Caltrain Electrification Project Update

Peninsula Corridor Joint Powers Board

August 1, 2024

Agenda Item #12





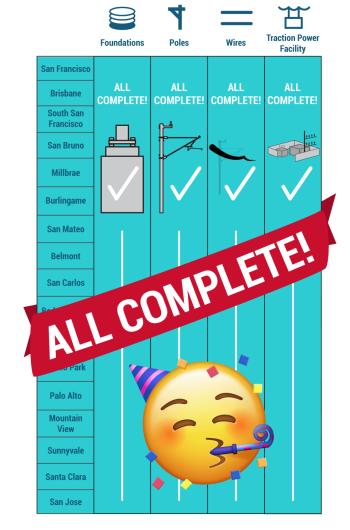
Project Highlights



Project Highlights

- Schedule: No change to revenue service date September 21, 2024
- Budget: No change to project budget \$2.44B
 - \$60K June 2024 draw from "\$50M Shared Risk Pool"
 - No draw in June 2024 from "\$40M Project Contingency"
- Testing, Punchlist & Pre-Revenue Service
 - Substantial Completion May 3, 2024
 - Successful Power Contingency Test on June 8 & 9, 2024
 - FTA OP54 Draft was issued on July 10, 2024, Caltrain has responded.
- Electric Trains
 - Nine Electric Trainset Completed 1,000-Mile Test
 - Fourteen Trainsets Delivered
 - Next Two Trainsets Expected Early September 2024

All Major Construction Complete



Safety and Security

Time Period	Reportable Injury Rate
January 1 to June 30, 2024	0.60
Since Project Start (2017)	1.85

Note: National Average Reportable Injury Rate is 2.4.

- Zero reportable injuries in June 2024
- 30 school outreach tabling/presentations completed
- Project Safety Awareness trainings ongoing for Local Fire and Police Departments (1,000 emergency responders trained to date)
- Completed 25kV training for all TASI and tenant railroad staff
- Development of emergency responder safety presentation for local first responders



As of June 30, 2024

Project Contingency and Shared Risk Pool

Item	Amount	Drawn in June 2024	Drawn To Date	Amount Remaining
BBII Shared Risk Pool	\$50.00M	\$0.06M	\$17.18M	\$32.82M
Project Contingency	\$40.00M	(\$0.24M)	\$37.93M	\$2.07M
Total	\$90.00M	(\$0.18M)	\$55.11M	\$34.89M

Note: Ongoing program needs beyond revenue service date to close out the project. Both parties need to agree to release the shared risk pool funds upon Final Acceptance.



Top Risks

- Theft of Impedance Bonds Cables
- Closeout of Open Traction Power System Items
- Closeout Punchlist and Documentation before Final Acceptance



Wireless Crossing Project Update

- Completed total of 43 (41 + 2 pedestrian) crossing cutovers with wireless technology
- Total 39 out of 43 are wireless active
- Staff is gathering the data for performance improvement of warning time. (e.g. Broadway Burlingame - 30% warning time reduction)
- Wireless crossing testing with electric trains is schedule for August 3rd



Service Changes and Customer Experience



Electrified Service Plan Benefits

Improved service for all riders



Get There Faster

Express from SF to SJ in under an hour

Quicker local service, 77 minutes instead of 100

Save more than 20 minutes on trips from Southern Santa Clara County to SF



Ride More, Wait Less

20% more train service

26% more train service at equity priority stations

Half-hourly service during weekends and off-peak

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First Class for Everyone

Free Wi-Fi

Smoother, quieter experience

Outlets at every seat

Digital trip information onboard

Spacious, accessible bathrooms



Clean and Green

GHG emissions reduced by 250K MTCO2 annually –equivalent to taking 55,000 cars off the road each year

Improves local air quality

Quieter trains, both onboard and off



City Fact Sheets

www.caltrain.com/servicebenefits

FASTER, MORE FREQUENT CALTRAIN SERVICE COMING IN FALL 2024

ELECTRIFIED SERVICE PLAN: CITY OF SAN BRUNO

Electric trains enable Caltrain to run faster, more frequent service with the same number of weekday trains we run today. This handout shows the final plans for electric service in fall 2024. The schedule will be finalized in spring 2024, after the new electric trains are tested



GET THERE FASTER (7)

SAN FRANCISCO TO SAN

JOSE IN UNDER AN HOUR Compared to 65+ minutes today

75 MINUTES FOR THE SAN FRANCISCO TO SAN JOSE LOCAL TRAIN

Compared to 100 minutes today

21 MINUTES SAVED FOR THE SAN FRANCISCO TO GILROY TRIP Compared to a 2+ hour trip today

CLEAN AND GREEN S

ALL-ELECTRIC TRAIN SERVICE FROM SAN FRANCISCO TO SAN JOSE

Annual emissions reduced by 250K MTCO2, equivalent to taking 55,000 cars off the road

RIDE MORE, WAIT LESS

TRAINS EVERY 30 MINUTES ON WEEKENDS

Compared to hourly service today

TRAINS EVERY 30 MINUTES **DURING MID-DAY AND EVENINGS**

Compared to hourly service at most stations today

TRAINS EVERY 15 TO 20 MINUTES DURING PEAK

HOURS* AT 16 STATIONS

Compared to 7 stations today

FIRST CLASS SERVICE HT

STATE-OF-THE-ART VEHICLES FOR SMOOTHER PIDES

Free Wi-Fi, outlets at every seat, spacious accessible bathrooms, and digital displays with trip information

FINAL ELECTRIFIED CALTRAIN SERVICE FOR SAN BRUNO

STATIONS	STATION STOPS	CURRENT SERVICE	ELECTRIFIED SERVICE
SAN BRUNO	Stops per Weekday	61	75
	Weekday Stops per Peak Hour*	2	2
	Weekday Stops per Off Peak Hour	1	2
	Weekend Stops per Hour	1	2











SNAPSHOT **AK1-HOUR** ERVICE ัด 2024

GET THERE FASTER

Most people will have quicker rides compared to service today

Trip travel times below compare the fastest diesel trip today to the fastest trip with electrified service.

SAN BRUNO STATION

LOCAL

17 min O MINUTES SAVED

To / from San Francisco

30 min -

To / from Palo Alto

57 min -

To / from San Jose Diridon

B Bellarmine Service

Tamien Service DIRECTION*, AND 1 STOP PER HOUR

South County Connector Service

4 DAILY ROUNDTRIPS WITH 1-2 DIESEL TRAINS PER HOUR IN THE PEAK DIRECTIONS, WITH TIMED 3-MINUTE CROSS-PLATFORM TRANSFER AT DIRIDON

*TRAIN TIMES SHOWN ARE FOR TRAVEL BETWEEN SAN FRANCISCO 4TH AND KING TO

**PEAK DIRECTION IS NORTHBOUND IN THE MORNING AND SOUTHBOUND IN THE

NOTE: BROADWAY STATION PROVIDES WEEKEND SERVICE ONLY, TRAVEL TIMES MAY CHANGE PENDING FURTHER TESTING AS NEW ELECTRIC TRAINS ARRIVE AND ARE





San Francisco 4-0-0-

Bayshore 2-South San Francisco 4-0-0-0

San Bruno 2-

Burlingame 2-

Hayward Park 2-

Belmont 2-

San Carlos 2-

Menlo Park 3-

California Avenue 3-San Antonio 3-

22nd Street 4-0-0-0-0

Millbrae 4-0-0-0

Hillsdale 4-0-0-0

Redwood City 4-0-0-0

Mountain View 4-0-0-0

Sunnyvale 4-0-

San Jose Diridon 4-0-0-0 Tamien T-0-0-0

Capitol S-O-

Blossom Hill S-O

Morgan Hill S-0

San Martin S-0

Lawrence 3-Santa Clara 3-

College Park B

Palo Alto 4-0-0-0-0

San Mateo 4-0-0-





Soft Launch & Project Celebration

- Mid-August: Soft Launch
 - Mixed fleet running same schedule as today
 - Gradually introducing electric trains intro service every week to allow for operational testing and crew adaptation
- September 21, 2024: Launch New All Electric Schedule
 - 14 electric trains providing all electric mainline service
 - 4 diesel trains between San Jose and Gilroy with 3-minute cross platform transfer
 - Schedule is finalized and will be posted online for the public by mid-August
 - Corridor-wide celebrations on September 21 & 22

Passenger Information System

Components

- Digital Displays 4-6 per car, depending on configuration
- Automated Announcements
- External Signage front cab and sides
- Public Address System for Manual Announcements

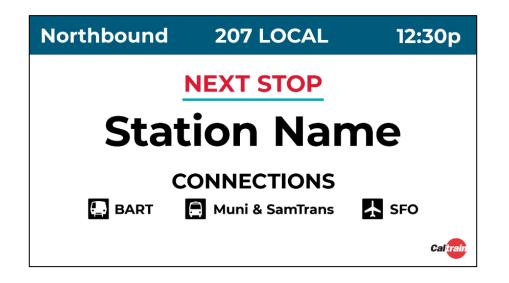
Automated Visual and Audio Announcements:

- Train Number, Direction, Stopping Pattern and Terminus
- Station Transit Connections
- Safety, Fare, and Courtesy Information





Passenger Information System – Samples















Upcoming Board Items



Upcoming Board Items

Monthly Updates on PCEP Project

PCEP Project – Construction Update

Board of Directors Update



Focus Areas

- Continue viewing everything thru the Zero Harm lens
 - ▶ YTD RIR .55
 - ▶ Project Total 1.62
 - ▶ 1 Recordables and 0 Lost Times for June/July
- Pre-Revenue Testing
 - ▶ Power Scenario Testing June 8 9 Complete
- Training Schedule
 - ▶ Traction Power Complete
- Punchlist Execution
 - ▶ 100% of the areas walked & punch list established
 - ▶ 95.4% punch list items complete
- Closeout Execution
 - ► Final Acceptance September 6th, 2024
- Continue to measure what we do every day

Balfour Beatty

Overall Path to Final Acceptance

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Revised Path to Completion - Weather Event 02.04.2024		Jan	nuary		Feb	bruar	у	March				April				M	ау	June				July				August				Ser	ptem	nbe	
OCS Main Line Completion - COMPLETE																																	
Complete Re-Build for San Antonio & Burlingame/Re-Te	st]
OCS Panning/Loop/HighPot Testing Complete					Ī]
OCS SF Station Completion]
Sectionalization Testing																																	
SCADA Testing Complete																																	
Parallel Station Complete																																	
Wayside Power Cabinets Complete																																Ī	
Short Circuit Testing																																Ī	
Segment 1 & 2 Live Run Test																																	
End to End Test																						Ī										Ī	
Substantial Completeion Documents Complete																						Ī										Ī	*****
Substantial Completion																						Ī										Ī	******
Punchlist Complete																																Ī	******
Final Acceptance Documents Complete																																Ī	*****
Final Acceptance																																	

Final Acceptance Path

- Track Access to Complete Punchlist Timely
- Resolving Legacy QC Issues
- Punchlist Completion/Acceptance
 - ▶ 95.5% Work to Complete (784)
 - ▶ 84.8% Signed Off Completed
- As-Built Finalization
 - ▶ Target 8/10 Completion
 - ▶ 28 of 41 Packages 68% Complete

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