

Caltrain Electrification Project Update

Citizens Advisory Committee
August 17, 2022
Agenda Item 9



Project Overview

Project Overview

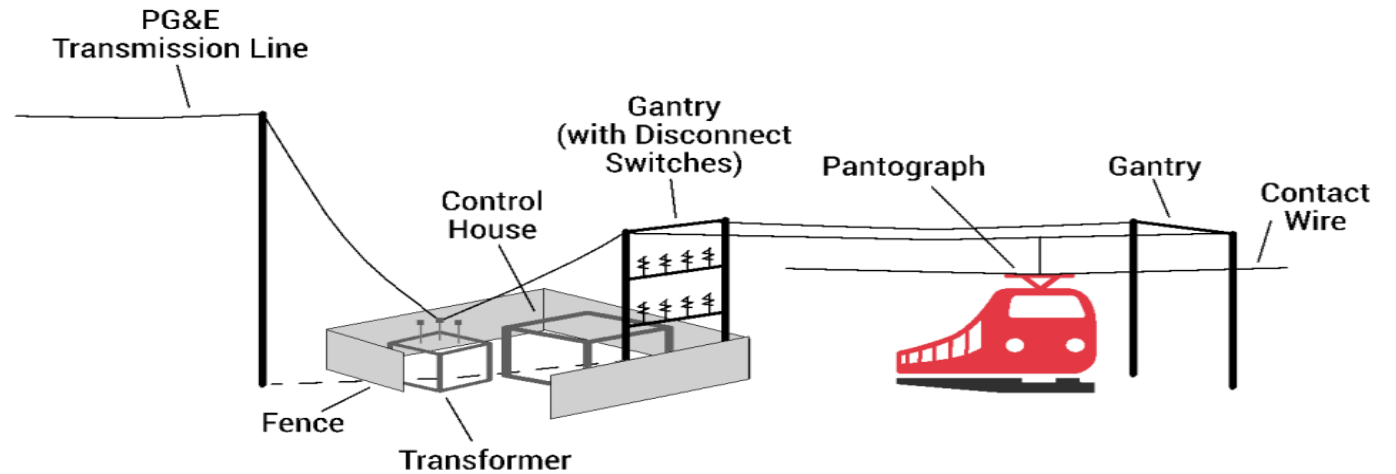
- San Francisco to San Jose (Tamien Station)
- 51 miles
- Project Cost: \$2.44B
- Revenue Service: Fall 2024



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



SUSTAINABILITY

Reduce greenhouse gas emissions and air pollution through electrification



EQUITY

Decrease emissions and noise pollution in communities of concern



BUY AMERICA

Electric trainsets manufactured by Stadler in Salt Lake City, Utah



SAFETY

State-of-the-art trainsets with better crash safety ratings and improved braking



READY FOR THE FUTURE

Set the foundation for future Caltrain service growth and HSR



CAPACITY

Expand service and capacity to carry more people



JOB CREATION

Create nearly 33,000 jobs locally and in 36 states across the country



ENERGY INDEPENDENCE

Reduce dependence on foreign energy and rely on renewable domestic energy

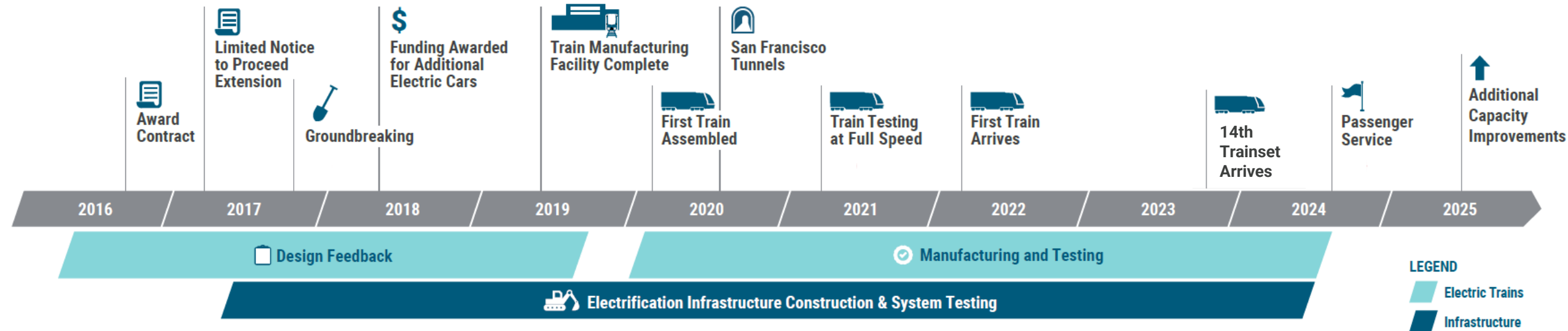


TRAFFIC RELIEF

Remove congestion on streets and highways

Project Update

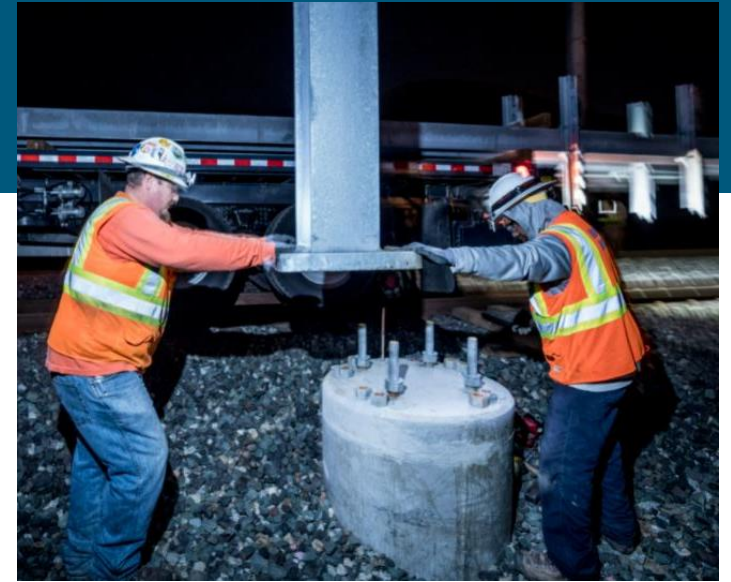
Project Schedule



Infrastructure

- **Foundations:** All 3,092 foundations complete (January 2022)
- **Start Testing:** Spring/Summer 2022
- **Poles:** Installation to be completed 2022
- **Wire:** Installation to be completed 2023
- **Traction Power Facilities:** All 10 facilities to be completed 2022
- **Signal Work / System Integration and Testing:** 2022-2024

Revenue Service: September 2024



Foundations



Overhead Catenary System

Electric Trains

- **Trainsets 1 & 2 Arrive:** March 2022
- **Static Testing Begins:** Spring/Summer 2022
- **Santa Clara/San Jose Clearance Test:** July 2022
- **Trainsets 3 & 4 Arrive:** August 2022
- **Dynamic Testing:** Fall 2022

Revenue Service: September 2024



First Trainset Arrival



Clearance Test

Energization

Traction Power Facilities

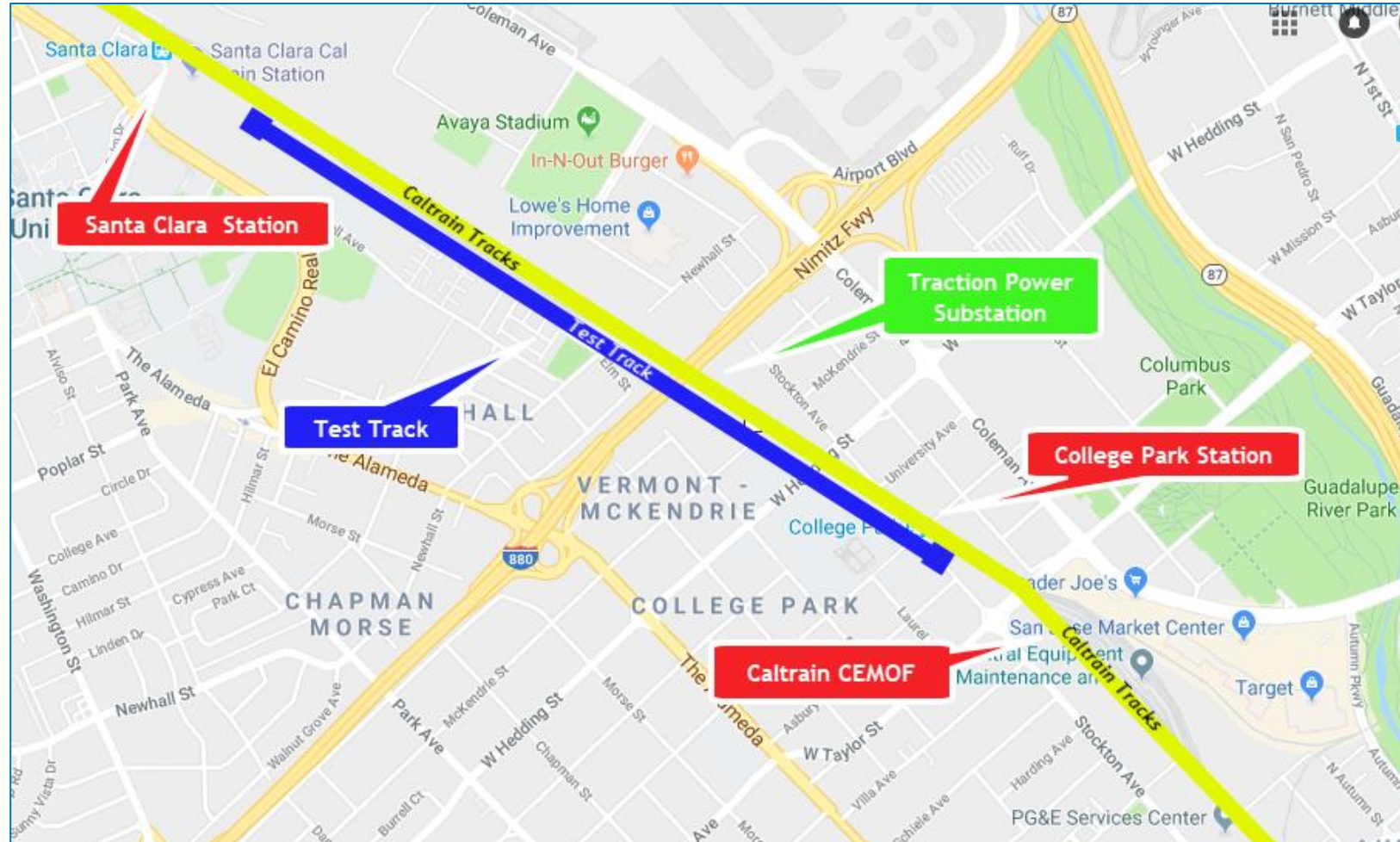
- 10 Traction Power Facilities Installed throughout Corridor
 - 1 Traction Power Substation Installed in San Jose
 - 1 Paralleling Station in San Jose
 - Gantry structures up to 50'
- Provides electrical power to trains through the Overhead Contact System
- Unstaffed station
- Day and weekend construction work
- Limited night work during construction

Traction Power Substation – San Jose



Test Track

- Approximately 1.5 miles of existing maintenance track
- Located between Santa Clara Station and Caltrain maintenance facility (CEMOF) in San Jose
- Trains will be tested first on test track before tested on main track



Testing Schedule – San Jose & Santa Clara

Start Date	Work Activity
Late August 2022	Powering On Overhead Wire Santa Clara & San Jose Segment
Fall 2022	Testing of Traction Power Substation and Overhead Wires in Segment 4
Fall 2022	Electric Train Testing at CEMOF Facility
Late 2022	Electric Train Testing in Segment 4

Safety Campaign Outreach

- Dedicated Webpage: Caltrain.com/safety
- Mailers to Segment 4 (San Jose and Santa Clara)
 - Mailers to other segments as they are energized
- Social Media
- Email Blasts
- Virtual Community Meeting
- City Communication Channels
- Local First Responder Coordination
- School Outreach Campaign



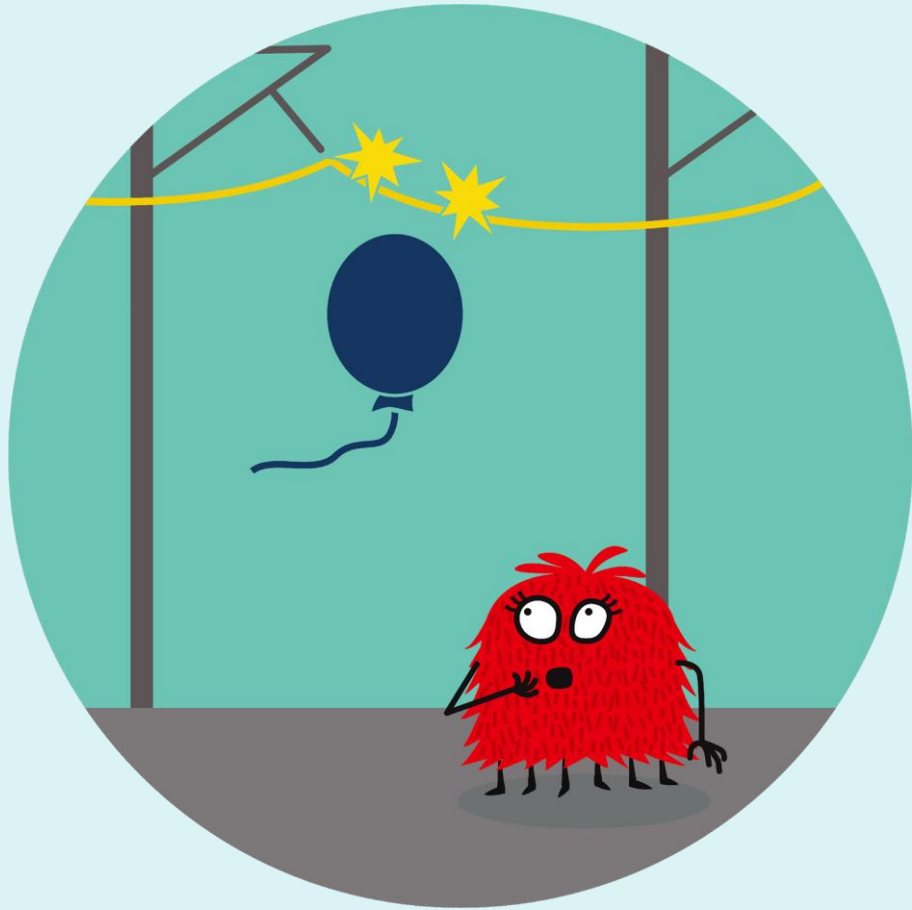
Sample Mailer

Be aware of overhead wires



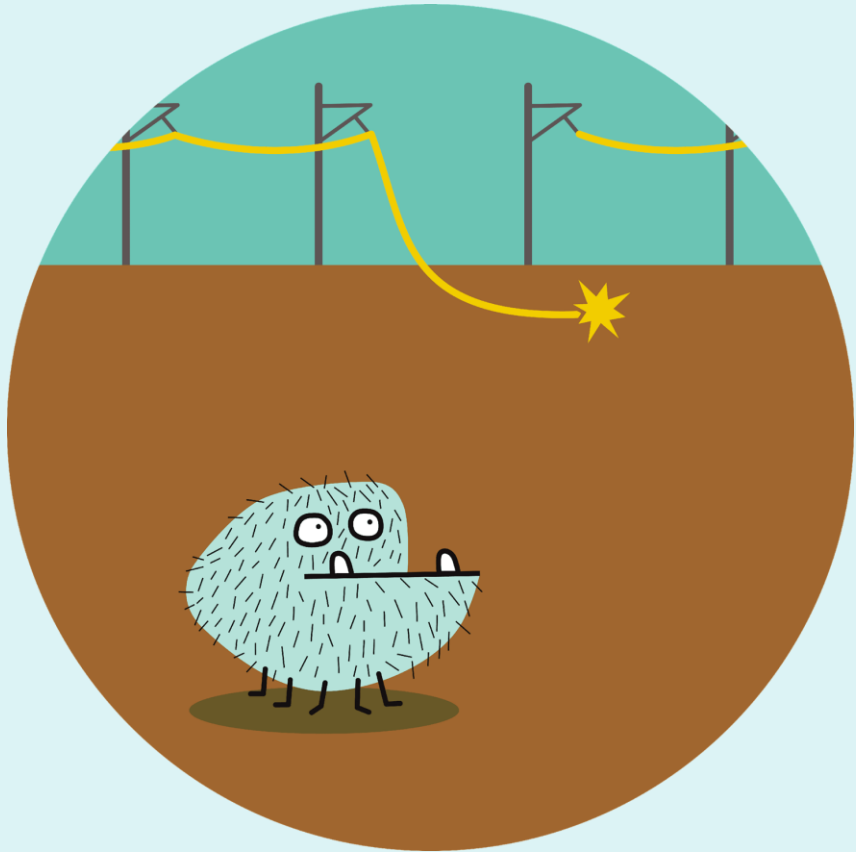
Caltrain's electric overhead wires carry 25,000 volts of electricity and can be dangerous and even life-threatening.

Keep yourself and objects away



**Never approach
overhead wires with
things like ladders,
antennas, balloons,
and most importantly,
yourself!**

Report damaged wires

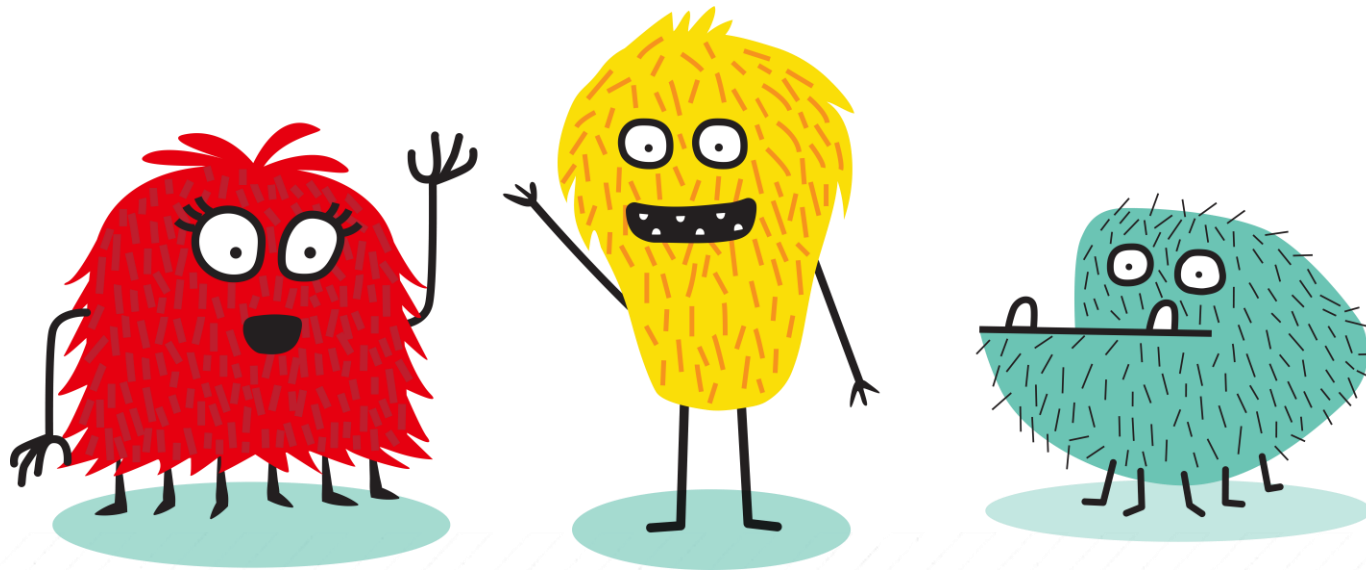


If you see a downed or otherwise damaged overhead wire, stay at least 25 feet away.

For emergencies or suspicious activity on Caltrain, call the Transit Police at 1.877.SAF-RAIL (1.877.723.7245).

Learn More at [Caltrain.com/safety](https://caltrain.com/safety)

Visit **Caltrain.com/safety** for more information about how to stay safe around the new electric overhead wires.



FOR MORE INFORMATION

WWW.CALTRAIN.COM

