California High-Speed Rail
BRIEFING: June 16, 2022 AGENDA ITEM #2

TO: Board Chair Richards and Board Members
FROM: Brian Kelly, Chief Executive Officer
DATE: June 16, 2022
RE: Construction Update

Summary
Information Item to update the Board of Directors on Program Delivery activities.

Background
This presentation reflects the Authority’s commitment to brief the Board periodically on program progress. The CEO, Regional Director, and Deputy COO will present a program update with a PowerPoint presentation to the Board. This presentation expands on the monthly Central Valley Status Report to provide a broader picture of program activities and final project challenges. This Program Update aims to give the Board a look at where program activities are and what is on the horizon as construction advances, the Authority strives for full project definition, and we look towards advancing design and Track and Systems procurement.

Discussion
This information item provides an update on major activities across the Program, including achievements and goals relative to environmental clearance, right-of-way (ROW) delivery, construction on the 119 miles in the Central Valley, and what is on the horizon for Track and Systems. The presentation will include further information on the following topics:

1. Regional Goals
   The Authority has environmentally cleared 380 miles between San Jose and Palmdale and can begin advancing some design work, identifying “shared corridor” early capital investments, and developing funding plan options for the Bay Area and Southern California. The presentation outlines the goals for the three major regions in the State: The Bay Area, Southern California, and the Central Valley.

   a. Bay Area – The 159 miles between San Francisco and Merced is eligible to begin advanced design in 2022/2023. Corridor electrification is underway on 51 miles through the Caltrain Electrification Project. The goal is to advance design work in 2023, identify ROW; identify “shared corridor” early capital investments; and develop funding plan options (segment construction is currently unfunded).

   b. Southern California – The 164 miles between Bakersfield and Anaheim is 56% environmentally cleared and eligible to begin some advanced design work in 2023. LA Union Station Phase A is fully funded and will be environmentally cleared in 2022. The goal is to complete all environmental
clearance; begin advanced design in 2023; identify ROW; identify “shared corridor” early capital investments; and develop segment funding plan options (segment construction is currently unfunded).

c. Central Valley – The 171 miles between Merced and Bakersfield is environmentally cleared with 119 miles under construction and 52 miles starting advanced design work. The Track and Systems (T&S) contract is poised to be awarded in 2022, with train procurement commencing in 2023. The goal is to have initial operations by 2030.

2. Project Management
In the Central Valley, we are striving toward improved construction project management through:

a. Defining scope via executing change orders;

b. Improving ROW planning and management for schedule forecasting;

c. Concentrating on expediting third-party design approvals; and

d. Working with Design-Build (DB) contractors to re-sequence work and mitigate schedule impacts.

3. Right-of-Way Progress
A new management approach to ROW processes has contributed to increased ROW acquisition and improved schedule forecasting. The Authority is ahead of schedule in delivering Right-of-Way. Parcel delivery was projected to reach 90% of the total needed in July 2022, but has surpassed that with over 90% (2,093) of the 2,305 parcels needed having been delivered in April 2022.

4. Construction Progress
In the Central Valley, current construction design packages are nearing completion and third-party requirements are largely identified, bringing the project scope into greater focus and stabilizing the ROW footprint. To obtain a full project definition, the Authority is advancing efforts to finalize scope and schedule. Negotiations are underway that will finalize new scope into the contracts, and the potential for re-sequencing work to mitigate schedule impacts. Progress and remaining challenges in each of the construction package (CP) in the Central Valley will be detailed, including the following:

a. CP 1 – One design package is pending, with approval anticipated in June 2022. The Revised Baseline Schedule is expected to be finalized in summer 2022. Half of the major change orders needed to finalize scope have been executed in the last six months. The three remaining major change orders are in negotiation. The primary risk that remains is utility relocations, including design reviews/approvals and complex cutover activities. Utility relocations are more complex and time-consuming in CP 1 than in other CPs, as the density of locations in the urban area within Fresno has six times more utility conflicts than any other area of the 119 miles currently under construction. Aggressive efforts are planned for 2022/2023 to complete the majority of the remaining utility relocations, which would outpace historic performance levels.

b. CP 2-3 - One design package is pending, with approval anticipated in June 2022. The Revised Baseline Schedule is expected to be finalized in summer 2022. Of the four major commercial issues to resolve, one change order was executed to finalize the scope of the BNSF Intrusion Protection Barriers. The remaining issues include Hanford Viaduct and Deer Creek Viaduct - both moving into the negotiation process, and Cross Creek Viaduct is under review. The primary risk areas are ROW acquisitions for utility relocations, third-party design reviews/approvals, and the commercial issues noted above.

Further, the presentation will include an overview of the Tied Arch Bridge rebuild, an example of our quality assurance practices. Tied Arch Bridge is a 249-foot-long Type 1 structure that will support HSR trains, located on State Route 43 between Davis and Cairo avenues in Fresno County. During the concrete pour of the bridge abutment, the Authority identified workmanship
issues and put the contractor on notice of potential issues with the pour. The Authority took corrective actions:

- Required the contractor to create a prevention plan to ensure workmanship issues are addressed for future construction.
- Performed the Quality Oversight process and required the contractor to begin a thorough investigation and third-party testing.
- Required two non-destructive tests to be performed that identified areas along the abutment that did not meet Authority specifications.
- Concurred with the contractor that the best course of action was to remove and rebuild the abutment at the contractor’s cost.
- Demolition began March 2022 and will be completed July 2022.

c. CP 4 – All design work is complete and the Actual Earned Value as of April 30, 2022, was 82.4%. All major change orders have been executed to finalize major scope. The primary risks that remain are relative to design reviews/approvals with Semitropic Water Storage District, PG&E, and BNSF. Mitigations include a targeted effort to obtain the design approvals, with increased staff dedicated to finding resolution. Substantial completion for construction is expected in March of 2023.

Additional key performance indicators for each construction package will be provided in the presentation.

5. Track and Systems
The Track and Systems (TS) contract is scheduled to be awarded by the end of 2022. The presentation will outline the sequence of work and timing to complete the procurement process, as well as for issuing Notices to Proceed (NTPs) for work packages from 2022 through 2026.

Legal Approval
This is an informational item, and by itself, does not raise any legal concerns.

Budget and Fiscal Impact
This is an informational item, and by itself, does not have a budget or fiscal impact.

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| Reviewer Name and Title: Brian Annis  
Chief Financial Officer | Signature verifying budget analysis: |
| Reviewer Name and Title: Alicia Fowler  
Chief Council | Signature verifying legal analysis: |

Recommendations
This is an informational item.