



CALIFORNIA
High-Speed Rail Authority

**Consider Providing Approval to Release a Request for
Qualifications for High-Speed Trainsets and Related
Services**

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TRAINSET RFQ OVERVIEW

AGENDA

- **Objective**
- **Trainset Procurement Scope Overview**
- **Trainset Procurement Timeline**
- **Relationship of Trainsets to Track and Systems**
- **Board Actions**



TRAINSET RFQ OVERVIEW

OBJECTIVE

- **Request for Action:**

- » Release a Request for Qualifications (**RFQ**) for high-speed trainsets to industry
- » RFQ will result in the receipt of Statements of Qualifications (SOQs) from prospective trainset contractors
- » Authority will evaluate the SOQs and create a shortlist of qualified contractors capable of delivering high-speed trainsets
- » No funding is required for the RFQ process.

TRAINSET RFQ OVERVIEW

OBJECTIVE

OVERVIEW OF PACKAGING AND ANTICIPATED DATES

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

TRAINSET RFQ OVERVIEW

OBJECTIVE

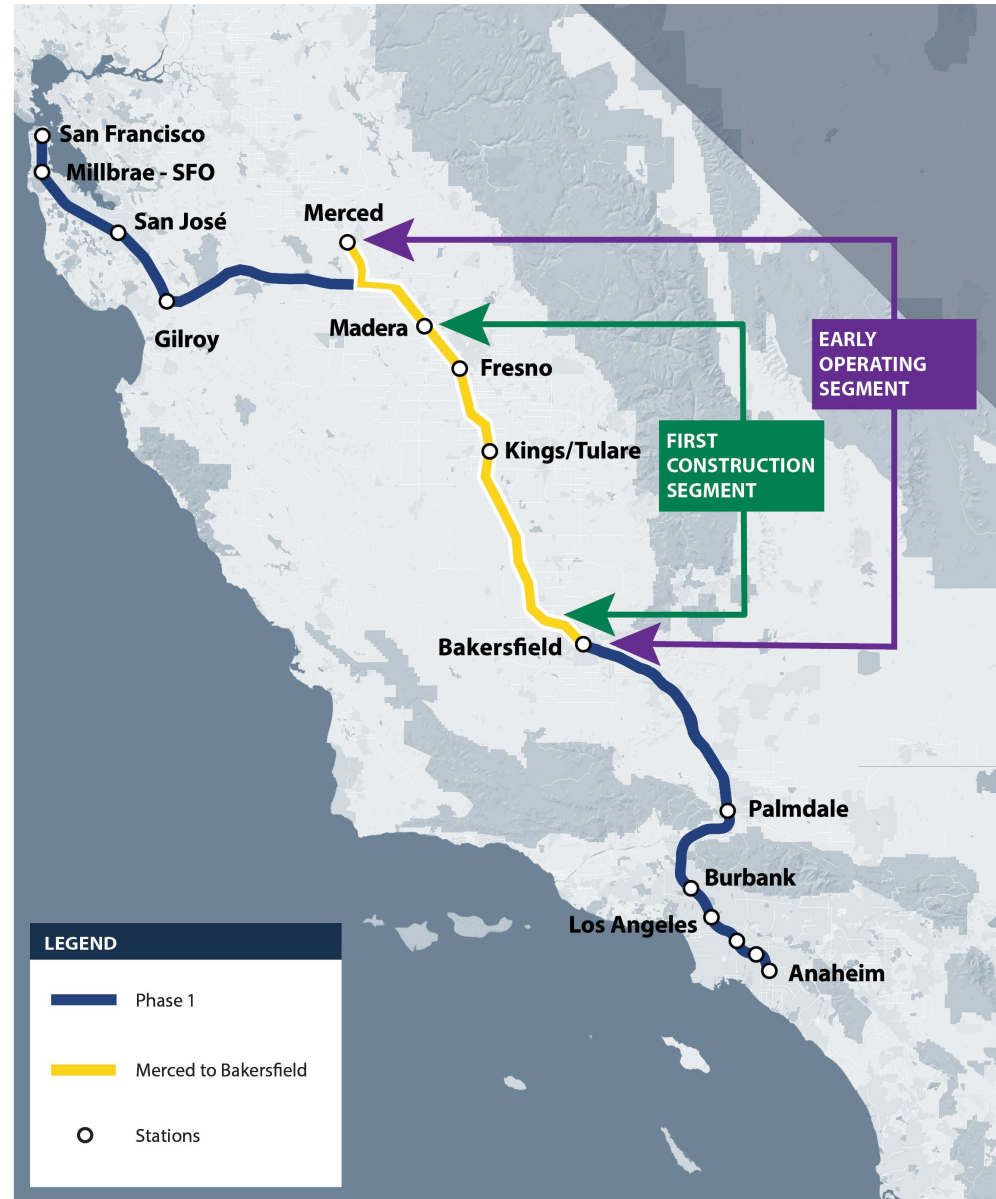
- **Initiating the Trainset procurement process will allow Authority to:**
 - » Meet our Federal Railroad Administration (FRA) / American Recovery and Reinvestment Act (ARRA) grant timeline to start dynamic testing in December 2028
- **Aligned with the 2023 Project Update Report (PUR)**



TRAINSET RFQ OVERVIEW

TRAINSET PROCUREMENT SCOPE OVERVIEW

- **Procurement of 6 trainsets capable of operating at 220 mph, tested to 242 mph**
 - » Two prototypes to support static/dynamic testing and trial running
 - *Delivery to Authority by 2028*
 - » Four additional trainsets to support revenue operations of the Early Operating Segment (Merced to Bakersfield)
 - *Revenue service by end of 2030*



TRAINSET RFQ OVERVIEW

TRAINSET PROCUREMENT SCOPE OF WORK

In addition to the procurement of the trainsets, the Contractor will:

- Provide a driving simulator;**
- Develop design criteria for facilities, track and systems contracts, and stations;**
- Participate in the testing and commissioning of the facilities, track, and systems;**
- Develop and provide information as required by law to support the certification and subsequent commissioning of the Trainsets;**
- Maintain each Trainset for 30 years and provision of all Spares for such Trainsets; and**
- Operate and maintain the Facilities (to be built by others).**

TRAINSET RFQ OVERVIEW

TRAINSET PROCUREMENT TIMELINE

- **Authority timeline from RFP to revenue service is projected to be 7 years**
- **Authority Trainset Procurement to span 1 year from RFQ to selection (pending notification of Federal Grant awards, or other funding in Q4 2023)**
 - » Recommend the Authority progress the RFQ now to enable initiation of the RFP soon after Federal Grant awards, or other funding are identified
- **Procurement Goals**
 - » Prioritize the development of a validated model that simulates vehicle-to-track interaction with FRA acceptance
 - » Co-locate team responsible for performing vehicle-to-track interaction testing

TRAINSET RFQ OVERVIEW

RELATIONSHIP OF TRAINSETS TO TRACK AND SYSTEMS

- **Procurement of trainsets to be aligned with the Track and Systems procurement(s)**
 - » Will allow the selected trainset contractor to identify critical interfaces to inform maintenance facilities, track and systems, and stations design
 - » Ensures that interface and integration requirements are complete, without conflicts



TRAINSET RFQ OVERVIEW

CHALLENGES & OPPORTUNITIES

- **Buy America & Tier III compliant**
 - » Trainsets must meet new FRA Tier III regulations and Buy America requirements
- **Aggressive Schedule**
 - » Operational availability to support Dynamic Testing By 2028
- **Evaluating opportunities for a joint procurement of trainsets**
 - » Benefits economy of scale
 - *Increase base order of trainsets → drive competition*
 - *Spread non-recurring costs over a larger # of trainsets*
 - » Promotes interoperability

TRAINSET RFQ OVERVIEW

BOARD ACTIONS

- **Seeking Board approval**

- » Request for Qualification (RFQ)
 - *Release of RFQ (August 25, 2023)*

- **Future Board Actions**

- » Approval of shortlisted firms and release of the Request for Proposal (RFP)
 - *Release of RFP (Q1 2024) – contingent on funding*
- » Execution of Contract
 - *Potential for Multiple Notices To Proceed (July 2024 = NTP 1)*



CALIFORNIA
High-Speed Rail Authority

Questions



CALIFORNIA

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