



Summit Report

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In May 2004, the Western States Seismic Policy Council (WSSPC), U.S. Geological Survey, and Federal Emergency Management Agency, along with western states geological surveys, sponsored the second Basin and Range Province Seismic Hazards Summit (BRPSHSII) in Reno-Sparks, Nevada. The meeting was successful in highlighting technical issues important to understanding earthquake hazards in the extensional Basin and Range Province (BRP), and in developing policy recommendations to aid BRP states in reducing losses. The BRPSHSII built on the results of the original BRPSHS in May 1997, also in Reno and sponsored by the same groups. Craig M. dePolo, Nevada Bureau of Mines and Geology (NBMG), was chairman of the organizing committee and general conference chair for both meetings.

The purpose of the BRPSHSII was to bring together geoscientists, engineers, emergency managers, and policy makers to present and discuss the latest earthquake hazards research and to evaluate its implications for hazard reduction and public policy. Sessions addressed: 1) general earthquake hazards issues, 2) estimating earthquake size and hazards from faults, 3) determining fault activity, 4) earthquake recurrence intervals, and 5) ground motions. The agenda included 26 invited speakers and 38 poster presentations, and nearly 100 attended the meeting.

Some of the specific important earthquake issues in the BRP identified and discussed at the BRPSHSII included: 1) using time-dependent, Poisson, and clustering models in characterizing fault behavior, 2) using displacements to estimate earthquake magnitudes, 3) the need for both short- and long-term paleoseismic records for faults, 4) modern geodetic extension rates and geologic slip rates, and 5) appropriate attenuation relations and stress drops in modeling ground motions, including consideration of evidence from precarious rock studies. The final session addressing ground motions also covered near-fault, site, and basin effects on ground shaking levels in the BRP.

Following each day's papers and panel discussions, Jon Price (Director, NBMG) led a discussion to identify important policy-related issues and develop policy recommendations for WSSPC to consider adopting. Five policy recommendations were developed at the BRPSHSII and were presented to the WSSPC Board in June 2004. Final policy recommendations were considered for adoption by WSSPC at the National Earthquake Conference in St. Louis in September 2004.

Papers presented at the BRPSHSII are published in a proceedings volume edited by William R. Lund, Utah Geological Survey (UGS), as [UGS Miscellaneous Publication 05-2](#), available on a CD. The proceedings of the original BRPSHS are still available as [UGS Miscellaneous Publication 98-2](#).