

PUBLICATION

Learning from Past Mistakes on Infrastructure Projects

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When we read news reports of failures in newly-constructed massive infrastructure projects endangering lives, we generally assume we are reading about shoddy work performed by Chinese construction companies in China or abroad. Recent headlines are a stark reminder, however, that U.S. construction companies working on large U.S. infrastructure projects may also be capable of cutting corners and endangering safety and structural integrity. U.S. construction companies must learn from the past failures of U.S. and Chinese construction companies working on large infrastructure projects if they are to maintain their position of global leadership in large construction projects.

Construction is ongoing on the \$6.4 Billion “[Bay Bridge Seismic Safety Projects](#)” to rebuild the 4.5 mile long Bay Bridge connecting San Francisco and Oakland, California—the most expensive infrastructure project in California history. Much has been made of the fact a company owned by the Chinese government was awarded the contract to fabricate the structural steel for the project and that all of this work was done in Shanghai by Chinese workers before being shipped to the U.S. and installed. We recently wrote on this blog about concerns some have regarding awarding contracts for large U.S. infrastructure projects to Chinese construction companies in light of China's checkered past with large building projects. We may have jumped the gun with that post, as it does not appear that concerns have been raised regarding the safety and integrity of the materials [actually provided by the Chinese](#) company.

In contrast, in recent weeks, serious concerns have been raised that the concrete foundations installed on the Bay Bridge project by a joint venture of U.S. construction companies may have serious structural problems, and that the government entity overseeing the project (the California Department of Transportation, or “Caltrans”) may not have adequately ensured that this concrete was properly tested during construction. Such allegations of faulty concrete in the foundations of the Bay Bridge bring to mind the tragic consequences that resulted when improperly installed concrete panels in another massive U.S. infrastructure project—[Boston's Big Dig](#) transportation project of the 1990's—fell and crushed a driver soon after the project was opened to the public. It should be noted that no allegations to date suggest that the Bay Bridge project will face flaws, safety concerns, delays, and cost overruns that come close to rivaling those of the Big Dig project. Hopefully, the contractors and regulators working on the Bay Bridge and other large infrastructure projects in the U.S. learned from the [mistakes made during the Big Dig](#) project and will take the steps necessary to ensure the safety and structural integrity of the Bay Bridge.

Nevertheless, while the new Bay Bridge has been touted as having an “[elegant, futuristic appearance](#)”, concerns about the concrete foundations call into question whether the bridge will be able to withstand the powerful earthquakes that will inevitably hit the San Francisco Bay at some point in the future. This is particularly concerning because the [impetus behind this project](#) is the fear of future earthquakes and the lingering damage to the Bay Bridge caused by the 1989 Loma Prieta earthquake (a/k/a the [Oakland A's-San Francisco Giants World Series earthquake](#)), when portions of the upper deck of the bridge fell onto the lower deck, with tragic consequences. Hopefully, concerns regarding the Bay Bridge are overblown and the project will serve as an example of a modern, stable, and iconic infrastructure project on par with the nearby 75 year old Golden Gate Bridge for decades to come. Nevertheless, if these concerns prove correct and there are serious structural problems with the concrete foundation of the Bay Bridge, it would appear that U.S.

construction companies and government regulators learned nothing from Boston's Big Dig, and the results could be tragic. If that is the case, perhaps the Chinese will be the ones to teach us this lesson when they are awarded future projects to rebuild the U.S. infrastructure system.