

OREGON RESILIENCE PLAN HIGHLIGHTS STATE'S RESILIENCE GAPS

By: Edward Wolf

SALEM, Ore. -- On March 14, Oregon's Seismic Safety Policy Advisory Commission (OSSPAC) presented the *Oregon Resilience Plan: Reducing Risk and Improving Recovery for the Next Cascadia Earthquake and Tsunami* to a special joint hearing of the House and Senate Committees on Veterans and Emergency Preparedness. The plan provides a comprehensive look at how to prepare the State to withstand and recover from a magnitude 9.0 Cascadia subduction zone earthquake and tsunami.

Following the March 11, 2011 Tohoku earthquake and tsunami in Japan, Oregon's House of Representatives unanimously adopted House Resolution 3 directing OSSPAC to "lead and coordinate preparation of an Oregon Resilience Plan that reviews policy options, summarizes relevant reports and studies by state agencies, and makes recommendations on policy direction to protect lives and keep commerce flowing during and after a Cascadia earthquake and tsunami". The Resolution directed OSSPAC to deliver its plan and recommendations to the Legislative Assembly no later than February 28, 2013.

The Commission recruited eight task groups comprising nearly 170 professionals to describe the scenario earthquake, examine potential impacts to the State's roads, bridges, buildings, and utilities, explore the special challenges facing coastal communities, and anticipate the disruption of business continuity that could jeopardize disaster recovery.

The plan is Oregon's first attempt to describe the resilience gaps that separate expected infrastructure performance (e.g., time needed to restore electricity and telecommunications services) from the performance levels achieved after recent earthquakes in more resilient economies, including Chile and Japan. Oregon's resilience gaps, while somewhat speculative due to limited data, range from weeks to months – far wider than commonly assumed.

The plan outlines steps that can be taken over the next 50 years to bring the State closer to resilient performance through a systematic program of vulnerability assessments, capital investments in public infrastructure, new incentives to engage the private sector, and policy changes that reflect current understanding of the Cascadia threat.

The probability of a magnitude 8 or larger earthquake on the Cascadia fault within the next 50 years is approximately 40 percent; the probability of a worst-case magnitude 9 earthquake is estimated at 15 percent.

First steps presented in the *Oregon Resilience Plan* include expanding initiatives such as Oregon's small grant program to retrofit public schools, completing assessments to disclose the vulnerability of key infrastructure, and encouraging residents, particularly on the Oregon Coast, to learn evacuation options and prepare for a minimum of two weeks of self-sufficiency – far longer than the 72-hour doctrine of emergency preparedness.

Sen. Brian Boquist (R-Dallas), chair of the Senate Committee on Veterans and Emergency Preparedness, expressed interest in scheduling hearings to explore Resilience Plan topics in detail in May or June 2013, to set the stage for future legislative efforts.

SEAO members who played a prominent role in the creation of the *Oregon Resilience Plan* include OSSPAC chairman Kent Yu, Ph.D. of Degenkolb Engineers and Critical Buildings Task Group co-chairs Trent Nagele (VLMK Consulting Engineers) and Ed Quesenberry (Equilibrium Engineers). Critical Buildings Task Group members Andre Barbosa, David Bugni, Ed Dennis, Kimberly Dills, Shane Downing, Shelly Duquette, Jennifer Eggers, Joe Gehlen, Tonya Halog, Robert Johnson, Kevin Kaplan, Amit Kumar, Dominic Matteri, Anne Monnier, Willy Paul, Josh Richards, Tim Rippey, Richard Rogers, Terry Shugrue, Jason Thompson, Mark Tobin, Jim Weston, Michael Wieber, and Edward Wolf contributed to the report.

Links:

Oregon Resilience Plan executive summary (PDF):
http://www.oregon.gov/OMD/OEM/ossprac/docs/Oregon_Resilience_Plan_Executive_Summary_Final.pdf

Oregon Resilience Plan full report, by chapter:
http://www.oregon.gov/omd/oem/pages/ossprac/ossprac.aspx#Oregon_Resilience_Plan

Coverage in *The Oregonian* (Feb. 4, 2013):
http://www.oregonlive.com/business/index.ssf/2013/02/cascadia_earthquake_and_tsunami.html#incart_m-rpt-2

Coverage in *The Seattle Times* (March 9, 2013):
http://seattletimes.com/html/localnews/2020525702_earthquakerecoveryxml.html

Oregon Seismic Safety Policy Advisory Commission:
<http://www.oregon.gov/omd/oem/pages/ossprac/ossprac.aspx>