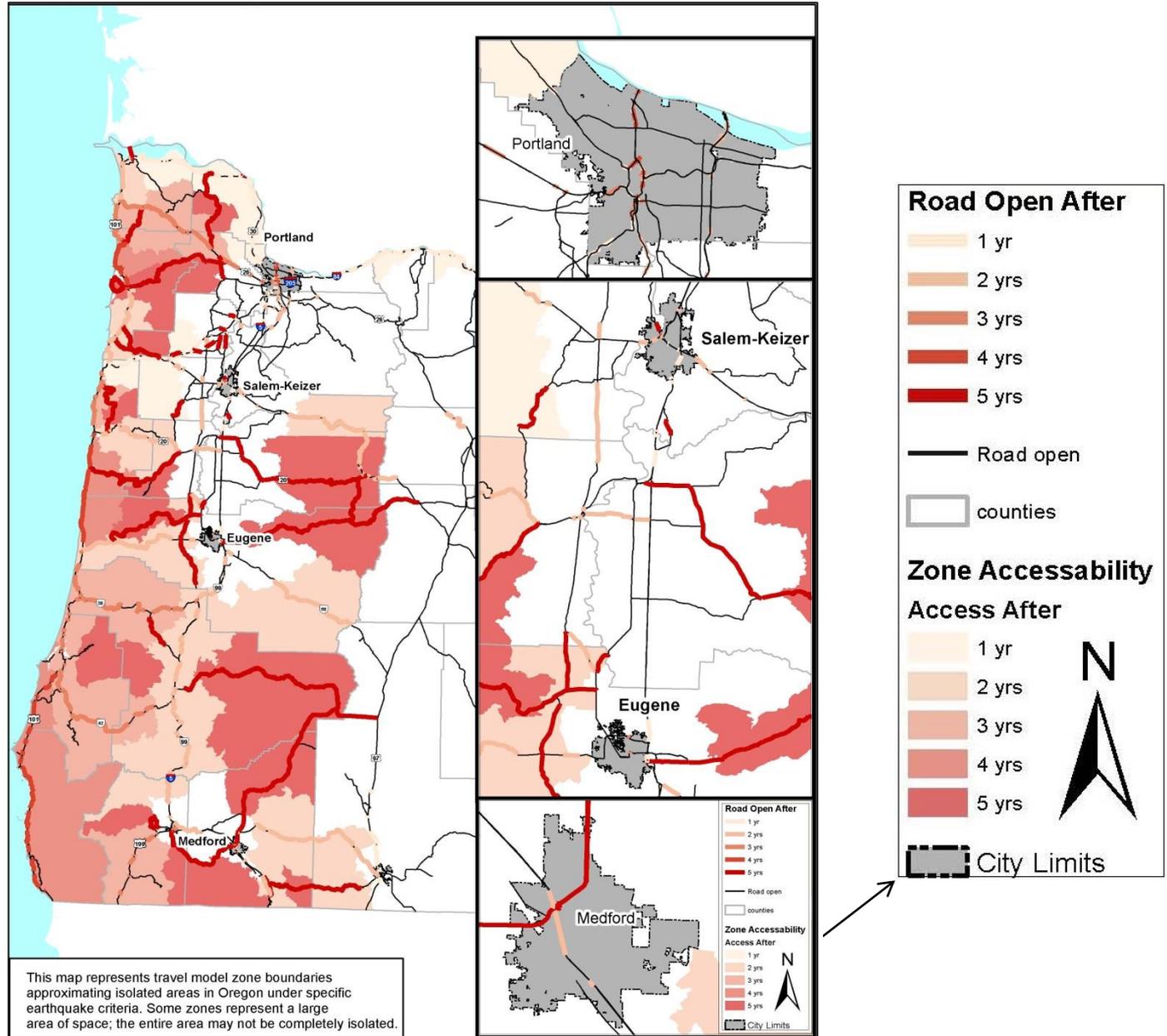
Damage to the highway system will result in **\$350B loss** in gross state product over 8-10 years.



*Japan: before and after*

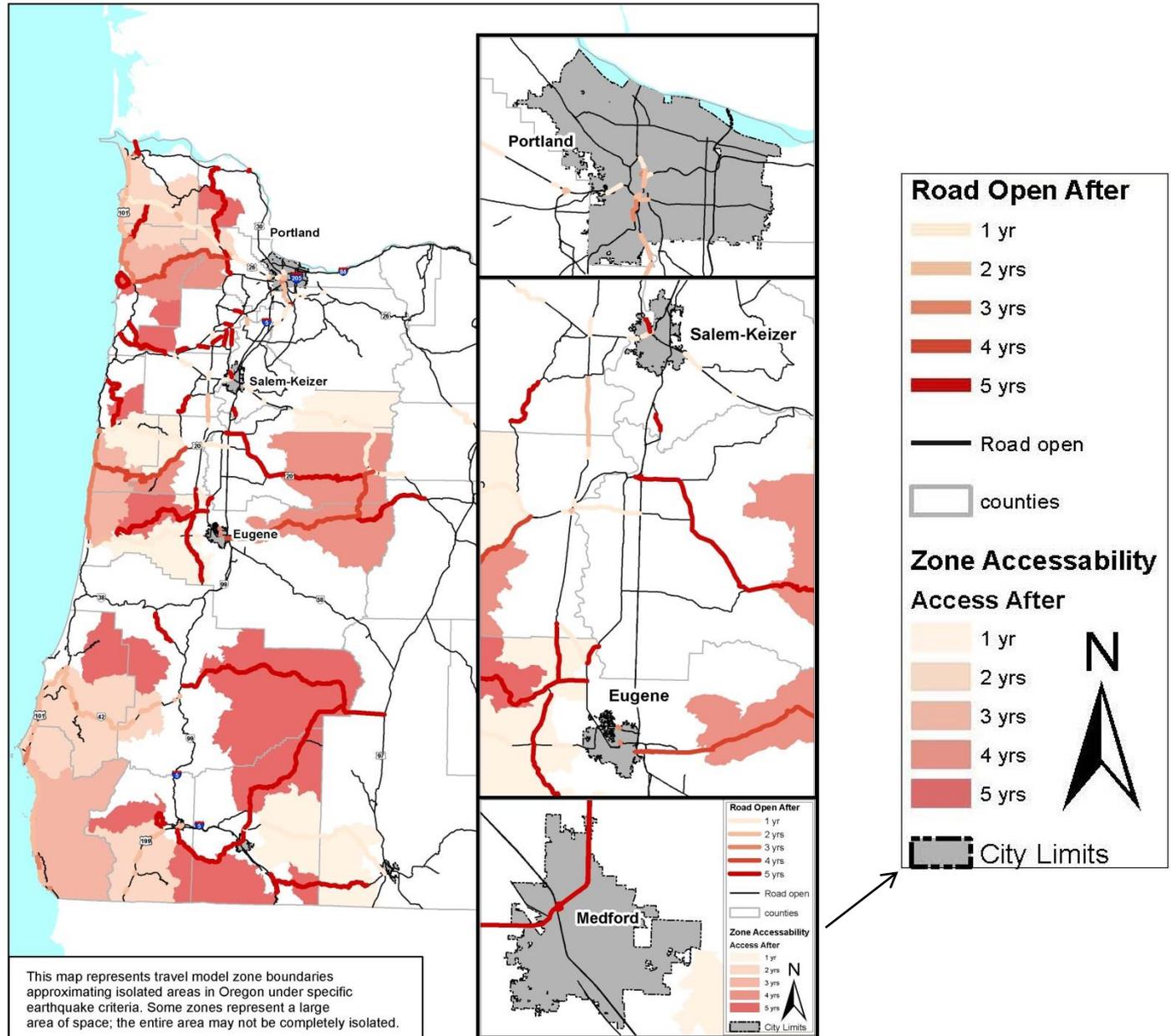
# Major Seismic Event: Isolated Areas

Total economic loss: **\$350B**



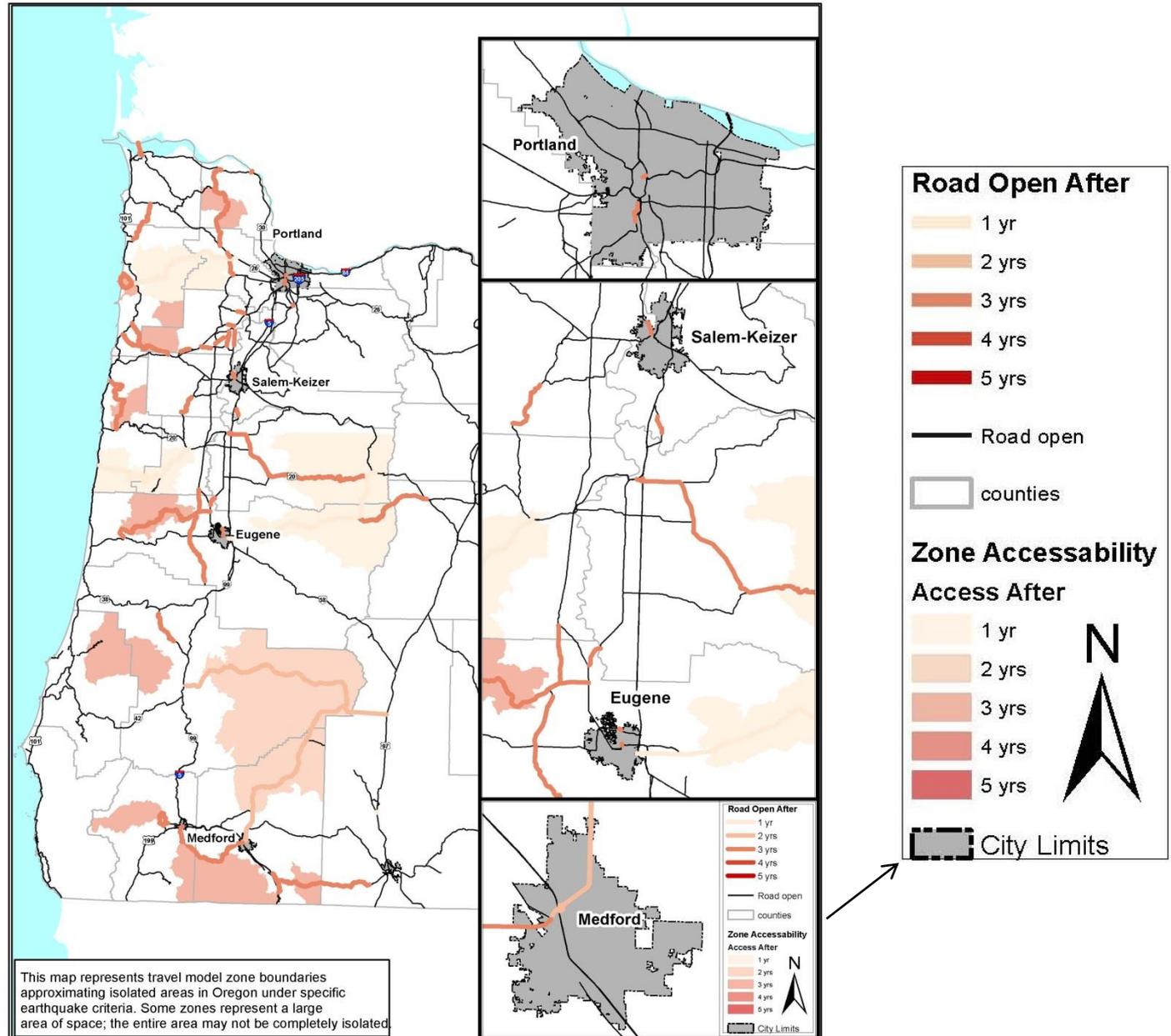
# Isolated Zones: Stage 1 Scenario

Reduce economic loss by: **\$35B**



# Isolated Zones: Full Seismic Program

Reduce economic loss by: **\$84B**



# Rate of Return is 46:1

	Stage 1	Stage 2	Stage 3
<b>Total Cost</b>	<b>\$0.9B</b>	<b>\$0.6B</b>	<b>\$0.3B</b>

**Total Program Budget = \$1.8 Billion**

**Benefit/Cost is 46/1**

	Stage 1	Stage 2	Stage 3
<b>Total Economic Loss Avoided</b>	<b>\$35B</b>	<b>\$20B</b>	<b>\$29B</b>

**Total Economic Losses Avoided = \$84 Billion**

# We Need to Start **Now**

Transportation is key to the overall response  
California and Washington are ahead

- California: **5147 Bridges - \$13 billion**
- Washington: **416 Bridges - \$177 million**
- Oregon: **143 Bridges - \$44 million**

# New Funding to Lifeline Routes

To avoid \$84B in economic losses and minimize loss of life: **Dedicate new funding to complete all 3 tiers by 2030.**



*I-84 Sandy River Bridge*



*I-84 Sandy River Bridge*



*I-5 Willamette River Bridge (Eugene)*