

California's High-Speed Rail Project: How Should the State Safeguard the Public's Interest?

Joint Hearing Transportation and Housing Committee and Budget and Fiscal Review Subcommittee No. 2 on Resources, Environmental Protection, Energy, and Transportation

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Committee Background Report

I. Introduction

State law assigns the California High-Speed Rail Authority (HSRA) with responsibility for planning and implementing one of the most significant and expensive projects in the state's history. Proponents of the high-speed rail project see it as the singular opportunity to affect positively the growth and development of the state over the next millennium; they point to how New York City would have developed without its integrated subway system. Alternatively, opponents point out the uncertainties of the project, such as its unknown funding sources and the high levels of risk that plague most megaprojects.

Since 2007, the Senate has held over a dozen oversight hearings in order to increase the Legislature's understanding of the project and encourage the administration to effectively move the project forward. Over this time, independent entities such as the Legislative Analyst's Office, the Bureau of State Audits (State Auditor), and HSRA's own peer review group have raised many legitimate concerns about the development of the project.

This hearing continues the Senate's oversight work by focusing on two issues related to safeguarding the public's interest regarding the project. First, the hearing will examine how HSRA and the administration are addressing concerns about proper management and oversight of contractors involved in the project's development and construction. Second, the committee will contemplate what the proper role should be for publicly-employed inspectors of work completed by private contractors.

II. Background

Senate Bill 1420 (Kopp), Chapter 796, Statutes of 1996, created HSRA to direct development and implementation of inter-city high-speed rail service that would be fully coordinated with other public transportation services. A nine-member board governs HSRA. The governor appoints five members of the board, the Senate Rules Committee appoints two, and the Assembly Speaker appoints two. The board hires a CEO, currently Jeff Morales, to lead the

Authority. Until recently, HSRA was a small entity with limited funding that focused its efforts primarily on program level studies and other analyses. With the recent influx of state and federal funding, HSRA's size and scope of work has grown substantially. HSRA currently has 71.5 authorized staff positions and, while in the past it has struggled to fill many of these jobs, it has made substantial progress in filling key management jobs over the past year.

Assembly Bill 3034 (Galgiani), Chapter 267, Statutes of 2008, placed the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century, also known as Prop 1A, before the voters. Passage of Prop 1A made available approximately \$9.9 billion in general obligation bond funding for the project. Of this total amount, \$950 million is set aside for capital improvements to existing intercity urban and commuter rail systems to provide direct connectivity to high-speed rail, are incorporated as part of high speed rail, or provide safety or capacity enhancements. The remaining \$9 billion in Prop 1A funding is specifically set aside for the high-speed rail project.

Prop 1A establishes a path from Anaheim-Los Angeles Union Station to the San Francisco Transbay Terminal via Fresno and San Jose as the initial phase of the eventual statewide system. It specifies certain characteristics for the design of the system, including electrified trains capable of sustaining speeds of no less than 200 miles per hour and capacity to achieve travel times between San Francisco and Los Angeles Union Station of 2 hours, 40 minutes. Further, Prop 1A requires that the bond funds used for construction of the high-speed line be matched 50/50 with other non-state dollars. Finally, Prop 1A requires HSRA to follow a number of steps in order to access funding for construction. Since approval of Prop 1A, the state has received a commitment of roughly \$3.5 billion in federal funding for the high-speed rail project.

Recent Activity

In April of last year, HSRA released its revised 2012 Business Plan, which was a significant refinement of the draft plan presented to the Legislature fall of 2011. The 2012 plan includes enhancing local rail service immediately and sets a total projected cost of \$68 billion for the initial phase of the HSR project. According to the revised plan, construction of the entire 520-mile system would be completed in 2028. Key features of the revised plan include the following:

- Construction of a 300-mile initial operating section of electrified rail from Merced to the San Fernando Valley, beginning in 2013 and completed within 10 years.
- Improvements to existing rail service in the Bay Area and Los Angeles regions (the "bookends") to prepare those regions for high-speed service. These include conversion of local diesel-powered rail systems to electric power and safety improvements such as positive train control, including upgrades on the Amtrak/Metrolink corridors between Los Angeles and Anaheim.
- The potential to access revenues generated through the state's newly implemented carbon trading program for the reduction of greenhouse gas emissions, known as "cap and

trade,” to match and supplement state bond funds should federal funding not become available to complete the system.

Following release of the revised 2012 Business Plan, the governor released his revised budget, which proposed the following appropriations:

- \$5.9 billion (\$3.2 billion federal funds, \$2.6 billion Prop 1A bond funds) to construct an initial 130-mile segment of the high-speed rail project between Madera and Bakersfield.
- \$253 million (\$48 million federal funds, \$204 million Prop 1A bond funds) for completion of environmental and preliminary design work for various segments of the system. This includes \$152.4 million to complete environmental review for each of the 10 segments comprising the system, as well as \$100.2 million to fund full preliminary design of the Merced-Fresno and Fresno-Bakersfield segments and partial design of other segments.
- \$819 million (Prop 1A connectivity bond funds) for intercity (Caltrans-funded) and local rail operators to improve existing rail operations to enhance connectivity to the future high-speed rail system. This appropriation consists of \$106 million for intercity projects to increase travel speeds and frequencies and \$713 million for enhancements to local systems that will directly benefit the HSR project.

SB 1029, (Committee Budget and Fiscal Review), Chapter 152, Statutes of 2012, appropriated these funds along with an additional package of \$1.1 billion in bond funds for investment in the bookends in northern and southern California. These bookend projects include \$600 million primarily for electrification of the Caltrain corridor between San Francisco and San Jose and \$500 million for projects to improve the Metrolink corridor between Palmdale and the San Fernando Valley. These improvements shorten travel times for commuter trains that will connect to the high-speed rail line as part of the blended system. Finally, SB 1029 includes extensive language that restricts expenditures or requires reporting to various control entities and to the Legislature.

Following the multi-billion dollar appropriation in SB 1029 to complete preliminary design and commence construction of the initial project phase, the governor’s budget proposal for 2013-14 makes only minor modifications. The proposal adds 15.5 staff positions, most of which are in the area of software and information systems, but otherwise is not remarkable. The budget proposal also notes that local partners will submit to HSRA their final selection of specific projects for the bookend investments (the \$1.1 billion noted above) by June of this year.

In September of 2012, the Federal Railroad Administration approved the required environmental impact assessments for the Merced-Fresno alignment and HSRA expects that the environmental clearance process for the Fresno-Bakersfield alignment should be concluded this spring. HSRA has divided the initial 130-mile segment in the Central Valley into five separate design-build contracts and has begun the process to award the first contract by this summer, initiating the beginning of construction on the project.

III. State Management and Oversight

In April 2010, the State Auditor released a report on HSRA identifying a number of concerns, including risk of an incomplete system because of inadequate planning, weak oversight, and lax contract management. In a follow up report published in January of 2012, the auditor identified a number of critical, ongoing problems involving HSRA's oversight of the high-speed rail program.

Specifically, the auditor concluded that HSRA's processes for monitoring the performance and accountability of its contractors — especially the Program Manager (Parsons Brinkerhoff or PB) — were inadequate. During the follow-up review, the auditor found that HSRA has continued to struggle to provide an appropriate level of oversight, in part because it was significantly understaffed. Without sufficient staffing, the state struggled to oversee its contractors and subcontractors, who at the time outnumbered HSRA employees by about 25 to one. As noted above, HSRA now has over 70 employees, but it is not clear what the best number of employees is to manage a project as large and complex as a statewide high-speed rail project.

In addition, the auditor's 2012 follow-up report revealed that HSRA failed to ensure that it and the public were aware of its contractors' and subcontractors' potential conflicts of interest. The report states that although HSRA's conflict-of-interest code requires its contractors to file statements of economic interest that help to identify any potential conflicts of interest that they may have, the review found that some of the contractors had failed to file their statements. Further, HSRA does not require all of its subcontractors to file statements of economic interest. As a result, HSRA has no way to verify that subcontractors do not have real or perceived conflicts of interest.

The follow up report also concluded that, in part because HSRA has so few staff, it has delegated significant control to its contractors. As a result, HSRA may not have the information necessary to make critical decisions about the program's future. For example, when the auditor reviewed three of the monthly progress reports that PB submitted to HSRA to inform it of the program's progress, the auditor found over 50 errors or inconsistencies of various types. Most significantly, the report noted differences between what was reported in the regional contractors' reports to PB and what PB summarized and reported to HSRA, thus demonstrating that PB had provided the HSRA board with misleading information. Additionally, at the time of the auditor's follow up report, HSRA had been minimally involved in the risk-management process, instead relying almost completely on PB to both identify and mitigate potential problems. According to the chief deputy director, PB was at the time more engaged than HSRA staff in risk management because HSRA had not been able to hire a risk manager. HSRA has since hired Jon Tapping, recently the risk manager for the San Francisco Bay Bridge project, to be HSRA's Risk Manager.

Since June of 2012, the administration has made significant progress addressing the state management and oversight issues that the auditor raised. The Governor's Reorganization Plan, which takes effect on July 1, 2013, removes some of HSRA's independence and places it within the newly-created Transportation Agency. This will presumably increase the accountability of

the HSRA board and give more ownership of the project to the governor's administration, while also hopefully improving the integration of the project with other similar state efforts. In addition, HSRA has filled most of its executive leadership positions and is in the process of developing an organization it asserts will be sufficient to provide proper oversight and management of the project.

IV. Project Inspection

As mentioned earlier, HSRA plans to let multiple design-build contracts for construction of the system, and has already begun the process for the first construction segment in the Central Valley. Design-build is a method of procurement where the state contracts with a private general contractor to both design and build an infrastructure project. This is different than the state's typical design-bid-build procurement process in which one private firm or state staff design a project and another private contractor constructs it. With design-build, the general contractor is responsible for subcontracting with other entities for design as well as construction of the project.

One of the benefits of procuring a project through design-build is the potential transfer of certain risks from the state to the contractor. For example, through the traditional design-bid-build procurement method, the state completes the design and then expects the contractor to construct the project as designed. If issues arise with the design, the contractor will often bill the state for the complication, increasing costs and delaying the project. With design-build, the private firm is responsible for the interface between the design and construction and has to deal with any complications that arise on its own. Further, design-build proponents generally believe that the private sector is often better able to develop innovative project designs and construction techniques than the state. Greater design and construction innovation could result in a variety of potential benefits, including lower project costs, higher quality, shorter construction schedules, and enhanced project features.

All public works projects, regardless of the procurement method, require a certain level of quality control to assure the infrastructure is built in a manner that keeps safe the public user of the facility. The level of project inspection completed by engineers employed directly by the public agency responsible for the facility may vary from state to state and even by project. In the case of federally-funded highways, the Federal Highway Administration (FHWA) requires the owner agency to maintain responsibility for the inspection and oversight. While it is possible for agencies to augment quality control staff with outside consultants, FHWA does not allow an agency to delegate the ultimate responsibility to a consulting firm; FHWA requires some level of verification and testing by the owner agency. The Federal Rail Administration, a separate division of the US Department of Transportation, is providing partial funding for the high-speed rail project, and it is at this time unclear what level of oversight it will require.

Through its design-build request for proposal (RFP), HSRA has outlined a four-level quality assurance/quality control plan. First, the RFP requires the design-build contractor to develop and submit to HSRA for approval its own quality management plan. This is typical in design-build as well as with traditional design-bid-build procurement. Second, the RFP requires the

contractor to pay an independent consultant to review 100 percent of its inspection plans and procedures and report directly to HSRA all results of the review. HSRA suggests this full review is unique to its design-build proposal, and that this provides an extra layer of verification and review that is not typically found in design-bid-build procurement. A third layer of inspection is conducted by the construction management firm, whose role is similar to a general contractor. In the case of state highway projects, the California Department of Transportation (Caltrans) usually fills this role. When Caltrans implements design-bid-build, either state engineers or consultants conduct inspections of the contractor's work by doing verifications and randomized reviews of the contractor's quality management plan. The construction management firm will do this work for HSRA. Finally, HSRA engineers will perform statistically significant spot verifications of the tests and inspections conducted by the design-build contractor. HSRA suggests it initially will have around five in-house engineers doing this work and will contract with Caltrans for additional engineers, if necessary, to maintain proper oversight.

The model proposed by HSRA seems to be typical of that in other states that use design-build procurement. Florida's design-build Guidelines expressly describe a similar model. HSRA staff suggests Utah and Oregon have also successfully implemented this model. To further reassure the public, HSRA points out that anywhere the new facility interacts with existing infrastructure, whether highways, roads, railroads, or other utilities, the managing entities of that infrastructure will also participate in inspection and quality control processes.

V. Conclusion

Construction of the proposed high-speed rail project will take many years, with the first step in the process expected to begin this summer. While already giving the train the green light with initial appropriation last summer, the Legislature maintains responsibility to oversee the progress of the project and the administration's activities related to the public's interest. This hearing is an opportunity for members to exercise that oversight, and for the administration to reassure the Legislature that it is moving forward responsibly. Due to the project procurement timeline, however, HSRA warns that any changes to its proposed process will lead to delay and likely risk the project's future.