

**Western States Seismic Policy Council
2013 Awards in Excellence**

Overall Award in Excellence for Mitigation Efforts

Administering Agency:	Washington State Seismic Safety Committee (SSC)
Program Name:	Washington School Seismic Safety Assessment Pilot Project
Contact:	SSC Co-Chairs: Dave Norman, State Geologist and Robert Ezelle, EMD Director
Address:	Building 20 Camp Murray, WA 98430
Telephone:	253-512-7001
Website:	www.emd.wa.gov

Program Summary

A goal that had been on the horizon for several Washington State agencies, including but not limited to the Emergency Management Division (EMD), Department of Natural Resources (DNR), the Office of Superintendent of Public Instruction (OSPI), and Washington State's Seismic Safety Committee, was to systematically evaluate all public school buildings and critical facilities within Washington in order to establish the seismic risk for each. While a few individual school districts had completed such assessments, there had been no consistent, comprehensive statewide approach.

In late 2009, the aforementioned agencies, with funding support from FEMA through the National Earthquake Hazard Reduction Program (NEHRP), initiated a pilot project to evaluate school buildings in two school districts, Walla Walla Public Schools and the Aberdeen School District. Local emergency managers from Grays Harbor County and Walla Walla County participated in the process and included the school districts in their hazard mitigation plan update process, thus enabling the districts to be eligible for FEMA grant funding. ASCE 31-Tier 1 assessments were completed by volunteer structural engineers from the Structural Engineering Association of Washington (SEAW) and volunteers from the Washington Association of Building Officials (WABO) provided further examination of non-structural elements. To get a true picture of risk for a particular site, staff from the Department of Natural Resources, used non-invasive methods that assessed the physical site characteristics by measuring how seismic waves travel through the upper 30 meters of soil. DNR Staff then input the identified building and soil characteristics in to FEMA's loss estimation modeling program, Hazards United States (HAZUS). Upon completion of the pilot project, participating districts were provided with a study report that they are using to strongly justify applications for FEMA grant funding through the Pre-Disaster Mitigation Grant Program (PDM) and the Hazard Mitigation Grant Programs (HMGP) to seismically retrofit deficient structures, thus alleviating some of the future costs that could be incurred.