# California High-Speed Rail BRIEFING: July 27, 2023 Board Meeting Agenda Item: #3

**TO:** Chairman Richards and Board Members

**FROM:** Bruce W. Armistead, Chief of Rail and Operations Delivery/ Bill Casey, Chief Operating

Officer

**DATE:** July 27, 2023

**RE:** Informational Briefing on Track, Systems and Trainsets Procurement Strategy

#### **Summary**

The purpose of this briefing is to update the Board of Directors on the planned approach and schedule for the design, manufacture, installation, and construction of the track, systems, and trainsets scope. This briefing provides an overview of the delivery methods the Authority will use for these contracts and information on how the scope of work will be apportioned into multiple smaller contracts.

#### **Background**

The Authority needs to advance key procurements in the second half of 2023 and early 2024 to deliver an operation schedule consistent with the timelines in the Project Update Report and our agreements with the Federal Railroad Administration. The scope of work within these procurements was previously contained within the proposed Track and Systems contract as well as the proposed Trainsets contract. Track and Systems Background

In July 2019, the Authority released a Request for Qualifications for the procurement of track and systems for the 119-mile Central Valley Segment. The scope included the design, construction and 30-year maintenance of all track and system components within one scope package. The scope also included system integration and infrastructure manager responsibilities, as well as extensions to Bakersfield and Merced. The Request for Proposals was released to the three shortlisted teams in December 2019.

In October 2022, after careful consideration and given the economic climate, supply-chain challenges, and 40-year high inflation, the Authority determined it was not in the State's best interest to extend the time for the Track and Systems procurement and opted to let it expire so that the procurement approach could be restructured to better respond to market conditions.

Since October, Authority staff has worked internally and with an expanded consultant team to develop a strategy to move this complex work forward in a manner that:

- Is consistent with our goal to achieve revenue service from Merced to Bakersfield by 2030- 2033,
- Enhances value for money and competition,
- Permits flexibility, and
- Mitigates program risks.

The procurement strategy group also gathered extensive industry feedback through nine debrief meetings with firms involved in the prior track and systems procurement and conducted 15 meetings with firms interested in this future work.

Details on the new procurement strategy are provided in the Discussion section of this memorandum.

#### **Trainsets Background**

In 2014, the Authority prepared draft procurement documents for a trainset procurement that was reviewed by industry. Ultimately, the Authority did not proceed with the trainset procurement due to lack of funding, and a desire to focus on completion of the ARRA grant scope.

The Authority plans to procure high-speed trainsets capable of operating at 220 mph (tested to 242 mph) that will be Buy America and FRA Tier III compliant. The order will include two prototype trainsets scheduled to be delivered by 2028 to support static/dynamic testing and trial running, followed by delivery of four additional trainsets by the end of 2030 to support revenue operations. More information on this procurement is provided in the Discussion section of this memorandum.

#### **Prior Board Action**

Previously, the Board approved the release of a Request for Qualifications for Track and Systems on July 16, 2019 (#HSRA 19-04), and release of a Request for Proposals to shortlisted firms on December 10, 2019 (#HSRA 19-11). In October 2022, the Authority determined it was not in the best interest of the State to extend the time for this procurement, as discussed above. In adopting the 2022 Business Plan and accepting the 2023 Project Update Report, the Board chose

In adopting the 2022 Business Plan and accepting the 2023 Project Update Report, the Board chose to move forward with a business model that includes procurement of track, systems, and trainsets with sufficient time to achieve the delivery requirement within the American Recovery and Reinvestment Act (ARRA) and other grant agreements with the federal government.

#### **Discussion**

This information item provides an update to the Board on the High-Speed Rail Authority's progress made to advance these key procurements. This plan is influenced by our agreements with the Federal Railroad Administration. The plan outlines a procurement and contracting strategy to meet the Authority's obligations and address the risks in reaching revenue service certification.

The new approach to delivering the program's next phase of work incorporates lessons learned and is tailored to align with the post-Covid economic climate and industry trends. The large amount of complex scope has been appropriately separated into smaller, more flexible contracts that will best position the Authority to complete its 119-mile test track and achieve a certified, electrified high-speed rail segment from Merced to Bakersfield.

This approach, which uses progressive delivery methods, should minimize change orders that can arise under lump-sum, fixed price design-build contracts. The plan also permits more flexibility to adjust schedules and advance design and construction as needed.

Below is an overview of the anticipated scope packages, delivery methods, and timing to advance the procurements.

Package	Scope	Description	Indicative Timing
Package 1 (broken up into two separate contracts)  Overhead C System (C Track Civil Track Bed,	Track and Overhead Contact System (OCS)	Package 1A: Design  Architectural & Engineering contract	Q3 2023
	(Track Civil Works, Track Bed, Track, and OCS)	Package 1B: Construction  Manager/General Contractor  (CM/GC)	Q4 2023
		CM/GC contract	
Package 2	Systems  (Signaling, train control, core communications and traction power system, Supervisory Control and Data Acquisition)	Package 2: Systems  Progressive Design-Build contract	Q4 2023
Package 3	Trainsets	Package 3: Trainsets	RFQ: Q3 2023
		Supply-Maintain contract	RFP: Q1 2024
Package 4	Depots/Facilities	Package 4: Depots/facilities  [Packaging and scope of depots/facilities subject to ongoing discussion]	2025

Additional Contracts Program-wide support for Track and Systems		Independent Cost Estimator (ICE)	Q4 2023
		Construction Manager	Q4 2023
		Integration Support	Q4 2023
		Independent Safety Assessor (ISA)	Q3 2023

Below is an overview of the anticipated timeline to release each procurement.

No.	Package	Indicative timing
1.	Package 3: Trainsets (Request for Qualification)	Q3 2023
2.	Package 1A: Track and Overhead Contact System - Design	Q3 2023
3.	Independent Safety Assessor	Q3 2023
4.	Integration Support Services	Q4 2023
5.	Independent Cost Estimator	Q4 2023
4.	Package 1B: Track and Overhead Contact System - Construction Manager/General Contractor (CM/GC)	Q4 2023
5.	Package 2: Systems	Q4 2023
7.	Construction Manager for Track and Systems	Q4 2023
8.	Package 3: Trainsets (Request for Proposal)	Q1 2024

Staff will return to the Board for approval prior to releasing future procurements.

#### Legal Approval

The Legal Office has reviewed, and this item complies with Authority policy.

### **Budget and Fiscal Impact**

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

REVIEWER INFORMATION	SIGNATURE
Reviewer Name and Title:	Signature verifying budget analysis:
Brian Annis	
Chief Financial Officer	
Reviewer Name and Title:	Signature verifying legal analysis:
Alicia Fowler	
Chief Legal Counsel	

# Recommendations

This item is informational only, and there are no recommended actions at this time.

## **Attachments**

PowerPoint Presentation