

# Plate tectonic press release

[Science](#), [Geology](#)



For many years people always called southern California Americas Promised Land because of Its beautiful weather, beaches and Its film industry. Now with 13 million habitants it's been looked at as hazard city. " Not only does the San Andrea Fault, marking the conservative margin between the Pacific and North American plates, cross Southern California, but LA was built across a myriad of transform faults" (" Case StudyFor Multiple Hazards; Los Angel's, California, Usa. , 1999). These Include the Santa Monica fault, the San Fernando fault, and the Northerner/Santa Barbara fault. Although the most violent earthquakes are predicted to occur along the San Andrea Fault, earth movements frequently occur along most of the lesser known faults. " The most recent of 11 earthquakes to affect LA since 1970 occurred in January 1994, focusing in the Northerner area It registered 6. On the Richter scale, lasted for 30 seconds, and was followed by aftershocks lasting several days, The quake killed 60 people, injured several thousand, caused buildings and sections of freeway to collapse, Ignited fires following a gas leak and explosion In the Granddad Hills area, and left 500, 000 homes without power and 200, 000 homes thou water supplies" (" Case study For Multiple Hazards: Los Angel's, California, Usa. ", 1999). There'd many reasons as too what causes the earthquakes and how they started.

The earthquakes in California are caused by movements of huge blocks of the earth's crust known as the Pacific and North American plates. " The Pacific Plate is moving in the North West direction and is scraping pass North America at a rate of two Inches a year. About two-thirds of this movement occurs on the San Andrea Fault and some parallel faults- the San Action,

Elisions, and Imperial faults" ("Southern California Earthquakes And Faults", n. . ). Over time, these faults minor earthquakes.

Let's talk about plate tectonics. There six major plates and they are named after the continents that they are embedded in, such as North America, Africa, and Antarctic. The plates make out the outer shell of the earth called the lithosphere. " One way a mountain is formed is through convergent boundaries which is when plates serving land masses collide, the crust crumbles and buckles into mountain ranges" ("Plate Tectonics", 1996-2014). Mountain ranges are also formed through divergent boundaries in the ocean. Magma from deep inside the earth's antler rises towards the surface and pushes apart two plates and mountains and volcanoes rise along the seam" ("Plate Tectonics", 1996-2014). On January 17 1994 an earthquake rocks Los Angel's, California, 'killing 54 people and causing billions of dollars in damages. The Northerner quake (named after the San Fernando Valley community near the epicenter) was one of the most damaging in U. S. History' ("Earthquake Rocks Los Angel's", 2014). " According scientists using a new model to determine the probability of big quakes, California has more than a 99% chance of having a magnitude 6. r larger earthquake within the next 30 years" ("Earthquake Rocks Los Angel's", 2014). How prepared are you for an earthquake? People with mobile homes and homes not attached to a foundation are at a much greater risk for damage. Buildings resting on unstable soil such as landfills are also at a much greater risk of damage. The Red Cross suggest that you: Become aware of fire evacuation and earthquake safety plans for all of the buildings you occupy regularly. Pick safe places in each room of your home, workplace and/or school.

A safe place could be under a piece of furniture or against an interior wall away from windows, bookcases or tall furniture that could fall on you. Practice "drop, cover and hold on" in each safe place. If you do not have sturdy furniture to hold on to, sit on the floor next to an interior wall and cover your head and neck with your arms. Keep a flashlight and sturdy shoes by each person's bed in case the earthquake strikes in the middle of the night. Make sure your home is securely anchored to its foundation. Bolt and brace water heaters and gas appliances to wall studs. Bolt bookcases, china cabinets and other tall furniture to wall studs. Hang eave items, such as pictures and mirrors, away from beds, couches and anywhere people sleep or sit. Brace overhead light fixtures. Install strong latches or bolts on cabinets. Large or heavy items should be closest to the floor. Learn how to shut off the gas valves in your home and keep a wrench handy for that purpose. ("Prepare For An Earthquake", 2014) Now that you know all there is to know about earthquakes and how to protect yourself in them, you will better keep yourself protected from the dangers of them.