

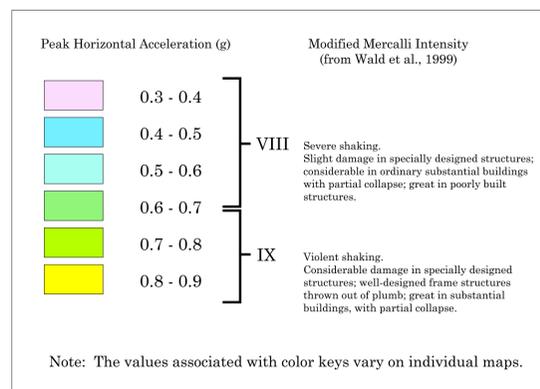
2% Probability of Exceedance in 50 Years
Peak Horizontal Acceleration (g) at the Ground Surface

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
JOHN D. BEAULIEU, STATE GEOLOGIST

IMS - 16
Earthquake Scenario and Probabilistic Ground Shaking Maps
for the Portland, Oregon, Metropolitan Area

by
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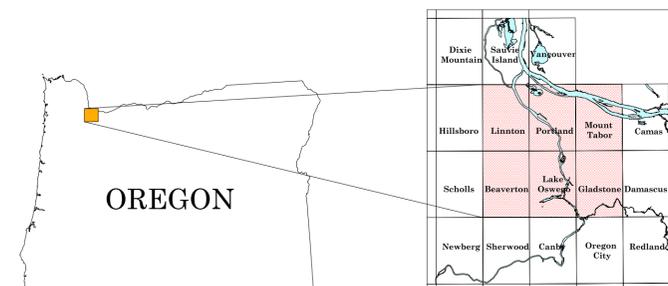


POTENTIALLY SEISMOGENIC FAULTS

- 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.



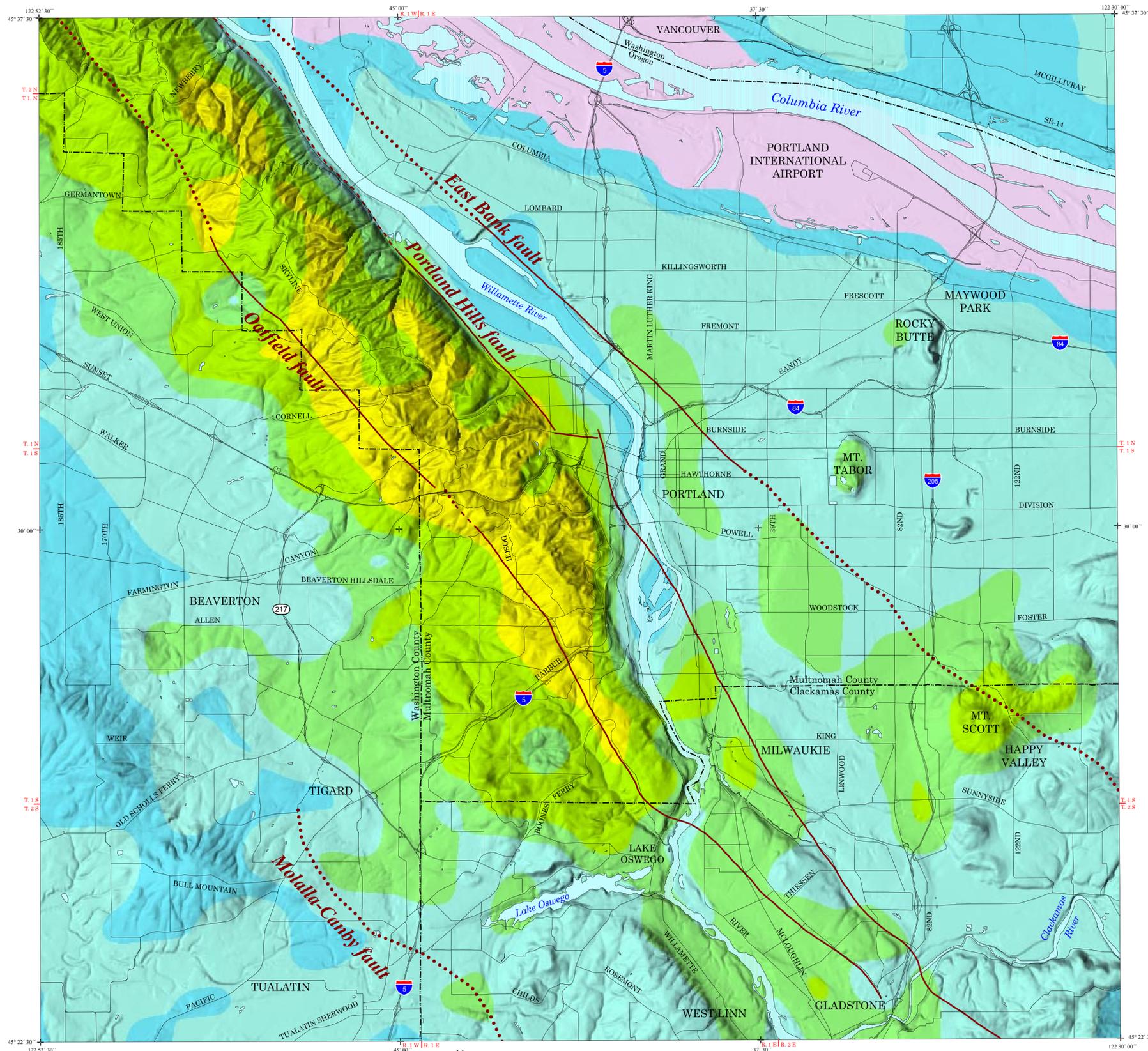
MAP AREA LOCATION

USGS 7½ Minute Quadrangles

Limitations

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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Base Map Data from REGIONAL LAND INFORMATION SYSTEM, Metro Data Resource Center. Relief Shading Derived From USGS 7.5 Minute Quadrangle Digital Elevation Model Data.

Universal Transverse Mercator Projection, Zone 10
1927 North American Datum.

