

## II PURPOSE AND NEED

The purpose and need of the LBNL Seismic Phase 2B Project is to remedy or remove LBNL space which poses seismic life-safety risks and to provide seismically safe and modern research space at LBNL.

UC LBNL completed seismic evaluations of all permanently owned and occupied LBNL buildings in 2007. These evaluations revealed that several buildings are seismically deficient, and would not be expected to survive a major earthquake without significant damage to the structure and appreciable life safety hazard to their occupants. UC LBNL has vacated the most seismically deficient buildings, which has created a need for suitable safe and modern replacement space. The U.S. Geological Survey has estimated the probability of a major seismic event in the San Francisco Bay Area at approximately 67 percent in the next 30 years. The LBNL site is located less than 1 kilometer from the Hayward Fault and would be subjected to severe shaking during a major seismic event on this fault.

The LBNL Seismic Phase 2B Project has the following objectives:

- ◆ Remedy or remove seismically deficient general-purpose research facilities and lab-wide resource buildings;
- ◆ Provide researchers with safe, modern, science research space that is fully suitable for 21st century science;
- ◆ Provide general-purpose research and institutional space that is upgradeable in the future and that can flexibly meet the high accuracy requirements of the DOE's 21st century missions. High accuracy laboratory space is essential for the continued development of the DOE's key program areas;
- ◆ Increase efficiency of LBNL research operations and promote scientific adjacencies by offering modern, cost-effective consolidated space at the LBNL site; and
- ◆ Co-locate researchers and graduate students within a cluster of science research facilities to expand opportunities for instrument sharing and interacting among scientists engaged in a wide range of research projects, and offer convenient access to LBNL user facilities and similar resources.

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SEISMIC PHASE 2B PROJECT EA  
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