



CALTRAIN ELECTRIFICATION UPDATE

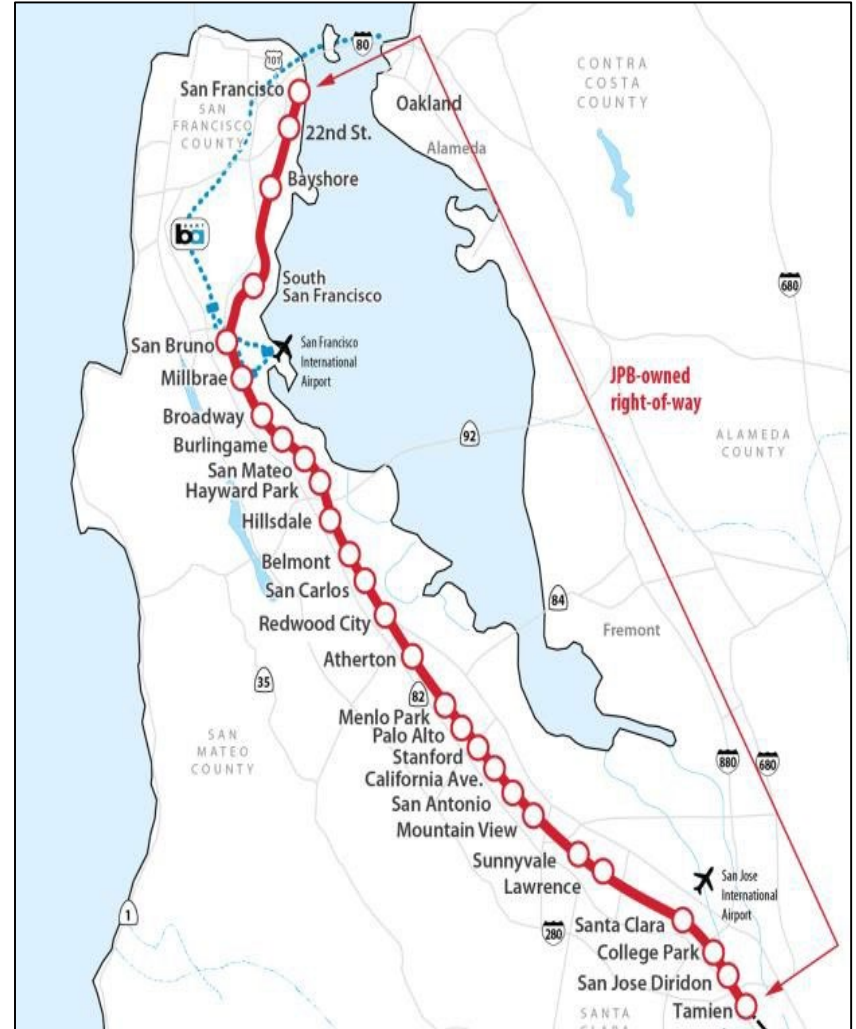
Local Policy Maker Group Meeting
October 28, 2021

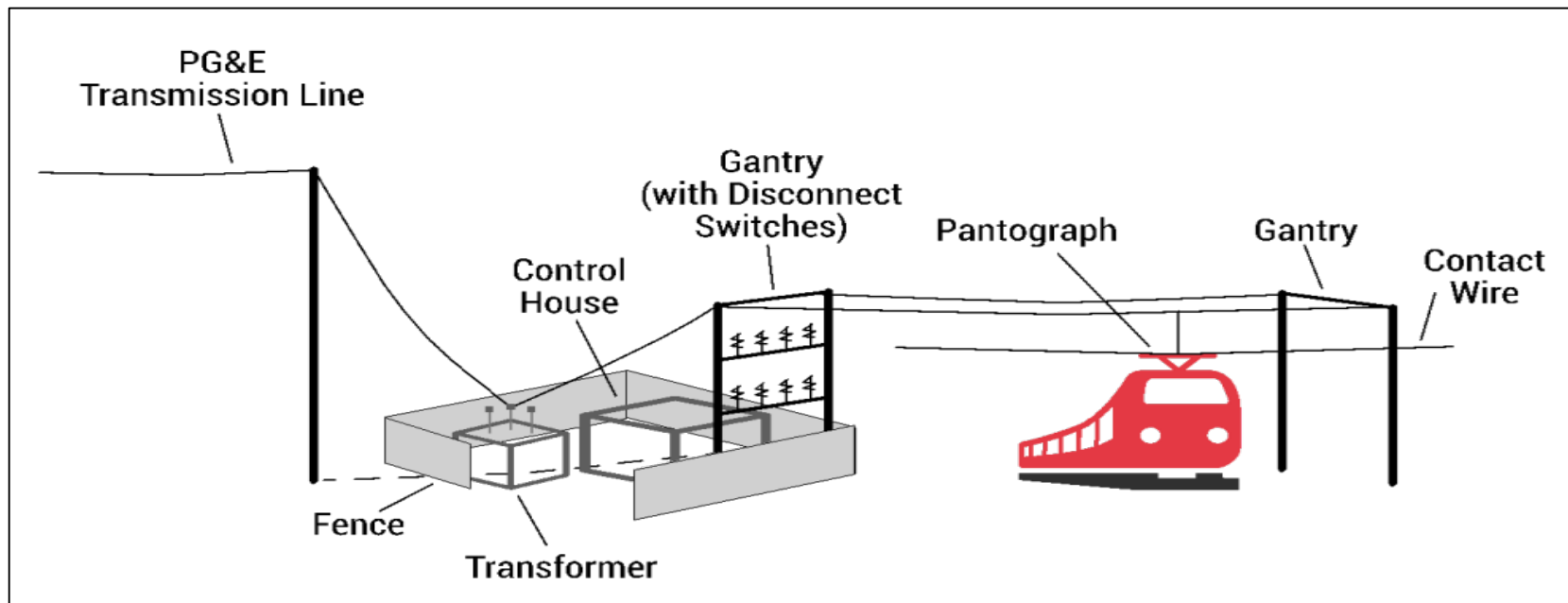


PROJECT OVERVIEW



- Caltrain Electrification
- San Francisco to San Jose (Tamien Station)
- 51 miles
- Updated Project Cost: \$2.31B
- Update Revenue Service: Sept. 2024





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)*



**Improved Train
Performance,
Increased Service
and Greater Capacity**



**Improved Regional
Air Quality and
Reduced Greenhouse
Gas Emissions**

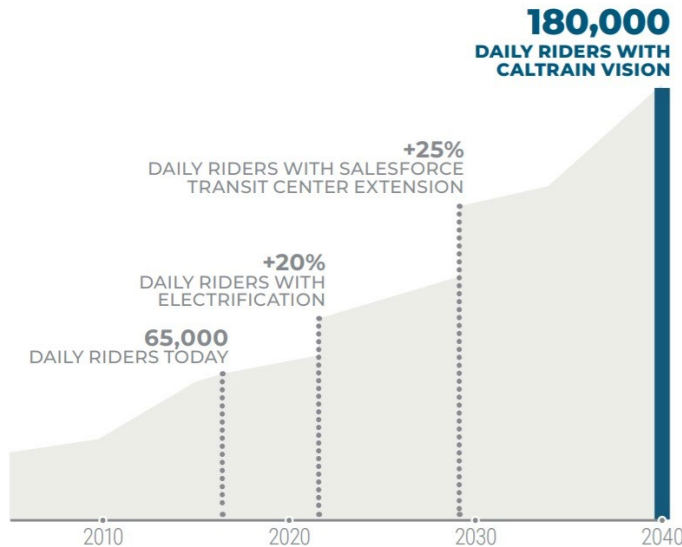
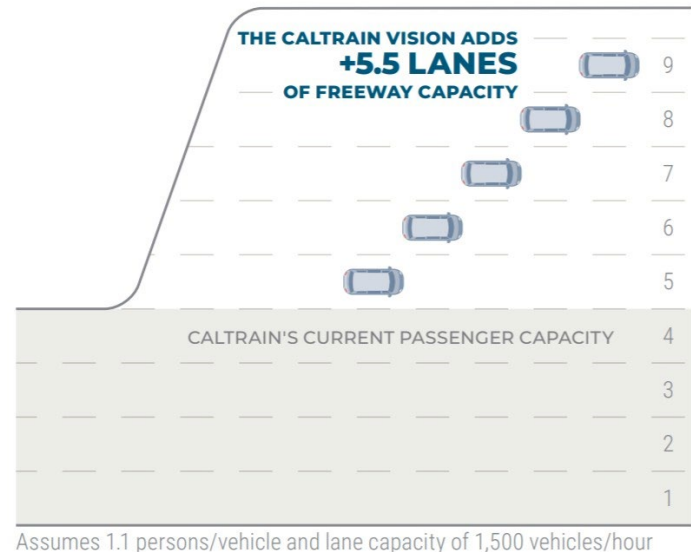


**Positive Economic
Benefits for the
Region**



**Reduced Engine
Noise Emanating
from Trains**

- Electrification sets foundation for future growth of system
- Meet projected regional growth in jobs and housing in the Bay Area
- Triple ridership, increase peak and off-peak service
- Carry equivalent of 5.5 lanes of US 101 highway traffic

**CARRYING MORE PEOPLE****TRAINS VS LANES**

CONSTRUCTION UPDATE

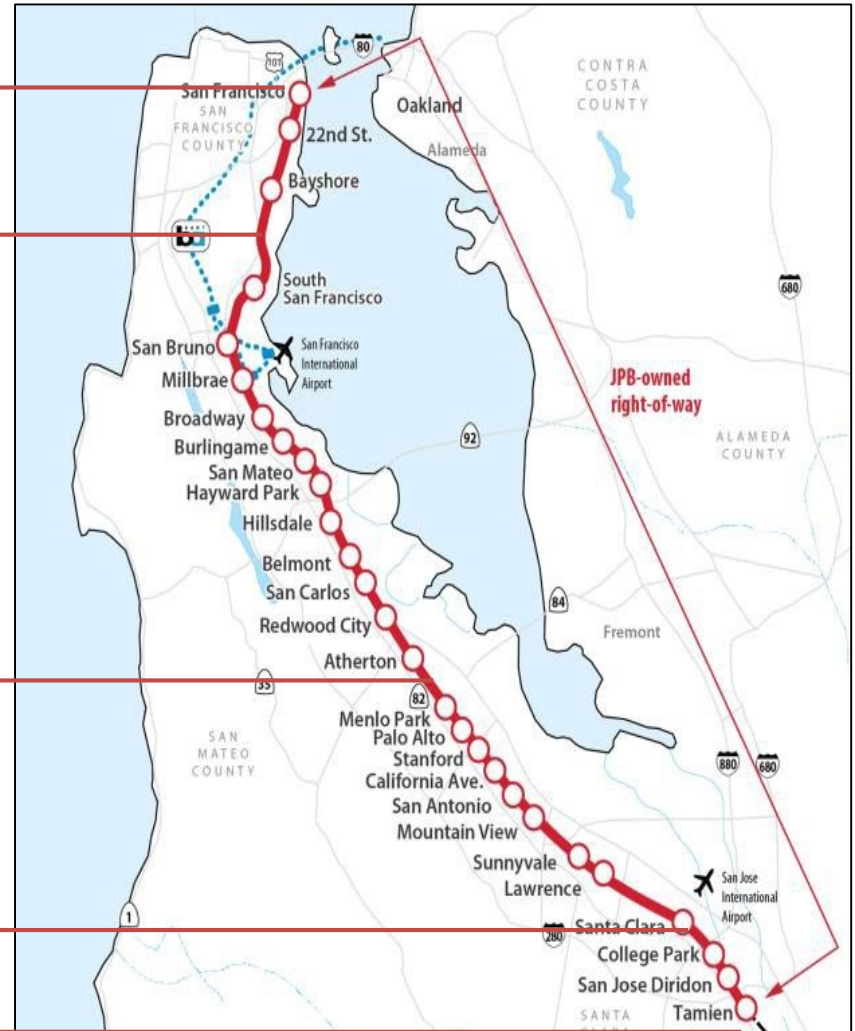


Segment 1
San Francisco to Brisbane

Segment 2
South San Francisco to Atherton

Segment 3
Menlo Park to Santa Clara

Segment 4
Santa Clara to Tamien



- Overhead Contact System (OCS)
 - Foundations 92% complete (89% last month)
 - Poles 67% complete (66% last month)
 - Segment 4 Wire 78% complete (56% last month)
- Traction Power Facilities
 - Transformer installed at 10 of 10 facilities (9 last month)
 - Traction Power Substations 1 98% complete (96% last month)
 - Traction Power Substations 2 96% complete
 - Switching Station 1 94% complete (93% last month)
- Electric Trains (133 cars total)
 - 88 shipped (86 last month)
 - 73 in Salt Lake City manufacturing facility
 - Trainset 1 in Pueblo for on-track testing

Segment	Foundations Required	Foundations Remaining	Installation Percent Complete	Completed Last Month	Anticipated Completion Date
Segment 1	569	239	58%	101	12/30/2021
Segment 2	1,179	Complete	100%	N/A	Complete
Segment 3	901	Complete	100%	N/A	Complete
Segment 4	370	Complete	100%	N/A	Complete
CEMOF	85	Complete	100%	N/A	Complete

Data as of September 30, 2021

Segment	Required	Remaining	Installation Percent Complete	Completed Last Month	Anticipated Completion Date
Segment 1	442	442	0%	0	05/18/22
Segment 2	971	418	61%	47	11/31/21
Segment 3	755	Complete	100%	Complete	Complete
Segment 4	304	12	96%	4	10/31/21
CEMOF	83	Complete	100%	1	Complete

Segment	Installation Percent Complete	Completed Last Month (in feet)	Anticipated Installation Completion	Testing Percent Complete	Anticipated Testing Completion
Segment 1	0 %	0	06/23/22	0 %	07/20/22
Segment 2	20 %	0	12/15/2021	8 %	01/20/22
Segment 3	100 %	0	05/03/2021	100 %	05/15/2021
Segment 4	78 %	46,911	11/15/21	0.0 %	11/21/21

Segment	95% Design Percent Complete	Anticipated 95% Design Complete	Installation Percent Complete	Anticipated Installation Complete	Testing Percent Complete	Anticipated Testing Complete
Segment 1	64%	03/31/2023	21%	08/31/2023	0%	09/23/2023
Segment 2	98%	07/17/2022	25%	08/01/2022	7%	12/16/2022
Segment 3	67%	12/11/2022	21%	02/28/2023	0%	04/24/2023
Segment 4	100%	Complete	93%	10/31/2021	95%	11/15/2021

Data as of October 21, 2021

Facility	Sitework	Substation Building	Low / High Voltage Equipment	Transformer	Gantry	Total Completion	Anticipated Completion
TPS-1 (SSF)	95%	89%	98%	100%	99%	96%	1/30/2022
TPS-2 (San Jose)	95%	98%	100%	100%	98%	98%	10/15/2021
SWS-1 (RWC)	93%	89%	96%	100%	94%	94%	12/31/2021
PS-1 (SF)	65%	86%	96%	100%	91%	88%	1/19/2022
PS-2 (SF/Brisbane)	87%	80%	89%	100%	82%	88%	12/22/2021
PS-3 (Burlingame)	26%	68%	5%	47%	15%	32%	4/18/2022
PS-4 (San Mateo)	90%	82%	96%	100%	87%	91%	11/21/2021
PS-5 (Palo Alto)	77%	94%	96%	100%	94%	92%	1/7/2022
PS-6 (Sunnyvale)	93%	94%	91%	100%	92%	94%	10/15/2021
PS-7 (San Jose)	96%	99%	95%	100%	97%	97%	10/31/2021

Wayside Power Cabinets

Required	Installed
27	20

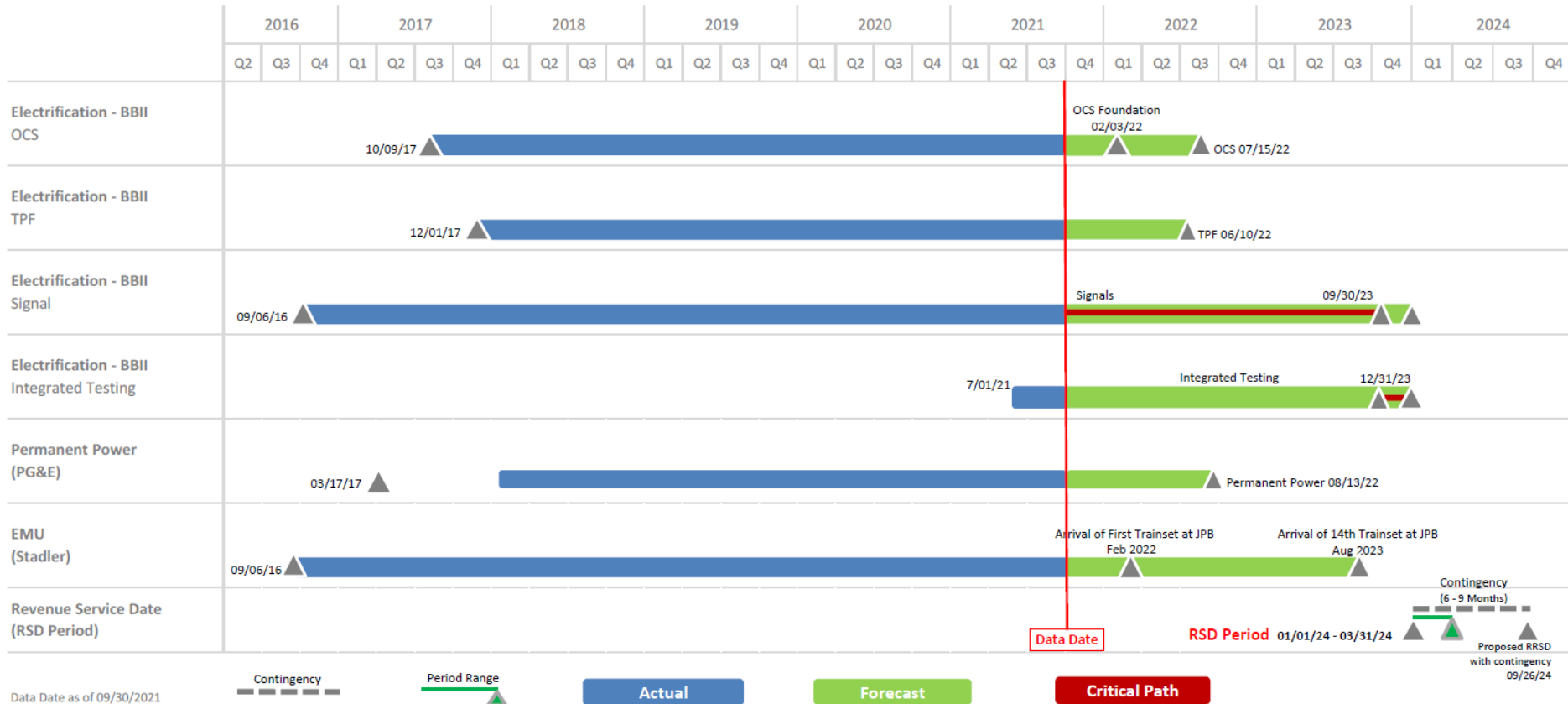
- Production
 - COVID-19-related global safety measures have slowed production
 - Salt Lake City assembly delayed
 - Trainsets 3 to 15 in various states of production
- Testing
 - Dynamic type testing on schedule in Pueblo on trainset 1
 - HVAC type testing trainset 2 ongoing
 - Routine testing trainsets 3 through 6 being performed in SLC
- Schedule
 - First trainset to Caltrain 1st Quarter 2022
 - Acceptance of 14 of 19 trainsets 2nd Quarter 2023

PROJECT UPDATE



Revenue Service September 2024

Contract Baselines vs. Forecast



- As of August 31, 2021
- December update subject to BBI negotiations and budget refresh

Total Project Cost	\$2.31B <i>(\$1.98B Previous Project Cost)</i>
Committed	\$1.85B
Carryover Contingency (Previous Budget)	\$129.8M
Additional Known (Allocated)*	\$161.0M
Additional Reserve*	\$172.0M

*Note: Total \$333M additional cost recommended by FTA

- Resolve BBII contract commercial issues
- BBII requests for change orders / claims
- Delays in parts supply chain affecting vehicle production schedule
- Continue to mitigate underground site conditions and assist BBII with redesign efforts

- Priority funding opportunities
 - State Budget (MTC Northern California)
 - Federal FY22 appropriations
 - Federal Infrastructure Bill
- Other sources
 - CTC Solutions for Congested Corridors Program (SCCP)
 - CTC Local Partnership Program (LPP)
 - CTC Trade Corridor Enhancement Program (TCEP)
 - Consolidated Rail Infrastructure and Safety Improvement (CRISI)

- Resolve BBII contract commercial issues (December)
- Project Assessment (transition from civil to system work)
- Keep construction moving forward (including 2SC work)
- Budget amendment request to JPB
- FTA / CAHSRA Project Recovery Plan
- FFGA update
- Funding advocacy

QUESTIONS

