LBNL Seismic Program

Agenda

- Seismic Program Goals & Criteria
- Building Evaluations
- Rehabilitation Projects
- New and Future Buildings

Seismic Program Goals & Criteria

Goal of the program	To achieve Life Safety for our building occupants in the event of the Maximum Credible Event.
Definition of Life Safety	No partial or total collapse of the building; structural & non-structural damage anticipated; exit paths permit safe egress.
Maximum Credible Event	7.0+ on the Hayward Fault. Accelerations at or above 0.7g for 20 seconds.

U.C. Seismic Safety Policy

GOOD	Some structural and non-structural damage, life safety not *significantly* jeopardized
FAIR	Structural and non-structural damage represent *low* life hazards
POOR	Significant structural and non-structural damage represent *significant* life hazards
VERY POOR	Extensive structural and non-structural damage represent *high* life hazards

Building Evaluations

- **DOE permanent owned buildings:** 1,611,000 SF (2007)

- **Evaluations & ratings:**

  Buildings evaluated & rated between 1997 & 2007

  Evaluated by registered Structural Engineers

  Concensus standards & ground accelerations recommended by USGS used to evaluate buildings.

U. C. Rating	2007 Bldgs	2007 Area (KSF)	2010 Bldgs	2010 Area (KSF)
Good	14	274 (17%)	19	435 (26%)
Fair	40	728 (45%)	41	904 (55%)
Poor	23	513 (32%)	20	270 (16%)
Very Poor	7	97 (6%)	6	37 (2%)
		1611		1646

Seismic Rehabilitation Projects

The Lab is pursuing a five phase seismic rehabilitation program.

The program will rehabilitate or demolish all of the 'poor' and 'very poor' buildings.

Phase I complete; Phase II in progress.

New and Future Buildings

- Designed to the current California Building Code
- Structural design is peer reviewed by an independent structural engineer.