

Caltrain Electrification Project Update

San Mateo County Transportation
Authority

February 3, 2022



Program Overview

Program Overview

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



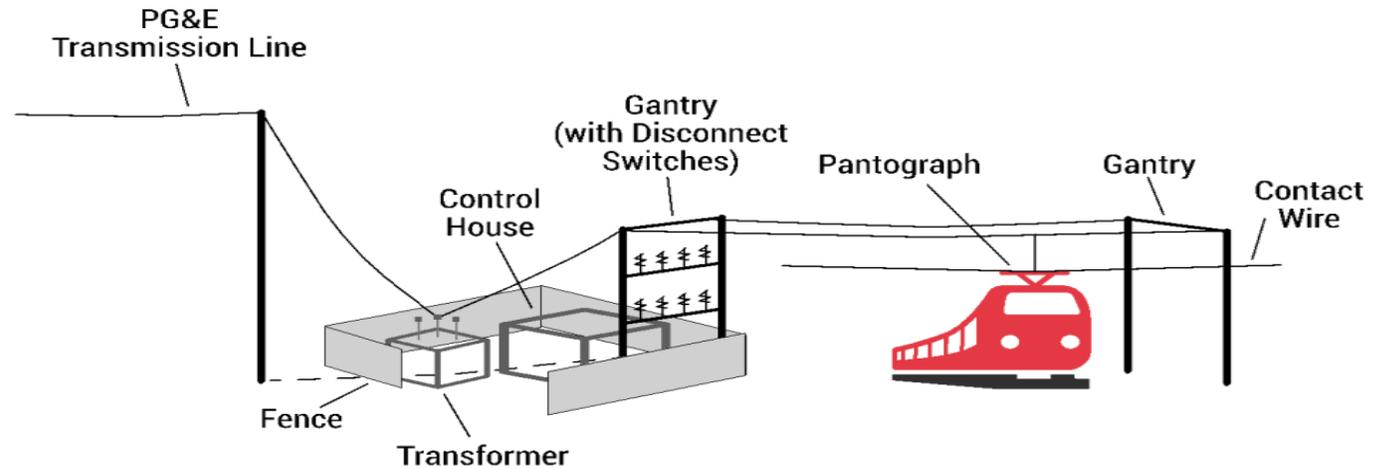
Project Elements

- 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



Executive Summary

- December 6 Special Board Meeting
 - Board adopted a new budget of \$2.44B
 - Board approved Global Settlement in the amount of \$346.7 million with Balfour Beatty (BBII). Settlement includes:
 - Three Change Orders
 - Resolution of all outstanding changes as of 10/31/2021
 - Time extension and signal work.
 - Risk Pool of \$50 million and \$15 million incentives

Program Budget

Description of Work	Current Budget (1)	Cost for Month (2)	Cost to Date (3)	Estimate to Complete	Project Total
Electrification	\$1,749,139,438	\$44,612,678	\$1,129,552,170	\$619,587,268	\$1,749,139,438
EMU	\$693,551,258	\$2,808,673	\$319,926,409	\$373,624,849	\$693,551,258
Program Total	\$2,442,690,696	\$47,421,351	\$1,449,478,579	\$993,212,118	\$2,442,690,696

Notes:

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

2 "Cost This Month" represents cost of work performed December 2021

3 "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) as of December 2021



Contingency, Risk and Incentive

	Project Contingency	BBI Shared Risk Pool	BBII Incentive Pool*	Total
Baseline Amount <i>as of 12/6/21</i>	\$40.0M	\$50.0M	\$18.5M	\$108.5M
Usage <i>through 12/31/21</i>	(\$0.0M)	(\$0.0M)	(\$0.0M)	(\$0.0M)
Remaining Balance	\$40.0M	\$50.0M	\$18.5M	\$108.5M

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

Funding

Funding Strategy

FTA / CHSRA Recovery Plan	Additional Funding Sources for Project Cost Increase*
<ul style="list-style-type: none"> - \$52.4 ARP - \$150M credit financing - \$60M Measure RR capital reserve - \$200M super contingency 	<p><u>STATE</u></p> <ul style="list-style-type: none"> - State Budget FY22, FY23 - Transit and Intercity Rail Capital Program - CTC: Solutions for Congested Corridors Program, Local Partnership Program, Trade Corridor Enhancement Program <p><u>FEDERAL</u></p> <ul style="list-style-type: none"> - Appropriations FY22, FY23 - RAISE, CRISI, INFRA, Railroad Crossing, National Infrastructure Project Assistance, Railcar Replacement Program

*Note: Remaining \$200M funds may include federal, state or other funding. Caltrain and partners will seek federal and state grants to fund remaining project costs. Should those grants or funds not be sufficient, then JPB commits to identifying “own source funding” that would provide the \$200M including member agencies’ funding, RR revenues or proceeds from bonds secured by measure RR or low carbon fuel standards credits revenue.

Funding Update

- Develop \$410M Funding Plan
 - Identified consultant support and prepare federal /state funding action plan
 - Developing collateral materials (jobs map, etc.)
- Federal Update
 - Tracking Notice of Funding Availability (NOFA) / administration push for significant awards in 2022
 - Continuing to meet with federal delegation and funding agencies regarding project need
 - Seeking clarity on Capital Investment Grants funding eligibility
 - Advocating for FY22 appropriations language to maximize funding for Full Funding Grant Agreement projects in need

Funding Update, cont.

- State Update
 - -Tracking Notice of Funding Availabilities (NOFAs)
 - -Meeting with state delegation and funding agencies regarding project need
 - -Governor's Budget Included \$9.1B for transportation
 - -Discussion with Budget Chairs underway geographic targets and existing funding formula vs TIRCP language flexibility

Construction Update

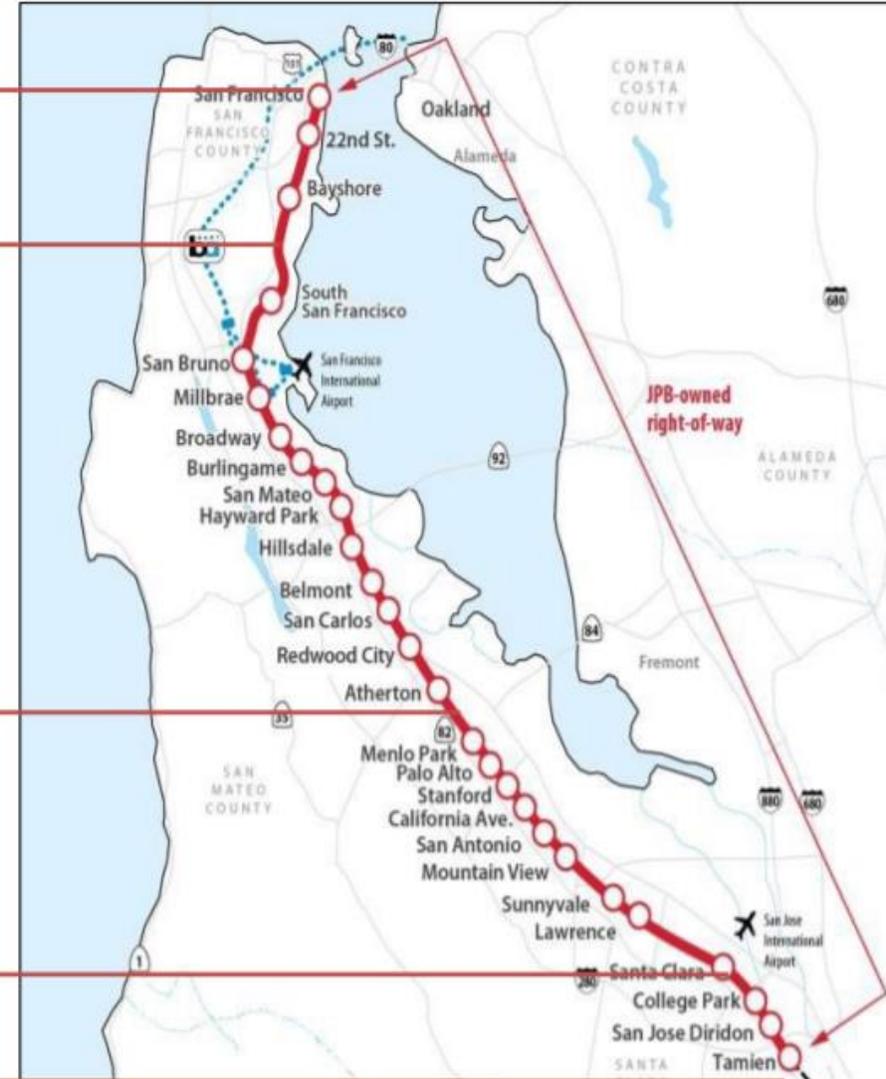
Construction Segments

Segment 1
San Francisco to Brisbane

Segment 2
South San Francisco to Atherton

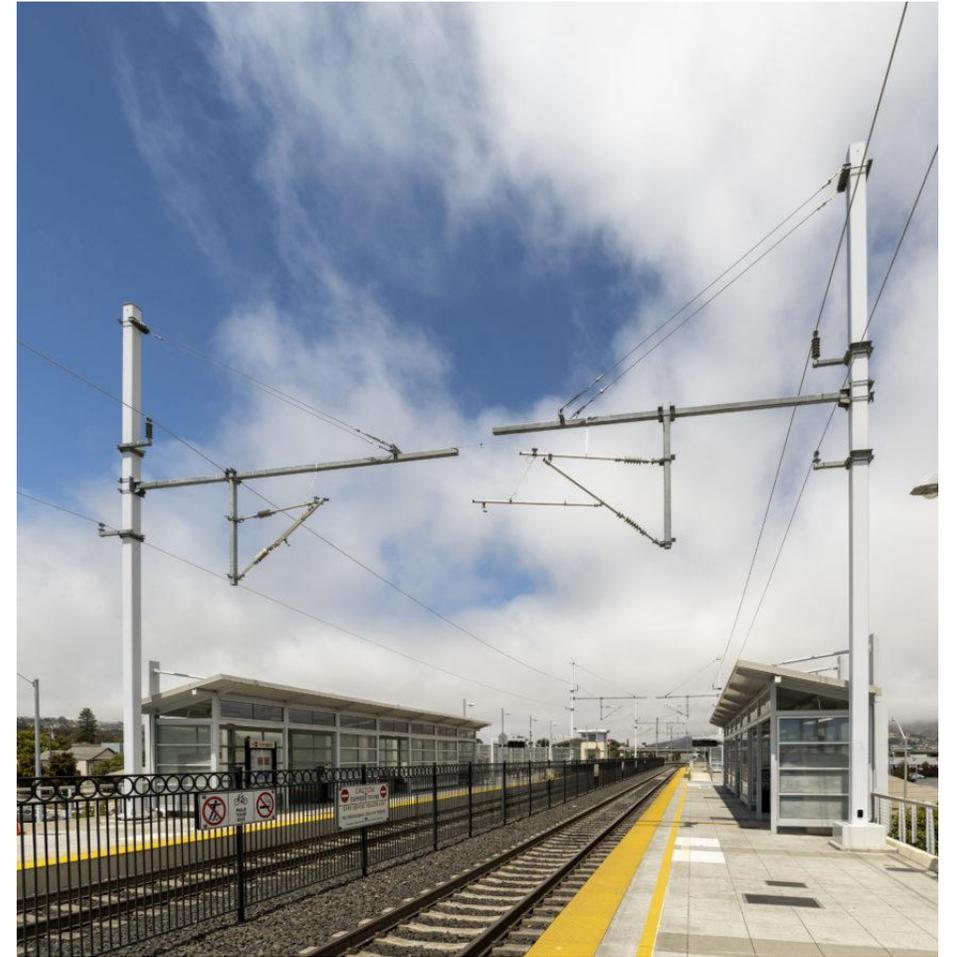
Segment 3
Menlo Park to Santa Clara

Segment 4
Santa Clara to Tamien



Overhead Contact System

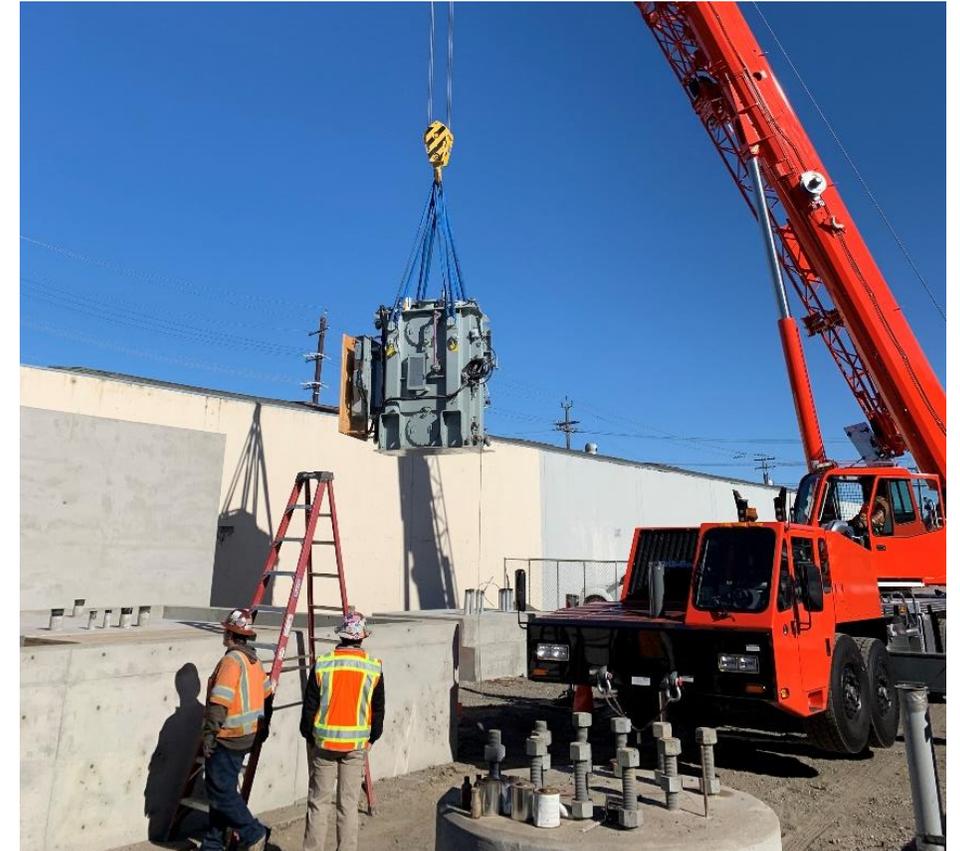
- Foundations (3,092 total)
 - All Foundations Complete
- Poles (2,587 total)
 - Segments 3, 4 and CEMOF: Complete
 - Segments 1 and 2: 758 Poles Remaining
- Wire (1.5M linear feet total)
 - Segments 3 and 4: Complete
 - Segments 1 and 2: 571K Linear Feet Remaining



As of January 20, 2022

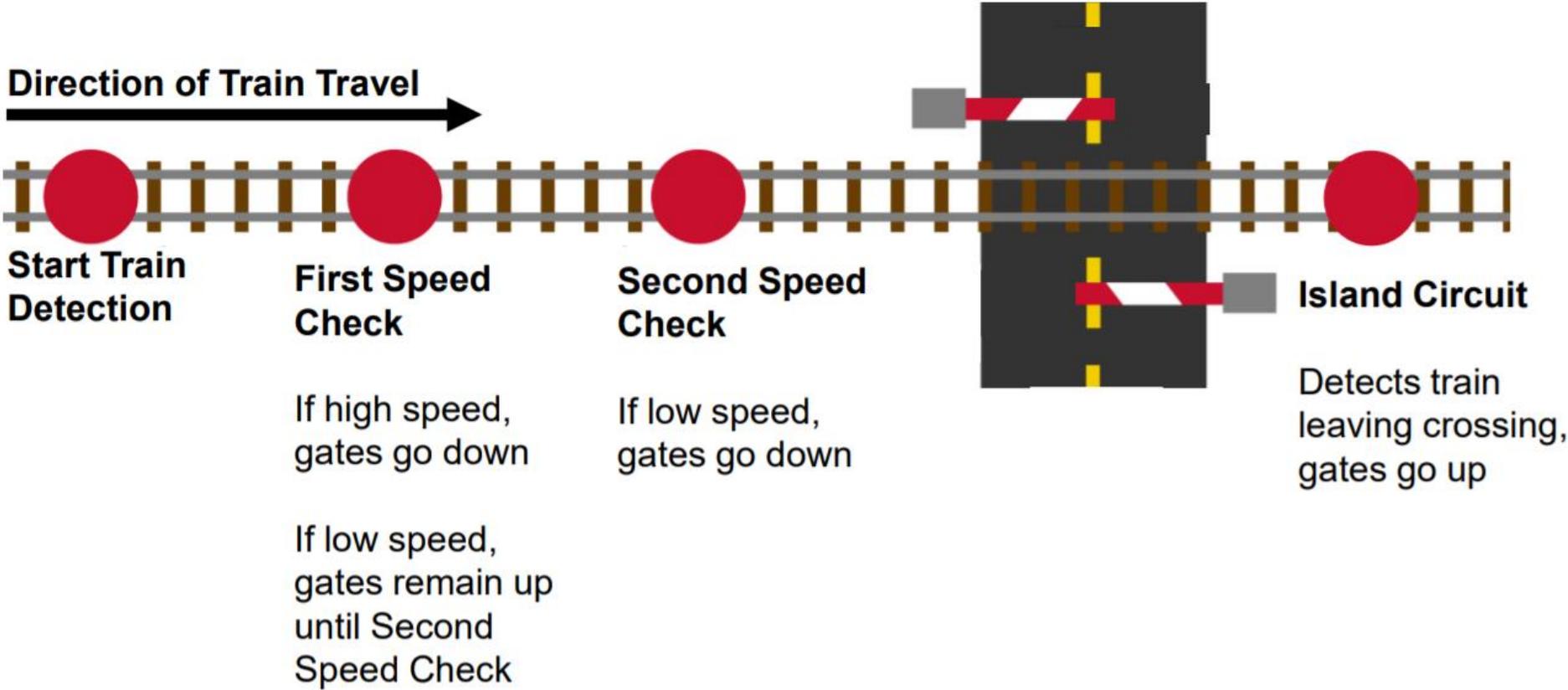
Traction Power Facilities and PG&E

- Traction Power Facilities (10 Facilities)
 - Approximately 80% Complete
 - Work Remaining: Energization, Commissioning, Testing
 - All work is anticipated to be completed by fall 2022
- PG&E
 - Single Phase Study
 - Availability of temporary power
 - Availability of permanent power
 - Completion of interconnect testing



Signal System and Communication

2 Speed Check Overview



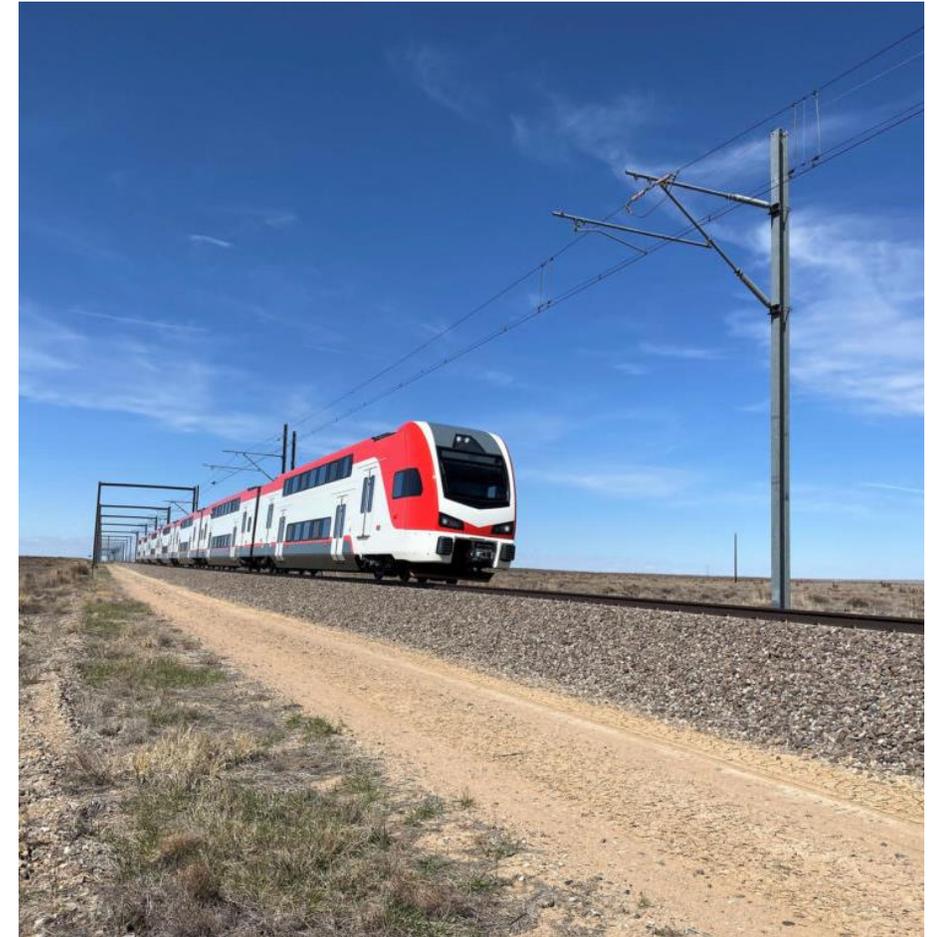
Signal System and Communication

2 Speed Check

- Segment 4
 - Complete
- Segment 2
 - Major cutover mid-March
 - Complete remaining activities November 2022
- Segments 1 and 3
 - Work remaining: power drops, field installation, testing and cutover
 - Signal and communication work anticipated to be complete by winter 2023

Electric Trains

- Completion of 4,000 mile testing first trainset in Pueblo, CO
- First trainset to be shipped March 2022
- Rebaseline of production schedule
- 14th trainset anticipated arrival winter 2023 for revenue service fall 2024
- 19th trainset anticipated arrival fall 2024



As of December 15, 2021

Change Management Board

Change Management Board Membership

- Established in 2016 per Seven-Party Funding Partners
MOU
- Staff membership:
 - Metropolitan Transportation Commission
 - Santa Clara Valley Transportation Authority
 - San Mateo County Transportation Authority
 - City and County of San Francisco / San Francisco County Transportation Authority
 - California High Speed Rail Authority
 - PCEP

Change Management Board Role

- Meets monthly to review:
 - Project status
 - Contingency drawdown status
 - Change order logs
 - Information items
- Action on changes over \$200,000
 - Change orders
 - Increase in contract authority
 - Increase in work directive authority

Risk Management

Top Risks

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

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

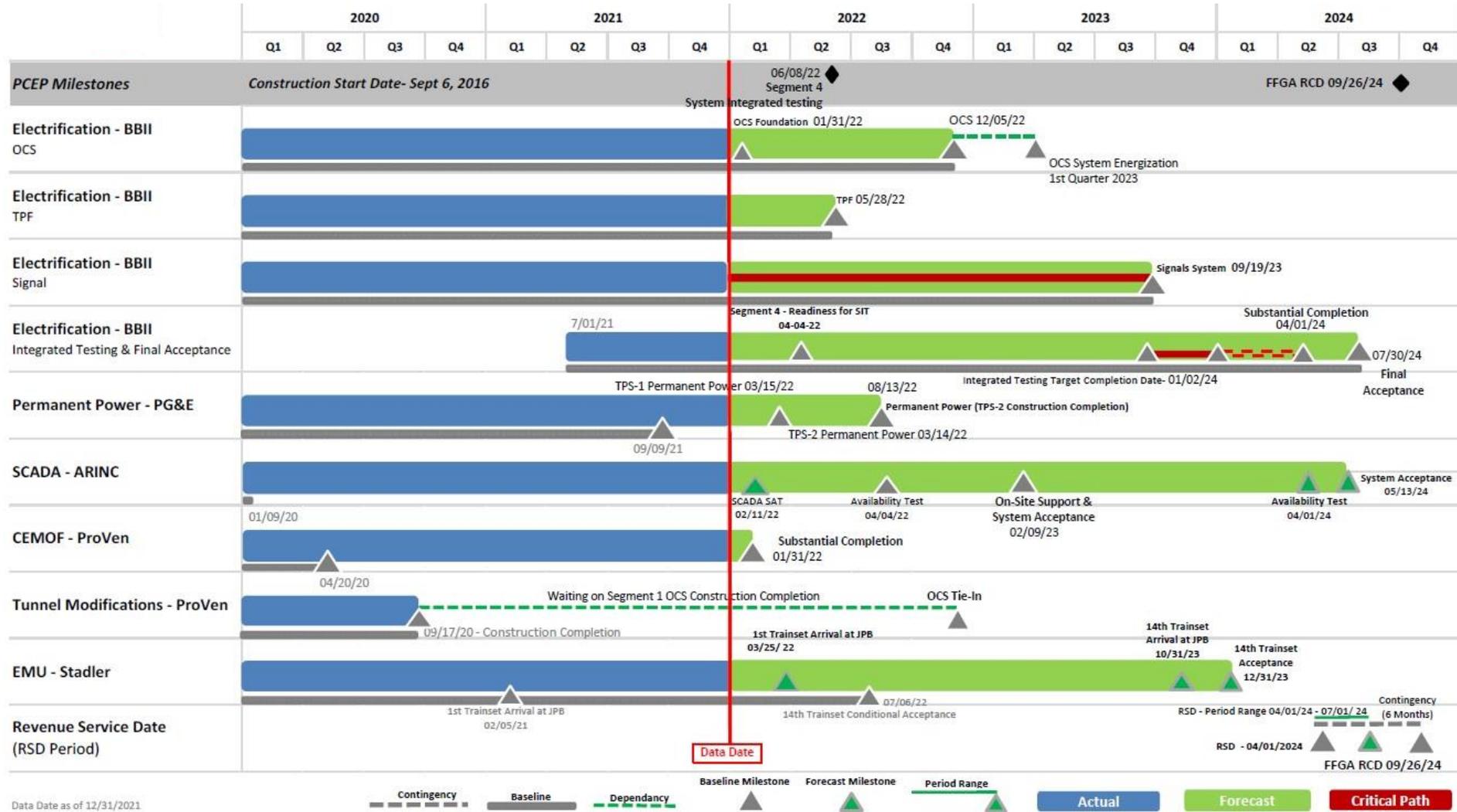
Red = Impact to budget/schedule

Delay of two speed check design, installation and testing
\$410M funding gap
Single Phase Study approval delay may impact testing and energization of Segment 4
Delays in parts supply chain affecting vehicle production
System integration and interface with existing operational systems testing duration and resources
Different site condition resulting duct bank construction delay impacting signal cutover schedule

Project Summary

Program Master Schedule

Revenue Service Date Remains Fall 2024



Data Date as of 12/31/2021



Highlights

- Revenue service date remains fall 2024
- No impact to new adopted budget
- No draw to BBII risk pool, contingency and incentive
- Funding team identified to pursue state and federal resources
- New team organization implemented

Recent Activities

- BBII rebaseline schedule
- Started weekly meetings with BBII to manage and mitigate shared risk
- Partnering
 - First executive partnering held December 2021
 - Project level partnering in January 2022
- JPB/BBII organization change to address shift from civil to systems integration and testing
- Segment 4 Readiness Review workshop

Reset Program Organization

- Resources focused on System Integration & Rail Activation
- New executive leadership
 - Acting Executive Director
 - Project Chief
- Legal representation Olsen Remcho
- New Program Director and responsible functions:
 - System Integration & Testing
 - Project Delivery
 - Program Controls
 - Rail Activation and Startup

Milestones

Item	Date
Finalize FTA Recovery Plan	January 2022
All Foundations Installed	January 2022
Energization of Segment 4	Winter 2022
Major Signal System Cutovers in Segment 2	March 2022
Arrival of First Trainset	Spring 2022
Completion of Segment 4	Spring 2022
Revenue Service Date	Fall 2024

FOR MORE INFORMATION

WWW.CALTRAIN.COM

