

Caltrain Electrification Update

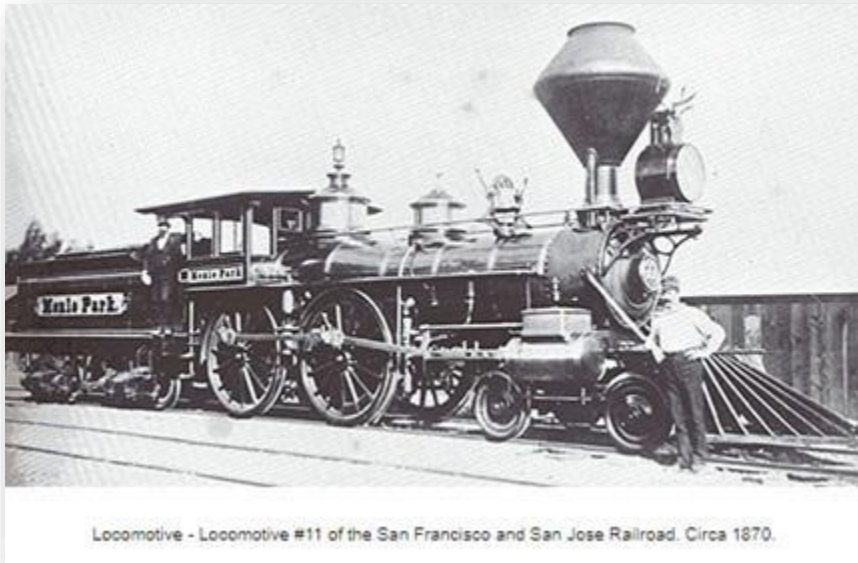
San Mateo County
Transportation Authority
August 1, 2024



Transformational Moment

Caltrain is the oldest continuously operating passenger railroad in the West (160 years)

First time in a generation any US system fully converted from diesel to electric system



Steam 1864



Diesel 1950s



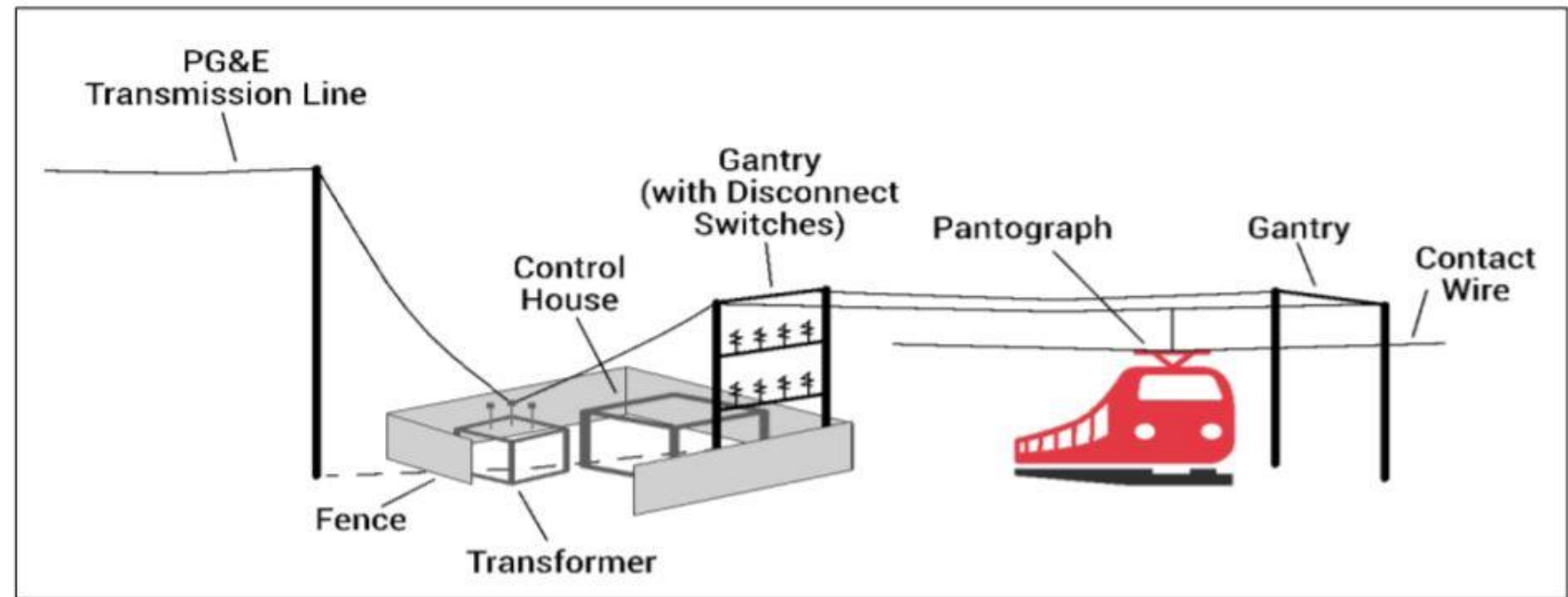
Electric 2024



Transition from Diesel to Electric

First Electric Commuter Railroad in CA

- 25KV Overhead Contact System (used by high-speed rail system)
- 24 EMU 7-car trainsets (replaces full diesel fleet between SF and SJ)
- Two-Speed Check signal system (approved by FRA, UP and CHSRA)



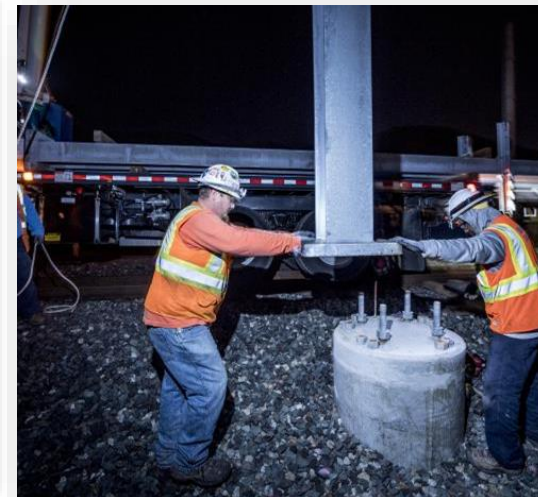
Key Milestones

Complete:

- Foundations (3,000+)
- Poles (2,500+)
- Traction Power Facilities (10)
- Overhead Wire (2.5 million feet)
- Upgraded the Signal System San Francisco to San Jose (31 at grade crossings)
- 12 trainsets delivered (1,000 mile passed by 8 trains)
- Over 1,000 First Responders Trained
- Full Corridor Energized
- All Major Construction Complete (May 2024)

Upcoming:

- Additional trainsets on property and testing (Throughout 2024)
- September Service Schedule Finalized (July 2024)
- Soft Launch (August 2024)
- **Electric Passenger Service: September 21, 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	(\$0.25M)	\$37.90M	\$2.10M
Total	\$90.00M	(\$0.19M)	\$55.08M	\$34.92M

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..

Top Risks

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

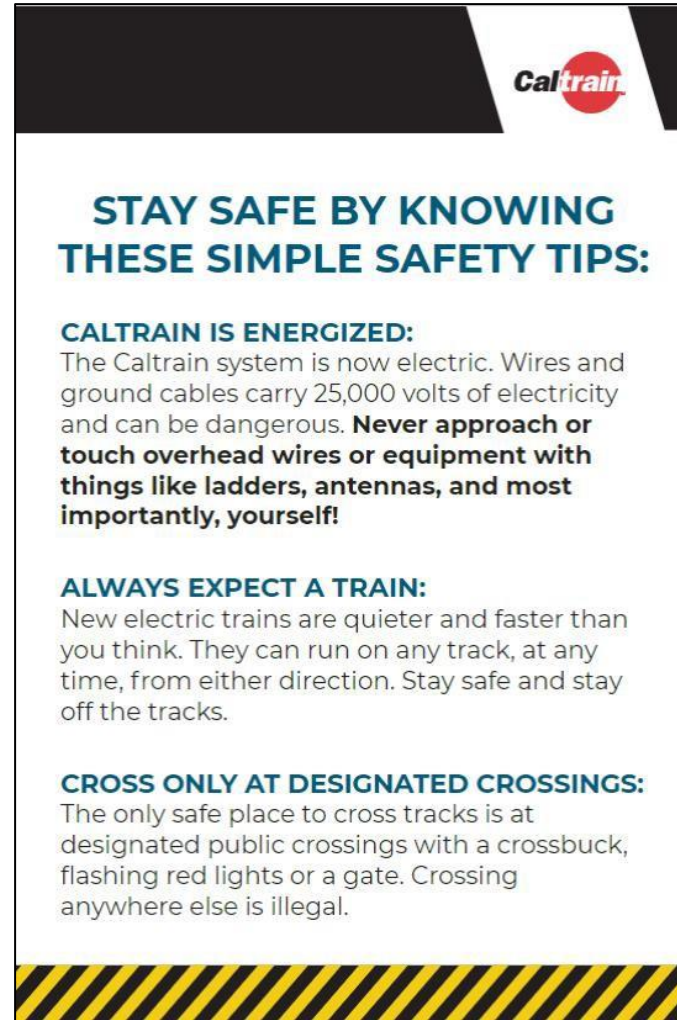
Public Train Tours – 12,000 People (San Jose, San Francisco, San Carlos)



Public Outreach Safety Campaign

- Community Meetings
- Residential Mailers
- Onboard Outreach
- School Campaign
- Public Service Announcements
- Right-of-way outreach

**Safety Video at
caltrain.com/safety**



The flyer features a black and white design with a red Caltrain logo in the top right corner. The main text is in blue and black, with a yellow and black striped border at the bottom. The title is 'STAY SAFE BY KNOWING THESE SIMPLE SAFETY TIPS:'. Below it are three sections: 'CALTRAIN IS ENERGIZED:', 'ALWAYS EXPECT A TRAIN:', and 'CROSS ONLY AT DESIGNATED CROSSINGS:'. Each section includes a brief explanation and safety instructions.

Caltrain

STAY SAFE BY KNOWING THESE SIMPLE SAFETY TIPS:

CALTRAIN IS ENERGIZED:
The Caltrain system is now electric. Wires and ground cables carry 25,000 volts of electricity and can be dangerous. **Never approach or touch overhead wires or equipment with things like ladders, antennas, and most importantly, yourself!**

ALWAYS EXPECT A TRAIN:
New electric trains are quieter and faster than you think. They can run on any track, at any time, from either direction. Stay safe and stay off the tracks.

CROSS ONLY AT DESIGNATED CROSSINGS:
The only safe place to cross tracks is at designated public crossings with a crossbuck, flashing red lights or a gate. Crossing anywhere else is illegal.

Right-of-Way Flyer



The mailer has a yellow background with a black and white striped border at the top and bottom. It features a red Caltrain logo in the top right corner. The title is 'STAY AWARE, STAY SAFE.'. Below it is a paragraph of text, followed by three circular illustrations with accompanying text: 'Always wait for the gate', 'Be mindful of overhead wires', and 'Stay away from damaged wires'. At the bottom, there is a black box with white text providing emergency contact information.

Caltrain

STAY AWARE, STAY SAFE.

Caltrain is getting an upgrade: out with diesel, in with electricity! While this change means big improvements for the Caltrain community, it also means new electric overhead wires will be installed to power the new trains. Electric overhead wires can be **dangerous and even life-threatening**. The new electric trains will also be much quieter than the diesel trains. You can stay safe by following a few easy rules:

Always wait for the gate
Even if you can't hear the new trains coming, make sure to wait for the gate to fully rise before crossing.

Be mindful of overhead wires
Caltrain's electric overhead wires carry 25,000 volts of electricity and can be dangerous. Never approach overhead wires with things like ladders, antennas, balloons, and most importantly, yourself!

Stay away from damaged wires
If you see a downed or otherwise damaged overhead wire, stay at least 25 feet away and call the Transit Police at 1.877.SAF.RAIL (1.877.723.7245).

Caltrain Caltrain.com/safety

CALL 1.877.SAF.RAIL
for any emergency on Caltrain, to report suspicious activity, or if you see a damaged electrical wire.

Residential Mailer



Electrified Service Plan Benefits

Improved service for all riders



Get There Faster

Express from SF to SJ in under an hour

Quicker local service, 75 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



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 MILLBRAE

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

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

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

STATE-OF-THE-ART VEHICLES FOR SMOOTHER RIDES
Free Wi-Fi, outlets at every seat, spacious accessible bathrooms, and digital displays with trip information

FINAL ELECTRIFIED CALTRAIN SERVICE FOR MILLBRAE

STATIONS	STATION STOPS	CURRENT SERVICE	ELECTRIFIED SERVICE
MILLBRAE	Stops per Weekday	104	104
	Weekday Stops per Peak Hour*	4	4
	Weekday Stops per Off Peak Hour	1	2
	Weekend Stops per Hour	1	2

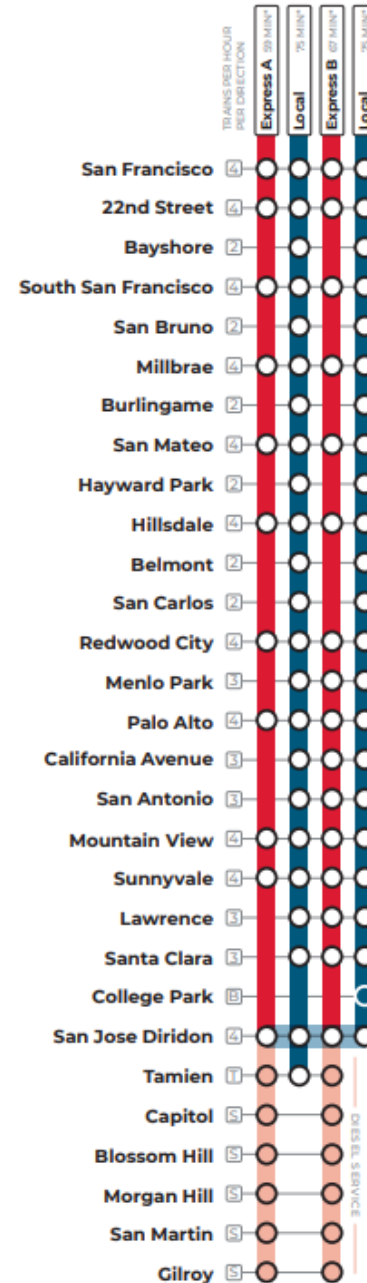
*PEAK HOURS VARY BY STATION, GENERALLY COVERING 6:30AM-9:30AM AND 3PM-7PM ON WEEKDAYS.
NOTE: TRAVEL TIMES MAY CHANGE PENDING FURTHER ELECTRIC TRAIN TESTING.

FOR MORE INFORMATION caltrain.com/electrification calmod@caltrain.com

SPRING 2024



FALL 2024 ELECTRIFIED SERVICE WEEKDAY PEAK 1-HOUR SNAPSHOT



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.

MILLBRAE STATION EXPRESS

18 min — 1 MINUTE SAVED

To / from San Francisco

19 min — 4 MINUTES SAVED

To / from Palo Alto

41 min — 5 MINUTES SAVED

To / from San Jose Diridon

B **Bellarmine Service**
2 STOPS PER DAY IN EACH DIRECTION

T **Tamien Service**
2-3 STOPS PER HOUR IN THE PEAK DIRECTION*, AND 1 STOP PER HOUR IN THE REVERSE-PEAK DIRECTION

S **South County Connector Service**
4 DAILY ROUNDTRIPS WITH 1-2 DIESEL TRAINS PER HOUR IN THE PEAK DIRECTION*, WITH TIMED 3-MINUTE CROSS-PLATFORM TRANSFER AT DIRIDON

*TRAIN TIMES SHOWN ARE FOR TRAVEL BETWEEN SAN FRANCISCO 4TH AND KING TO SAN JOSE DIRIDON STATION.

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

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

FOR MORE INFORMATION caltrain.com/electrification calmod@caltrain.com



1st Class Experience For Everyone

- **Technology:** Free Wi-Fi, outlets at every seat, digital displays
- **Quality:** Well-designed environment, smoother ride, secure, pleasant lighting, better storage, and spacious bathroom (with a baby changing table)
- **Convenient:** Faster, more frequent, and reliable

Our success means that we enhance everyday life for the people who live and work in our communities



FOR MORE INFORMATION

WWW.CALTRAIN.COM

