

APRIL 12, 2023

# High-Speed Rail 2023 Project Update Report

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PRESENTED TO:

Assembly Budget Subcommittee No. 3 on Climate  
Crisis, Resources, Energy and Transportation  
Hon. Steve Bennett, Chair

Assembly Committee on Transportation  
Hon. Laura Friedman, Chair



LEGISLATIVE ANALYST'S OFFICE

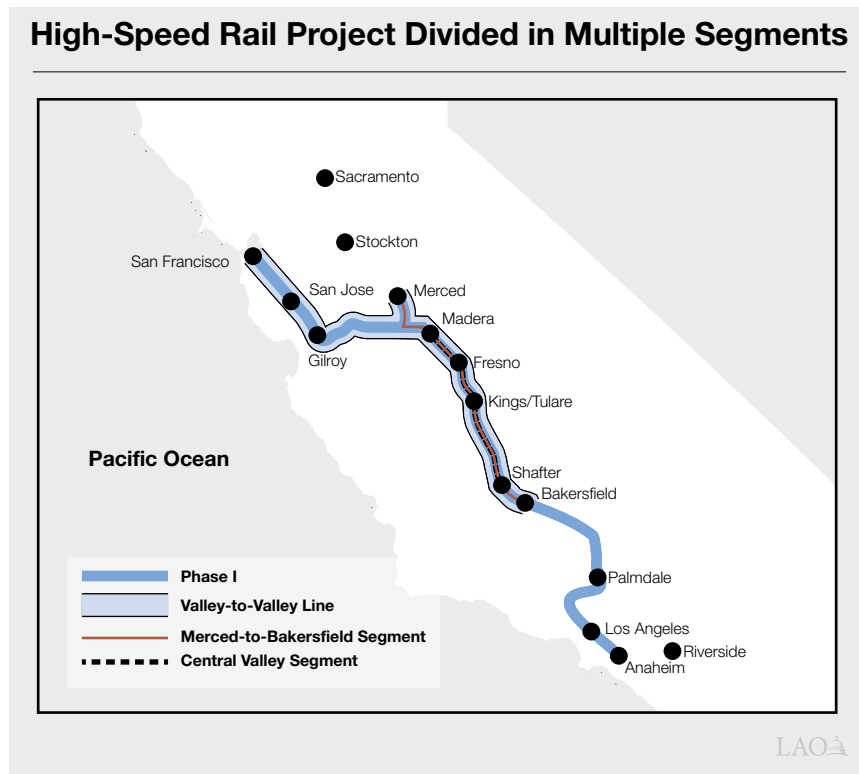
# Introduction

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- ***Statutory Reporting Requirements.*** State law requires the High-Speed Rail Authority (HSRA) to prepare a business plan every even year that provides certain key information about the planned high-speed rail system. State law also requires HSRA to prepare a project update report (PUR) every odd year that provides certain updated information, such as related to costs and schedule. As we discuss in further detail later, Chapter 71 of 2022 (SB 198, Committee on Budget and Fiscal Review) expanded the required elements of the PUR.
- ***2022 Business Plan Deferred Some Updates to 2023 PUR.*** HSRA adopted its 2022 business plan on April 27, 2022. HSRA indicated at that time that the 2022 business plan was intended to serve as a bridge document and that a more comprehensive analysis and update would be provided as part of the 2023 PUR.
- ***2023 PUR Released in March 2023.*** HSRA released its most recent PUR on March 1, 2023.
- ***Overview of Handout.*** This handout (1) provides background information on the planned high-speed rail system and the Legislature’s actions in 2022-23, (2) describes the major features of the 2023 PUR, (3) identifies issues for legislative consideration, and (4) highlights near-term questions facing the Legislature.



# Project Delivery Plan



- **Phase I Consists of Multiple Segments.** Phase I would provide service for about 500 miles from San Francisco to Anaheim. As shown in the figure, the delivery of Phase I is divided into segments.
  - The first segment to be completed is the Central Valley Segment (CVS), which extends for 119 miles through the Central Valley from Madera (about 25 miles north of Fresno) to Poplar Avenue in Shafter (about 20 miles north of Bakersfield). This segment is also referred to as the Initial Construction Segment.
  - After the construction of the CVS, the project is planned to be extended north to Merced and south to Bakersfield. This 171-mile segment is referred to as the Merced-to-Bakersfield segment.
  - Ultimately, the project is envisioned to then be extended first to San Francisco and then to Anaheim. The segment between San Francisco and Bakersfield is referred to as the Valley-to-Valley line.



## Project Delivery Plan

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- ***State Also Supporting Bookend and Connectivity Projects.*** In addition, HSRA and state and local partner agencies have initiated a variety of projects on commuter rail lines. These include “bookend projects” along the proposed high-speed rail alignment in the San Francisco Bay Area and Southern California. For example, a significant bookend project is the electrification of the Caltrain Corridor in the San Francisco Bay Area. Various partner agencies also have initiated “connectivity projects” intended to provide benefits to existing commuter rail systems that are planned to connect to the high-speed rail system.



# Project Funding and Expenditures to Date

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## Proposition 1A Bonds

- ***Voters Approved Bonds 15 Years Ago.*** Proposition 1A (2008) authorized the state to sell about \$10 billion in general obligation bonds—\$9 billion for the high-speed rail system itself, with the remainder to support connectivity projects. (Of the \$9 billion, HSRA has set aside \$1.1 billion to contribute to locally administered bookend projects.) Proposition 1A specified certain conditions that the system must ultimately achieve, including that the train service provided by HSRA or pursuant to its authority not require an operating subsidy.
- ***Proposition 1A Dollars Fully Appropriated, but Not Fully Expended.*** The Legislature appropriated the last of the Proposition 1A monies as part of the 2022-23 budget process. To date, HSRA and partner agencies have spent about \$4.9 billion of the Proposition 1A funds—just over \$4 billion on the high-speed rail project (including bookend projects) and about \$825 million on connectivity projects. As such, about \$5.1 billion remains to be expended.

## Cap-and-Trade Auction Revenues

- ***Project Receives Continuous Appropriation of Cap-and-Trade Revenues.*** In 2014, the state began providing cap-and-trade auction proceeds—which are deposited into the Greenhouse Gas Reduction Fund (GGRF)—for the high-speed rail project. Since 2015-16, the project has received a continuous appropriation of about 25 percent of annual cap-and-trade revenues. Through December 31, 2022, the project has received about \$5.5 billion from GGRF, of which HSRA has spent about \$3.7 billion. The cap-and-trade program currently is authorized to continue through 2030.



# Project Funding and Expenditures to Date

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## Federal Grant Awards

- **Federal Government Provided Large Grants in 2009 and 2010.**  
The federal government has awarded HSRA two major grants totaling \$3.5 billion. First, the state received \$2.6 billion in American Recovery and Reinvestment Act funds in 2009, which HSRA has fully expended. Second, the state received a \$929 million grant from the federal High-Speed Passenger Rail program in 2010 (“FY 10 Federal Grant”). The federal grant agreements included certain conditions, including that the state (1) use the funds to support the construction of a segment useable for intercity passenger rail and (2) complete all environmental reviews for Phase I.
- **Federal Government Terminated Then Subsequently Restored One of These Grants.** In May 2019, the federal government terminated the FY 10 Federal Grant, arguing that the project had failed to meet grant requirements and make reasonable progress. However, the state challenged this decision in court. In June 2021, the federal government announced a settlement with the state to restore this funding. As part of this settlement, HSRA entered into a revised agreement with the federal government, which includes certain modified conditions, such as specifying that the CVS track be electrified.
- **Federal Government Recently Provided Two Small Grants.**  
HSRA also has received a few small federal grants. Most notably, the project recently received two Rebuilding American Infrastructure with Sustainability and Equity grants totaling a combined \$49 million—\$24 million in 2021 for improvements near the city of Wasco and \$25 million in 2022 for the design of the Merced extension.



## Key Actions in 2022-23 Budget Process

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- **Appropriated Remaining Proposition 1A.** As noted, the 2022-23 budget package appropriated essentially all of the remaining unappropriated Proposition 1A bond funds—\$4.2 billion—for the high-speed rail project.
- **Adopted Statutory Changes.** The package also included associated budget trailer legislation. Some of the key provisions included:
  - Expressing legislative intent to (1) prioritize funding for planning and constructing the Merced-to-Bakersfield segment and (2) complete Phase I of the project.
  - Prohibiting HSRA from entering into new commitments using GGRF outside of activities supporting the Merced-to-Bakersfield segment, except as specified. Such exceptions include the use of GGRF for certain environmental review and project management work, as well as for up to \$500 million in additional activities. This prohibition is in effect until the Merced-to-Bakersfield segment is fully funded or through June 30, 2030, whichever occurs sooner.
  - Establishing an independent HSRA Office of the Inspector General (OIG) with various authorities and responsibilities. The legislation also specifies a process for appointing the Inspector General (IG) in which the Governor selects an individual from a list of three candidates identified by the Joint Legislative Audit Committee (JLAC).
  - Limiting the use of the \$4.2 billion Proposition 1A appropriation to the Merced-to-Bakersfield segment, with \$2.2 billion available only after HSRA or the OIG submits a specified report and notification to the Governor and Legislature.
  - Requiring HSRA to notify the chairpersons of the relevant committees of both houses of the Legislature before submitting a federal grant application and before releasing a request for proposals for certain contracts, such as for the acquisition of trainsets.
  - Specifying that future PURs and business plans include certain additional information, such as updated schedules and costs for various activities related to completing the Merced-to-Bakersfield segment.



## Key Actions in 2022-23 Budget Process

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- ***Actions Considered Along With Broader Transportation Package.***  
The above actions were part of a larger budget package agreement that also included \$9.5 billion from the General Fund for various transportation infrastructure programs. (The Governor's budget for 2023-24 proposes to reduce this amount by \$2.2 billion.)





## Project Status

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- ***Environmental Reviews Are Still in Progress.*** HSRA has completed the environmental reviews for about 85 percent of the Phase I alignment (422 out of 494 miles). The authority expects to complete the remaining environmental reviews for (1) Palmdale to Burbank by November 2023 and (2) Los Angeles to Anaheim by December 2025.
- ***Right-of-Way Acquisitions for CVS Nearly Complete and Utility Relocations in Progress.*** As of January 2023, HSRA had (1) acquired about 96 percent of the parcels necessary for the construction of the CVS (2,213 of 2,299) and (2) completed just over half of the utility relocations (978 of 1,836) planned for the CVS.
- ***Construction of CVS Civil Works Is Well Underway.*** In 2015, HSRA initiated construction of the CVS. To date, HSRA has completed several major structures, such as overpasses and viaducts, as well as the realignment of a portion of State Route 99. Overall, HSRA reports that, as of December 2022, roughly three-quarters of the CVS structures were either in progress or complete. HSRA estimates it will complete the civil works for the CVS in 2026.
- ***Track and Systems Contract Procurement Pulled.*** In 2019, HSRA initiated a procurement to contract for (1) the construction of track and associated systems (such as electric catenary and signal systems) and (2) 30 years of infrastructure maintenance. In October 2022, shortly before the contract award was anticipated to be made, HSRA decided to pull back the solicitation due to concerns over the bid environment, among other factors. HSRA intends to issue a revised solicitation—with a modified scope—sometime in 2023.
- ***Process of Appointing an Inspector General Is Underway.*** The selection of the newly created IG is currently underway. Specifically, JLAC has received applications and currently is in the process of selecting three nominees to submit to the Governor for consideration.



## Major Features of 2023 PUR—Project Delivery

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- ***Continues Focus on Merced to Bakersfield.*** The 2023 PUR continues the approach first presented in 2019 of focusing the state's efforts on the construction of the Merced-to-Bakersfield segment. This focus is consistent with legislative direction, as articulated in Chapter 71.
- ***Continues Intent to Use Third-Party Operator for Interim Service.*** HSRA proposes to launch interim high-speed passenger service on the Merced-to-Bakersfield segment sometime between 2030 and 2033. HSRA does not anticipate operating this interim service. Instead, it expects to lease the right to use its track to a third party—likely the San Joaquin Joint Powers Authority, which currently oversees the Altamont Corridor Express (ACE) and San Joaquins services.
- ***Continues to Plan for Other Segments of Phase I.*** HSRA continues to work towards completing the environmental reviews for the remainder of Phase I, consistent with the federal grant requirement. The authority intends to advance design for each section of Phase I as it is environmentally cleared, in order to improve its understanding of potential engineering and construction issues, as well as potential risks and costs. It also plans to submit federal grant applications to help fund these planning activities, including submitting a grant application by April 21, 2023 for \$194 million for design work for the San Jose-to-Merced segment and Bakersfield-to-Palmdale segment (proposed to be matched by \$48 million in GGRF).
- ***Articulates Intent to Commence Other Phase I Activities Starting in 2025.*** Additionally, HSRA intends to begin other activities—such as right-of-way acquisitions, utility relocations, and agreements with third parties such as utilities and railroads—in 2025 for the segments beyond Merced-to-Bakersfield, pending funding availability. The 2023 PUR continues to envision the Valley-to-Valley line being completed after the CVS, followed by the Southern California segments.



## Major Features of 2023 PUR—Project Delivery

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- ***Removes Single Track as an Option.*** HSRA plans to proceed with double tracks and does not plan to request that bidders provide estimates on a single-track option. (Under a single-track option, passing tracks would be constructed to allow approaching trains to go by each other.) This is a different approach from the 2022 business plan, which included both single and double-track options and stated that constructing the double-track option was contingent on the receipt of additional federal funds.
- ***Adds Some New Elements to Project Scope.*** The 2023 PUR now proposes to add a solar and battery storage system to the project. It also reflects a change in the location for the Merced station so it will be co-located with planned stations for the ACE and San Joaquins services, consistent with Chapter 71. While HSRA had expressed an intent to utilize a combined station to facilitate transfers for a couple of years, the associated costs of this approach were not reflected in the 2022 business plan.
- ***Shifts Some Scope and Costs to Merced-to-Bakersfield Segment.*** The 2023 PUR reflects the cost to build a permanent station at F Street in Bakersfield as part of the Merced-to-Bakersfield segment. HSRA indicates that the 2022 business plan instead attributed this cost to the Bakersfield-to-Palmdale segment. Additionally, the 2023 PUR reflects the costs of a more significant maintenance facility as part of the Merced-to-Bakersfield segment compared to what was previously assumed. These costs were previously reflected in “other project costs” that were not attributed to any specific construction segment.



# Major Features of 2023 PUR— Schedule Projections

## 2023 PUR Anticipates Delays for Completing Some Key High-Speed Rail Activities

Activity	Estimated Completion Date	
	2022 Business Plan	2023 PUR
Phase I environmental work	2024	December 2025
CVS civil works	Quarter 4 of 2023	2026
CVS track and systems work, commence train testing	2025	2028
Launch interim Merced-to-Bakersfield service	2029	2030 to 2033
Valley-to-Valley line construction	2031	Not updated
Phase I construction	2033	Not updated

PUR = project update report and CVS = Central Valley Segment.

- **Reflects Delays Compared to 2022 Business Plan.** As shown in the figure, the 2023 PUR identifies delays in various activities. For example, it assumes Phase I will be environmentally cleared by late 2025 rather than 2024. Additionally, it projects completing the civil works for the CVS by 2026 rather than 2023 as envisioned in the 2022 business plan.
- **Does Not Revise the Schedule Beyond Merced to Bakersfield.** The 2023 PUR does not provide a revised schedule for the Valley-to-Valley segment, which the 2022 business plan assumed would be completed in 2031, or for Phase I, which previously was estimated to be completed in 2033. Given the other projected delays, these activities likely also are behind schedule.



# Major Features of 2023 PUR—Cost Projections

## Base Capital Cost Estimates for Phase 1

(Dollars in Billions)

Segment/Activity	2022 Business Plan	2023 PUR <sup>a</sup>	Change From 2022 to 2023	Percent Change
<b>Merced to Bakersfield</b>	<b>\$23.9</b>	<b>\$35.3</b>	<b>\$11.4<sup>b</sup></b>	<b>48%</b>
Central Valley Segment	14.5	18.3	3.8	26
Merced extension	2.4	4.5	2.1	86
Bakersfeld extension	1.2	3.3	2.0	164
Solar and utility interconnection	0.0	0.2	0.2	N/A
Trainsets	0.7	0.6	-0.1	-17
Maintenance facility and simulator	0.02	0.4	0.4	2,222
Bookend commitments	1.3	1.3	—	—
Other <sup>c</sup>	3.8	6.8	3.0	79
<b>Other Northern California</b>	<b>\$23.8</b>	<b>\$27.1</b>	<b>\$3.3</b>	<b>14%</b>
San Francisco to San Jose	1.7	5.0	3.3	201
San Jose to Gilroy	6.0	6.0	—	—
Gilroy to Carlucci Road	13.6	13.6	—	—
Central Valley Wye balance	2.2	2.2	—	—
Advance design costs	0.2	0.2	—	—
<b>Southern California</b>	<b>\$41.4</b>	<b>\$40.2</b>	<b>-\$1.2</b>	<b>-3%</b>
Bakersfeld to Palmdale	18.4	17.1	-1.2 <sup>d</sup>	-7
Palmdale to Burbank	16.8	16.8	—	—
Burbank to Los Angeles	2.9	2.9	—	—
Los Angeles to Anaheim	2.9	2.9	—	—
Advance design costs	0.4	0.4	—	—
<b>Other System Costs</b>	<b>\$5.1</b>	<b>\$5.1</b>	<b>—</b>	<b>—</b>
Solar power generation balance	0.0	0.2	\$0.2	N/A
Heavy maintenance facility balance	0.5	0.3	-0.2 <sup>e</sup>	-43%
Trainset balance	4.6	4.6	—	—
<b>Total Costs</b>	<b>\$94.2</b>	<b>\$107.6</b>	<b>\$13.4</b>	<b>14%</b>

<sup>a</sup> For Merced to Bakersfield, HSRA has modeled that there is a 65 percent chance that the costs will remain within this budgeted amount (compared to a 70 percent chance under the approach HSRA previously used for this segment).

<sup>b</sup> \$1.7 billion of the \$11.4 billion difference is due to scope that was shifted from other portions of the project budget.

<sup>c</sup> Includes project development and support, stations, track and systems balance (including Central Valley Segment second track), and contingency balance.

<sup>d</sup> Reflects the shift of \$1.2 billion for a permanent Bakersfield station and Bakersfield utility costs to the Merced-to-Bakersfield segment.

<sup>e</sup> Reflects the net result of (1) shifting \$481 million in maintenance facility costs to Merced to Bakersfield and (2) \$275 million in additional maintenance facility costs.

PUR = project update report; N/A = Not Applicable; and HSRA = High-Speed Rail Authority.



## Major Features of 2023 PUR—Cost Projections

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- **2023 PUR Estimates \$13.4 Billion in Higher Costs for Phase I.**  
As shown in the figure, the 2023 PUR estimates total base costs to complete Phase I at \$107.6 billion, which is an increase of about \$13.4 billion (14 percent) over what was included in the 2022 business plan.
- **Reflects \$11.4 Billion in Higher Costs for Merced to Bakersfield.**  
The 2023 PUR adds roughly \$11.4 billion to the estimated cost for the Merced-to-Bakersfield segment (from \$23.9 million to \$35.3 million). This represents a nearly 50 percent increase in costs for the segment compared to last year. According to HSRA, this includes:
  - \$3.9 billion related to scope changes, such as to reflect the costs of a combined station in Merced and a new proposed solar and battery storage system.
  - \$3.7 billion related to contingencies and other factors.
  - \$2.1 billion related to inflation and timing impacts. (The 2023 PUR now assumes an inflation rate of 5.3 percent in 2023, falling to 2 percent starting in 2027. The 2022 business plan assumed 2.25 percent in 2023, increasing to 3 percent starting in 2025-26.)
  - Shifting \$1.7 billion to the Merced-to-Bakersfield segment, including costs related to the new station in Bakersfield (\$1.2 billion) and maintenance facilities (\$481 million).
- **Reflects \$3.3 Billion in Higher Costs for Constructing San Francisco to San Jose.** The 2023 PUR updates the cost estimate of the recently environmentally cleared San Francisco-to-San Jose segment from \$1.7 billion to \$5 billion (roughly three times as much).



## Major Features of 2023 PUR—Cost Projections

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- **Reflects Offsetting Changes to Other System Costs.** The 2023 PUR reflects changes to some project costs that are not associated with specific segments. This includes an increase of about \$200 million associated with the portions of the solar and battery system outside of Merced to Bakersfield. It also includes a net decrease of about \$200 million in maintenance facility costs. (This includes a combination of shifting some costs to the Merced-to-Bakersfield segment, as discussed above, the impact of which is partially offset by increased cost estimates for other maintenance facility-related costs.)
- **Does Not Revise Other Cost Estimates.** The 2023 PUR does not make any adjustments to the cost estimates for the other segments of Phase I—such as Southern California or between San Jose and the Central Valley Wye—to account for factors such as cost escalation or additional changes that may be needed to address community concerns. For example, the draft environmental document for the Palmdale-to-Burbank segment contains cost estimates of over \$22 billion—notably higher than the \$16.8 billion reflected in the 2023 PUR.



## Major Features of 2023 PUR—Funding Sources

<b>2023 PUR's Estimated Merced-to-Bakersfield Segment Funding and Costs</b>	
(In Billions)	
<b>Projected Funding</b>	<b>Amount</b>
<b>Federal Funds</b>	
ARRA	\$2.6
FY 10 federal grant	0.9
RAISE grants and other	0.1
Subtotal, Federal Funds	(\$3.6)
<b>State Funds</b>	
Proposition 1A	\$8.5
Cap-and-trade received through November 2022	5.5
Future cap-and-trade	6 - 7.7 <sup>a</sup>
Subtotal, State Funds	(\$20 - \$21.7)
<b>Total Funding Available</b>	<b>\$23.5 - \$25.2</b>
<b>Merced to Bakersfield Costs</b>	<b>Amount</b>
Central Valley Segment	\$18.3
Merced and Bakersfield extensions	7.7
Other	9.3
<b>Total Costs</b>	<b>\$35.3</b>

<sup>a</sup> Assumes cap-and-trade revenues of between \$750 million and \$1 billion annually.

PUR = project update report; ARRA = American Recovery and Reinvestment Act; and RAISE = Rebuilding American Infrastructure with Sustainability and Equity.

- Identifies Funding From Various Sources and Assumes Robust Cap-and-Trade Revenues.** HSRA estimates that available funding sources will provide a total of between \$23.5 billion and \$25.2 billion for the Merced-to-Bakersfield segment, depending on future cap-and-trade auction revenues. The estimated range is somewhat higher than assumed in the 2022 business plan (between \$21.2 billion and \$25.2 billion). The main difference is that the 2023 PUR assumes the project will receive between \$750 million and \$1 billion per year from cap-and-trade (projecting recent GGRF revenue trends will continue), whereas the 2022 business plan assumed it would receive \$500 million to \$1 billion per year.





## Major Features of 2023 PUR—Funding Sources

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- **Reflects at Least \$10 Billion Funding Gap.** The 2023 PUR identifies a roughly \$10 billion to \$12 billion gap between the estimated revenues and the updated cost estimate for completing the segment. This is in contrast to the 2022 business plan, which estimated that revenues would be roughly equivalent to costs.
- **Identifies \$8 Billion Target for Federal Funds.** The 2023 PUR identifies a target of attaining \$8 billion of additional federal funds from various competitive grant programs authorized by the Infrastructure Investment and Jobs Act and the Inflation Reduction Act. (Because the state has not yet attained these funds, they are not reflected in the above figure.) HSRA assumes the project will rely on federal funds to complete various key activities, such as the purchase of trainsets and construction of the second track, as well as the right-of-way acquisition and construction of the Merced and Bakersfield extensions.
- **Does Not Identify Specific Funding Sources for Remainder of Phase I.** The 2023 PUR continues to suggest that the state’s goal is to complete Phase I. However, it does not identify specific sources of funding to construct any portion of Phase I beyond Merced to Bakersfield.



## Major Features of 2023 PUR— Ridership Estimates

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- ***Revises Ridership Estimates Downward.*** The 2023 PUR revises high-speed rail ridership estimates for the first time since 2020. It now estimates the Valley-to-Valley segment will have ridership of 11.5 million annual passengers by 2040, down from the previous estimate of 18.4 million (38 percent decline). HSRA also estimates Phase I will have ridership of 31.3 million annual passengers by 2040, compared to the previous estimate of 38.6 million (19 percent decline).
- These revised estimates are based on a new ridership model, as well as revised assumptions, such as about population and employment growth, and travel behavior.



## Key Issues for Legislative Consideration

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### Large Funding Gap Has Emerged for the Merced-to-Bakersfield Segment

- **Funding Gap of at Least \$10 Billion for Merced to Bakersfield Could Grow.** The 2023 PUR estimates a funding gap of roughly \$10 billion to \$12 billion for completing this initial segment, due to various factors such as changes in inflation estimates and scope. However, the risk that this funding gap could grow even larger is significant.
  - **Actual Costs Could Be Even Higher.** The project has a history of cost increases, and inherent cost risks are associated with large and complex construction projects. Also, while the CVS is well underway, the Merced and Bakersfield extensions still are in the early planning stages, and thus subject to additional uncertainty. Additionally, while the project incorporates updated inflation estimates for the Merced-to-Bakersfield segment, these are not specific to the construction sector. To the extent that inflation in construction costs continues to outpace overall inflation or that recent elevated inflation trends are more persistent than is currently assumed, this could result in even higher project costs.
  - **Some Expected GGRF Monies May Not Materialize.** The funding plan assumes that the higher cap-and-trade revenues the state has received over the past couple of years will continue through 2030. We caution, however, that forthcoming cap-and-trade revenues are subject to notable uncertainty, and this lack of clarity grows substantially the further into the future they are projected. Accordingly, the project could receive a smaller amount from GGRF than the 2023 PUR assumes.



## Key Issues for Legislative Consideration

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- **Unclear if Federal Funds Will Materialize.** HSRA has set a target of attaining roughly \$8 billion in additional funding from the federal government. However, even this amount would not fully meet the currently identified funding gap. Additionally, how much funding the state will receive from the federal government is highly uncertain. For example, from 2021 through March 2023, HSRA applied for at least \$1.6 billion in federal funds but only received \$49 million thus far. (Applications totaling \$327 million are still pending, and HSRA has notified the Legislature about its intent to apply for two grants totaling \$3 billion in additional federal funding by April 21, 2023.) Most recently, HSRA was unsuccessful in securing two federal grant applications totaling over \$1.2 billion, as the U.S. Department of Transportation deemed the proposals as not cost-effective.

### No Funding Plan Beyond Merced to Bakersfield

- **Over \$80 Billion Funding Gap for Phase I Likely to Grow.** Based on HSRA's current estimates, the project has a funding gap of over \$80 billion to complete Phase I. However, estimates for portions of Phase I beyond Merced to Bakersfield are subject to substantial uncertainty and therefore could ultimately be much higher. Some reasons include (1) many of these segments are in the early planning stages and additional changes to scope may be necessary as designs are refined, (2) some segments involve relatively complex and unpredictable work (such as tunneling), and (3) the state has experienced significant construction cost escalation since some of these costs were last comprehensively updated.
- **No Plan for Addressing the Phase I Funding Gap.** At this time, HSRA has not identified how the construction costs for the portions of Phase I beyond the Merced-to-Bakersfield segment would be funded. HSRA indicates that the project needs ongoing state and federal funding to implement its long-term goals. However, it has not identified a specific, credible plan for (1) how much funding it would secure from each specific source or (2) how it plans to obtain such funds. Absent such a plan, the path to completing Phase I is unclear.



## Key Issues for Legislative Consideration

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(Continued)

### Reduced Ridership Could Affect Business Case

- **Lower Ridership Could Increase the Likelihood of Operating Subsidy.** The lower ridership estimate is likely to reduce the net operating revenues, which could affect the business case for high-speed rail and make it more difficult for it to meet the Proposition 1A requirement that the project not require an operating subsidy. (We note that HSRA argues that this requirement would not apply if it uses a third-party operator to run the service—as it plans to for the Merced-to-Bakersfield segment.)

### Project Oversight Continues to Be Important

- **Legislature Created Framework for Improved Oversight.** With the passage of Chapter 71, the Legislature created a strong framework for additional project oversight, such as the establishment of an independent OIG. The benefits of these actions should start to become apparent as the OIG gets up and running over the coming year.



## Key Near-Term Questions Facing the Legislature

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The Legislature took important actions last year to provide additional project direction and establish a framework for enhanced oversight. However, given the significant changes reflected in the 2023 PUR, the Legislature may want to consider whether additional actions beyond those taken in 2022-23 are merited. As it does so, some key questions we suggest the Legislature keep in mind include:

- ***Is the Legislature Still Committed to Merced to Bakersfield?***

Chapter 71 expressed the Legislature’s intent to focus on the Merced-to-Bakersfield segment. This approach was based on the information available at that time that suggested that the project had roughly sufficient funds to complete that segment. The Legislature may want to consider the extent to which the updated information in the 2023 PUR—such as the emergence of the multibillion dollar funding gap—affects its intent.

- ***What Funding Does the Legislature Want to Use to Fill the Merced-to-Bakersfield Gap?*** To the extent the Legislature is still committed to completing the Merced-to-Bakersfield segment, it will likely need to identify billions of dollars of additional funding within the next few years to fill the funding gap. While the Legislature does not need to identify its specific funding plan immediately, at least beginning to formulate its preferred funding approach soon would allow it more time to fully evaluate and weigh the difficult trade-offs associated with each option. Some factors the Legislature will want to consider include:

- ***Financial Approach:*** The Legislature could use cash to pay up front or borrow, such as by seeking voter approval for another general obligation bond, issuing revenue bonds, or pursuing federal financing programs.
- ***Fund Source:*** Examples of potential fund sources for up-front cash or debt service payments include the General Fund, additional GGRF, or truck weight fees (which currently offset General Fund costs associated with repaying transportation-related general obligation bonds). All of these sources come with trade-offs, given other legislative priorities and uses of the funds—particularly in light of the current and forecasted out-year budget problems.



# Key Near-Term Questions Facing the Legislature

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- **Existing or New Revenues.** The Legislature could use existing revenues (such as by reducing spending in other areas) or raise new revenues (such as by increasing an existing tax or establishing a new tax).
- **Does the Legislature Agree With the Elements Included in Merced to Bakersfield?** One way to help modestly decrease the size of the funding gap could be to reduce the scope of the project elements included in the Merced-to-Bakersfield segment. Most of the proposed elements—such as two tracks, basic stations, and a combined station at Merced—are important to the functioning of basic, reliable service. However, the Legislature could consider whether certain elements are less critical and could be removed. For example, the 2023 PUR adds \$230 million in costs—\$101 million of which are in Merced to Bakersfield—for a newly proposed solar and battery storage system. Given the funding gap, the Legislature could consider whether it deems this added scope to be critical to the project.
- **Does the Legislature Agree With HSRA’s Planned Actions Beyond Merced to Bakersfield?** HSRA indicates that it plans to take various actions related to segments of Phase I beyond Merced to Bakersfield. This includes pursuing federal grants for the design of other segments in Northern and Southern California, such as the grants it intends to submit by April 21, 2023. Additionally, starting in 2025, HSRA indicates it plans to start undertaking activities beyond Merced to Bakersfield, such as right-of-way acquisitions, utility relocations, and agreements with third parties. The Legislature may want to consider whether it is comfortable with HSRA undertaking these activities, particularly in light of the funding gap that has emerged for the Merced-to-Bakersfield segment and the growing funding gap for Phase I. If not, the Legislature could consider strengthening the current statutory limitations to clarify its intentions.



# Key Near-Term Questions Facing the Legislature

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*(Continued)*

- ***Does the Legislature Have Sufficient Information to Inform Its Decisions?*** To the extent the Legislature feels it would benefit from additional information and analysis—such as to justify the project’s business case given revised ridership estimates, to gain more confidence in the project’s cost estimates, to better understand which project elements could be removed or modified to reduce costs, or to assess the available funding options—it could consider funding an appropriate third party to develop such information. The Legislature could also consider requesting the IG, once appointed, conduct particular analyses.
- ***How Can the Legislature Promote the Effectiveness of the IG in Providing Project Oversight?*** The IG has the potential to play a critical role in project oversight, such as by conducting independent, self-initiated audits. Taking legislative steps to ensure the effectiveness of the IG will be important. This could include selecting strong, independent candidates for the position, properly resourcing the new office, and establishing a robust working relationship with the ultimate appointee.

