



CALTRAIN ELECTRIFICATION UPDATE

San Francisco Community Meeting
February 24, 2021



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AGENDA

- Caltrain System Overview
- Project Overview
- San Francisco Construction Activities
- Questions

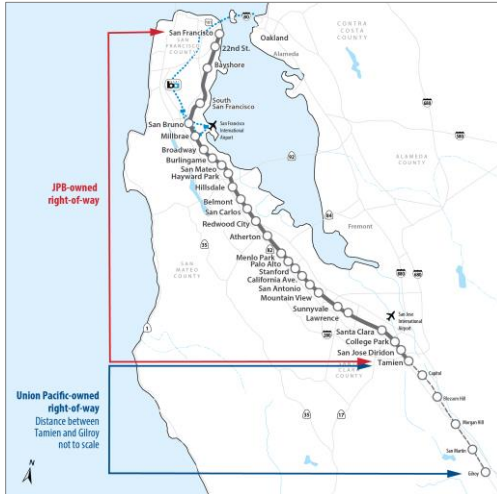
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CALTRAIN SYSTEM



- 31 Stations Gilroy to San Francisco
- 68 Weekday Trains
- At-Grade Crossings, Viaducts, and Bridges
- Intermodal Connections
- Bike Commuters

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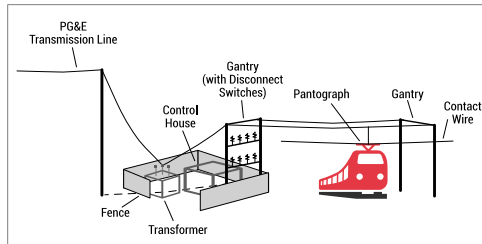
PROJECT DESCRIPTION

Project Area



- 51 miles
- San Francisco to San Jose (Tamien Station)

Project Elements



Electrification

- Overhead Contact System (OCS)
- Traction Power Facilities

Electric Trains*

- 19 7-car train sets
 - 133 electric cars
- *Includes 2018 State TIRCP Funding

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PROJECT DESCRIPTION

Service Elements



Speed

- Up to 79 mph



Service Increase

- 6 trains / hour / direction
- More station stops / reduced travel time
- Restore Broadway service



Mixed-fleet Service (interim period)

- Continue Tenant Service
- ACE, Capitol Corridor, Amtrak, Freight

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PROJECT BENEFITS



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



Increased Revenue and Reduced Fuel Cost

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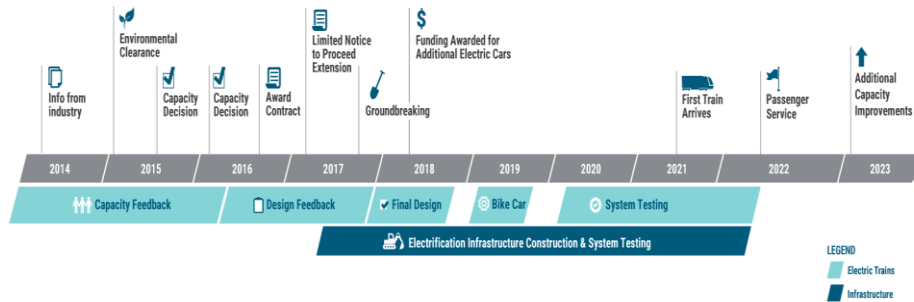
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SCHEDULE



* Note: Schedule subject to change



CONSTRUCTION PHASING

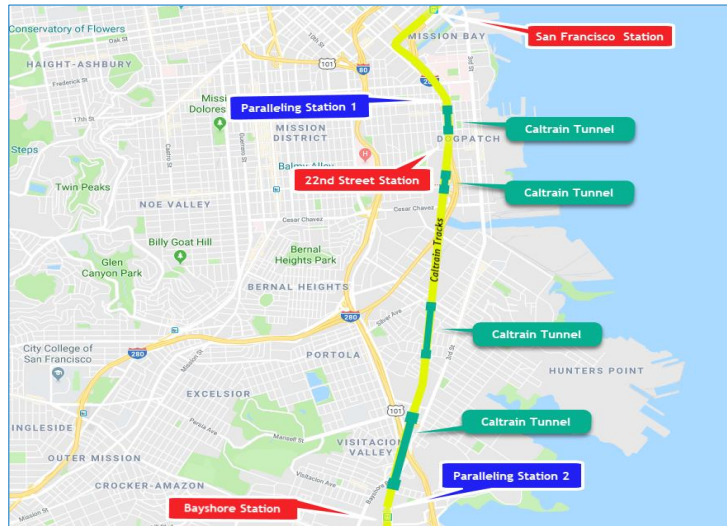


- 51 Miles Corridor
- 4 Work Segments
- 2,600 Poles
- 10 Traction Power Facilities





SAN FRANCISCO



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FIELD WORK PROGRESSION

Work Completed	<ul style="list-style-type: none"> • Utility Survey • Geotechnical Investigations • Disposal of Soil from Geotechnical Investigations • Soil Resistivity Testing • Site Surveys • Signal Cable Inspections • Tunnel Work
Work In Progress	<ul style="list-style-type: none"> • Tree Pruning/Removal • Potholing • Foundation Installation • Paralleling Station Construction
Future Work	<ul style="list-style-type: none"> • Pole and Wire Installation

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FUTURE CONSTRUCTION

San Francisco

Date	Work Activity	Expected Completion*
In Progress	Tree Pruning/Removal	Summer 2021
In Progress	Potholing	Summer 2021
In Progress	Foundation Installation	Fall 2021
Spring/Summer 2021	Pole Installation	Fall 2021
Spring/Summer 2021	Wire Installation	Fall 2021
January 2021	Paralleling Station Construction	Fall 2021

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FOUNDATION CONSTRUCTION

- Excavation
- Rebar and Anchor Installation
- Electrical Grounding
- Concrete Fill

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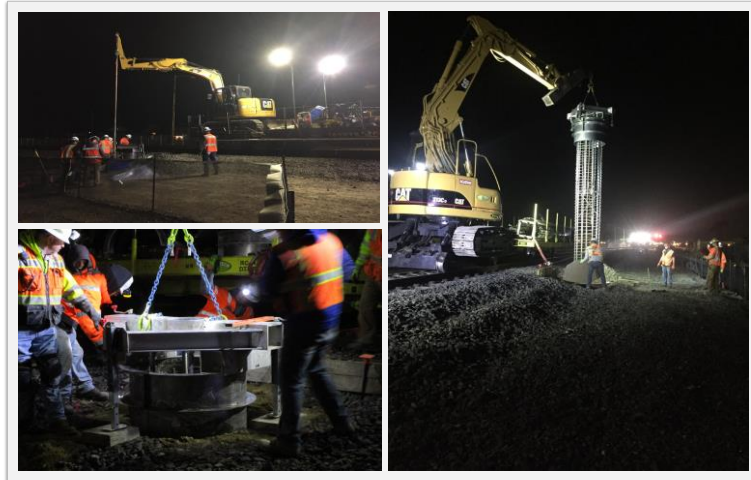
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FOUNDATION INSTALLATION



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On Track Equipment



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POLE INFORMATION

- 2,600 Installed throughout Corridor
 - Approx. 250 poles in San Francisco
- Pole Height: 30-50'
- Pole Spacing: ~180' apart

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POLE TYPES SAN FRANCISCO



Single Track Cantilever



Two Track Cantilever



Center

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Example of Poles Planned for Use in San Francisco



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POLE TYPES SAN FRANCISCO



Portal



Headspan

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Example of Poles Planned for Use in San Francisco



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POLE INSTALLATION



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CalMod.org *Current Pole Installation*



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STRINGING WIRE



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CalMod.org *On-track Equipment*



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TRACTION POWER FACILITIES

- 10 Traction Power Facilities Installed throughout Corridor
 - 2 Paralleling Stations installed in San Francisco
 - Gantry structures up to 63'
- Provides electrical power to trains through the Overhead Contact System
- Unmanned station
- Day and weekend construction work
- Limited night work during construction

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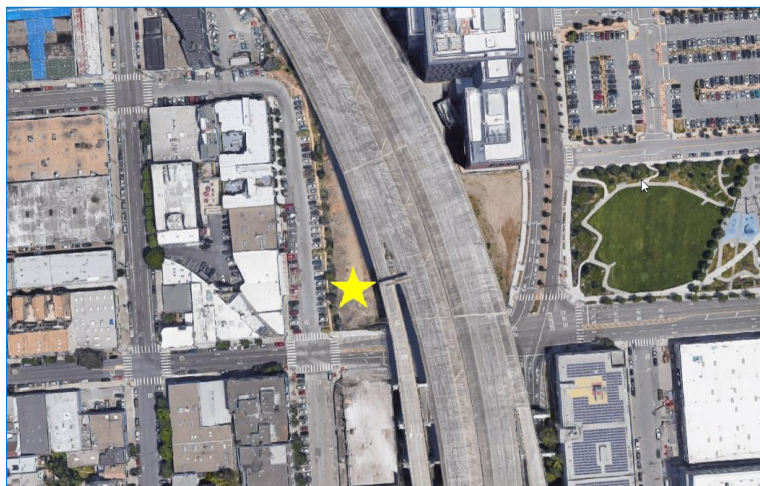
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PARALLELING STATION 1 LOCATION



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Facility located on east side of 280 freeway at Mariposa St./Pennsylvania Ave.



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PARALLELING STATION 1 LAYOUT



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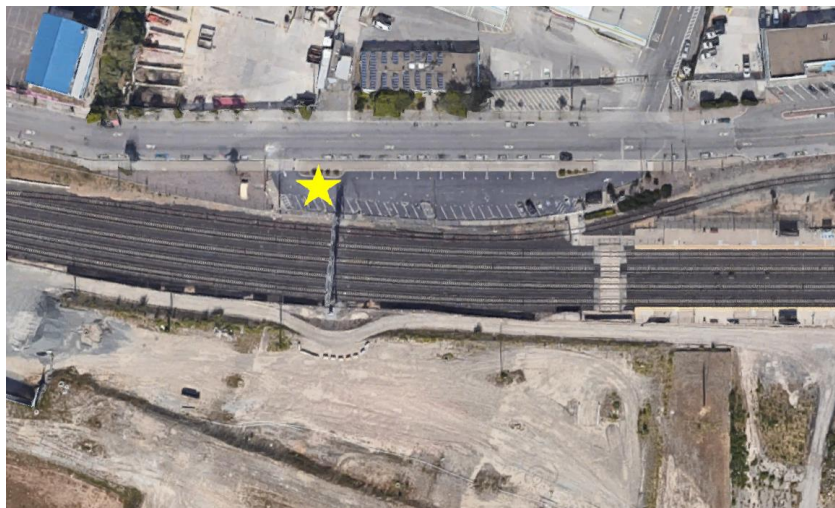
CalMod.org *Approximation locations of facility components. Design not final.*



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PARALLELING STATION 2 LOCATION



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CalMod.org *Facility located on the northern portion of the Bayshore Station Parking Lot*



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PARALLELING STATION 2 LAYOUT



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CalMod.org *Approximation locations of facility components. Design not final.*



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PARALLELING STATION EXAMPLE



Paralleling Station - Amtrak Northeast Corridor

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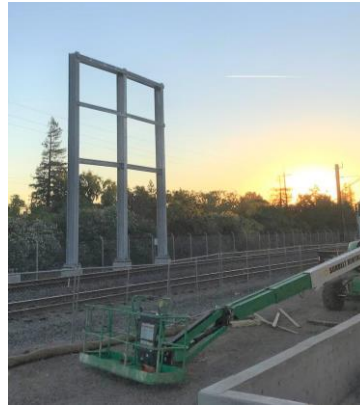
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GANTRY EXAMPLES



Main Gantry – San Mateo



Strain Gantry – Palo Alto

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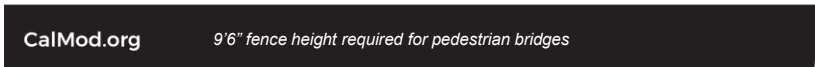
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BRIDGE BARRIERS

	<p>Polycarbonate Panel</p>
<p>Screen Mesh</p>	

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BRIDGE BARRIER LOCATIONS

- Mariposa Avenue
- 22nd Street
- 23rd Street
- Paul Avenue
- Oakdale Avenue
- Williams Avenue
- Interstate Overcrossings

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CONSTRUCTION INFORMATION

- Work will occur during day and night
- Some 24-hour weekend work
- Crews will utilize acoustical barrier blankets and position lights away from homes
- Dedicated hotline for construction complaints

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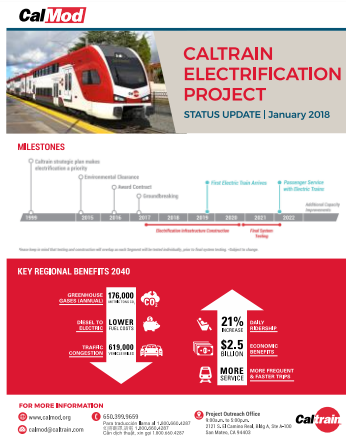
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PUBLIC OUTREACH



Doorhanger



Factsheet

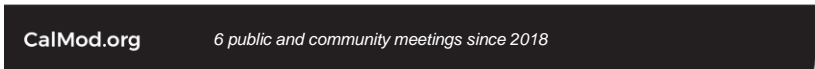


Postcard



Public Meeting

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PUBLIC OUTREACH

- Subscribe to Weekly Updates – Visit www.calmod.org/get-involved
- Social Media
- All project materials at <https://calmod.org/resources/>

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CALMOD CONTACT INFORMATION

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