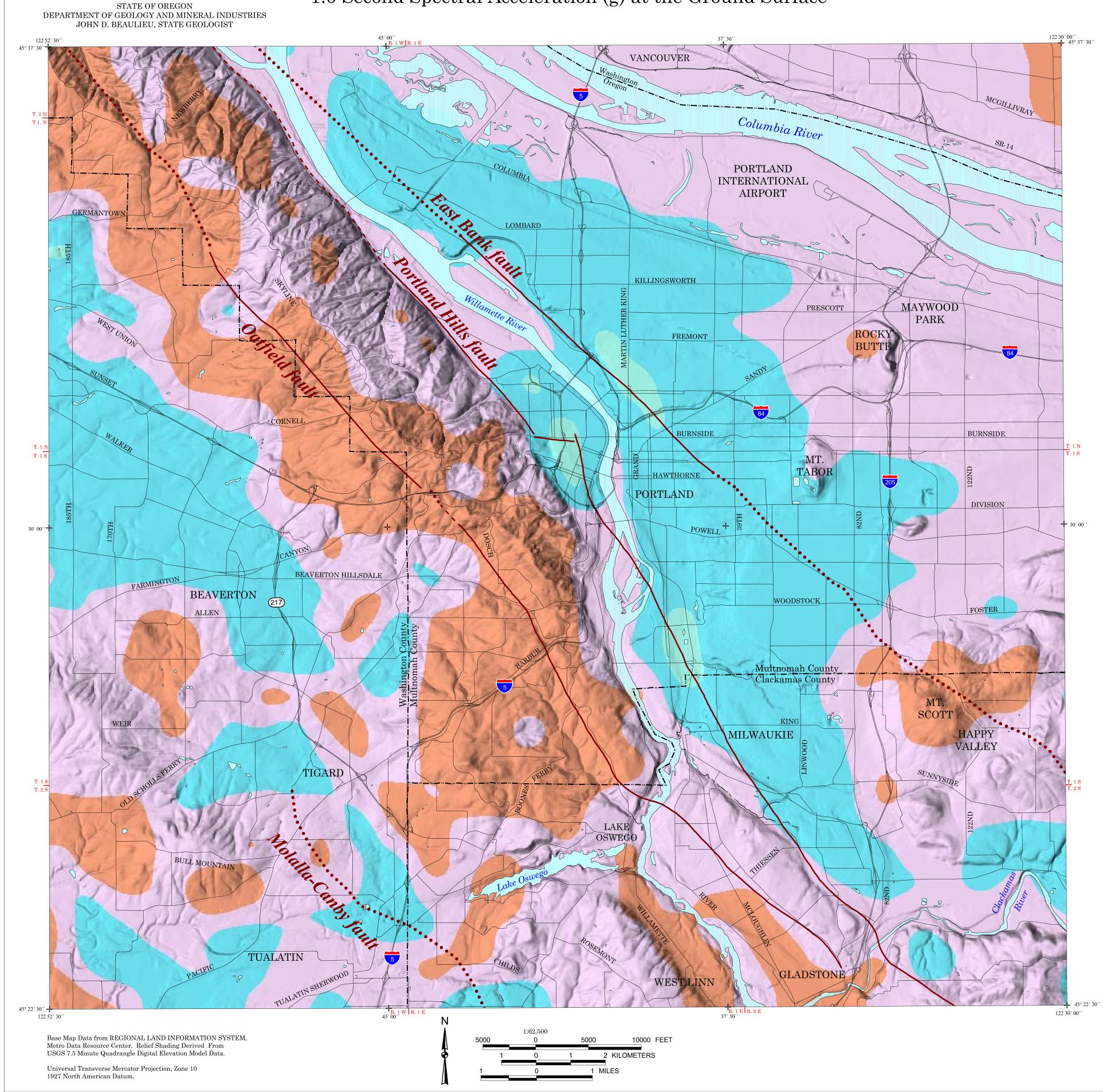
Probabilistic Earthquake Ground Shaking Map for the Portland, Oregon, Metropolitan Area

# 2% Probability of Exceedance in 50 Years 1.0 Second Spectral Acceleration (g) at the Ground Surface



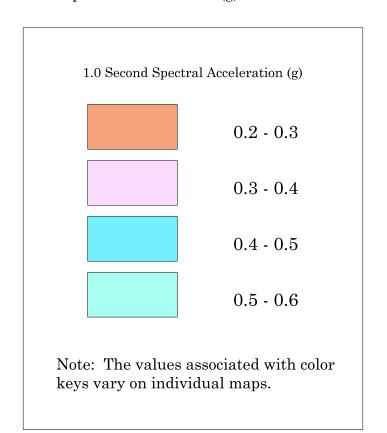
### IMS - 16

Earthquake Scenario and Probabilistic Ground Shaking Maps for the Portland, Oregon, Metropolitan Area

#### by

Ivan Wong, Walter Silva, Jacqueline Bott, Douglas Wright, Patricia Thomas, Nick Gregor, Sylvia Li, Matthew Mabey, Anna Sojourner, and Yumei Wang

2% Probability of Exceedance in 50 Years 1.0 Second Spectral Acceleration (g) at the Ground Surface



## POTENTIALLY SEISMOGENIC FAULTS

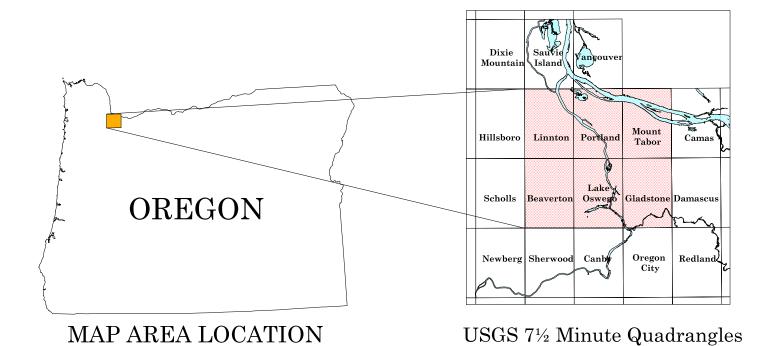
Mapped

**- - - -** Inferred in this study

••••••• Interpreted from aeromagnetic data

Data Sources: Madin, 1990, Beeson et al., 1991, and Blakely et al., 1995

Note: The locations of faults as depicted on these maps may have errors of up to 500 meters or more, particularly if they are concealed or based on aeromagnetic data.



There are large uncertainties associated with ground motion prediction in the Pacific Northwest due to a limited amount of region-specific information and data on the characteristics of seismic sources and ground motions. In the portrayal of the Cascadia subduction zone scenario, the uncertainties in the geometry and eastward extent of the rupture are particularly large. Additional uncertainty stems from the characterization of the subsurface geology beneath Portland and the estimation of the associated site response effects on ground motions. Thus the maps should not be used for site-specific design or in place of site-specific hazard evaluations.

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