

PRIORITIES FOR 2006 EARTHQUAKE RESEARCH IN UTAH

Utah Ground Shaking, Quaternary Fault Parameters, and Liquefaction Working Groups

Developed at the Salt Lake City meetings:
March 2-4, 2005

The Utah Geological Survey, Utah Seismic Safety Commission, and U.S. Geological Survey convened Utah's Earthquake Working Groups on March 2-4, 2005 to update priorities for earthquake research in Utah. Priorities evolve as work is completed, and the priorities for 2006 are listed below for each working group.

Ground Shaking Working Group:

- Collect data to better characterize the deep shear-wave velocity structure (greater than 150 m) along the Wasatch Front.
- Finalize development and testing of the Wasatch Front community velocity model.
- Continue laboratory testing of dynamic soil properties of Bonneville clays.

Quaternary Fault Parameters Working Group (perform detailed paleoseismic studies for the following fault zones, listed in order of priority):

- West Valley fault zone (Salt Lake County).
- Weber segment of the Wasatch fault zone (Weber and Davis Counties).
- Faults and folds beneath Utah Lake (Utah County).
- Washington fault (St. George area).
- East Cache fault zone (Cache Valley).

Liquefaction Working Group:

- Produce probabilistic liquefaction hazard map for southern Salt Lake County.
- Produce probabilistic lateral spread hazard map for northern Salt Lake County.
- Continue gathering subsurface data in Salt Lake County.
- Develop CPT-SPT correlations to allow lateral spread analysis from SPT data.
- Investigate the mapped prehistoric ground displacements in Salt Lake City using CPT.

Utah's Earthquake Working Groups include over 50 geologists, seismologists, and engineers from state and federal agencies, local governments, universities, and private consulting companies. The working groups are tasked with setting earthquake research goals for the State of Utah, and each has developed a plan for developing the next generation of hazard maps for the state. These plans can be viewed at the UGS Web site: <http://ugs.utah.gov/ghp/workgroups/index.htm>