

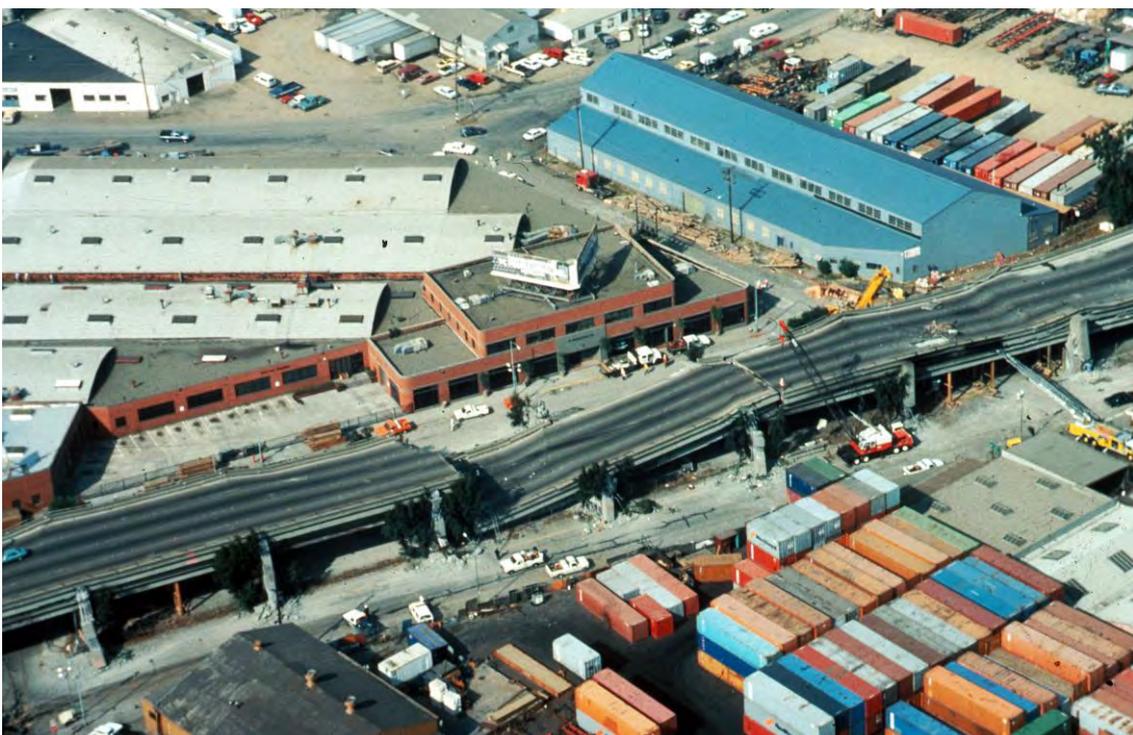
The 1994 Northridge earthquake occurred on January 17, at 4:30:55 a.m. PST and was centered in Reseda, a neighbourhood in the north-central San Fernando Valley region of Los Angeles, California. It had a duration of approximately 10–20 seconds and had a magnitude of 6.7. Strong ground motion was felt as far away as Las Vegas about 220 miles from the epicentre. The death toll was 57, with more than 5,000 injured. In addition, earthquake-caused property damage was estimated to be more than \$20 billion, making it one of the costliest natural disasters in U.S. history.

The earthquake struck in the San Fernando Valley about 20 miles (31 km) northwest of downtown Los Angeles. Although given the name "Northridge", the epicentre was located in the community of Reseda. This was the first earthquake with a hypocenter directly beneath a US city since the Long Beach earthquake of 1933.

Damage occurred up to 85 miles (125 km) away, with the most damage in the west San Fernando Valley, and the cities of Santa Monica, Simi Valley and Santa Clarita.

The exact number of fatalities is unknown, with sources estimating it at 60, or "over 60", to 72, where most estimates fall around 60. The "official" death toll was placed at 57, 33 people died immediately or within a few days from injuries sustained in the earthquake, and many died from indirect causes, such as stress-induced cardiac events. Some counts factor in related events such as a man's suicide possibly inspired by the loss of his business in the disaster. More than 8,700 were injured including 1,600 who required hospitalization.

The Northridge Meadows apartment complex was one of the well-known affected areas in which sixteen people were killed as a result of the building's collapse. The Northridge Fashion Center and California State University, Northridge also sustained very heavy damage—most notably, the collapse of parking structures. The earthquake also gained worldwide attention because of damage to the vast freeway network, which serves millions of commuters every day. The most notable of this damage was to the Santa Monica Freeway, Interstate 10, known as the busiest freeway in the United States, congesting nearby surface roads for three months while the freeway was repaired.



Additional damage occurred about 50 miles (80 km) southeast in Anaheim as the scoreboard at Anaheim Stadium collapsed onto several hundred seats. The stadium was vacant at the time. Although several commercial buildings also collapsed, loss of life was minimized because of the early morning hour of the quake, and because it also occurred on a federal holiday (Martin Luther King, Jr. Day). Also, because of known seismic activity in California, areabuilding codes dictate that buildings incorporate structural design intended to withstand earthquakes. However, the damage caused by the earthquake revealed that some structural specifications did not perform as intended. Because of these revelations, building codes were revised. Some structures were not red-tagged until months after the earthquake, because damage was not immediately evident.

Most casualties and damage occurred in multi-story wood frame buildings (e.g. the three-story Northridge Meadows apartment building). In particular, buildings with an unstable first floor (such as those with parking areas on the bottom) performed poorly. Numerous fires were also caused by broken gas lines from houses shifting off their foundations or unsecured water heaters tumbling. In the San Fernando Valley, several underground gas and water lines were severed, resulting in some streets experiencing simultaneous fires and floods. Damage to the system resulted in water pressure dropping to zero in some areas; this predictably affected success in fighting subsequent fires. Five days after the earthquake it was estimated that between 40,000 and 60,000 customers were still without public water service.<sup>[23]</sup> As is typical in earthquakes, unreinforced masonry buildings and houses on steep slopes suffered damage. However, school buildings (K-12), which are required by California law to be reinforced against earthquakes, in general survived fairly well.

An unusual effect of the Northridge earthquake was an outbreak of coccidioidomycosis (Valley fever) in Ventura County. This respiratory disease is caused by inhaling airborne spores of fungus. The 203 cases reported, of which 3 resulted in fatalities, was roughly 10 times the normal rate in the eight weeks following the earthquake. This was the first report of such an outbreak following an earthquake and it is believed that the spores were carried in large clouds of dust created by seismically triggered landslides. Most of the cases occurred immediately downwind of the landslides.



Gas from a ruptured supply line burns as water from broken water main floods Balboa Boulevard in the Granada Hills area of Los Angeles, on January 17, 1994. The fire from the gas main destroyed two homes.



Steel-reinforced concrete support beams damaged by the 1994 earthquake



University of California, Northridge, students walk by a parking structure that was heavily damaged on the CSUN campus in the January 17 earthquake.



Medical personal work a triage unit outside Olive View Medical Center in Sylmar, California, to help some of the dozens of people injured in the earthquake, on January 17, 1994



Octogenarian Art Mahony sleeps at the Red Cross shelter set up in the Santa Clarita, California, Boys and Girls Club, on January 18, 1994. Many people forced from their homes by the previous day's earthquake sought out shelters to get a night's rest.