

Joint Informational Hearing

On the California High-Speed Rail Project

Senate Transportation and Housing Committee

Senate Select Committee on High-Speed Rail

Senate Budget and Fiscal Review, Subcommittee No. 2 on Resources, Environmental Protection, Energy and Transportation

May 15, 2012

The California High-Speed Rail Authority's (HSRA) revised 2012 business plan published last month creates a vision for developing the high-speed rail project that is markedly different from the draft plan published last November. The revised plan proposes to integrate high-speed rail (HSR) operations with existing public and private railroad entities, commits to constructing the Initial Operating Segment (IOS) from Merced to the San Fernando Valley, and proposes an early investment strategy that will benefit existing rail passenger services but will be used by high-speed trains in the future. In the meantime, the HSRA is preparing to initiate building the first segment of the IOS from near Madera to near Bakersfield via Fresno.

This background report first presents a summary of the project as envisioned in the revised business plan. Then, because of the request by the HSRA for an appropriation of \$6 billion in state and federal funds for construction of the 130-mile project between Madera and Bakersfield, it reviews the possible risks that the project may encounter. The source of state funds for this project is Proposition 1A, Safe, Reliable High-Speed Train Bond Act for the 21st Century, which was approved at the November 2008 election.

Summary of the Revised HSR Project

1. Initial Operating Segment South. This is the line from Merced to the San Fernando Valley via Bakersfield and Palmdale. Construction of this segment would begin in 2013 and be completed in 2021. Embedded in the segment are three construction segments.

- Initial construction segment from Madera to Bakersfield. This is the American Recovery and Reinvestment Act of 2009 (ARRA) funded project for which the Governor is asking an appropriation of \$2.7 billion in Proposition 1A funds and \$3.3 billion in federal funds. Federal law dictates that this project must be completed by September 30, 2017. This is the only exclusively high-speed rail project under the management of the HSRA that is fully funded. The HSRA is proposing that Amtrak diesel-fueled equipment use this segment between Fresno and Bakersfield until it is necessary to electrify the line for the operation of high-speed trains. At Fresno and Bakersfield the trains would merge back onto the Burlington Northern Santa Fee (BNSF) tracks over which Amtrak currently operates.
 - Bakersfield to Palmdale. This project crosses the Tehachapi Mountains by paralleling the existing railroad line to Palmdale where it will connect with Metrolink, the Los Angeles region's commuter rail line. The HSRA proposes that construction of this segment occur between 2017 and 2021. It assumes \$2.2 billion in Proposition 1A funds and \$10.2 billion in federal funds.
 - Palmdale to San Fernando Valley. This would complete the IOS. It would cost \$12.7 billion, with \$2.2 billion in Proposition 1A funds and approximately \$10.2 billion of federal funds. Construction would commence in 2017 and be completed in 2021.¹
 - If federal funds are unavailable, the HSRA proposes using cap-and-trade funds as a backup.
2. Blended Operations with Regional Rail. The business plan proposes that from San Jose to San Francisco and from the San Fernando Valley to Los Angeles and Anaheim high-speed train operations be blended into the existing commuter services operating in these two corridors. Caltrain, the commuter operator between San Jose and San Francisco, intends to electrify its tracks by 2020. When the connection between Merced and San Jose is completed in 2026, passengers will have a one-seat ride from San Francisco Transbay Terminal to the San Fernando Valley.
 3. Connectivity funds. Proposition 1A includes \$950 million for funding rail transit and conventional intercity and commuter rail services that may connect to the high-speed service. A formula is included in Proposition 1A for allocating the funds. The California Transportation Commission (CTC) selected projects in 2010, and the Legislature appropriated funds for these projects in 2010 and 2011. The governor vetoed the funds both years, except for those that required a particular safety feature, positive train control. This year the governor's budget is asking for an \$802 million appropriation of connectivity funds, contingent upon the Legislature appropriating \$6 billion for the initial construction segment. The CTC, HSRA, and stakeholders

¹ The cost information used in this report is from background material prepared for the Senate Budget and Fiscal Review Committee, Subcommittee No. 2, April 18, 2012.

are reviewing the connectivity projects that are consistent with the HSRA's development plan. The CTC may adopt a new list of projects at its June meeting.

4. Bookend investments. The HSRA is proposing to spend in the future \$1.1 billion of Proposition 1A high-speed rail funds for what is referred to as "bookend" projects. This funding is in addition to the connectivity funds. Bookend investments are intended to further the blended strategy for high-speed rail development. The funds will be used in urban areas for projects that in the near-term benefit existing passenger rail services and in the long-term will be a benefit to high-speed rail. There are memorandums of understanding between the HSRA and the Southern California Association of Governments and the Metropolitan Transportation Commission in the Bay Area that outline funding options and project selection criteria.
5. Northern California Unified Service. The revised business plan includes another intermediate strategy to take advantage of the potential of the IOS between Merced and the San Fernando Valley. The plan proposes improvements to the existing passenger rail service between Sacramento and Merced using Amtrak. In addition, the East Bay and San Jose are linked to Merced by upgrades to the Altamont Corridor Express Service (ACE), a commuter service that operates from San Joaquin County to San Jose. This service would take advantage of the availability of the high-speed rail line before it would be electrified and offer service down the San Joaquin Valley traveling, at times, up to 125 miles per hour. After the IOS becomes electrified, the unified service would become a feeder service connecting with high-speed trains at Merced.
6. Bay to Basin. HSRA believes that the ridership of the IOS will be sufficient to cover its operating and maintenance cost. In the HSRA's opinion, the IOS will attract sufficient private capital to connect San Jose to Merced and fund other segments that may be required to create a service linking northern and southern California referred to as Bay to Basin.

Impact of the Revised Business Plan

The blended approach described in the April revision of the 2012 business plan results in lower cost than the draft plan, which estimated a cost of \$98.5 billion. This compares to the \$68.4 billion that the HSRA is now estimating. The cost savings are due to the blended operations, abandoning plans to build to Anaheim, and revised assumptions on future interest rates. This will result in a system with less capacity, about 30 percent fewer riders, or 20.1 million riders compared to 29.6 million. The benefits of the revised business plan include improvements to current commuter and Amtrak services. In addition, the Northern California unified service will provide near-term enhanced conventional rail service to the residents of the Bay Area and Sacramento with improved connections between the two regions and the San Joaquin Valley, and, perhaps just as importantly, it will be developing a market for the fully developed Phase I blended system.

Summary of Funding

The following table summarizes the funding for the project. The HSRA proposes that 56.4 percent of the funding will come from the federal government. Because the federal government has not been consistent with funding high-speed rail, it is difficult to predict exactly how much federal funding will be available. The HSRA hedges its bets by suggesting that the cap-and-trade revenues will serve as a backstop for any shortfall in federal funds. It is too early to determine if this is likely, as there will be many competing interests for these funds.

Sources of Funding for Phase I Blended

	Amount (\$ in billions)	Percent
Proposition 1A bonds	\$ 8.2	\$12.0
Secured federal grants	\$ 3.3	4.8
Unsecured federal grants or cap-and-trade backstop funding	\$38.6	56.4
Private capital	\$13.1	19.2
Other funds (local and development funds)	\$ 5.2	7.6

Source: LAO

Near Term Risks

The revised business plan is a vision of what a high-speed rail system may look like in the future. To be sure, the emphasis on the blended approach is more realistic than the concepts in earlier plans. Moreover, it offers real benefits to Californians sooner than was previously proposed. The immediate issue before the Legislature is not the vision, but the decision to appropriate \$6 billion of federal and state funds to construct the 130-mile segment from Madera to north of Bakersfield.

The HSRA is currently in the process to engage a design-build contractor to build the first segment from near Madera to just south of central Fresno. The accompanying map depicts the four construction segments. A fifth construction package is laying the tracks on the infrastructure. The risks associated with the first segment were generally discussed in the business plan, but at the HSRA's May meeting there was a more detailed discussion, including the following:

Right-of-way

The entire project from Madera to Bakersfield requires the purchase of about 1,000 parcels, several hundred of which are between Fresno and Madera. While work is underway on finalizing the definition of the needed parcels, the HSRA is unable to proceed with negotiations with property owners or make offers until there is approval of the final environmental documents and the Legislature appropriates funds. The consultant making a presentation to the HSRA board at its May meeting summarized the ability to secure right-of-way in a timely fashion as “dicey.”

Permits

Obtaining permits for large construction projects is a complex matter. In one example, relating to water courses, permits will be required from at least the U.S. Army Corps of Engineers and the State Water Resources Control Board. Generally, the identification of issues before the approval of environmental documents is possible, but actual determination of the range of environmental issues and the suggested mitigation strategies will not be addressed until after the approval of the environmental documents. Committee staff has learned that there may be as many as 300 water courses, ranging from rivers to small streams to wetlands, which regulatory agencies must reviewed and determine what mitigation may be required. The consultants to the HSRA pointed out that the time required for review, in some cases, may depend on the staff resources available to the regulatory agencies.

Railroad Agreements

The project will cross railroad land, close grade crossings, and perhaps share portions of railroad right-of-way. In all cases, agreements must be reached with the railroads prior to the initiation of construction. The HSRA’s goal is to reach agreement with both the UP and the BNSF by June 2012.

Allocation of Risk between the HSRA and Contractors

One of the objectives of HSRA’s design-build construction procurement process is to shift risk to the design-build contractor. The term-sheet describes terms and conditions that the HSRA and the contractor have mutually agreed. For example, aside from obtaining the environmental clearances, which is the HSRA’s responsibility, the contractor is “responsible for obtaining all other permits and governmental approvals, including the final versions of any draft approvals obtained by the Authority.” Term-sheet negotiations between the Authority and the likely bidders are being finalized now. Failure to obtain various approvals may affect the schedule, which has cost ramifications to both the contractor and the HSRA.

Litigation

All large projects assume there will be litigation, usually on environmental issues. This project is no different. There have been at least two lawsuits on the program environmental document between San Francisco and Merced. Recently, the Madera and Merced County Farm Bureaus have announced that

they intend to sue the HSRA over the adequacy of the environmental document. It is expected that parties in Kings County will likely sue on the same grounds.

These risks are difficult to assess. In the worst case, litigation can set the project schedule back, significantly.

How Much of Madera to Bakersfield can be Constructed?

The business plan makes it clear that the HSRA is uncertain as to whether the entire line can be constructed. The attached map identifies four construction segments, which is the basic railroad infrastructure. The fifth construction segment is the laying of the railroad tracks. In a box on the map, the HSRA indicates that the two segments from Madera through Fresno to the vicinity of Hanford will be constructed for certain. The next two segments from Hanford to Bakersfield will depend on the outcome of the environmental analysis for that corridor and the amount of resources available. In essence, there is a risk that the project will not reach Bakersfield. This suggests that the environmental review is resulting in higher cost for that corridor than previously thought, or perhaps the cost of the first two construction segments will increase, substantially.

Conclusion

The purpose of the May 15th hearing is to understand the high-speed rail development concept in the revised business plan, and the nature and implications of the risks inherent with the Madera to Bakersfield project.