

Deadly but little-known -- why scientists are so afraid of the San Jacinto fault

Rong-Gong Lin II, Shelby Grad and Joseph Serna, Los Angeles Times, 6-10-16

Friday's 5.2 magnitude earthquake that hit the desert southeast of Los Angeles was centered along the San Jacinto fault, which is one of the region's most active and potentially dangerous fault lines.

The fault runs through populated areas such as San Bernardino, Colton, Moreno Valley, Redlands, Loma Linda, Hemet and San Jacinto, as well as near Riverside, Rialto and Fontana. The epicenter of Friday's quake was in a more isolated area near Borrego Springs.

Experts have been warning for some time that the San Jacinto fault — while less well known than the San Andreas — poses a major threat to the region.

A study released earlier this year said both faults could rupture together in a 7.5-magnitude earthquake.

"Because the San Jacinto fault cuts into the middle of the Inland Empire — instead of the edge of the desert — it cuts through a lot more people," Julian Lozos, a Cal State Northridge professor of geophysics, told the Los Angeles Times in March. "There's just more people directly living on this fault."

The study, which Lozos wrote while working on post-doctoral research at Stanford University and at the U.S. Geological Survey, looked at whether a massive 1812 quake in Southern California was the result of shaking on both fault lines.

The San Jacinto stretches for 130 miles, from the Cajon Pass in San Bernardino County southeast toward the Mexican border. The 1987 Superstition Hills earthquakes, which hit about 90 miles east of San Diego, topped out at magnitudes 6.5 and 6.7, and caused \$3 million in damage in Imperial County.

Experts have said there needs to be a great recognition of the San Jacinto's dangers because it runs under major population centers.

One big concern is San Bernardino — a city of 215,000 people that fell into bankruptcy in 2012 and suffers from one of the highest poverty rates among the nation's largest urban areas. San Bernardino has one of the largest concentrations of earthquake-vulnerable brick buildings in a location with a high risk of intense shaking.

According to the USGS, a quake on the fault in 1918 caused significant damage and one death in San Jacinto.