

High Speed Rail: 2016 Draft Business Plan

The purpose of this hearing is to review the draft 2016 Business Plan prepared by the California High-Speed Rail Authority (HSRA) and provide an opportunity to hear feedback from the public on the contents of the draft plan within the 60-day comment period. Ultimately, the intent of this hearing is to create a forum to help HSRA with development of the final 2016 Business Plan, which aims to serve as the funding plan to deliver a world-class passenger rail system in California.

Background:

Introduction:

State law requires that the 2016 Business Plan be published, adopted, and submitted to the Legislature no later than May 1, 2016. The current draft plan is the third biennial edition, but the first since the HSRA began to award contracts for construction of the first phase of the project in the Central Valley. In many respects, the current draft builds on the 2014 plan, providing refined cost, schedule, and ridership projections as well as increased detail with regard to funding strategies. However, in other respects, the 2016 plan departs from earlier plans.

Brief history of HSRA and prior business plans:

The HSRA was established in 1996 (SB 1420, Kopp, Chapter 796, Statutes of 1996) for purposes of planning and constructing a high-speed train system to connect the state's major population centers. However, until voters approved Proposition 1A in 2008, authorizing the state to sell up to \$9.95 billion in general obligation bonds for the project, HSRA lacked a significant source of funding. Proposition 1A imposed specific requirements on the project as a condition of using the funds, including that it be capable of achieving specified operating speeds and travel times between certain cities. Proposition 1A also limited funding to no more than 50% of the construction cost of any corridor or usable segment of the system, and further required that the system operate without a public subsidy.

Subsequently, the project has received approximately \$3.5 billion in federal funds, including \$2.6 billion in federal stimulus funds which must be expended by September 30, 2017. Furthermore, in 2014, the Legislature authorized a portion of the state's annual cap-and-trade auction proceeds to be used for the project.

Construction of the project was to begin in the Central Valley with a 130-mile segment — the Initial Construction Segment (ICS) running from Madera to an area north of Bakersfield. HSRA intended to

construct the remainder of the Initial Operating Segment (IOS) in segments, though high-speed trains would not operate on the system until the entire IOS was complete. In July 2012, the Legislature appropriated \$5.85 billion (\$2.61 billion from Proposition 1A and \$3.24 billion in federal funds) to complete the ICS. At the same time, the Legislature also appropriated \$1.1 billion for investment in the “bookends” — the San Francisco Bay Area and Los Angeles Basin regions — including electrification of Caltrain between San Francisco and San Jose and various projects to improve travel times along Metrolink’s Antelope Valley corridor between Palmdale and the San Fernando Valley. HSRA originally planned to complete the ICS by 2017. However, due to litigation and other delays, groundbreaking for the ICS did not occur until January 6, 2015. HSRA now expects to complete the ICS in 2020 or shortly thereafter. This segment of the project is being constructed using a series of design-build contracts.

HSRA Business Plan:

Pursuant to state law, beginning in 2012 and every two years thereafter, HSRA is required to prepare and submit to the Legislature a business plan outlining key elements of the high-speed rail project. At minimum, the plan must include project development information, including a description of the type of service being developed, the timing and sequence of project phases and segments, and estimated capital costs. It must also include estimates and descriptions of the total anticipated federal, state, local, and other funds that HSRA intends to access to construct and operate the system; forecasts of financial scenarios based on projected ridership levels; and maintenance and operations costs. Additionally, it must identify all reasonably foreseeable risks to the project and outline HSRA’s strategies for managing those risks.

HSRA has always planned to develop the project in phases, with Phase I connecting San Francisco to Anaheim over a distance of approximately 500 miles. A subsequent Phase II would extend the system to San Diego in the south and add a separate link to Sacramento in the north. When the HSRA adopted its 2012 Business Plan, it outlined a framework for development of Phase I at a cost of approximately \$68 billion, including an IOS that would connect the Central Valley with the Los Angeles Basin within 10 years. The 2012 plan proposed to accelerate the benefits of high-speed rail through a “blended approach,” which utilizes and upgrades existing rail infrastructure wherever possible, combined with increased early investment in the bookends. The purpose of this early investment was to enhance regional rail service in two major population centers while simultaneously paving the way for future high-speed rail service. At that time, the primary rationale for a southern-oriented IOS (as opposed to a northern connection to San Francisco) was that the densely populated San Fernando Valley could provide the high levels of ridership needed to operate the system without a subsidy. The intent was to complete the northern connection to

San Francisco once the IOS was operational and ridership levels could be demonstrated. However, the 2012 plan did not specifically identify funding for this portion of the project.

HSRA's next business plan, presented and adopted in 2014, updated the project's cost estimates and revised HSRA's ridership and revenue forecasts, but did not significantly alter the construction plan. The 2014 plan continued to peg total costs of Phase 1 at \$68 billion. It proposed a number of potential revenue sources to fund the project but did not definitively identify any new funds beyond the Proposition 1A and federal resources previously identified.

The draft 2016 Business Plan:

As noted above, the draft 2016 Business Plan (draft plan) is the first provided by HSRA since construction has commenced on the ICS. It provides updated cost and schedule information informed by lessons learned through the work completed to date. In addition, it proposes significant changes to the construction plan and sequencing originally outlined in the 2012 Business Plan. Key elements of the plan include the following:

- Change to northern orientation for IOS
- Full funding plan for northern IOS
- Updated cost and schedule estimates for Phase 1 (including projected savings)
- Expanded project scope in Burbank-to-Anaheim corridor (using projected savings)
- Concepts for full funding of the total Phase 1

Changes the IOS to a northern orientation:

The most notable new element of the draft plan is the change in implementation strategy. Although the 2012 Business Plan had planned to construct the IOS south, under the draft plan, the IOS will now instead extend north, from the ICS currently under construction to Gilroy and then to Diridon Station in San Jose. Because the ICS is currently planned to terminate in an agricultural area near Shafter (north of Bakersfield), HSRA is proposing to construct an interim station at that location. The draft plan indicates that the primary reason for the change in implementation strategy is that the proposed northern IOS can be constructed with currently identified funding as opposed to the more costly construction of the southern IOS. Additionally, because the northern IOS has fewer engineering challenges, it can be constructed more quickly than could the more technically challenging connection to the Los Angeles region. The draft plan estimates that the northern IOS will cost \$20.7 billion (including \$7.3 billion for the ICS) and be complete by 2025. The draft plan estimates that in its first year, IOS north will carry at

least 2.2 million riders and potentially as many as 4.1 million. By 2028, it anticipates that the route will carry at least 3.9 million and potentially as many as 8.9 million riders annually.

Full funding for northern IOS:

The draft plan proposes to fund the \$20.7 billion cost of the northern IOS as shown in the table below. Approximately \$10 billion will come from currently allocated federal and state funds and the remaining unappropriated Proposition 1A funds. The draft plan identifies an additional \$5.4 billion that would come from annual allocations of cap-and-trade proceeds through 2024. The remaining estimated \$5.2 billion would be generated through an as-yet-unspecified financing instrument backed by \$500 million annually in cap-and-trade proceeds through 2050. It should be noted that, because this final \$5.2 billion would be financed, the true cost, including debt service, could be substantially higher.

Funding Plan for Northern IOS

\$5.8 billion	Currently Allocated to fund ICS construction (\$3.165 federal; \$2.609 Prop. 1A)
\$4.2 billion	Remaining unappropriated Prop. 1A funds
\$5.4 billion	Cap-and-trade proceeds through 2024
\$5.2 billion	Financed (backed by cap-and-trade proceeds through 2050)
\$20.6 billion	Total Construction Funds

The draft plan acknowledges that, while the identified funding is only sufficient to complete the IOS to San Jose, ridership would be significantly enhanced by the ability to provide one-seat service north to San Francisco and by extending the southern end of the IOS to Bakersfield. The plan indicates that HSRA intends to pursue new federal funding to complete these extensions.

Updated cost and schedule estimates for Phase 1:

The draft plan also includes updated cost and schedule estimates for the Full Phase I. The plan indicates that HSRA has been able to reduce estimated costs by \$5.5 billion, from the \$67.7 billion identified in the 2014 plan to \$62.1 billion in the current plan. These savings were the product of several factors. One technique used by HSRA, known as Alternative Technical Concepts (ATC), allowed bidders on the ICS projects to offer innovative proposals not included in the engineers’ estimates that could reduce costs or improve efficiency. Bidders were compensated for these ATCs, which became the property of HSRA and

could be utilized regardless of which bidder was chosen. The innovations could also be applied to other areas of the system, further reducing costs. In addition, the plan identifies favorable economic conditions and a healthy competitive environment in the industry as factors that have driven cost estimates down.

The plan indicates that this substantial savings will enable HSRA to enhance service levels in the Burbank-to-Anaheim corridor (additional details provided below). HSRA plans to apply \$2.1 billion of the projected cost reductions described above to an expansion of the project scope “intended to increase speeds, improve reliability, and add capacity” in that corridor. Thus, according to the draft plan, the expected savings combined with the expanded scope will result in a revised Phase 1 cost estimate of \$64.2 billion.

According to the 2014 Business Plan, the IOS was projected to be complete by 2022, the Bay-to-Basin connection (San Jose to the San Fernando Valley) by 2028, and the full extension of Phase I to Anaheim by 2028. The 2016 draft plan projects completion of Phase I by 2029, only one year later than the earlier plan. However, the new northern IOS is now projected to come online in 2025.

Expanded project scope in Burbank-to-Anaheim corridor:

Another significant feature of the 2016 draft plan is a \$2.1 billion increase in project funding directed to the Anaheim-Burbank corridor. The draft plan indicates that this expanded scope was made possible due to the overall cost savings anticipated elsewhere on the project. The plan emphasizes that this is a shared corridor, which means that improvements benefit not only high-speed rail but immediately improve freight and commuter rail operations as well. The draft plan does not identify funding for specific improvements in this corridor, but generally indicates that HSRA intends to accomplish this work by “leveraging existing funds and attracting new funding sources, forging stronger partnerships, and working through the State’s programmatic, holistic approach being developed for the 2018 State Rail Plan.” The plan does suggest several potential funding sources which are discussed below.

Funding for completion of Phase I:

While the draft plan does not provide a full funding plan for Phase I (beyond the northern IOS), it does outline several strategies that HSRA intends to pursue. As noted above, HSRA plans to seek additional federal funds specifically to facilitate extension of the IOS north to San Francisco and south to Bakersfield. In addition, the draft plan proposes that once the northern IOS is operational, system operating revenue could be monetized to fund future construction. The draft plan asserts that “as the system develops over time, it will generate financial value through positive net operating cash flow,” and

that this future revenue stream “is projected to have material value to a potential private sector investor as a stand-alone service.” In short, the plan suggests that HSRA could use this cash flow to secure private investment to fund future phases of system expansion. Such financing would “likely be structured as a combination of private-debt financing, federally subsidized loans, or other financing tools and private equity.”

In addition, to provide early investment in Southern California that will pave the way for future high-speed service, HSRA is proposing to invest up to \$4 billion in a range of improvements. The draft plan outlines a package of projects, including multiple grade separations, track improvements, and platform modifications, as well as technical studies that it says will set the stage for future shovel-ready projects. In order to advance these projects quickly, the plan proposes pursuing funds from a number of sources. According to the draft plan, these might include the new National Highway Freight Program (NHFP) and the Nationally Significant Freight and Highway Program (NSFHP), both created in the federal Fixing America's Surface Transportation (FAST) Act. NHFP is a formula program dedicated to funding priority projects included in the State Freight Plan, whereas NSFHP is a national competitive grant program. Additionally, the draft plan suggests pursuing funding from two cap-and-trade funded programs, the Transit and Intercity Rail Program and the Intercity Rail Capital Program. These programs also are competitive, and funds directed to HSR projects could impact funding for projects elsewhere in the state.

Project risks:

The draft plan does in fact identify a number of risks associated with the funding and construction of the project. Project risks assessed in the draft plan include program level, construction, and technical risks. Both the Peer Review Group and Legislative Analyst's Office have released reports providing a thorough analysis of the project risks and also provided recommendations to be considered by the Legislature (both documents are provided for the hearing).

Conclusion:

As mentioned, the intent of this hearing is to provide members of the Legislature with information and feedback on the draft 2016 Business Plan. This hearing is not structured to discuss the construction of the high-speed rail project in its entirety. Hearing panelists will include state departments and government entities that are required to submit analyses of the draft plan to the Legislature or that will have a direct impact relative to the modifications made in the draft plan. A public comment portion will be placed on the agenda to provide members of the public an opportunity to comment on the draft plan.