## Western States Seismic Policy Council 2014 Awards in Excellence

## Overall Award in Excellence for Multijurisdictional Planning

**Administering Agency:** Washington State Military Department, Emergency Management

Division; United States Geological Survey – PNW Team; Federal Emergency Management Agency – Regions 8 & 10, Washington State Department of Natural Resources, Geology and Earth Sciences;

Western Washington University- Resilience Institute, URS

Corporation.

**Program/Project Name:** Washington State Earthquake Scenario Catalog

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## **Program Summary**

The Washington State Earthquake Scenario Catalog (WSESC) is a new web-based tool using GIS, HAZUS, and social vulnerability and economic indicators to enable emergency managers to better understand what the particular impacts are from 20 different earthquake scenarios. Prior to the development of the WSESC, much of the relevant and available literature regarding earthquakes was heavily focused on documenting and characterizing the seismic hazards that exist throughout Washington State, but seemed to fall short on details of what matters most to emergency managers — what and why. Because scenarios are helpful tools that enable responders to envision potential impacts (WSSPC advocated for their usefulness in Policy 12-1 Earthquake Planning Scenarios), Washington State Emergency Management (EMD), along with experts from the Washington Department of Natural Resources (DNR), the Federal Emergency Management Agency (FEMA), and the U.S. Geological Survey (USGS), developed the scenario catalog, which provides credible, consistent, authoritative, and up-to-date information for mitigation planning; response planning; exercises and training; and earthquake response. To ensure the resulting product would meet the needs of its intended users, Western Washington University's Resilience Institute engaged focus groups with local emergency management organizations to collect feedback on how they wanted to interact with the data, what data should be shown and how it should look.

WSESC is the first of its kind, a powerful tool that blends USGS calculated ground motions with FEMA's HAZUS loss estimation modeling software and USGS' social vulnerability and community economic indicators to create an online GIS tool that lets users customize the information in a way that is relevant to them, and in a way that non-technical users can visualize and easily understand. Future plans include the incorporation of additional hazards, such as tsunamis and volcanoes. Meanwhile, WSESC's value has already been established – it is being used to help develop the Cascadia Region Response Plan, and the Pacific Northwest Economic Region used it to create scenarios for a regional port exercise focused on long-term earthquake recovery.

More information can be found: https://fortress.wa.gov/dnr/seismicscenarios/