

# LOMA PRIETA EARTHQUAKE

April 2006

### The Loma Prieta earthquake registered magnitude 6.9.

It struck at 5:04 p.m. on October 17, 1989. Its epicenter was located in the Santa Cruz Mountains, about 16 kilometers northeast of Santa Cruz and 30 kilometers south of San Jose. The earthquake occurred 18 kilometers beneath the earth's surface. It ruptured a forty-kilometer segment of the San Andreas fault, spreading both northwest and southwest.

### Damage was spread over a wide area.

The strong shaking lasted less than 15 seconds, but the direction of the movement, combined with deep soil conditions, magnified the shaking intensity. Damage was heaviest in Santa Cruz and Watsonville, where downtown commercial structures collapsed and approximately 10 percent of the housing stock was severely damaged. Damage overall was concentrated in three sectors: highways and bridges, residential structures, and public facilities.

### Casualties and costs were noteworthy.

The earthquake killed 62 people and injured approximately 3,700. It caused an estimated \$7.4 billion in direct damage and about \$2.6 billion in uninsured property damage and in secondary economic impacts. The earthquake occurred during the opening minutes of the third game of the "Bay Bridge" World Series between the Oakland A's and San Francisco Giants, so commute traffic was exceptionally light, and that perhaps saved lives. A presidential disaster declaration included 10 counties.

### Residential structures were hard hit.

More than 75 percent of damaged buildings were residential. Approximately 11,500 housing units were lost or severely damaged (40% single-family and 60% multifamily structures). The worst residential damage was concentrated in six neighborhoods in four cities: the Sixth Street corridor, South of Market, and Tenderloin and Marina districts in San Francisco; downtown Oakland; the Santa Cruz Pacific Garden Mall, with four single-room-occupancy (SRO) hotels; and the downtown Watsonville core.

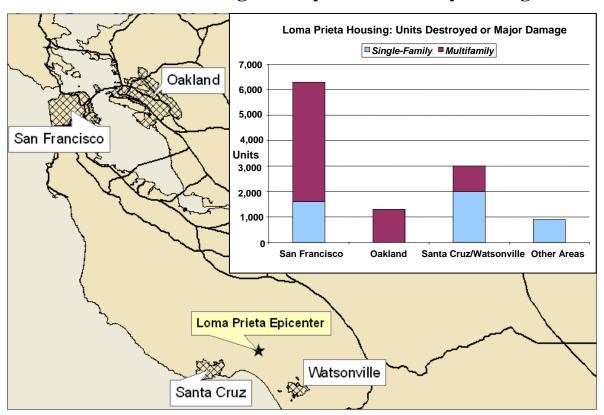
#### **Low-income renters bore much of the brunt.**

Three-quarters of the units lost in San Francisco, all of those lost in Oakland, and one-third of the units in the cities of Santa Cruz and Watsonville were occupied by low-income renters. This caused extraordinary problems in providing emergency shelter and replacement housing.

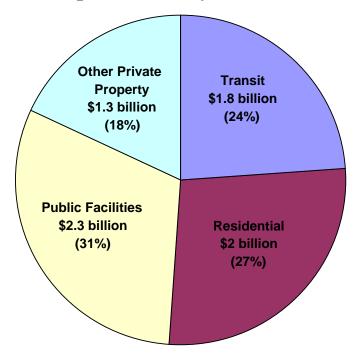
#### The quake had lasting effects on Bay Area transportation.

In San Francisco, the upper decks of the Central and the Embarcadero freeways collapsed. In Oakland, a portion of the Bay Bridge and two sections of the Cypress freeway collapsed. The Embarcadero freeway was later demolished and the Cypress freeway was rerouted. The work of building a new section of the Bay Bridge is still under way fifteen years later.

# Loma Prieta Housing Destroyed or Seriously Damaged



# Loma Prieta Capital Losses by Sector (\$7.4 billion total)



Source: *Disaster Hits Home: New Policy for Urban Housing Recovery* (University of California Press, 1998), by Mary C. Comerio, Professor of Architecture and Chair, Department of Architecture, University of California, Berkeley.