Toll Bridge Seismic Retrofit Program

The State Could Save Millions of Dollars Annually by Implementing Lessons Learned

Background

In 1996 the California Department of Transportation (Caltrans) was charged with implementing a Toll Bridge Seismic Retrofit Program (seismic program) to ensure critical structures—such as the Bay Bridge—meet the latest seismic safety standards. This program required the retrofit or replacement of California’s state-owned toll bridges. Although by 2002 Caltrans had finished seismic retrofits for some bridges in the San Francisco Bay Area and in Southern California, due to soaring cost estimates in 2005 the Legislature shifted oversight of the seismic program from Caltrans to the Toll Bridge Program Oversight Committee (Oversight Committee). We performed an audit related to the management of the seismic program by the Oversight Committee and costs associated with the program.

Key Recommendations

The Legislature should require the following for all publicly funded major transportation infrastructure construction projects that are estimated to cost $500 million or more:

- To form oversight committees that would act as the authorities for critical decisions and have sufficient staff to support the decision making.
- To develop and use risk management plans throughout the course of the projects to ensure committees and the agencies involved engage in sufficient and appropriate risk management.

Key Findings

- The Oversight Committee’s involvement curbed cost overruns—it encouraged competitive bidding for one project avoiding nearly $50 million in potential costs and in another project, it directed the creation of an alternative demolition strategy which saved the State more than $90 million.
- The Oversight Committee used risk management—a process of analyzing and prioritizing the effect of project risks—in decision making and avoided hundreds of millions of dollars in potential costs and seven years of potential delays.
- State law does not require all major publicly funded transportation infrastructure projects to establish oversight committees and risk management processes such as that established for the seismic program; yet, transportation infrastructure projects are forecasted to be more than $600 billion in the coming decades.
  - Not all projects involve Caltrans’ risk management and even when federal oversight is required, there is no assurance that federal oversight will be sufficient to prevent cost overruns.
  - Use of risk management applies to Caltrans’ capital and major maintenance projects.
- The seismic program is projected to end by 2019 at an estimated cost of just under $9 billion, not including ongoing maintenance and rehabilitation costs.