



## Giannini Hall, Seismic Safety Corrections

### Full Mitigation Best Practice Story

#### *Alameda County, California*



**Berkeley, CA** -- Giannini Hall received a "poor" seismic rating in the 1997 review of campus buildings and a project to correct structural deficiencies was scheduled to begin July 2005. The schematic design is scheduled to take up to two years, with construction scheduled to begin in 2007.

Giannini Hall is a four-story concrete building totaling 69,564 gross square feet. It houses programs in the College of Natural Resources, including the Dean's Office, classrooms and faculty offices, as well as administrative offices for the Department of Molecular and Cell Biology and the Giannini Foundation of Agricultural Economics. The building was designed by William C. Hays in 1930. It is listed in the National Register of Historic Places and is one of the Berkeley campus' most historically significant buildings.

The primary goal of the project is to correct the building's seismic deficiencies, but it will also address mandatory fire and life-safety requirements, accessibility improvements and essential deferred maintenance.

The project is expected to provide new shear walls and collector beams to improve the building's resistance to seismic forces. It will also add new concrete footings, soil anchors and other reinforcements designed to minimize the risk of falling objects. The proposed scheme, developed during the feasibility phase, maintains the historic interior and exterior of the building while providing the needed seismic corrections.

Some of the required upgrades to the building will include altering an entrance to improve wheelchair accessibility, installing a new elevator and shaft, installation of a fire sprinkler system, installation of a complete fire alarm system and eliminating dead-end corridors.

The university seeks to avoid major relocation or reconfigurations of space, but the project will need to address program impacts caused by the seismic project. In order to avoid substantial interior modifications to the building to meet fire codes, the Electron Microscope Lab will be relocated to another campus building. This will make space available in the basement level of the building, providing flexibility to address program impacts elsewhere.

In order to carry out the seismic work while continuing academic activities, all of the occupants of Giannini Hall will need to be relocated during construction.

#### Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region IX**

State: **California**

County: **Alameda County**

City/Community: **Berkeley**

## Key Activity/Project Information

Sector: **Public**  
Hazard Type: **Earthquake**  
Activity/Project Type: **Retrofitting, Structural**  
Structure Type: **Concrete, Reinforced**  
Activity/Project Start Date: **07/2005**  
Activity/Project End Date: **Ongoing**  
Funding Source: **Hazard Mitigation Grant Program (HMGP); Local Sources**  
Funding Recipient: **Critical Facility - School**  
Funding Recipient Name: **University of California**

## Activity/Project Economic Analysis

Cost: **\$22,000,000.00 (Estimated)**

## Activity/Project Disaster Information

Mitigation Resulted From Federal  
Disaster? **Unknown**  
Value Tested By Disaster? **No**  
Repetitive Loss Property? **Unknown**

## Reference URLs

Reference URL 1: <http://www.oes.ca.gov/>  
Reference URL 2: <http://www.berkeley.edu/>

## Main Points

- Giannini Hall received a "poor" seismic rating in the 1997 review of campus buildings and a project to correct structural deficiencies was scheduled to begin July 2005. The schematic design is scheduled to take up to two years, with construction scheduled to begin in 2007.
- The primary goal of the project is to correct the building's seismic deficiencies, but it will also address mandatory fire and life-safety requirements, accessibility improvements and essential deferred maintenance.
- The university seeks to avoid major relocation or reconfigurations of space, but the project will need to address program impacts caused by the seismic project.