1933 Long Beach Earthquake and The Field Act, Improving the Design and Building Standards for California Schools

The Earthquake
Occurred March 10, 1933, at 5:54 p.m.
Magnitude 6.4
120 fatalities
$50 million in damages (1933 dollars)
Damage was most significant to poorly designed and unreinforced brick structures.
120 schools in and around the Long Beach area were damaged, of which 70 were destroyed.
Experts concluded that if children were in school at the time of the earthquake, casualties from the earthquake would have been in the thousands.

Ground-Shaking Damage to Schools
John Muir Elementary School
Long Beach
Compton Junior High School
Compton

The Field Act
The California Legislature enacted the Field Act just one month after the earthquake due to the findings that loose subsoils, poor workmanship, and substandard materials all contributed to the failure of schools.
The Field Act and its subsequent revisions authorized the Division of the State Architect (DSA) to review and approve all public school plans and specifications and to furnish general supervision of the construction work.

The California Geological Survey assists the DSA by reviewing geologic hazards affecting schools under the Field Act.

Since the passage of the Field Act, no school has collapsed due to a seismic event, and there has been no loss of life.

California Geological Survey (CGS) is regarded as the primary source of geological and seismological products and services for decision making by California’s government agencies, its businesses and the public.

For more information, visit the California Geological Survey Website: http://www.conservation.ca.gov/cgs/News/LongBeach.htm

Photo and figure sources: U.S. Geological Survey, the Historical Society of Long Beach, H. M. Engle, James Laub (Long Beach Unified School District), and CGS.

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