

Caltrain Electrification Project Update

Peninsula Corridor Joint Powers Board
February 2, 2023
Agenda Item #14



Project Highlights

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- Schedule: No change to revenue service date - fall 2024
 - Reforecast schedule available March 2023
- Budget: No change to project budget - \$2.44B
 - \$100K draw from \$50M Shared Risk Pool in December 2023
 - No draw from \$40M Project Contingency in December 2022
- Construction
 - Implementation of 2023 Construction and Service Changes Plan
 - Assessment of damages from winter storms
- Electric Trains
 - All train cars now in production

Safety and Security

Time Period	Reportable Injury Rate
January 1 to December 31, 2022	2.82
Since Project Start (2017)	1.91

Note: National Average Reportable Injury Rate is 2.50.

- No reportable personal injuries for December 2022
- Completed 25kV training for all TASI and tenant railroad staff
- Additional safeguards in 2023 construction and service impact plan
- Project Safety Awareness trainings ongoing for Local Fire and Police Departments
- Development of emergency responder safety presentation for local first responders

Top Risks

- Overhead Contact System installation delay due to low contractor productivity
- Sufficient field roadway worker in charge (RWIC) for increased work crews
- Signal and communication design, installation, testing, and cutover

Project Fully Funded!



\$43M Federal

\$367M State

\$410M Total



Thank You!

- **Elected officials**
- **Environmental groups**
- **Transit advocates**
- **Businesses large and small**
- **Labor**
- **Educational and health care institutions**
- **Housing advocates**

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2023 Construction and Service Changes Plan

February to July 2023 – Weekend Shutdowns

Area (Phase)	Work Activity	Weekends	Number of Weekends
San Francisco to Millbrae (Phase 1)	OCS Construction	February 11-12 February 25-26 March 4-5 March 11-12	4
Millbrae to Hillsdale (Phase 2)	OCS Construction	March 25-26 April 1-2	2
Belmont to Menlo Park (Phase 3)	OCS Construction	April 8-9 April 15-16	2
Menlo Park to Santa Clara (Phase 4)	Signal Installation OCS Testing System Integration Testing	April 22-23 April 29-30 May 5-6 May 13-14 May 20-21	5

- No service changes planned for weekends of February 18-19 or March 18-19 for signal install and equipment staging
- Temporary weekday service changes April 17-28 for signal installation and testing
- 2 contingency weekends in June and July

Planned Activities - February 2023

- Short Circuit Testing - Santa Clara to San Jose
- First Electric Train Runs - Santa Clara to San Jose
- Signal Installation and Testing – Menlo Park
- San Francisco to Millbrae Weekend Shutdowns – February 11-12 & 25-26
 - Complete Pole Installation in Segment 1 (15 poles)
 - 54,000 linear feet of wire
 - Wire regulation
 - Assemblies, tensors, balance weights

Phase 1 - San Francisco to Millbrae

- South of Millbrae Station, trains make all weekend local stops
- Customers should use alternative transportation, including timed BART transfers at Millbrae
 - Alternative transit options posted at caltrain.com/status
- Lifeline bus bridge provided
 - Bus service designed to serve local stations only; overall capacity will be limited
 - Limited bike space on buses; customers should use bike parking or bike share
 - ADA accessible vehicle provided for each connecting train during service
- Service ends earlier to align with BART schedule
 - The last northbound train will depart San Jose Diridon Station at 10:28p
 - The last southbound bus will depart San Francisco Station at 11:13p
 - The last southbound train will depart Millbrae Station at 12:15a

Customer Outreach

- Website Landing page: caltrain.com/status
- Social Media
- Paid digital and print ads
- Email blasts
- Mobile app alerts
- Visual messaging signage at stations
- Onboard and station announcements
- Amplify message via elected officials, cities, counties
- Station ambassadors
- Outreach to major event centers



WEEKEND SERVICE SHUTDOWNS IN EFFECT!

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Improving service with Caltrain Electrification.

Customer Service: 1.800.660.4287
Weekdays: 7 am - 7 pm
Weekends & Holidays: 8 am - 5 pm



Para traducción llama al 1.800.660.4287
如需翻译, 请电 1.800.660.4287
คำศัพท์: 1.800.660.4287

Project Resiliency

Project Resiliency

- Supervisory Control and Data Acquisition (SCADA) System
- Power Redundancy
 - 4 independent feeds from PG&E
 - 7 Paralleling Stations and 1 Switching Station to support power throughout corridor
- Design Criteria
 - Wind maximum: 110 mph
 - Ambient temperature rating: 108 Fahrenheit
- Maintenance
 - Tree evaluation and management program

Upcoming Board Items

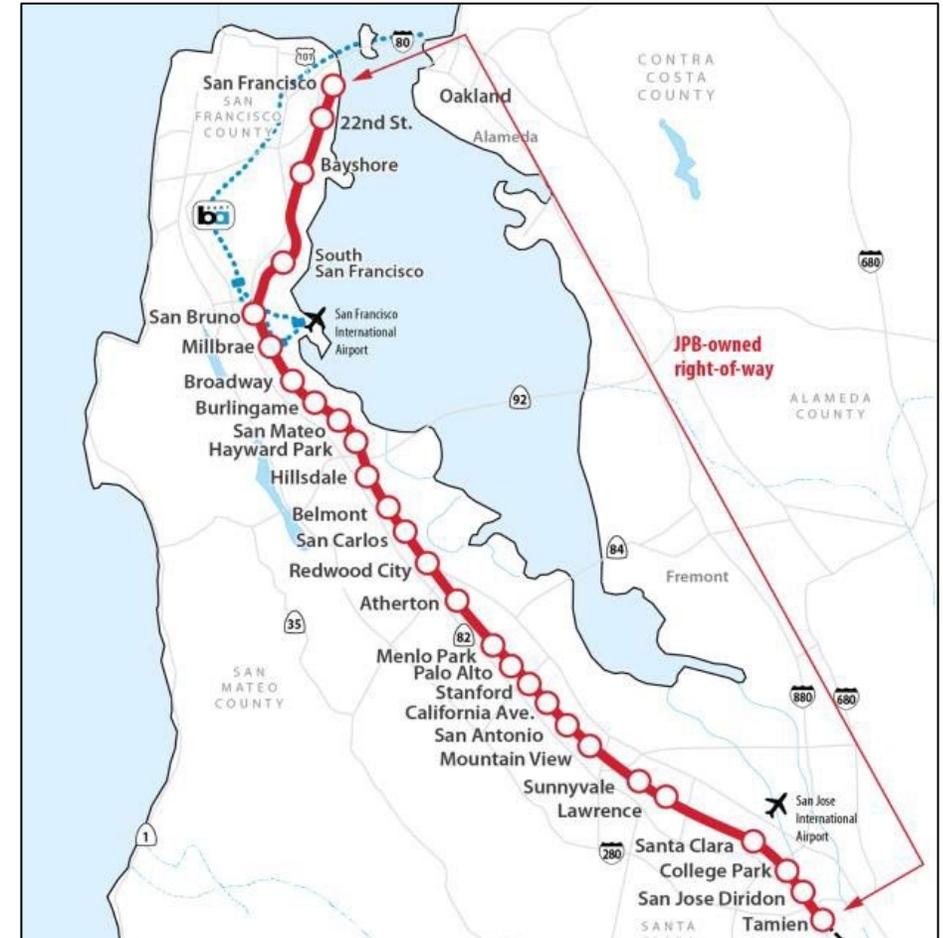
Upcoming Board Items

- Monthly Updates on Construction Progress and Service Changes
- Maintenance Contract
 - Informational (Spring 2023)
 - Board Action (Summer 2023)
- Railroad Isolation Protection Change Order (April 2023)
- Increase Contract Authority Within Existing Budget for Consultant Services
 - Hatch LTK (October 2023)

Appendix

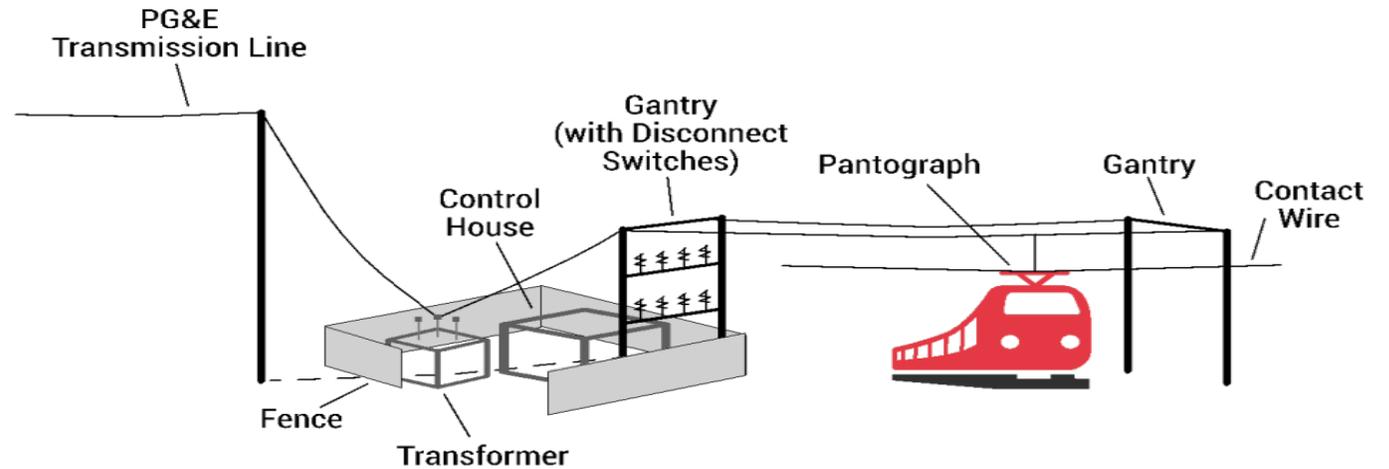
Project Overview

- 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)
 - 75% replacement diesel fleet



(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 Budget

Description of Work	Budget	Cost This Month	Cost To Date	Estimate To Complete
Electrification	\$1,097,149,881	\$17,461,139	\$871,811,548	\$225,222,333
EMU Procurement	\$556,072,601	\$0	\$414,698,351	\$141,506,615
Minor Construction Contracts (SSF, 25th Grade, Tunnel, CEMOF, SCADA, Non-BBI OCS)	\$67,055,072	\$7,996	\$64,602,778	\$3,488,416
Real Estate Acquisition & Support	\$34,914,177	\$71,416	\$23,980,488	\$10,933,689
PG&E, Utilities	\$132,088,995	\$521,186	\$202,044,621	-\$69,955,626
Management Oversight & Support	\$312,699,697	\$2,786,148	\$257,522,069	\$57,485,698
TASI Support	\$114,488,767	\$2,091,448	\$90,614,275	\$23,874,492
Finance Charges	\$9,898,638	\$59,348	\$9,304,280	\$594,358
Insurance	\$6,581,851	\$0	\$4,897,449	\$1,684,402
Other Required Projects & Services	\$9,084,176	\$102,452	\$3,174,578	\$5,909,598
Environmental Mitigation	\$14,438,866	\$0	\$1,242,229	\$13,196,637
Caltrain Capital Overhead (ICAP)	\$48,217,887	\$657,051	\$21,424,272	\$26,793,616
Contingency	\$40,000,089	\$0	\$0	\$36,639,532
Total	\$2,442,690,697	\$23,758,183	\$1,965,316,938	\$477,373,758

Notes: "Re-Baseline Budget" includes executed change orders and awarded contracts;

"Cost This Month" represents cost of work performed December 2022;

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

"Contingency" budget is drawn down and transferred to other elements after CMB approvals as reflected in the Estimate at Completion.

As of December 31, 2022



Project Contingency and Shared Risk Pool

Item	Amounts	Current Month	Executed To Date	Amount Remaining
BBII Shared Risk Pool	\$50.00M	\$0.01M	\$3.20M	\$46.79M
Project Contingency	\$40.00M	\$0.00M	\$3.48M	\$36.34M
Total	\$90.00M	\$0.01M	\$6.68M	\$83.13M

FOR MORE INFORMATION

WWW.CALTRAIN.COM

