

# Caltrain Electrification Project Update

Peninsula Corridor Joint Powers Board

March 3, 2022

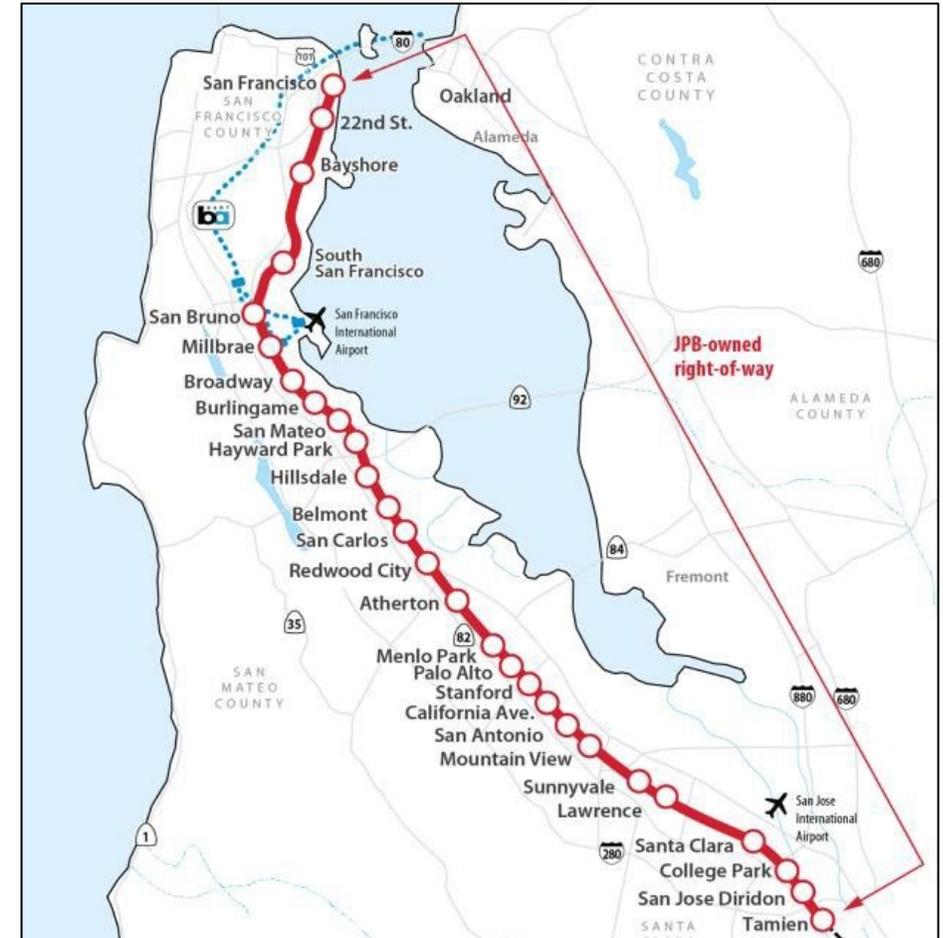
Agenda Item #5



# Project Overview

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- San Francisco to San Jose (Tamien Station)
- 51 miles
- Project Cost: \$2.44B
- Revenue Service: fall 2024



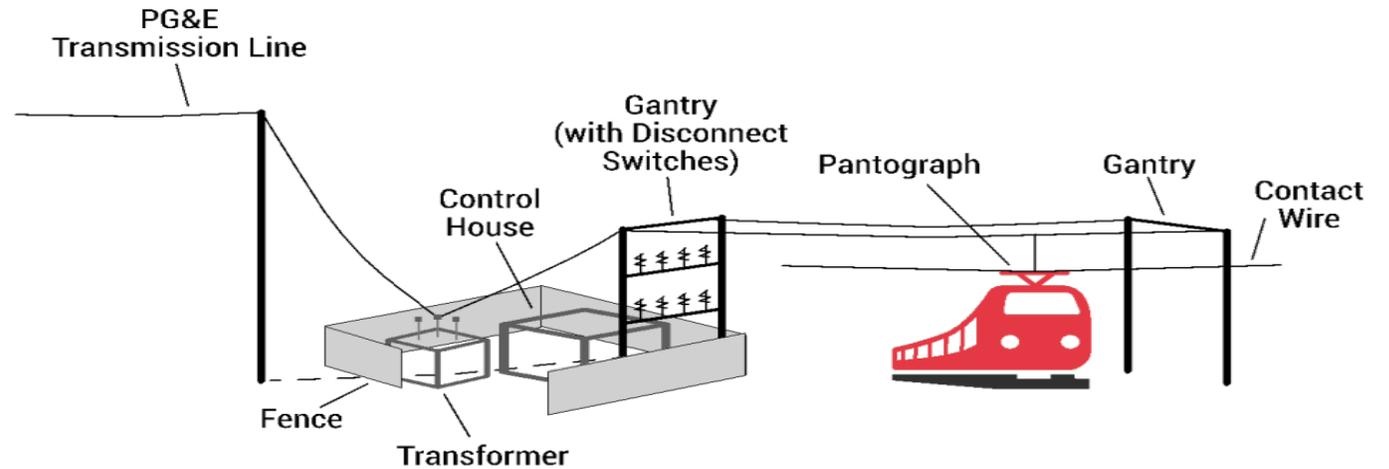
# Project Elements

- Electrification
  - Overhead Contact System (OCS)
  - Traction Power Facilities
  - Signal System

- Electric Trains

- 19 7-car train sets (133 cars)

*(Note: 96 cars funded by project; 37 cars funded by State TIRCP)*



# Project Benefits



Improved Train Performance,  
Increased Service and Greater Capacity



Improved Regional Air Quality and  
Reduced Greenhouse Gas Emissions



Job Creation Locally and  
Across the Country



Reduced Engine Noise  
Emanating from Trains



# Project Highlights

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- No change to revenue service date
- Construction progress
  - All foundation work complete
  - Segment 4, “punch list” complete
- Go decision on March/April signal work
  - Segment 2 signal cutover plans developed
  - Temporary service changes prepared for March/April
- Close monitoring of signal installation, testing and system risks
  - Close coordination with PG&E

# Project Highlights, cont.

- No change to project budget
  - No draw from project contingency, incentive pool
  - \$46,000 drawn from shared risk pool
  - Proven claim resolution
  - ICAP reevaluation / FTA and CHSRA review
- BBII/JPB additional resources in place and partnering efforts continue
- Progress with FTA and CHSRA on Recovery/Remediation Plan
- Funding
  - State and federal funding opportunities identified and advocacy continues
  - \$150M project financing approved by JPB

# Foundations Complete Celebration

U.S. Congresswoman **Anna Eshoo**  
U.S. Congresswoman **Jackie Speier**  
CA State Speaker Pro Tempore  
**Kevin Mullin**  
CA State Assemblymember **Phil Ting**  
CA State Senator **Scott Wiener**  
President of the San Francisco  
Board of Supervisors & Caltrain  
Board Member **Shamann Walton**



# Upcoming Milestones

Item	Date
Finalize Recovery / Remediation Plan	March 2022*
Major Signal System Cutovers in Segment 2	March 2022
Arrival of First Trainset	April 2022
Energization of Segment 4	June 2022**
Completion of Segment 4	June 2022**

\*Previous milestone January 2022. Review time extended. No impact to revenue service date.

\*\*30-day delay. No impact to revenue service date.

# Safety and Security

Time Period	Reportable Injury Rate
Year-to-Date	0
Since Project Start (2017 to Today)	1.71

*Note: National Average Reportable Injury Rate is 2.50*

- OCS safety awareness training complete
  - Caltrain employees
  - BBII
  - TASI roadway workers
  - Transit police
- Contractors / subcontractors COVID-19 plans based on federal, state and local requirements
- Collaboration with San Jose / Santa Clara Fire Departments (upcoming emergency response exercise

# **Construction Update**

**January / February 2022**

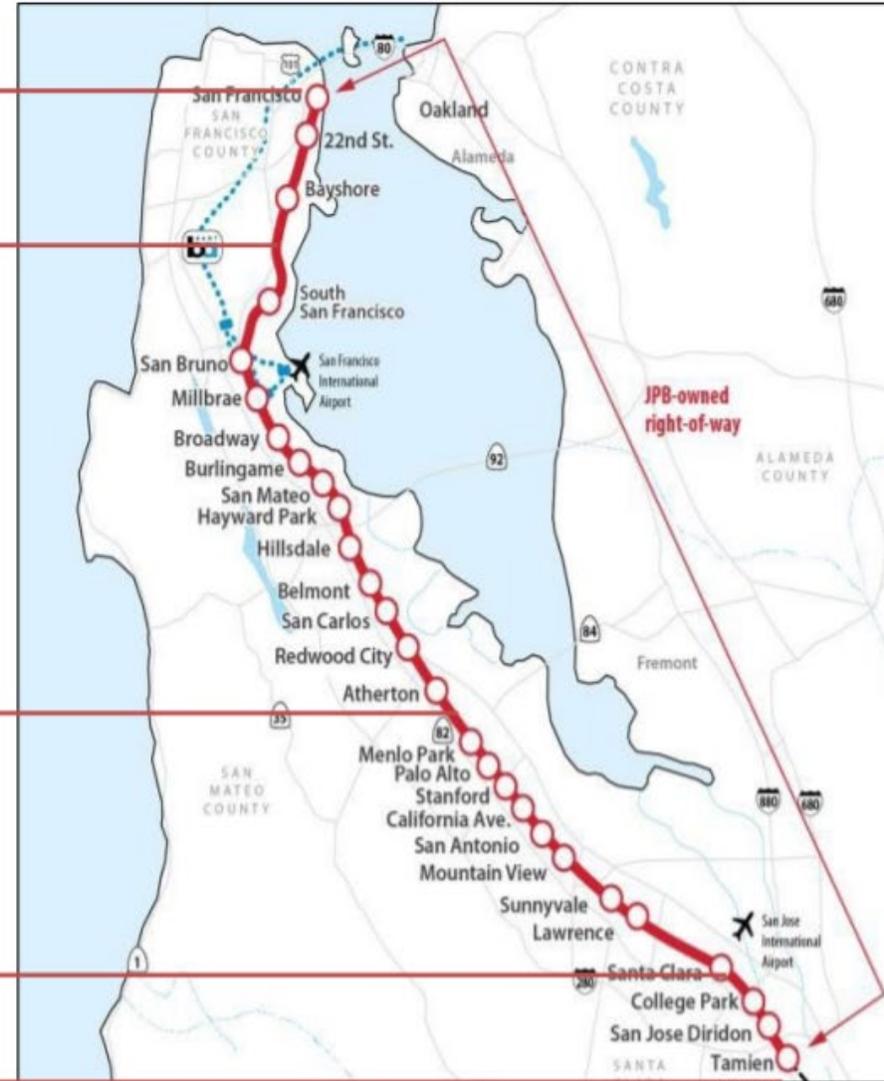
# Construction Segments

**Segment 1**  
San Francisco to Brisbane

**Segment 2**  
South San Francisco to Atherton

**Segment 3**  
Menlo Park to Santa Clara

**Segment 4**  
Santa Clara to Tamien



# Overhead Contact System

- Foundations (3,092 total)
  - All Segments: Complete
- Poles (2,587 total)
  - Segments 3, 4 and CEMOF: Complete
  - Segments 1 and 2: 722 poles remaining (758 previous)
- Wire (1.5M linear feet total)
  - Segments 3 and 4: Complete
  - Segments 1 and 2: 571K linear feet remaining



*As of February 20, 2022*

# Traction Power Facilities

- 10 facilities
- **Approximately 83% complete (80% previous)**
- Work remaining: energization, commissioning, testing
- Anticipated completion fall 2022



*As of February 20, 2022*

# Signal System and Communication

- 2 Speed Check
  - Segment 4
    - Complete “punch list”
  - Segment 2
    - Major cutover mid-March (temporary service schedule)
    - 17 grade crossings in Burlingame and San Mateo
    - Work dates: March 14<sup>th</sup> to April 2<sup>nd</sup>
    - Anticipated completion November 2022
  - Segments 1 and 3 work remaining
- Crossing Optimization Project work on-going

# Temporary Service Schedule

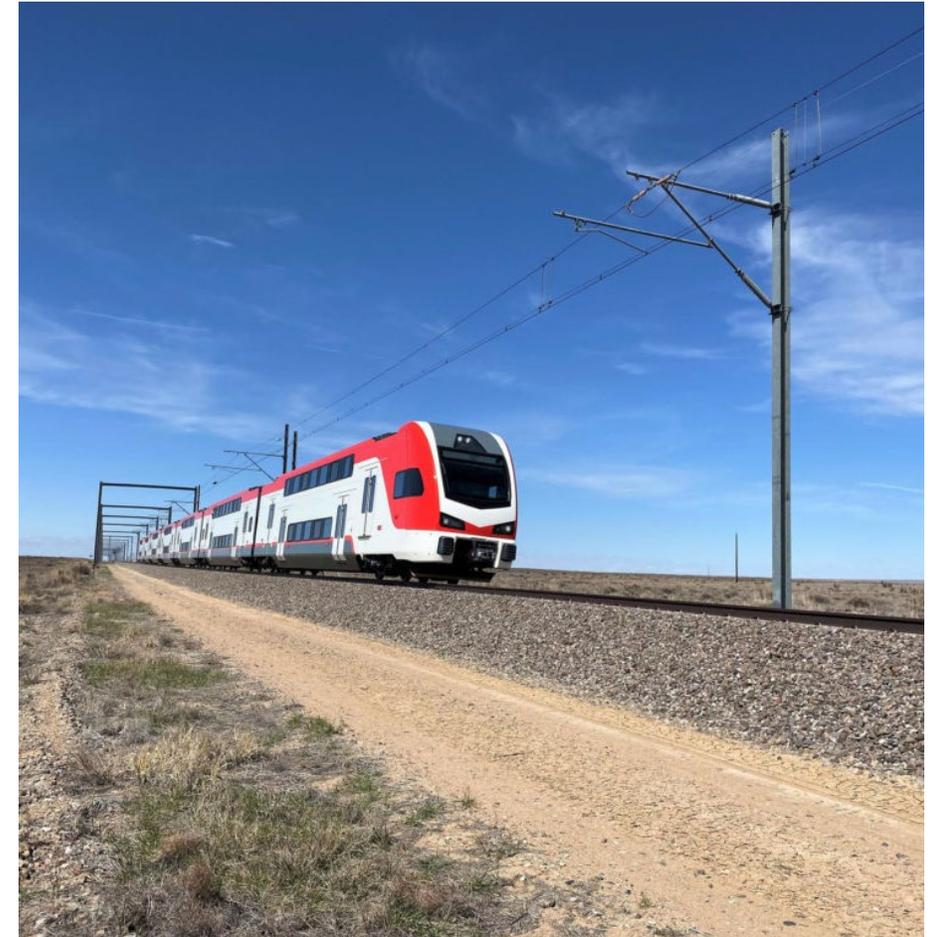
- Temporary train schedule March 14 to April 1
- No change: Mid-day, evening, and weekend schedules
- Overall service reduction from 104 to 88 trains/weekday
  - Peak service reduction from 4 to 3 limited trains/hour/direction
  - No local service during peak hours
  - Suspended Baby Bullet service
- Trains single-track at Broadway, Burlingame, San Mateo, Hayward Park and Hillsdale stations

# Customer Outreach

- Landing page
- Organic social  
(Twitter, FB, IG, Nextdoor, Tiktok)
- Paid digital and print ads
- Station ambassadors
- Email blasts
- Mobile app alerts
- Visual messaging signage at stations
- Onboard and station announcements
- Press release
- Amplify message via elected officials, cities, counties
- Updates to key stakeholders, business groups
- 50% off fare promotion for month of April

# Electric Trains

- FRA successful final inspection prior to shipment
- Completion of first article inspection for trainset 3 and 4 in Salt Lake City, UT
- First trainset to be shipped March 2022
- Rebaseline of production schedule
- 14<sup>th</sup> trainset anticipated arrival fall 2023
- 19<sup>th</sup> trainset anticipated arrival fall 2024

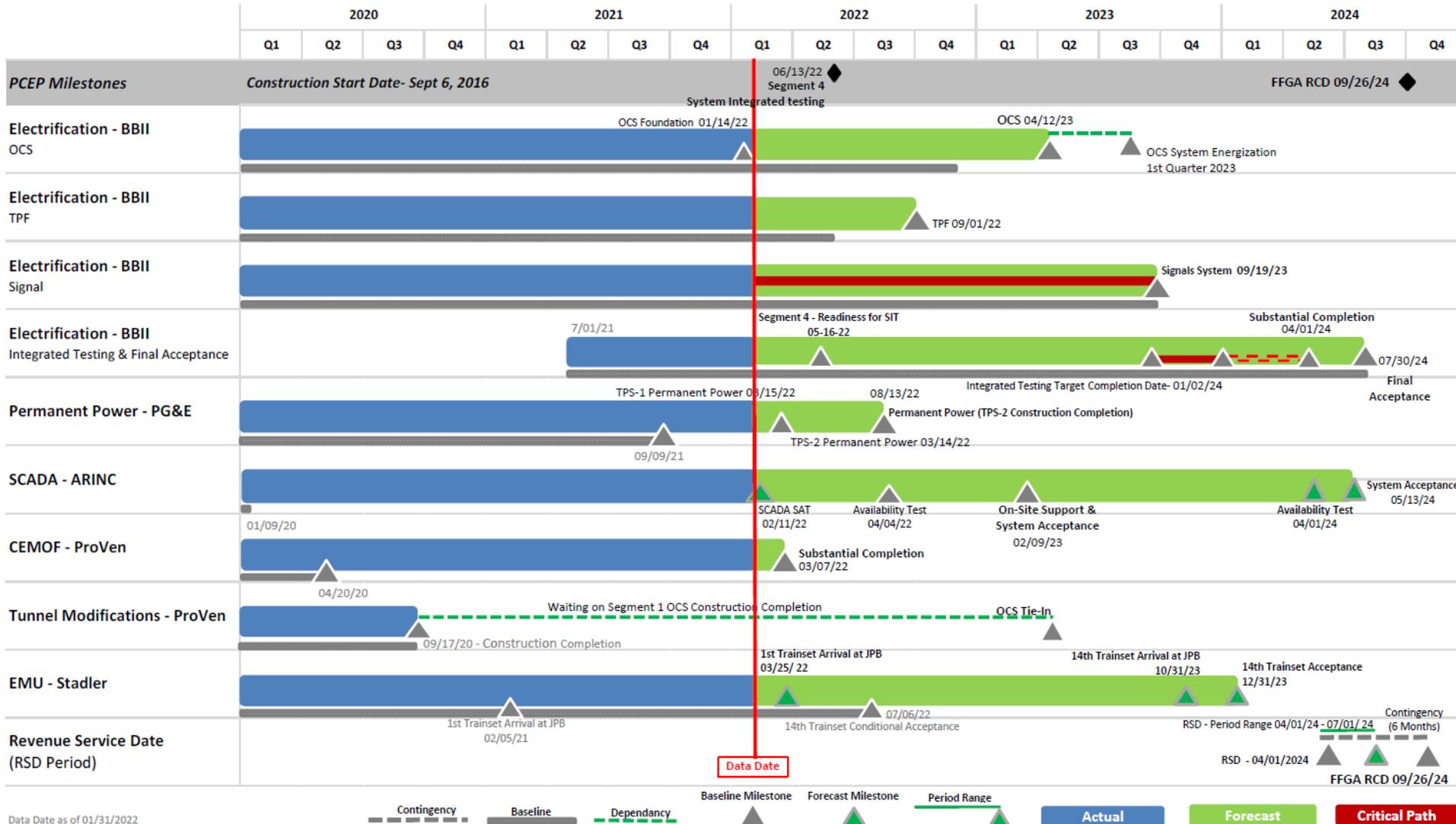


*As of February 20, 2022*

# Program Management

# Program Master Schedule

## Revenue Service Fall 2024



Data Date as of 01/31/2022



# Top Risks

	Risk	Mitigation
Yellow	Late completion of Signal Phase Study (SPS) for TPS 2 impact to Segment 4 OCS/TPS Commissioning and EMU testing	Technical team meetings with PG&E weekly to expedite modeling effort for SPS. Caltrain and PG&E Executives meetings weekly to monitor progress.
Yellow	Late execution of PG&E Transmission Operating Load Agreement impact to Segment 4 energization	Technical team and management to expedite documentation reviews.
Yellow	Delay of signal design, installation and testing	Global settlement resolved signal scope and fee. PCEP team and Design Builder focused on timely completion of cutovers.
Yellow	\$410M state/federal funding plan	Funding team has identified federal and state grant opportunities to pursue. Targeted advocacy is on-going.
Yellow	Contractor field resources and equipment availability	Schedule / resources workshop with contractor. Identifying areas of concern and solutions.
Yellow	Caltrain resources for project acceptance, operations and maintenance	Organization and specialized staff plan development.

**Green = Mitigations/actions identified and no impact to budget/schedule**

**Yellow = Mitigations/actions identified and potential impact to budget/schedule**

**Red = Impact to budget/schedule**

# Program Budget

Description of Work	Current Budget (1)	Cost for Month (2)	Cost to Date (3)	Estimate to Complete	Project Total
<b>Electrification</b>	\$1,749,139,438	\$43,002,814	\$1,172,554,984	\$576,584,454	\$1,749,139,438
<b>EMU</b>	\$693,551,258	\$13,710,817	\$333,637,226	\$359,914,849	\$693,551,258
<b>Program Total</b>	\$2,442,690,697	\$56,713,631	\$1,506,192,210	\$936,498,487	\$2,442,690,697

*Notes:*

1 "Current Budget" includes executed change orders and awarded contracts

2 "Cost This Month" represents cost of work performed January 2022

3 "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) as of January 2022

# Contingency, Risk and Incentive

	<b>Project Contingency</b>	<b>BBII Shared Risk Pool</b>	<b>BBII Incentive Pool*</b>	<b>Total</b>
<b>Baseline Amount</b> <i>as of 12/6/21</i>	\$40.0M	\$50.0M	\$18.5M	\$108.5M
<b>Usage / Add</b> <i>through 2/28/22</i>	(\$0.0M)	(\$0.05M)	(\$0.0M)	(\$0.0M)
<b>Remaining Balance</b>	\$40.0M	\$45.95M	\$18.5M	\$108.45M

Notes: \*Total incentive includes carryover from original budget and \$15M from BBII global settlement

# Funding Update

- \$410M State / Federal funding plan being developed
- Funding team with consultant support activated
- Federal efforts
  - Advocate for infrastructure funding for FFGA projects impacted by COVID with completion certainty
  - FRA ***State Partnership for Intercity Rail*** grant program in partnership with HSR

# Funding Update, cont.

- State efforts
  - Advocate for “TIRCP Plus” funding through State budget process
  - Support **AB 2197 (Mullin)** for \$260M project funding
  - Assess **CTC Solutions for Congested Corridors Program** for eligibility and competitiveness
- Work with MTC on capital project list for state and federal advocacy



**Kevin Mullin**, CA State Speaker Pro Tempore  
**Charles Stone**, JPB member, Belmont City Council  
**Rosanne Foust**, SAMCEDA Executive Director

# Upcoming Board Actions

- Proven claim resolution
  - No change to budget
  - Need contract authority

FOR MORE INFORMATION

[WWW.CALTRAIN.COM](http://WWW.CALTRAIN.COM)

