

# Caltrain Electrification Project Update

Peninsula Corridor Joint Powers Board  
January 5, 2023



# Project Overview

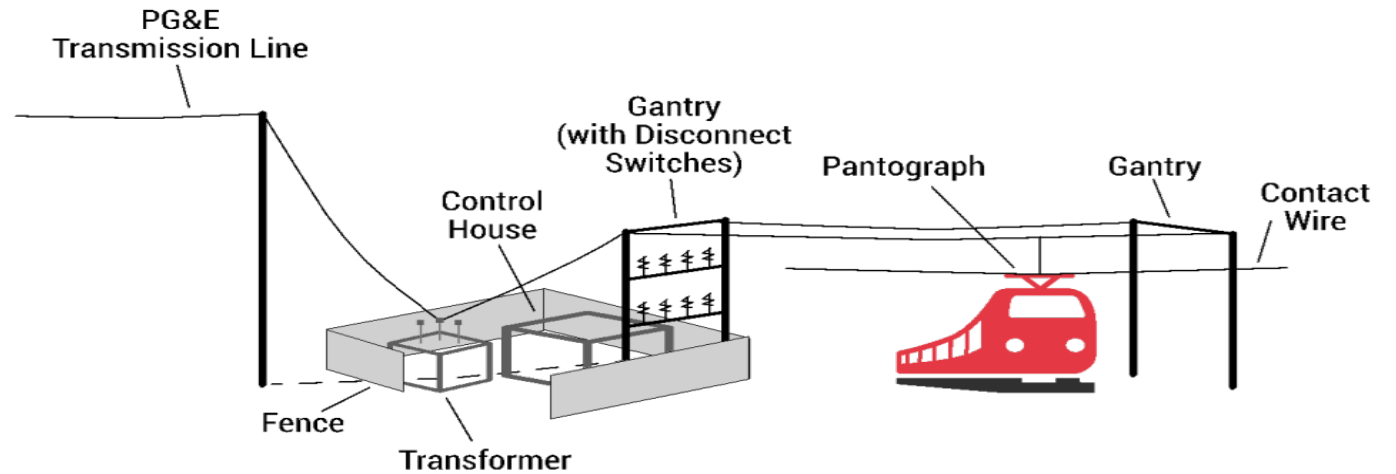
# Project Overview

- 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 Highlights

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- Schedule: No change to revenue service date - fall 2024
- Budget: No change to project budget - \$2.44B
  - \$2.1M draw executed from \$40M project contingency in most recent month (November 2022)
  - \$0.21M draw executed from \$50M shared risk pool in most recent month (November 2022)

# Project Highlights

- Construction
  - Construction and Service Changes Plan
  - Successful completion of major signal software installation and testing in December
- Electric Trains
  - All 133 train cars now in production
  - Received updated Stadler delivery schedule
  - Static testing continues on property



# Safety and Security

Time Period	Reportable Injury Rate
January 1 to November 30, 2022	3.08
Since Project Start (2017)	1.95

*Note: National Average Reportable Injury Rate is 2.50.*

- Two reportable personal injuries for November 2022
- Full-scale emergency exercise on November 20, 2022
- Additional safeguards in 2023 construction and service impact plan
- Continued safety trainings for staff, contractors and consultants
- Project Safety Awareness trainings ongoing for Local Fire and Police Departments
- Development of emergency responder safety presentation for local first responders

# Funding Update (Federal)

- \$33M received from supplemental FTA Capital Investment Grants Full Funding Grant Agreement (FFGA) funding
- \$10M received from “Community Project” funding
- FRA Federal State Partnership for Intercity Rail grant program
  - Reviewing NOFO. Applications are due March 7, 2023
  - Coordination with MTC, Diridon, Downtown Extension, HSR stakeholders

# Funding Update (State)

- FY 23 State Budget signed into law
  - \$10.9B transportation package over 4 years
  - \$900 - \$1.2B available for existing projects outside of Southern California that meet certain criteria - Caltrain Electrification eligible – Application submitted December 6. Announcement of awards expected January 31, 2023

# Construction and Service Changes Plan

# Construction and Service Changes Plan

- 2023
  - Construction completion
  - Infrastructure, signal system, and electric trains testing
  - Temporary service changes required
- 2024
  - Pre-revenue service testing
  - Simulated service runs
  - Operator training
  - Final acceptance & contract closeout
- Fall 2024 Passenger Service

# Overview

- Implement total of 31 weekend area shutdowns in 2023 to complete required testing and address top risks
  - Includes 4 weekends of full corridor shutdowns for end to end testing
- Benefits
  - Ensure Fall 2024 delivery of electrified service
  - Enhance safety by physically separating construction work and passenger service trains
  - Mitigate risk of overhead contact system construction delays due to low contractor productivity (top project risk)
  - Reduce Roadway Worker in Charge (RWIC) field resource need (top project risk)
  - Minimize impact to weekday passenger service by reducing weekday construction needs

# Estimated Cost and Potential Funding Options

- Construction and Service Plan Costs: Up to \$6M
  - Bus Bridge Support
  - Ambassador Contract
  - TASI Operations Support
  - Caltrain Staff and Consultant Support
- Estimated revenue fare loss \$1M-\$3M
- Construction and Service Plan costs to come out of \$2.44B Project Budget

Item	Amount Remaining
BBI Shared Risk Pool	\$47.11M
BBI Schedule Incentive	\$15.0M
Program Contingency	\$36.63M

# Customer Experience



# Customer Experience Overview

- Customer travel will be impacted
- Key considerations for Service Change Plan
  - Customer experience
  - Cost
  - Staff resources
  - Alternative travel options
- Bus bridge service to be implemented for San Francisco to Millbrae weekend shutdowns (Phase 1)
  - Staff to monitor bus bridge effectiveness for future phases

# 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

# August to December 2023

- Up to 16 weekend area shutdowns needed August to December 2023
  - Signal installation and testing
  - Electric train testing
  - Full corridor electric train runs
- Includes 4 weekends of full corridor shutdown in November for end-to-end testing
- Staff is working to refine plan and will provide update in Spring 2023

# Customer Outreach

- Full campaign
- Website Landing page
- Organic social  
(Twitter, FB, IG, Nextdoor, TikTok)
- Paid digital and print ads
- 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
- Outreach to event venues
- Station ambassadors
  - Incentivizing employee participation
  - Ensuring ambassador contract resources

# Next Steps

- January
  - Public outreach campaign starting mid-January
  - Caltrain Citizen's Advisory Committee Update
  - Bicycle and Active Transportation Advisory Committee Update
  - Local Policy Makers Group Update
  - City/County Staff Coordinating Group Update
- February
  - Board approval of bus bridge and ambassador contracts
  - First weekend shutdown: February 11-12
- Ongoing
  - Weekly construction updates
  - Monthly Board updates and dashboard

FOR MORE INFORMATION

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