

Caltrain Electrification Update

Caltrain Citizen's Advisory Committee
June 21, 2023
Agenda Item 9

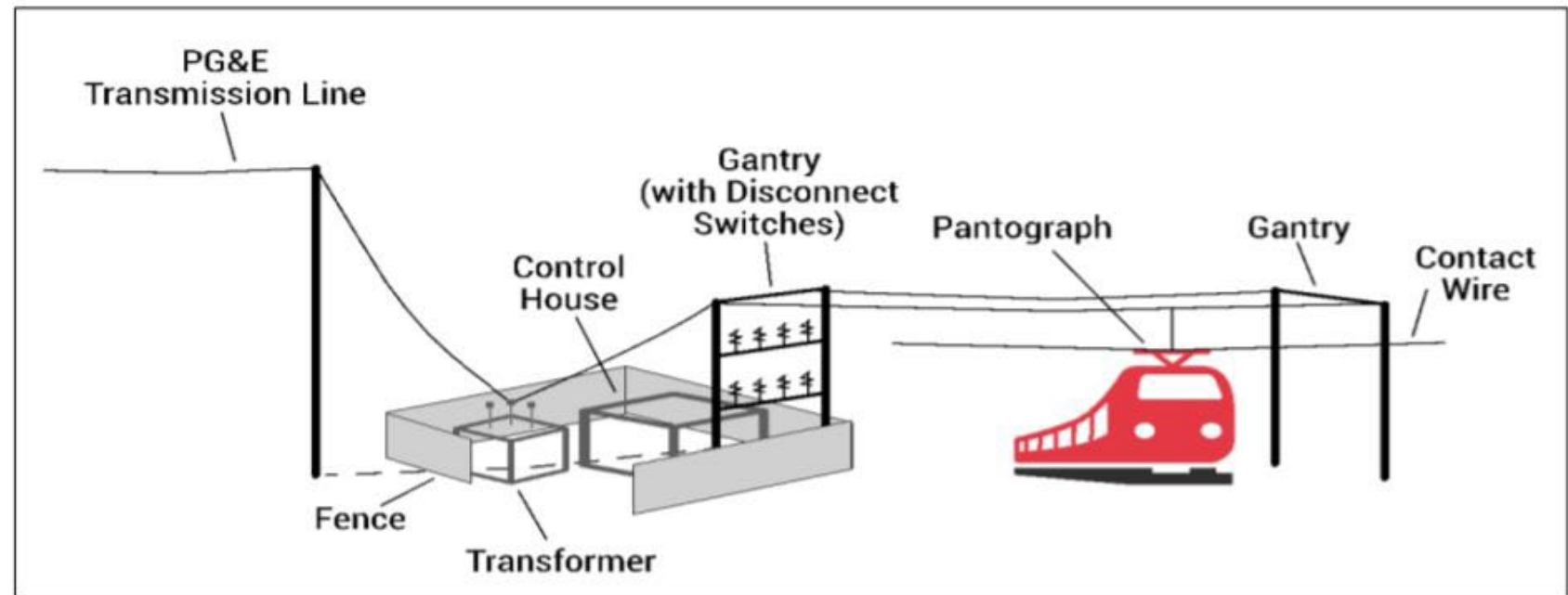


Electrification Project Overview

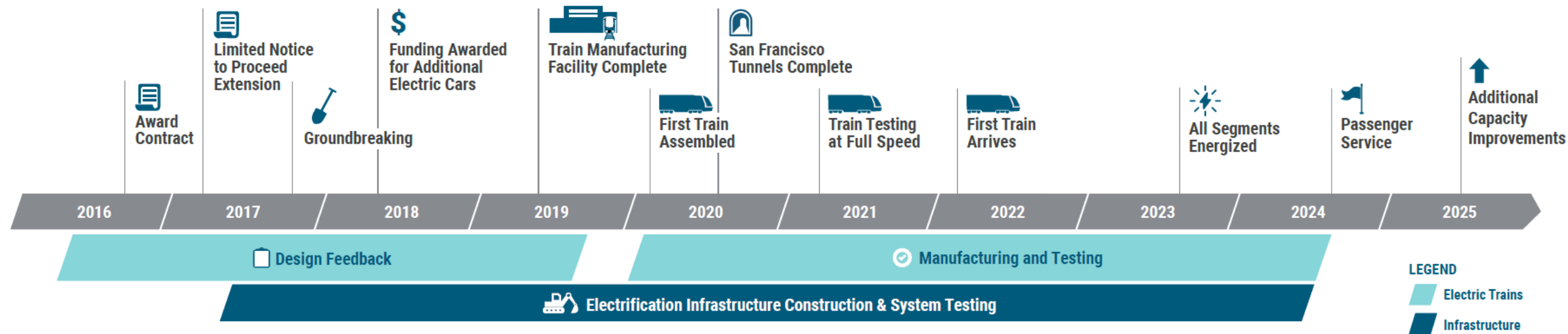
Transition from Diesel to Electric

First Electric Commuter Railroad in CA

- 25KV Overhead Contact System (used by high-speed rail system)
- 19 EMU 7-car trainsets (replaces 75% of diesel fleet)
- Two-Speed Check signal system (approved by FRA, UP and CHSRA)



Timeline



Project Milestones

- Overhead Contact System
 - 99% of poles installed
 - 85% of wire installed
 - Overhead Contact System construction completion in October 2023
- Electric Trains
 - Drill tracks live runs started June 5
 - Main track live runs Summer 2023
 - All train cars in production
 - 4 trainsets on site at Caltrain; next two trainsets expected fall 2023
- Pre-Revenue Service: Spring 2024
- Revenue Service: September 2024



Foundations



Overhead Catenary System

Overhead Contact System Production

February 6 – June 12, 2023

Activity	Remaining to Completion as of 2/6	Planned 2/6-6/12	Installed 2/20-6/12	Difference 2/20-6/12	Remaining to Completion as of 6/12
Poles	73	61	65	4	8
Beams	88	69	84	15	4
Cantilevers & Drop Tubes	1,078	621	619	(2)	459
Feeder & Static Wire Assemblies	1,242	791	892	101	350
Messenger Wire (linear feet)	256,576	116,421	125,947	9,525	130,629
Contact Wire (linear feet)	271,062	146,483	138,869	(7,614)	132,193
Feeder Wire (linear feet)	122,684	37,093	49,452	12,359	73,232
Static Wire (linear feet)	109,249	16,100	36,177	20,077	73,072
Regulation	3,063	957	969	12	2,094

Signal System Update

- Electrified system requires new signal and grade crossing activation system to be installed
- 39 crossings cutover as of May 2023
- Subsequent Crossing Optimization Project (separate from Electrification) will provide real-time information between train and signal system

City	Number of Crossings	2 Speed Check Implementation
San Jose	2	Completed
Millbrae	1	Completed
Burlingame	6	Completed
San Mateo	9	Completed
South San Francisco	1	Completed
San Bruno	1	Completed
Redwood City	6	Completed
Atherton	2	Completed
Menlo Park	4	Completed
Palo Alto (Alma and Churchill)	2	Completed
Palo Alto (Charleston and East Meadow)	2	Completed
Mountain View	2	Completed
Sunnyvale	2	Completed
San Francisco	2	August 2023

Service Changes and Customer Experience

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	4
San Francisco to Millbrae (Phase 5)	OCS Construction Signal Installation	June 10-11 June 17-18	2
Hillsdale to Palo Alto (Phase 6)	OCS Construction	July 15-16 July 22-23	2

- Potential temporary weekday changes in August to support signal installation and testing
- August to December up to 16 weekend shutdowns

June to July - Regular Service Weekends

Caltrain will run regular weekend service on the following dates:

- **June**

- June 24-25: Giants Home Games & Pride Parade

- **July**

- July 1-2
- July 8-9: Giants Home Games
- July 29-30: Electric Train Tour



May 21, 2023 Bay to Breakers Caltrain Special Service

Customer Communication

- caltrain.com/status



A screenshot of the Caltrain website. The top navigation bar includes the Caltrain logo, a search bar, and a language selector. Below the navigation bar are links for Stations, Fares, Rider Information, Projects, and About Caltrain. A secondary navigation bar features buttons for Trip Planner, Live Map, Service Alerts, and Schedules. A large banner with a teal and white background reads "SERVICE CHANGES IN EFFECT!" in bold red letters. Below this, a dark teal box contains the text "Temporary Weekday Service Changes Starting April 17, 2023. Plan ahead at caltrain.com/status." To the right of the text is an icon of a train with a speech bubble containing an exclamation mark. At the bottom of the banner, a red bar contains the text "ALERT: : Temp. Weekday Service Changes Starting April 17. Weekend Shutdowns in Effect. Plan ahead: Caltrain.com/Status."

First Public Train Tour - July 29th at San Jose Diridon Station

Additional Tours Fall 2023



FOR MORE INFORMATION

WWW.CALTRAIN.COM



