

# Earthquake Concerns Have Some Worried About L.A. Bridge

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## Construction Material in Question



By Miriam Hernandez

LOS ANGELES, Aug. 22, 2007 (KABC-TV) (KABC) -- Experts say the 75-year-old 6th Street Viaduct, which connects downtown to Boyle Heights, is deteriorating and may collapse in the event of a major earthquake.

Among the bridges of Los Angeles, the 6th Street Viaduct is distinctive. Seventy-five years old, it has dual arches, and a serious defect.

"The 6th Street Viaduct has some issues, major issues that we are facing," said John Koo, L.A. City Dept. of Works, Bureau of Engineering.

Major issues on a corridor that connects downtown L.A. to Boyle Heights: Eleven-hundred vehicles per day. Underneath is where you can see the cracks. As each one appears, the Los Angeles Bureau of Engineering fills them in with epoxy. They've installed retainers to hold the deck onto the columns. A major fix is not scheduled until 2011. Until then there is the specter of what happened in Northridge.

"In the presence a major earthquake, there's 70 percent probability of major damage," said Koo.

The problem began in the late 1920s. The construction crews needed concrete material, aggregate material, to mix up all the cement to make the bridge. They found it near the Los Angeles River. Turns out, though, that sandy mixture had a fatal flaw: Alkali.

Alkali, which reacts to silica and moisture, dissolves into a gel.

For bridge travelers, it conjures images of the Minneapolis 35W bridge collapse.

"It is kind of a little freaky, because you don't know, anything could happen," said Greg Negrete, frequent bridge traveler.

"I won't pass through here," said truck driver Ernie Diaz.

But what is the likelihood of a 7.5-magnitude earthquake happening before the scheduled reconstruction?

"Something in the range of less than one percent," said Dr. Tom Heaton of the California Institute of Technology.

More serious, says Heaton: concrete buildings in Los Angeles constructed prior to 1975.

"Many of those buildings will collapse with no void-spaces between the floors. My opinion is that possibly tens of thousands of people will be killed in those buildings," said Dr. Heaton.

The message to Angelenos: Be prepared. And to users of the 6th Street Bridge: Proceed with caution.

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