

CALIFORNIA LEGISLATURE

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SENATE TRANSPORTATION COMMITTEE
& SENATE BUDGET SUB-COMMITTEE #5
JOINT INFORMATIONAL HEARING
REVIEW OF THE CALIFORNIA HIGH-SPEED RAIL AUTHORITY DRAFT 2022
BUSINESS PLAN
MARCH 8, 2022
BACKGROUND PAPER

Introduction

The purpose of the hearing is to review the California High-Speed Rail Authority's (Authority) Draft 2022 Business Plan (Draft Plan) and assess the state of the project. Hearing panelists include representatives from the Authority, the Legislative Analyst's Office (LAO), the independent High-Speed Rail Peer Review Group (PRG), and partner transportation agencies responsible for projects that will eventually become part of the high-speed rail system. This is a critical time for the project. There are ongoing discussions between the Administration and lawmakers over the short and long term decision points for the project and the funding needed to continue building. The Authority remains committed to the completion of an electrified high-speed operating segment in the Central Valley, but costs continue to rise and schedules continue to slip. The high-speed rail project is the largest public works project in the country and has a major impact on the economy, especially in the Central Valley. As of July 2021, high-speed rail investments have generated roughly 70,500 job-years of employment, with over \$5 billion in labor income, and \$13 billion in economic output.

Today's hearing is an opportunity for Legislators and the public to focus in and gain a better understanding of the current project being built in the Central Valley; the costs associated with delivering a usable segment; the existing and potential funding sources; and its value in meeting the state's infrastructure, environmental, and economic goals. Additionally, partner transportation agencies from the Central Valley, Southern California, and the Bay Area will give an update on their respective roles and projects that connect and will eventually support the high-speed rail network.

In January, Governor Newsom proposed a transportation infrastructure package in his budget proposal totaling roughly \$9.1 billion. This includes funding for transit, active transportation, and climate resiliency. This amount includes the appropriation of \$4.2 billion in of Proposition

1A bonds (the remaining amount) for the project. As the Legislature considers the proposed transportation package many questions remain. The hearing will help provide some answers and guidance for Legislators to help inform the ongoing discussions.

Background

The Draft Business Plan Has Few Updates

The Authority is statutorily required to prepare, publish, and adopt a Business Plan every two years outlining key required elements of the high-speed rail project. Those elements include project development information, including a description of the type of service being developed; the timing and sequencing of project phases and segments; estimated capital costs; ridership estimates; and a discussion of reasonable foreseeable risks and strategies to manage those risks. Additionally, the Business Plan is required to contain estimates and descriptions of the total anticipated federal, state, local, and other funds the Authority intends to access for the construction and operation of the system. The Business Plan is required to be published in draft form for public comment and submitted to the Legislature for review.

The Draft 2020 Business Plan was released on February 12, 2020 to begin a 60 day public comment period. However, shortly thereafter, the nation shut down due to COVID-19. The Authority, following state agency guidelines, shifted away from in-person operations and moved to a virtual format for meetings. The Authority postponed the final adoption of the Plan. Since that time, there were dramatic changes in the operation of public agencies, construction projects, and revenue estimations. Therefore, the Authority updated many of the projections and released the Revised Draft 2020 Business Plan on February 9, 2021. The final version of the 2020 Business Plan was submitted on April 12, 2021, a full year after its original due date.

Therefore, according to the Authority, the Draft 2022 Business Plan is an update on what has occurred over the last 10 months affecting the program. The Draft Plan does not contain updated cost or ridership estimates. The Authority previews that an update of all cost estimates, ridership numbers, and a new baseline budget will be included in the statutorily required Project Update Report in 2023.

History of High-Speed Rail in California

Development of high-speed rail in California began more than 20 years ago. SB 1420 (Kopp), Chapter 796, Statutes of 1996, created the Authority to direct development and implementation of intercity high-speed rail service that would be fully coordinated with other public transportation services. The Authority reports to the California State Transportation Agency and is governed by an eleven-member Board of Directors. The Governor appoints five members of the board, the Senate Rules Committee appoints two, and the Assembly Speaker appoints two. Additionally, the board includes two ex-officio, non-voting members, one member of the Assembly and one member of the Senate.

Assembly Bill 3034 (Galgiani), Chapter 267, Statutes of 2008, placed before the voters the Safe, Reliable High Speed Passenger Train Bond Act for the 21st Century (Proposition 1A) in

November of 2008. California voters approved the initiative, which authorized \$9.9 billion in general obligation bonds for two distinct purposes: \$9 billion to develop and construct a high-speed rail system connecting San Francisco Transbay Terminal to Los Angeles Union Station and Anaheim; and \$950 million for connecting intercity and commuter rail systems that would enhance those systems' capacity, safety, or connectivity to the high-speed rail system.

Proposition 1A prescribes specific route and design requirements for the high-speed rail system including that it must be electrified, be capable of sustaining speeds of no less than 200 miles per hour, and have the capacity to achieve travel times between San Francisco and Los Angeles of 2 hours and 40 minutes. Additionally, Proposition 1A requires a one to one match of all bond funds from other sources and lays out specific requirements the Authority must meet in order to access and spend the bond funds, including submission of detailed funding plans to the Legislature and Department of Finance. Furthermore, Proposition 1A requires high-speed rail to operate without government subsidies. At the time of the passage of Proposition 1A, estimates for the cost of the system varied. The analysis by the LAO that accompanied the ballot measure referenced a 2006 estimate from the Authority that the total cost to develop and construct the entire high-speed rail system would be about \$45 billion.

In July 2012, the Legislature approved SB 1029 (Committee on Budget and Fiscal Review, Chapter 152, Statutes of 2012), that appropriated nearly \$8 billion in federal and state funds to begin the construction between Madera and Bakersfield. SB 1029 funded three components of the project, including \$5.8 billion (\$3.2 billion federal grants and \$2.6 billion Proposition 1A) to fund the construction of the high-speed rail "backbone" in the Central Valley; \$819 million of Proposition 1A bonds for "connectivity" projects on existing rail and transit systems throughout the state; and \$1.1 billion for the "bookends" projects in the Bay Area and Southern California (\$600 million for the electrification of Caltrain and \$500 million for projects in the Los Angeles Basin) to improve existing rail corridors for eventual use by the high-speed rail system.

Further, a 2014-15 state budget trailer bill SB 862 (Committee on Budget and Fiscal Review, Chapter 36, Statutes of 2014), continuously appropriated 25 percent of the revenues derived from the state's Cap-and-Trade program to the project. In July 2017, the Legislature extended the state's Cap-and-Trade program through 2030, in AB 398 (Garcia, Chapter 135, Statutes of 2017). The Authority estimates that this equates to a range of \$500 million to \$1 billion annually in funding for the program.

In 2015, the Authority broke ground on the first construction segment in the Central Valley, starting work on 119 miles from Madera to Poplar Avenue outside of Shafter. This work was reflected in the Authority's grant agreement with the Federal Railroad Administration (FRA) to spend the federal and state monies appropriated in SB 1029.

Evolution of the Project

Overall, the project is to be built in two phases, with Phase I covering roughly 500 miles from San Francisco to Anaheim. Phase II would extend the system to Sacramento in the north and San Diego in the south. The delivery of the project was broken into segments, including an Initial Operating Segment (IOS), which over the years changed from a southern-focused route to

Los Angeles, to a northern-focused route from San Francisco to Bakersfield, the so-called Silicon Valley to Central Valley Line (Valley to Valley).

Specifically, the 2016 Business Plan unveiled this new northern-focused route defining the Valley to Valley Line to run from 4th and King Streets in San Francisco south through the Silicon Valley turning east across the Pacheco Pass to Madera and then south to Bakersfield at a cost of roughly \$20.7 billion and would be up and running by 2025. The funding plan for the Valley to Valley segment includes existing sources of Proposition 1A bonds, federal funds, continued Cap-and-Trade pay-as-you-go funding and a Cap-and-Trade financing plan to 2050. The Cap-and-Trade financing plan continues to be a major source of possible revenue for the project. The Authority continues to request three things from the Legislature to make it successful: an extension of the Cap-and-Trade program through 2050, no-impairment of their current dedicated appropriation of 25 percent of Cap-and-Trade proceeds, and a minimum guarantee of funding. The Authority proposes that these factors would allow them to securitize the future stream of revenues to receive up front funds to continue construction.

In February 2019, Governor Newsom delivered his State of the State address and he appeared to signal a change in the project, shifting emphasis to completing a workable rail line in the Central Valley, but casting doubt over the completion of the full Phase I. Specifically, Newsom noted, “the project, as currently planned, would cost too much and take too long. There’s been too little oversight and not enough transparency.” He outlined a new Central Valley construction plan, including extending the current line north to Merced and south to Bakersfield, stating, “High-Speed Rail is much more than a train project. It’s about economic transformation and unlocking the enormous potential of the Valley.”

The statement caused serious confusion about the future of the project and created a public schism with the Trump Administration over the federal funding agreement and ongoing federal participation and commitment to the project. Specifically, the FRA moved to de-obligate \$929 million awarded to California stating that the Authority “failed” to comply with the terms of the agreement, and has failed to make reasonable progress on the project.” Additionally, the FRA stated that they would possibly attempt to claw back, the remaining \$2.6 billion in federal grants which had already been expended. Subsequently, the State of California sued the FRA over the de-obligation. The Biden Administration settled the court case with the state, and the Authority renegotiated the grant agreement with the FRA for the \$929 million. This new agreement extends the period of the grant to 2026, and added electrification of the Central Valley segment to the required scope of work.

Newsom’s Valley Vision

Governor Newsom’s new focus on the Valley construction was detailed in the 2019 Project Update Report (PUR) and continues in the 2020 Business Plan and the Draft Plan. The PUR committed the Authority to completing an initial “building block” of a high-speed system in the Central Valley. Specifically, the new Central Valley Line was a 171 mile high-speed rail line from Merced to Bakersfield, with stations planned for Merced, Madera, Fresno, Kings/Tulare, and Bakersfield F Street. The Central Valley Line included all of the current Central Valley construction (119 miles), with extensions to Merced and Bakersfield. In 2019, the Central

Valley construction was estimated to cost \$12.4 billion and the complete new Central Valley Line was estimated to cost \$20.4 billion to be completed by 2028. The Central Valley Line scope included the extensions in the north and south, double track and systems, new high-speed trains, and several maintenance facilities. The new line would be operated by an interim passenger rail operator, likely a partnership with the existing San Joaquins service.

2022 Draft Business Plan – Very Similar to the 2020 Business Plan

Focusing in on the Central Valley

As noted, the Draft Plan is similar to the 2020 Business Plan. There are very few changes and the Draft Plan serves as more of an update on activities from the last 10 months. It continues to focus on the Governor’s two main objectives: completion of the 119 miles Central Valley Segment from Madera to Shafter, in compliance with the FRA grant agreement; and the path forward for the Central Valley Line for high-speed train service from Merced to Bakersfield.

Specifically, the Draft Plan details the Central Valley Segment as 119 miles from Madera to Shafter with a single track, no stations, and postpones the purchase of trainsets. The estimate for the segment is \$13.9 billion with civil works complete by 2023 and track installed by 2025. The full Central Valley Line is detailed as a 171 mile high-speed rail line from Merced to Bakersfield with a single track, stations (platforms) at Merced, Fresno, Kings/Tulare, and Bakersfield and the purchase of trainsets. The Central Valley Line is estimated to cost between \$21.4 and \$22.8 billion and be completed by the end of the decade. The Authority estimates that the double tracking of the full Central Valley Line would cost an additional \$1.1 billion, and would need additional funding – possible federal funding – to be completed.

Additionally, the 2022 Draft Plan continues to stress the need to move forward with the contract award for the track and systems, which would include the construction of track and associated systems (such as electric catenary systems and signal systems), and could have a 30 year term for maintenance. Concerns have been raised by the PRG, LAO, and some in the Legislature about the contract size, the risk associated with the long term, and whether the contract is needed now. To continue discussions on this and other issues, the Authority delayed the contract. However, bids are anticipated to be received in July 2022 and the contract is anticipated to be awarded sometime in the third quarter of 2022.

As mentioned, after the completion of the Central Valley Line, the Authority envisions an independent operator for the interim high-speed service. This could be the San Joaquin Regional Rail Commission (SJRRRC), which currently operates the San Joaquins intercity passenger rail (Amtrak) service in the Central Valley and the Altamont Corridor Express (ACE) to the Bay Area. It is unclear how this agreement would work in practice and how much it may cost the state. Proposition 1A requires “planned passenger train service to be provided by the Authority, or pursuant to its authority,” to operate without a subsidy. The Authority believes that by leasing the state rail asset to the SJRRRC to operate that they would not be in violation. However, SJRRRC may need additional subsidies from the state if revenue from the farebox does not cover operating expenses. In November 2020, the Authority entered into a Memorandum of

Understanding with the California State Transportation Agency and SJJPA for the “cooperation and coordination in the development of an interim service plan.”

The planned line would connect, cross platform, with the existing San Joaquins and ACE service at Merced. In the south, the high-speed rail line would connect with Amtrak bus service to Southern California. The San Joaquins is one of the busiest Amtrak routes in the United States, connecting the Central Valley to Sacramento and Oakland, with bus connections south to Los Angeles. Prior to COVID-19, ACE connected nearly 1.5 million commuters per year to the Bay Area. Authority’s ridership studies of the Central Valley corridor, included in the 2020 Business Plan, concluded that the route would generate the largest ridership increase of 4.8 million additional system-wide riders, the highest revenue increase of \$117.2 million in additional system revenues from passenger fares, and roughly 90 minutes would be shaved off travel times. As noted, these ridership estimates were not updated for the Draft Plan.

However, currently the high-speed rail station planned for Merced is not at the same location as the existing station served by the San Joaquins service or the station planned to serve ACE when it is extended to Merced. The Draft Plan identifies the goal of establishing a single station in Merced that would serve all three rail lines. This combined station would require additional funds to build, including federal or state funds. The Authority may also need to conduct additional environmental review to clear the alignment to the station location.

Where will the money come from?

The Authority identifies numerous existing sources of funding to complete the **Central Valley Line**.

Federal Funds:

- \$2.6 billion ARRA
- \$1 billion FY 2010 + RAISE Grant (*received in 2021 for City of Wasco*)

State Funds:

- \$4.3 billion Proposition 1A (*including book-ends*)
- \$4.5 billion Cap-and-Trade received through November 2021
- \$4.2 billion Proposition 1A (*must be appropriated by Legislature*)
- \$4.5 — \$8.7 billion Cap-and-Trade future revenue through 2030 (*assumes \$500 million - \$1 billion per LAO recent estimates*)

\$21 — \$25.2 billion total funding available (including \$1.1 billion for book-ends)

\$21.4 - \$22.8 billion estimated cost (an additional \$1.1 billion to double track)

The Draft Plan estimates the Authority’s portion of Cap-and Trade revenue at \$500 million to \$1 billion/annually, which is an increase over the \$500 -- \$750 million/annually range included in the 2020 Business Plan. The assumptions are based upon a new LAO estimate of Cap- and Trade revenue for the upcoming budget year. The LAO has expressed concerns over using this

assumption of much higher Cap-and Trade revenue out to 2030. Additionally, the PRG remains concerned that the Authority will be able to complete the 119 miles as required by the federal grant, but due to substantial risks facing the Merced and Bakersfield extensions, the Central Valley Line cannot be completed without additional funding.

More Funding Coming?

Last year, Congress passed the Infrastructure Investment and Jobs Act (P.L. 117-58), otherwise known as the Bipartisan Infrastructure Law (BIL), which will provide over \$550 billion in funding for infrastructure including roads, bridges, transit, rail, water infrastructure, and broadband over the next five years. Additionally, the Build Back Better plan, still pending in Congress, contains \$10 billion dedicated to the development of high-speed rail in the United States. The Authority identifies over \$57 billion in the BIL for which the Authority could compete. The idea being to break down component parts of the project and apply for specific pots of federal funding. The Draft Plan details these options, breaking them into three categories: capital funding for core elements of San Francisco to Anaheim high-speed network, such as funding for the Merced to Bakersfield extension with two tracks; capital funding for targeted program investments, such as stations, rail-highway grade crossings, and improvements in shared corridors; and other potential funding sources, such as energy grid resiliency and broadband. The Authority notes that funding from both Proposition 1A bonds and Cap-and Trade could serve as matching funds for federal grants.

Additionally, as noted earlier, Governor Newsom included \$9.1 billion for transportation infrastructure in his January Budget. Some of this funding, such as funding for transit capital projects and rail-highway grade crossings could also support the high-speed rail project by investing in shared corridors and connectivity to the future system.

The Next Big Step – Valley to Valley and Phase I

As noted, the Draft Plan focuses on achieving the goal of completing the two building blocks in the Central Valley. What is the next big step? The next big step would be the completion of the Valley to Valley line connecting the Central Valley with Silicon Valley. In the 2016 Business Plan the project was estimated to cost \$20.7 billion and be completed by 2025. The Authority did not update cost estimates for Valley to Valley in the current Draft Plan but did break out the costs for the remaining segments of Phase I which could put Valley to Valley at roughly \$40 billion.

As the Authority builds in the Central Valley, they continue to do extensive work in planning, design, and environmental clearance throughout the entire San Francisco to Los Angeles, full Phase I system. In fact, since the 2020 Business Plan was adopted last year, the Authority completed clearances for two Southern California segments, the Bakersfield to Palmdale segment and the Burbank to Los Angeles segment. These two segments contribute to an overall increase in Phase I costs of \$4.3 billion since the 2020 Business Plan, with Bakersfield to Palmdale increasing by \$2.7 billion (17 percent) and Burbank to Los Angeles increasing by \$1.6 billion (116 percent). When the Legislature took action on SB 1029 in 2012 Phase I was

estimated to cost \$68 billion and be up and running by 2029. The Draft Plan estimates the Phase I cost to be roughly \$87 billion and to be complete by 2033.

To move forward with the next steps of the program, the Authority would need a large amount of additional, dedicated, stable funding. Options could include the possible financing of Cap-and-Trade revenues which has been proposed repeatedly since 2016; additional state resources; or new federal funding. The PRG has recommended numerous state funding options over the years, such as a state sales tax or gasoline tax, to provide stable funding for the project.

Bookends – Partners in Bay Area and LA

As previously described, the so-called bookend projects were defined and funding was appropriated by SB 1029 in 2012. Specifically, the Authority has committed a total of \$714 million to the Northern California project, the electrification of Caltrain, with \$600 million in Proposition 1A bond funds and the remainder in state Cap-and-Trade funds. The Caltrain electrification project, which is scheduled to be completed by 2024, will electrify and upgrade Caltrain's commuter rail service between San Francisco and San Jose. The total cost of the Caltrain project is estimated at \$2.4 billion. Additionally, the Authority contributed \$84 million of \$180 million total to the San Mateo Grade Separation project on the Caltrain corridor.

In Southern California, two projects have been identified for funding from the \$500 million in Proposition 1A bond funds appropriated in SB 1029. \$76.7 million was approved for the Rosecrans/Marquardt grade separation project, which is in Santa Fe Springs on the BNSF mainline tracks at the intersection of Rosecrans and Marquardt Avenues. The intersection is also on the Los Angeles/San Diego/San Luis Obispo (LOSSAN) corridor, which is utilized by Amtrak and Metrolink. The intersection sees more than 112 freight and passenger trains per day and has been rated by the California Public Utilities Commission (CPUC) as the most hazardous grade crossing in California. The project is expected to be completed by 2023.

The remainder of the Proposition 1A bonds funds for Southern California, \$423.3 million, is dedicated to Los Angeles Union Station (LAUS) for the Link Union Station (Link US) project in downtown Los Angeles. The Link US project will extend up to 10 rail tracks at LAUS to the south of the station over U.S. Highway 101, including platforms and tracks for use by future high-speed rail. The project allows trains at LAUS to "run through" the station rather than head in and back out through a single entrance. The project is planned for two phases of construction with the cost of Phase A estimated at \$950.4 million, which is fully funded including Proposition 1A bond funds, and the cost of Phase B estimated at \$2 billion but is not currently funded.

Conclusion

The Authority is charged with planning, designing, building, and operating the nation's first high-speed rail system. It is a daunting task. The sheer size of the program, coupled with inadequate, unstable funding; rigid design criteria; constant legal threats; environmental and geological concerns; and difficult engineering challenges make success seem impossible. Additionally, the project has been plagued with cost increases and project delays, internal

restructuring and staffing issues, and for a time, a federal government not interested in being a full partner.

The Authority's Draft Plan does not contain much updated information but continues the vision to complete a working, electrified, high-speed rail line in the Central Valley and then look forward to completing the remainder of the system when funding becomes available. The Authority believes that the Merced to Bakersfield line could be completed with funding currently projected, if the volatile Cap-and-Trade program performs well, as it has been in the last year. However, needed components, such as double tracking and a new connected station in Merced would require new funding. Additionally, there is no funding plan beyond Merced to Bakersfield to complete either Valley to Valley or Phase I other than the possibility of federal funding from IJA or possible state funding for smaller portions of the project. Concerns remain about cost escalation of the existing work in the Central Valley, with possible increases coming soon from pending change orders for the Construction Packages coupled with supply chain and inflation issues.

The Legislature is currently discussing Governor Newsom's January Budget, including the \$9.1 billion transportation infrastructure package, of which \$4.2 billion is Proposition 1A bonds. As part of these discussions, the Legislature may want to consider:

- Does the proposed project serve the transportation needs of the state? At what point will the state see the benefits of the project?
- Can the Central Valley Line be built at the current cost and schedule? If not, what will the state need to commit to provide to complete the work?
- What does the Authority need to complete a usable segment? How can the state be sure the project creates value at each stage of completion?
- Should the Authority undertake activities outside of the Central Valley before the completion of a usable segment?
- Will the Authority be successful in getting new federal funding? How would receiving additional federal funding change the project schedule and timeline?
- Would more independent oversight of the project lead to better outcomes?

Today's witnesses will share their expertise and insights on these and other questions.