

Western States Seismic Policy Council
2018 Awards in Excellence
Award in Excellence for Use of Technology

Program/Project Name: USGS ShakeMap Scenario Suite

Administering Agency: U.S. Geological Survey

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Program Summary:

The USGS ShakeMap Scenario Suite for the Conterminous U.S. is a collection of over 800 earthquake events that can be used for scenario exercises, planning, education and outreach. The effort to make this new Scenario collection consistent with the U.S. National Seismic Hazard Map (NSHM) required algorithmic advances to the ShakeMap system, including the use of multiple-weighted Ground Motion Prediction Equations (GMPEs) and other technical solutions. Also, the deployment and delivery of the 800 scenarios in an ArcGIS platform required significant software and rendering efforts.

In addition, substantial interaction with critical users in the private, government, utility and response communities is required to make these products useful. Groups like FEMA can use the maps to produce losses with HAZUS that are then widely used for earthquake planning exercises and drills. The new catalog has already been used by many WSSPC states, including Colorado, Wyoming, Idaho, Montana, and California. A link to the map of the catalog is available [here](#).