



FEMA

Light Fixtures and Earthquakes Protecting School Children

Los Angeles, CA - The Los Angeles Unified School District (LAUSD) is second in size only to the New York City School District. At present, the District is composed of over 900 schools, serving over 800,000 students, and employing 57,000 full-time and 24,000 part-time staff. The LAUSD provides public education services to a 708 square mile area including the cities of Los Angeles, Bell, Carson, Cudahay, Gardena, Huntington Park, Lomita, Maywood, San Fernando, South Gate, Vernon, and West Hollywood; portions of 18 other cities; and the unincorporated areas of Los Angeles County.

At the time of the 1994 Northridge Earthquake, the LAUSD facilities were illuminated with suspended ceilings and imbedded pendant lighting systems. These lights tend to fall from the ceiling when impacted by strong seismic motion. Hundreds of lighting units fell onto desks in the classrooms when the earthquake hit.

Fortunately, the earthquake occurred early in the morning when the schools were closed. As a result of this experience the LAUSD, with the support of FEMA, decided to undertake the seismic retrofitting or replacement of pendant lights to increase life safety, reduce the earthquake injury risk, and to meet current building code standards.

In the Northridge Earthquake, 5,500 buildings owned by LAUSD were damaged with total damages currently estimated at \$134 million. Under Section 406 of the Stafford Act, FEMA funded \$3.1 million for damaged, unbraced pendant ceiling and lights. In addition, \$45 million were obligated to mitigate unbraced pendant ceiling and light systems of the same design that were not damaged.

The reinforcement and/or replacement of the unbraced pendant lights in the Los Angeles Unified School District will reduce the high risk of injury to the more than 800,000 school children during the next earthquake event.



Los Angeles County,
California



Quick Facts

Sector:

Public

Cost:

\$48,100,000.00 (Actual)

Primary Activity/Project:

Retrofitting, Non-structural

Primary Funding:

Hazard Mitigation Grant Program (HMGP)