

# **Senate Transportation and Housing Committee**

## **Informational Hearing**

### **Lessons Learned from the Development And Construction of the Bay Bridge**

Friday, January 24, 2014  
10 a.m. – John L. Burton Hearing Room (4203)

#### **BACKGROUND PAPER**

##### **Introduction**

On January 24<sup>th</sup> this committee will consider what lessons may be learned from the development and construction of the eastern span of the San Francisco-Oakland Bay Bridge. This hearing is the second in a series of informational hearings examining what went wrong with this project which led to it being significantly delayed and over-budget. The focus of this hearing is to identify opportunities to improve the state's development and delivery of large infrastructure projects.

Due to the vast scale of the Bay Bridge project, the Senate on behalf of the chairman of the committee hired an investigative reporter, Roland De Wolk, to produce a comprehensive timeline and review from the Loma Prieta earthquake to the new span's opening in September of 2013. Mr. De Wolk's report describes a number of potential issues and concerns with the construction of the bridge. This hearing will focus on these issues, attempting to use them to highlight the underlying problems within the California Department of Transportation (Caltrans) and state government generally that allowed these issues to occur in the first place. The review concludes that a general lack of transparency created the fertile ground for project managers to make decisions largely outside of the view of the public, its elected representatives, and the

press. From this conclusion come a number of legislative recommendations to help avoid similar mistakes on future state projects.

## **Hearing Structure**

To begin the hearing, the chairman will briefly describe the findings of Mr. De Wolk's report. Following that presentation and any introductory remarks by other committee members, Dr. Karen Trapenberg Frick, Assistant Director of the University of California Transportation Center, will provide some background on the Bay Bridge project and the challenges builders faced.

The first panel of witnesses includes six individuals who will describe from their perspective a number of issues or concerns with the development and construction of the bridge. All these witnesses will raise questions of construction quality that have gone generally unanswered and may never be adequately resolved because of the project's lack of transparency and accountability. This panel is expected to illustrate the challenges created by this demonstrated lack of transparency.

First expected to testify is James Merrill of the engineering firm MACTEC, and formerly a principal engineer at AMEC, the firm that did quality assurance work on the Bay Bridge project. Mr. Merrill will describe his experience when he raised concerns to bridge program managers about welds in bridge components manufactured in China. Joining him will be Philip Stolarski, Director of Caltrans' Material Engineering and Testing Services, and Doug Coe, Supervising Bridge Engineer, who was responsible for quality assurance for Caltrans in China alongside Mr. Merrill.

Then Mike Morgan, Engineering Geologist for Caltrans, will describe concerns he has with the way testing was performed on various concrete structures on the bridge, including the foundations. He, similar to the experience of the other witnesses, will suggest that when he brought his concerns to management, they were dismissed.

Finally, Lisa Thomas and Bernard Cuzzillo will present findings related to Caltrans' investigation into the high-strength steel bolts and rods in the bridge. Ms. Thomas co-authored a

report raising concerns with Caltrans' conclusions, and that questions whether Caltrans has the metallurgical expertise necessary to make critical decisions on steel structures.

The second panel includes individuals from Caltrans as well as representing the Toll Bridge Program Oversight Committee (TBPOC) and the bridge managers. They will be expected to respond to the concerns raised in the earlier panel as well as describe steps taken or expected to be taken to address many of these issues.

## **Recommendations**

The intent of this hearing is to use concrete examples of mistakes made in the development and construction of the Bay Bridge to illustrate the need for changes within Caltrans and with how the state delivers large infrastructure projects in general. From Mr. De Wolk's investigation come a number of recommendations to improve the transparency and accountability of the state when building these projects, as follows:

- No public agency, including the TBPOC, should be exempt from basic open government laws such as the Ralph M. Brown Act and the Bagley-Keene Open Meeting Law.
- In this day and age in California there should be mandatory Web sites that do not simply promote government projects such as the Bay Bridge but have room for disclosure, discourse, critiques, inquiries, and more. Some of this may be modeled on other excellent sites such as Washington State's Gray Notebook or here in California, San Diego's SANDAG.
- Public employees should have a secure place to bring their concerns, complaints, and above all their safety issues. They should not fear retribution, reprisal, or replacement. Robust, fearless discussions about issues such as safety, money management, and innovative methods should always be encouraged, not squelched. This needs to become a verifiable institutional practice.
- The Legislature should consider establishing a fully independent bureau of inquiry modeled on Inspector General offices, whether for Caltrans or other state departments. This might be a consolidation of the current LAO and Little Hoover Commission.

- Communications of any official nature should be not just allowed, but encouraged, to be in some permanent media, such as writing. This protects everyone.
- All government-commissioned studies, reports, and audits should be not only routinely collected and consolidated by subject but should be readily available to the public online.
- The legislature and state should consider a policy allowing estimates for future large projects to be delivered with malleable ranges: Best and worst cases, accompanied with risk assessments for each.
- State government should consider creating a formal change manager role on large projects. The position would be responsible for tracking all change orders, non-compliance reports, and the like. These, too, should be readily accessible online to the public.
- The Legislature should consider creating oversight committees for large projects that might be modeled after the strong points of the TBPOC. As the TBPOC Chairman states, it would be wise to have these oversight committees in place before projects begin, not afterwards when they are chartered to fix errors that are sometimes irreparable.
- The Legislature should consider conferring oversight powers to the California Transportation Commission, which last year alone doled out \$5.1 billion but has no real role in making sure the money is spent the way the commission stipulates.
- Caltrans should publish executed contracts between state agencies, such as Caltrans, and its many contractors. Aside from the fact that this regards the public's money, visible contracts will create competition not concealment.

## **Conclusion**

The committee has tentatively scheduled the third informational hearing in this series for February 11, 2014. At that hearing the committee expects to discuss these and other reform proposals from the California Transportation Agency, the Legislative Analyst's Office, and others.