## TRACK AND SYSTEMS CONTRACT OVERVIEW

Frank Vacca Chief of Rail Operations July 16, 2019



#### AGENDA TRACK & SYSTEMS

- Objective Board Approval to Release the Track and Systems Request for Qualifications (RFQ)
- Track & Systems (TS01) Procurement Overview
- Design/Build/Maintain Contract
- Technical/Contractual Discussion
- Challenges
- Next Steps



## **TODAY'S BOARD ACTION**

Release Track and Systems Request for Qualifications (RFQ)

## Request for action:

- » Release the Track and Systems RFQ to initiate procurement
  - » Track and Systems Contract Design/Build/Maintain



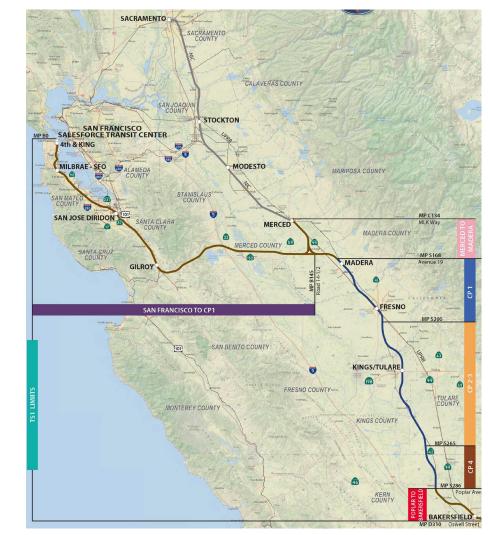
## PURPOSE OF TODAY'S REQUEST

- Meet our Federal Railroad Administration (FRA)/American Recovery and Reinvestment Act (ARRA) Grant December 2022 deadline
  - » Central Valley Segment 119 miles (Madera to Poplar Ave.)
- Align to 2019 Updated Baseline (\$15.6B)



#### **PROCUREMENT SEGMENTS** TRACK & SYSTEMS

- Silicon Valley to Central Valley Strategy (V2V) divided into six Notice-to-Proceed (NTP) Segments
  - » Segment 1: Central Valley Segment Madera to Poplar Ave. – 119 miles
  - » Segment 2: Poplar to Bakersfield 20 miles
  - » Segment 3: Madera to Merced 30 miles
  - » Segment 4: Gilroy to Central Valley Wye 96 miles
  - » Segment 5: San Jose to Gilroy 30 miles
  - » Segment 6: San Jose to San Francisco (Communications only) – 50 miles





## COSTS/BUDGET TRACK & SYSTEMS

 This request is for award of entire Valley to Valley (V2V) contract, but only authorization to proceed with Segment 1

» Madera to Poplar Ave.; 119 miles

 May 2019 Board Meeting: Budget approved in Updated Baseline for Segment 1





## **PROCUREMENT SCOPE OVERVIEW** TRACK & SYSTEMS

# • Scope includes: Design, construction, and 30-year maintenance agreement:

- » Track and Switches
- » Modern Automatic Train Control (ATC) System
  - Incorporates functional requirements of Positive Train Control (PTC)
- » Communication system
- » Early earthquake detection
- » Station platforms, canopies and vertical circulation (no buildings)
- » Overhead Contact System (OCS)
- » High-Voltage sub station and switching stations to support OCS
- » Operational Control Center (OCC)
- » Maintenance of Way Facilities
- » 30-year maintenance responsibilities of constructed civil structures



## TECHNICAL AND CONTRACTUAL DUE DILIGENCE

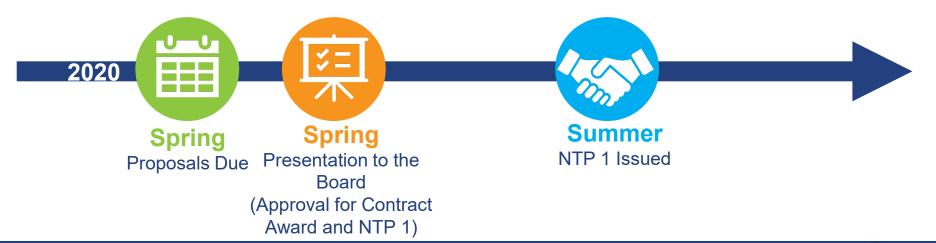
#### • Contract assembled by internal integrated team:

- » Early Train Operator (ETO)
- » Network Rail Consulting
- » Contract Procurement Group
- » Rail Delivery Partner
- » Legal
- » Finance
- » Financial Advisor
- Circulated within Organization for review/comment.
- Released draft to Industry for comments.
- Peer review: international team of high-speed rail experts.



## **PROCUREMENT TIMELINE** TRACK & SYSTEMS







## **BENEFITS OF A DESIGN/BUILD/30-YEAR MAINTENANCE CONTRACT**

## Systems Integration

- » Ensures mutual compatibility and functionality of all high-speed rail elements as a system
- Modern High-Speed Rail Service-Proven Technology
   » ATC
  - » Hazard Warning Systems (including earthquake detection)
- Life Cycle Costs Short Term vs Long Term Costs
- Long Term Partner
  - » Fixed maintenance costs with escalation
- Risk allocation to party best positioned to address it



## BENEFITS OF A DESIGN/BUILD/30-YEAR MAINTENANCE CONTRACT CONT...

- Balances design/build capital cost and whole systems life-cycle operating costs.
- Ensures design/builder commitment to operational functionality for 30 years.
- Accounts for life-cycle capital replacements.





## Access Issues

» Coordinating civil construction hand-over to Track & Systems

» Shared access as sites become available from civil construction

## • FRA Grant Schedule

» Completing ARRA Scope Track Work by December 2022



## NEXT STEPS... TRACK & SYSTEMS

## Board Approval Steps:

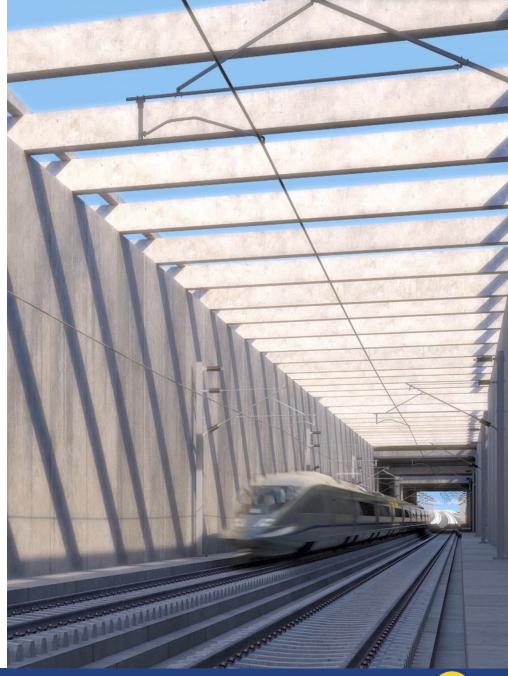
» Step 1: Request for Qualification (RFQ)
» Release of RFQ (July 17, 2019)
» Shortlisted firms (October 2019)
» Step 2: Request for Proposal (RFP)
» Release of RFP (Fall 2019)

» Step 3: Execution of Contract & NTP 1 (Spring/Summer 2020)

- Each NTP will have separate Board Approval
- Siting Operational and Maintenance Facilities (excl. HMF)



#### **QUESTIONS?** TRACK & SYSTEMS





#### **TRACK AND SYSTEMS** CALIFORNIA HIGH-SPEED RAIL





#### Headquarters

California High-Speed Rail Authority 770 L Street, Suite 800 Sacramento, CA 95814 www.hsr.ca.gov

