

Earthquake Regional Impact Analysis

Policy and Advocacy



The Oregon Department of Geology and Mineral Industries' (DOGAMI) Earthquake Regional Impact Analysis for Clackamas, Multnomah and Washington counties points to critical gaps in our preparedness for a large-scale earthquake and emphasizes the importance of efforts already underway to improve our resilience to such a hazard. Here are some of the primary findings and the work they help advance:

- **Investing in Seismic Resilience:** We have opportunities to work toward reducing estimated impacts by continuing to improve building codes, incentivize seismic retrofits, and promote smart long-term land use planning in areas with greater seismic risk.
- **ATC-20 Building Inspectors:** The analysis estimates up to \$37 billion in building repair costs. The report recommends increased investment to build a roster of qualified building inspectors to evaluate damages after an earthquake and subsequent aftershocks, which can help accelerate a return to normalcy. This recommendation aligns with the Oregon Seismic Safety Policy Advisory Commission's (OSSPAC's) call for the establishment of a Safety Assessment Program in Oregon, similar to the program California established in 1984. Such a program would help people more quickly re-occupy safe homes and businesses, and would ensure that people are prohibited from entering unsafe structures after a disaster. The RDPO has also green-lighted a proposal for regional ATC-20 training, pending FY'18 UASI grant funding.
- **Enhanced Planning for Mass Shelter:** The analysis estimates up to 85,000 people displaced from their homes. While limited to permanently displaced households, these findings underscore the need for continued planning for Mass Care (including shelters and temporary housing solutions) for people whose homes are damaged. The Regional Mass Sheltering Task Force, commissioned by the RDPO Steering Committee, has made progress this past year on assessing needs for improved preparedness around the region for a mass displacement event and providing regional guidance on mass shelter planning for smaller jurisdictions. The RDPO Manager is also serving as a facilitator for Oregon's Senate Bill 850 Work Group on Mass Care, gathering public input to enable OSSPAC to report on gaps and best practices and make policy recommendations to the Oregon State Legislature in Fall 2018.
- **Continued Investment in Hospital Surge Planning:** The analysis estimates that around 19,000 people will need basic medical aid, while approximately 8,000 more will need hospitalization or be fatally wounded by the earthquake. It continues to be a priority in the Portland Metropolitan Region to invest in surge planning with our hospital providers, including current efforts underway for pediatric surge capacity enhancements. The RDPO continues to fund the Pediatric Surge Planner at the NW Oregon Hospital Preparedness Organization.

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- **Regional Debris Planning:** The analysis estimates up to 17 million tons of debris from building damages, further validating what we know about the importance of coordinated debris management planning and careful site selection. Separate from the DOGAMI study, Metro recently added roads and vegetation to its earthquake debris forecasting. Together the two studies provide a very comprehensive estimate of total debris to support more refined planning efforts across the metropolitan counties and municipalities.
- **Earthquake Early Warning (EEW) System:** The findings emphasize that where people are when the earthquake strikes (whether inside a flexible wood frame structure or inside a more fragile building) influences the extent of injuries and casualties. Earthquake early warning systems provide much-needed life-saving seconds to minutes for people to protect themselves by taking cover or moving to a safer site. The RDPO will continue to advocate for investments in an EEW system for our state and region, and is currently participating in an Oregon statewide effort, in coordination with Washington and California, to develop communications for the limited roll-out of EEW to pilot partners in these states.
- **Seismic Evaluation of Emergency Transportation Routes (ETRs):** The report shows that most of our designated ETRs (meant to facilitate post-earthquake life-safety response activities) in the metropolitan region will experience significant ground failure or ground deformation. As such, we need to re-evaluate their designation for seismic events and plan for contingencies under a worst-case scenario M 9.0 CSZ earthquake. This will be done in coordination with Oregon and Washington Departments of Transportation. The RDPO has green-lighted a seismic ETR update, pending UASI FY'18 funding.

Further Information

Visit www.rdpo.org/earthquakeimpact to learn more about the analysis.

Questions?

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