Western States Seismic Policy Council
2012 National Awards in Excellence

Award in Excellence for Research

Administering Agency: Washington State Emergency Management Division (EMD) and Western Washington University’s Resilience Institute (WWU)

Program Name: Washington State Seismic Mitigation Policy Gap Analysis: A Cross-State Comparison

Contact: John D. Schelling, Earthquake Program Manager, EMD

Address: Building 20, Camp Murray, WA 98430

Telephone: 253-512-7084

Email: j.schelling@emd.wa.gov

Program Summary
Since its inception circa September 1986, the Washington State Seismic Safety Committee (SSC) has been charged with formulating earthquake risk reduction policies and providing recommendations on seismic related issues through the Emergency Management Council to the Office of the Governor and the Washington State Legislature.

To assist the SSC with their efforts, Washington State Emergency Management Division contracted with the Resilience Institute within Western Washington University’s Huxley College of the Environment to complete a comparative analysis of existing seismic legislation in Washington and across the country. This first of its kind study was accomplished by compiling, synthesizing, and analyzing state-level earthquake risk reduction policies listed in the mitigation plans of 47 states (3 could not be obtained by the completion of the study). This study resulted in the creation of a catalog describing each of the compiled policies – legislation or executive orders from the vast majority of states with seismic hazard throughout the nation.

A spreadsheet database that can be used by all states, commonwealths, and territories was created by the principal investigators in order to synthesize, search, and analyze the policies and each was categorized by its primary emergency management related function of mitigation, preparedness, response, and/or recovery. While this study examined only state-level seismic risk reduction policies, it can also function as a reference point for cities, counties, and tribes that may be interested in establishing similar legislation at a more local level. Quantitative analysis was conducted using a cross-state analysis and two different computed indicators based on seismic risk and policy count.

The cross-state analysis facilitate a broad assessment of Washington State’s policy coverage given its seismic risk, as well as identification of policies from states with more seismic mitigation policies than Washington State. Due to the limited resources available to complete this project, the study did not make any assessment regarding the relative efficacy of policies adopted by each state and so does not make any conclusion regarding whether Washington should model a new policy based on a particular policy from another state.
The creation of this legislative analysis study was also intended to assist the Washington SSC with the development of an ambitious project established as “The Resilient Washington State Initiative”, which is designed to engage key stakeholders in an effort to develop a framework for more effective seismic mitigation policies and provide recommendations for legislation and policy changes to enhance statewide seismic safety. The Resilient Washington State Initiative will be used to facilitate long-term implementation of seismic risk reduction policies across the state with the goal of making the state resilient to damaging earthquakes over a 50-year time frame. As more and more states and local communities begin to assess their current capacities for resilience to seismic hazards and seek to undertake change to reduce identified vulnerabilities, this study and policy database will serve as an important tool for a variety of stakeholders.

Funding for this effort was provided by the National Earthquake Hazard Reduction Program (NEHRP) via the Federal Emergency Management Agency’s (FEMA) State Earthquake Assistance Program.