

Caltrain Electrification Project Update

Peninsula Corridor Joint Powers Board

February 1, 2024

Agenda Item #12



Project Highlights

Project Highlights

- Schedule: No change to revenue service date - fall 2024
- Budget: No change to project budget - \$2.44B
 - \$352K December 2023 draw from “\$50M Shared Risk Pool”
 - No December 2023 draw from “\$40M Project Contingency”
- Construction
 - Overhead Contact System Remaining work – Completion in Early February
 - OCS Sectionalization Testing Complete – San Francisco to Mountain View
 - Short Circuit Testing Scheduled for February 2024 – Dates Approved by PG&E
 - Live Runs Scheduled for March 2024
- Electric Trains
 - Fourth Electric Trainsets Completed 1,000-Mile Test
 - Six Trainsets On-Site
 - Next Two Trainsets Expected February 2024

Safety and Security

Time Period	Reportable Injury Rate
January 1 to December 31, 2023	1.88
Since Project Start (2017)	1.95

Note: National Average Reportable Injury Rate is 2.4.

- **One reportable injury for December 2023**
- 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

Project Contingency and Shared Risk Pool

Item	Amount	Drawn in December 2023	Drawn To Date	Amount Remaining
BBII Shared Risk Pool	\$50.00M	\$0.35M	\$15.40M	\$34.60M
Project Contingency	\$40.00M	\$0.00M	\$32.11M	\$7.89M
Total	\$90.00M	\$0.35M	\$47.51M	\$42.49M

Top Risks

- Contractor Quality Control and Quality Assurance
- Theft of Impedance Bonds Cables
- Contractor Overhead Contact System Productivity
- Traction Power Energization and Short Circuit Testing (TPS-1)
- Timely Completion of Integrated Testing and Live Runs

Service Changes and Customer Experience

March Weekend Service Changes

Weekends: March 2-3, 9-10, 16-17

- Service changes to support electric train test runs between San Francisco and Mountain View
- **Morning Service (Significant Impacts):**
 - No Caltrain service between San Francisco and Mountain View (Approximately 7am to 1pm)
 - Replacement bus bridge provided at high ridership stations:
 - San Francisco, Millbrae, Hillsdale, Redwood City, Palo Alto, and Mountain View
 - There will be no replacement bus or train service at other stations between San Francisco and Mountain View. Alternative transit suggestions provided.

	Bus	Train
Tamien	-	•
San Jose Diridon	-	•
Santa Clara	-	•
Lawrence	-	•
Sunnyvale	-	•
Mountain View	•	•
San Antonio	-	-
California Avenue	-	-
Palo Alto	•	-
Menlo Park	-	-
Redwood City	•	-
San Carlos	-	-
Belmont	-	-
Hillsdale	•	-
Hayward Park	-	-
San Mateo	-	-
Burlingame	-	-
Broadway	-	-
Millbrae	•	-
San Bruno	-	-
South San Francisco	-	-
Bayshore	-	-
22nd Street	-	-
San Francisco	•	-

March Weekend Service Changes

Weekends: March 2-3, 9-10, 16-17

- **Mid-Day Service (No impacts)**
 - Regular Northbound Service Resumes with Train #237 at 12:12 p.m.
 - Regular Southbound Service Resumes with Train #236 at 11:58 a.m.
- **Evening Service (Some impacts)**
 - Southbound Train #280: Departs 30 minutes prior to regular schedule at 10:28pm
 - Last Northbound Train #281 (11:05pm): Canceled. No replacement bus service
 - Last Southbound Train #284 (12:05am) Canceled. No replacement bus service

LAST BUS BRIDGING OF THE PROJECT!

Customer Communication

- Web/Mobile
 - Landing page: caltrain.com/status
 - Caltrain Mobile App Alerts
 - Social Media
 - Nextdoor.com Posting
 - Website & 511 Transit Alerts
- Stations/Onboard
 - Station Signage (Notification and Wayfinding)
 - Train Seat Drops
 - Station Ambassadors
 - Station Audio Announcements
- Press Release
- Transit Alternatives List



NOTICE

TEMPORARY WEEKEND SERVICE CHANGE
MARCH 2 to MARCH 17, 2024

NO MORNING TRAIN OR BUS BRIDGE SERVICE AT THIS STATION FOR NORTHBOUND Trains #221, 225, 229 & 233
Regular Northbound Service Resumes at 12:12 pm from San Jose Diridon

SOUTHBOUND Trains #224, 228 & 232
Regular Southbound Service Resumes at 11:58 am from San Francisco
Southbound Train #680 Departs at 10:28 pm

TRAIN SERVICE CANCELED
Northbound Late Night Train #281
Southbound Late Night Train #284

Please use alternate transit options near these stations to complete your journey or board the train at a station with a bus bridge in place.

For information, visit www.caltrain.com/status

Customer Service: 1.800.650.4287
Hearing Impaired: (415) 650.508.6448
Weekdays: 7 am - 7 pm | Weekends & holidays: 8 am - 5 pm

TEMPORARY WEEKEND SERVICE CHANGE

MARCH 2 to MARCH 17, 2024
MORNING BUS BRIDGE

There will be NO train or bus bridge service for these trains at 22nd St., Bayshore, So. San Francisco, San Bruno, Broadway, Burlingame, San Mateo, Hayward Park, Belmont, San Carlos, Menlo Park, California Ave, and San Antonio stations.
Regular Service Resumes with Northbound Train #237 at 12:12 pm
Regular Service Resumes with Southbound Train #236 at 11:58 am

Northbound - WEEKEND SERVICE TO SAN FRANCISCO

Train No.	621	625	629	633	281
San Jose Diridon	7:15a	8:15a	10:15a	11:15a	---
San Bruno	7:30a	8:30a	10:30a	11:30a	---
San Francisco	7:45a	8:45a	10:45a	11:45a	---
San Antonio	8:00a	9:00a	11:00a	---	---
San Carlos	8:15a	9:15a	11:15a	---	---
Belmont	8:30a	9:30a	11:30a	---	---
Hayward Park	8:45a	9:45a	11:45a	---	---
San Mateo	9:00a	10:00a	12:00a	---	---
San Bruno	9:15a	10:15a	12:15a	---	---
San Francisco	9:30a	10:30a	12:30a	---	---

Southbound - WEEKEND SERVICE TO SAN JOSE

Train No.	624	628	632	636	284
San Francisco	7:45a	8:45a	10:45a	11:45a	---
San Bruno	8:00a	9:00a	11:00a	---	---
San Jose Diridon	8:15a	9:15a	11:15a	---	---
San Antonio	8:30a	9:30a	11:30a	---	---
San Carlos	8:45a	9:45a	11:45a	---	---
Belmont	9:00a	10:00a	12:00a	---	---
Hayward Park	9:15a	10:15a	12:15a	---	---
San Mateo	9:30a	10:30a	12:30a	---	---
San Bruno	9:45a	10:45a	12:45a	---	---
San Francisco	10:00a	11:00a	1:00p	---	---

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WEEKEND SERVICE SHUTDOWNS IN EFFECT!

INTERRUPCIONES DEL SERVICIO DE FIN DE SEMANA

周末服务暂停

Check status:
CALTRAIN.COM/STATUS

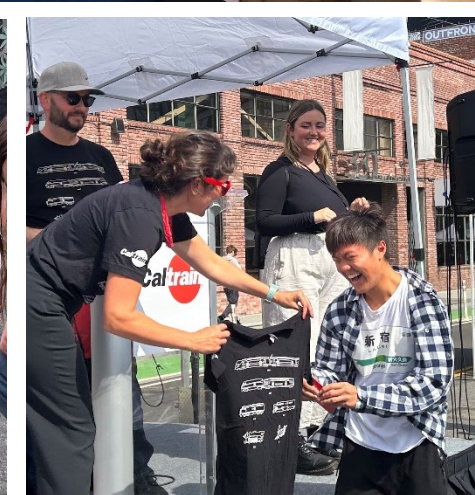
We appreciate your patience as we work to improve service for our riders as part of Caltrain Electrification.

Customer Service: 1.800.650.4287
Weekdays: 7 am - 7 pm
Weekends & Holidays: 8 am - 5 pm

Electric Train Public Tour & 160th Celebration

San Mateo County

Coming Spring 2024



Upcoming Board Items

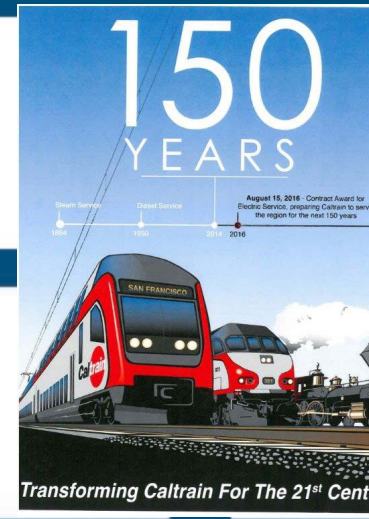
Upcoming Board Items

- Monthly Updates on Construction Progress and Service Changes

February 1, 2024

Caltrain Board of Directors Update - DRAFT

Balfour Beatty
Infrastructure Inc.



Focus Areas

- Continue viewing everything thru the Zero Harm lense – Improving RIR – 1.68 2023, 1.66 Job to Date
- OCS Production – Regulation
 - Main Line Regulation Complete – Ready for SC Testing
 - SF Station and Yard to complete - 51 Regulations Remaining
 - Sectionalization for Main Line Complete (Exception Guadalupe – This Weekend)
- Traction Power Stations and WPCs
 - Short Circuit Test - February 2024
 - SCADA Testing – Ongoing – Complete January
- Training Schedule
 - OCS – Complete
 - Signals – Complete
 - Traction Power – February 2024
- Punchlist Execution
 - 80% of the areas walked & punchlist established
 - 48% punchlist items complete
- Closeout Execution
 - As-Built 84% complete submitted to the EOR for redline
- Measuring what we do every day

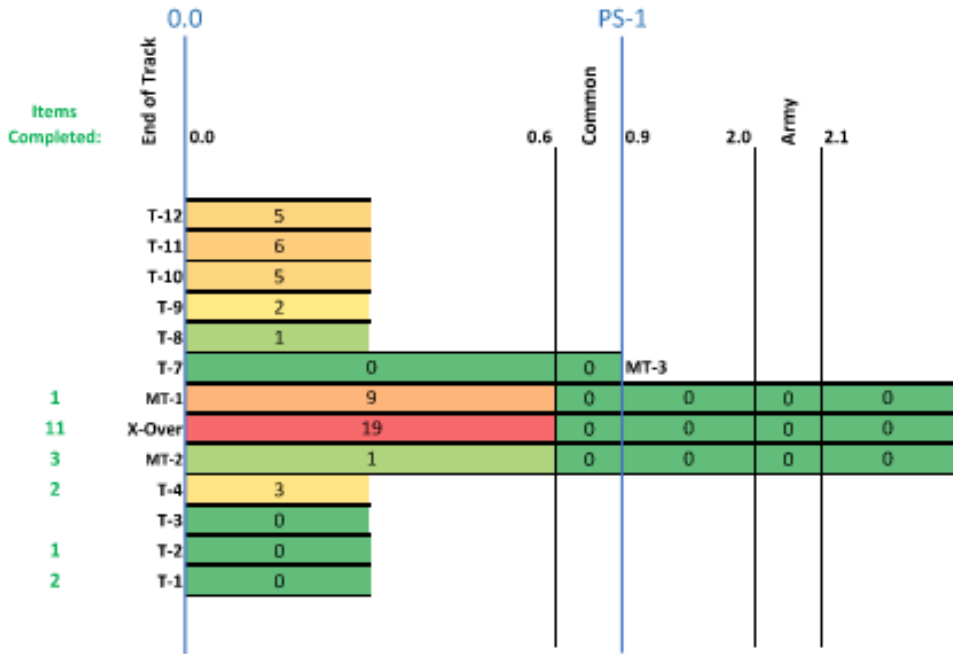
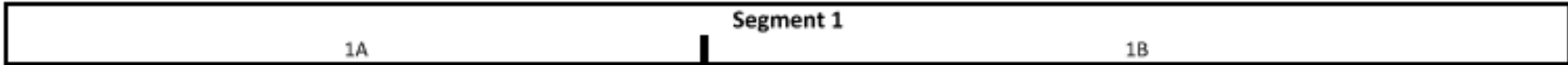
Current Overall OCS

Balfour Beatty Infrastructure, Inc							
Caltrain Peninsula Corridor Electrification Project							
Construction Progress Tracker				Week Completed		55	
					Updated	1/22/2024	
Commodity	Total Quantity	Job to Date % Complete	Total Quantity Remaining Starting Week 41	Planned Work from Week 41	Actual Installed from Week 41	Remaining Quantity to Install	Remaining Quantity Planned
OCS Completion items & Regulation Now includes 52 Reg at Guadalupe	5,815	98.78%	877	953	859	71	71
Panning	95	80.00%	95	96	78	19	19
Loop Testing	68	80.88%	68	62	49	13	13
High Pot testing	92	71.74%	92	87	61	26	26
Sectionalization Testing	4	75.00%	4	4	3	1	1
Feeder & Static Wire Assemblies	4,855	100%	12	12	12	-	-
Messenger Wire (Guadalupe Bridge)	771,077	100%	256,576	2,571	2,571	-	-
Contact Wire (Guadalupe Bridge)	782,985	100%	272,762	7,009	7,009	-	-
Feeder Wire (Guadalupe Bridge)	486,189	100%	122,047	2,192	2,192	-	-
Static Wire (Guadalupe Bridge)	604,799	100%	108,990	1,982	1,982	-	-
		90.64%					

Regulation – SFO Station

OCS Regulation Tracker

1/31/2024



	Left	Done	Total	% Comp.
0.0 to 0.9	51	453	504	89.9%
0.9 to TPS1	0	1163	1163	100.0%
TPS1 to SWS-1	0	2074	2074	100.0%
SWS-1 to 29.2	0	350	350	100.0%
Guadalupe	0	70	70	100.0%
Total:	51	4110	4161	98.8%

Category A & B Punchlist Items

OCS Punchlist/Inspection Tracker

		Segment 1	
1/29/2024		1A	1B
Left to Go:		251	0
% Complete:		42%	100%
Pole Inspections	SFT12		
	SFT11		
	SFT10		
	SFT9		
	SFT8		
	MT3		
	MT1		
	MT2		
	SFT4		
	SFT3		
	SFT2		
	SFT1		
Poles Inspected (Week to Date):		0	0
Open Items:		0	0
Open Cat A/B Items	SFT12		
	SFT11		
	SFT10		
	SFT9		
	SFT8		
	MT3		
	MT1		
	MT2		
	SFT4		
	SFT3		
	SFT2		
	SFT1		
Items Closed (Week to Date):		0	0

Cat A/B Punchlist Items									
	1A	1B	2-5	2-4	2-3	2-2	2-1	3-2	All
Open:	0	0	0	0	0	0	0	0	0
Done:	88	149	186	244	102	66	126	27	988
Total:	88	149	186	244	102	66	126	27	988
% Complete:	100%	100%	100%	100%	100%	100%	100%	100%	100%

Current Short Circuit Testing and Live Run Testing Plan

SC Test	Track	Teams @ MP	Revised Dates	Sub Station	Limits
Test 1	MT 2	45.24	2/23/2024	TPS 1	1.1 to 45.24
Test 2	MT 1	26.2	2/9/2024	TPS 1	TPS 1 to 26 Mp
Test 3	MT 2	1.1	2/17/2024	TPS 2	TPS 2 to 1.1
Test 4	MT 2	26.2	2/16/2024	TPS 2	TPS 2 to 26.2
Test 5	MT 2	38.61(PS 6)	2/10/2024	TPS 2	TPS 2 to SWS(26.1)

Note: The Short Circuit Testing dates are confirmed by PG&E

Overall Path To Completion

	January			February			March			April			May			June			July			
OCS Main Line Completion - COMPLETE																						
OCS Panning/Loop/HighPot Testing Complete	█	█	█	█																		
OCS SF Station Completion					█																	
Sectionalization Testing					█																	
SCADA Testing Complete	█	█	█	█	█																	
Parallel Station Complete						█																
Wayside Power Cabinets Complete	█	█	█	█	█	█																
Short Circuit Testing						█	█															
Segment 1 & 2 Live Run Test							█	█	█													
End to End Test								█														
Substantial Completion Documents Complete	█	█	█	█	█	█	█	█	█	█												
Substantial Completion											█											
Punchlist Complete	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Final Acceptance Documents Complete	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Final Acceptance Documents Complete	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

No Changes to Schedule from December 7th update

What are the action items to ensure Substantial Completion?

➤ What gives us confidence in the path to substantial completion

- Regulation on the Mainline is complete. This is what is needed for SC Testing - **Done**
- Crews on track with Cat A & Cat B Punchlist items – **Done**
- Sectionalization Main Line - **Done**
- 90-degree curve solution in place and tracking for completion – **Delayed – Materials arrived 1/29/2024**
- Traction Power SCADA Testing – **Tracking**
- Short Circuit Readiness Meetings – **Internal & Joint weekly bi-weekly meetings**
- **SFO Station has no bearing on Sectionalization Testing & Short Circuit Testing**

➤ Are there still risk to the plan?

- Yes
 - Weather – Paying OCS crews triple time to work thru the rain events
 - Successful Short Circuit Testing
 - Walking out and establishing the Cat C's punchlist in the remaining areas
 - Closing out every piece of paperwork – Time to do it, time to review it, time to close it

FOR MORE INFORMATION

WWW.CALTRAIN.COM

