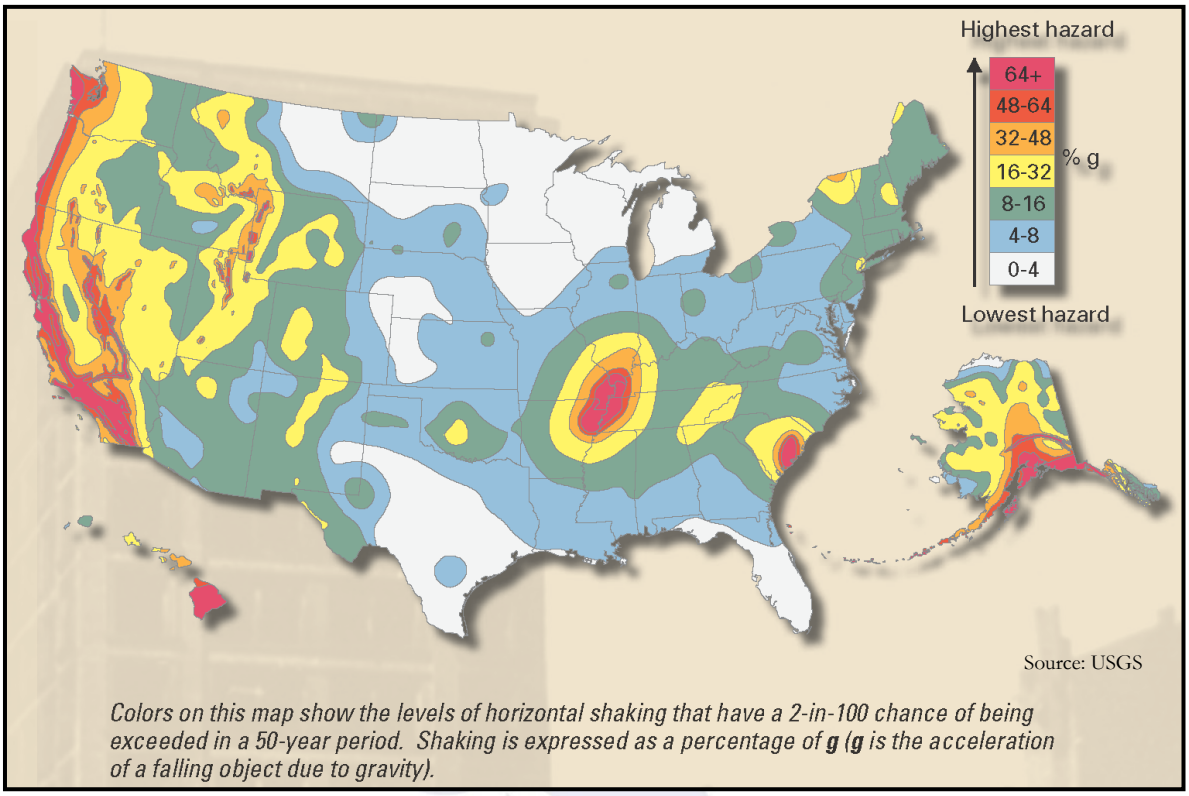
NEW SEISMIC HAZARD MAPS

U.S. Geological Survey has recently published 2008 seismic hazard maps for the U.S. The maps are intended for use in the future editions of building codes for new construction, as well as in standards for evaluation of existing structures. The sample map shown below depicts horizontal ground shaking levels with a 2% probability of being exceeded in a 50-year period. The changes in hazard vary from region to region, as briefly discussed on page 2.



*Colors on this map show the levels of horizontal shaking that have a 2-in-100 chance of being exceeded in a 50-year period. Shaking is expressed as a percentage of **g** (**g** is the acceleration of a falling object due to gravity).*

MRP ENGINEERING IN THE NEWS

Charlene Hails, PE, SE, and Mark Pierepiekarz, PE, SE, of MRP Engineering participated in the development of course materials for a recent seminar entitled **"Practical Approaches for the Rehabilitation of Existing Buildings"** presented by the Structural Engineers Association of Washington (SEAW). The seminar focused on the application of engineering standards for various structure types, including examples.

Mark Pierepiekarz, PE, SE, was named 2009 Structural Engineers Association of Washington (SEAW) Seattle Chapter **Engineer of the Year**. The award recognizes individuals who have provided service to SEAW and the profession, brought visibility to the profession that is favorable in the public eye, exhibited distinguished technical and creative achievement, and encouraged and nurtured others in their professional development.

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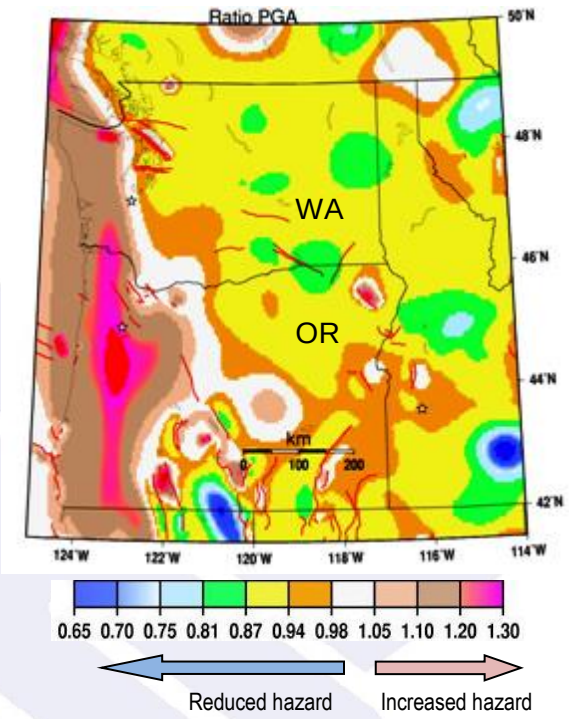
WHAT ARE THE IMPACTS OF THE NEW MAPS?

The following table highlights significant updates by region:

Region	Comment
Pacific Northwest	• Revised Cascadia Subduction Zone model • New faults included • Higher ground motions along Pacific Coast (see figure)
California	• Updated fault data for San Andreas Fault system (and others) • Updated 30-year probabilities of M6+ earthquakes (63% in San Francisco Bay area and 67% in Los Angeles region)
Central U.S.	• Adjusted New Madrid seismic zone model to include possibility of multiple large earthquake within a several year interval
Eastern U.S.	• Charleston, S.C., area includes offshore seismic sources

Source: USGS



Colors on this map indicate the ratio of horizontal peak ground accelerations (PGA) in the new 2008 maps versus the previous 2002 hazard maps.

MRP ENGINEERING SERVICES

MRP Engineering is a structural engineering and risk analysis company. We partner with our clients in assessing natural and man-made hazard risks and developing practical loss mitigation solutions. MRP Engineering services include:

- Earthquake and wind risk evaluation
- Structural benefit/cost analysis
- Upgrade design
- Independent design review
- Damage (root cause) investigation

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