




Peninsula Corridor Electrification Update Meeting

Redwood City Council
April 9, 2018



CalMod

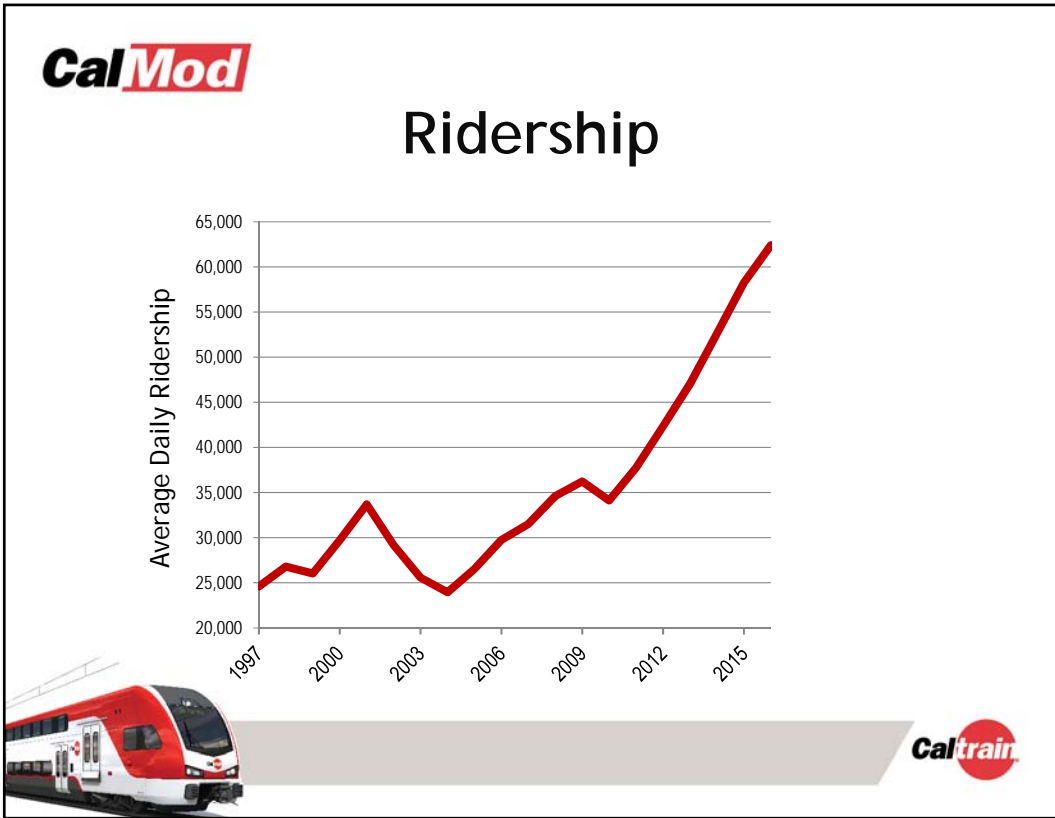
Caltrain System

- 32 Stations Gilroy to San Francisco
- 92 Weekday Trains
- At-Grade Crossings, viaducts, and bridges
- Intermodal Connections
- Bike Commuters

JBP owns right-of-way from SF to San Jose

Union Pacific owns





Aging Fleet

Table 1.2: Caltrain Fleet Inventory

SERIES	QUANTITY	NUMBER OF SEATS	YEAR OF MANUFACTURE	MAKE	RETIRE DATE
Locomotives					
F40 PH-2	5	na	1985	GM - EMD	2015
F40PH-2-CAT	15	na	1985-1987	GM - EMD	2015-2017
F40 PH-2C	3	na	1998	Boise Locomotive	2026
MP36PH-3C	6	na	2003	Motive Power	2033
Passenger Cars					
Gallery Trailer	26	142	1985-1987	Nippon Sharyo	2015-2017
Gallery Trailer	16	148	1985-1987	Nippon Sharyo	2015-2017
Gallery Trailer	14	120	1999-2000	Nippon Sharyo	2030
Gallery Cab (Bike)	10	108	1985-1987	Nippon Sharyo	2015-2017
Gallery Cab (Bike)	6	78	1999-2000	Nippon Sharyo	2030
Gallery Cab (Bike)	21	97	1985	Nippon Sharyo	2015
Bi-Level Trailer*	16	149	1997	Bombardier	2027
Bi-Level Trailer	9	144	2002	Bombardier	2032
Bi-level Trailer (Bike)	2	114	2002	Bombardier	2032
Bi-level Trailer (Bike)	5	114	2001-2002	Bombardier	2031-2032
Bi-level Trailer (Bike)	2	114	2008	Bombardier	2038
Bi-level Trailer (Bike)	1	127	2002	Bombardier	2032
Bi-Level Trailer	6	140	2008	Bombardier	2038

*Trailers recently acquired from Metrolink with refurbishment ongoing.



At Retirement Age: 20/29 loco; 73/134 cars



Project Description

Area	Project	Service
51 miles San Francisco to San Jose (Tamien Station)	Electrification: <ul style="list-style-type: none"> Overhead Contact System (OCS) Traction Power Facilities Electric Trains (EMUs) <ul style="list-style-type: none"> 75 percent of fleet 	Up to 79 mph Service Increase <ul style="list-style-type: none"> 6 trains / hour / direction More station stops / reduced travel time Restore Atherton & Broadway service Mixed-fleet service (interim period) Continue tenant service <ul style="list-style-type: none"> ACE, Capital Corridor, Amtrak, Freight





Service Benefits

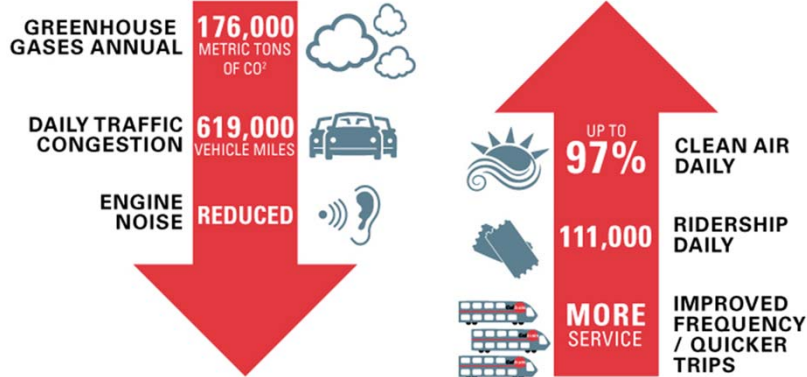
Metric	Today	PCEP
Example Baby Bullet Train		
Retain 5-6 stops	60 minutes	45 minutes
Retain SF to SJ 60 minutes	6 stops	13 stops
Example RWC Station		
Train stops / peak hour	3	5



Based on a Prototypical Schedule



Key Regional Benefits (2040)



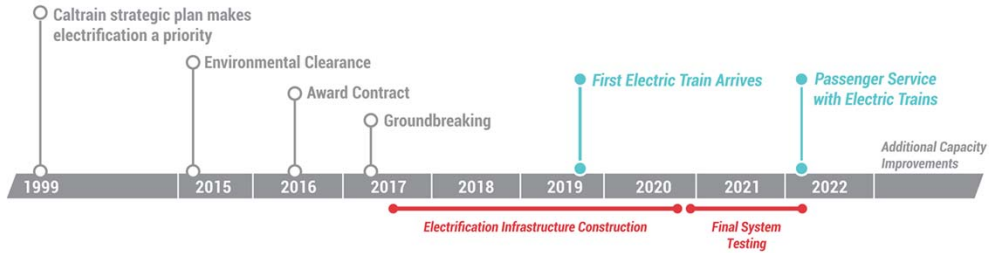
Note: 2013 BAC Report, generates \$2.5B economic activity and 9,600 jobs





Schedule

MILESTONES



*Please keep in mind that testing and construction will overlap as each Segment will be tested individually, prior to final system testing.



Note: Schedule Subject to Change



Electric Train Input

- 2016 Capacity Board Decision (bike to seat ratio, onboard bathrooms, upper doors 'not precluded')
- 2017 Design Refinement (exterior design, seats, bike storage, ADA restroom)
- 2018 Virtual Reality 360 Tour

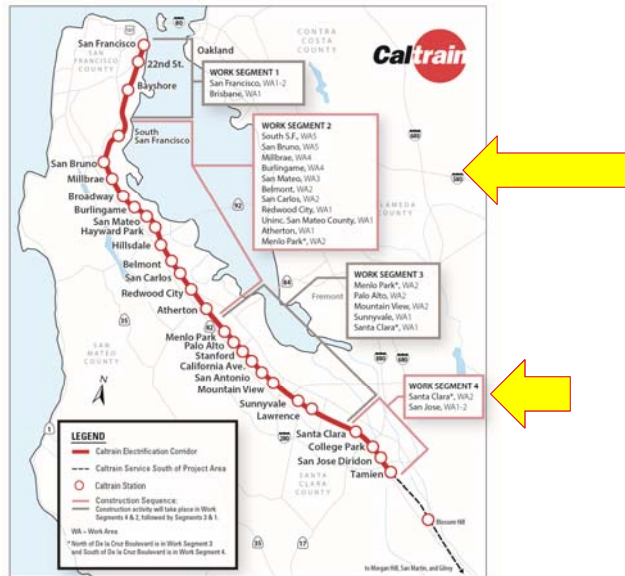


Over 15,000 comments (online, in-person, surveys, station popups)



CalMod Construction Phasing

- 51 Miles Corridor
- 4 Work Segments
- 3,000 Poles
- 10 Traction Power Facilities



Segments 2 & 4 followed by 1 & 3



CalMod Redwood City Field Work Status

Status	Activity
Complete	<ul style="list-style-type: none"> • Utility Survey • Geotech Investigations • Disposal of Soil from Geotech Work • Soil Testing • Site Surveys • Signal Cable Inspections • Potholing for Foundations and Signals • Tree Pruning and Removal*
Upcoming Work	<ul style="list-style-type: none"> • Foundation Installation • Pole Installation • Wire Installation • Switching Station Construction



*In Progress



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Redwood City Upcoming Work

Date	Work Activity	Expected Duration
Summer 2018	Foundation Installation	3-4 months
Late 2018	Overhead Pole and Wire Installation	3-4 months
Late 2018	Switching Station Construction	9-12 months



Expected duration indicates first and last day.
Number of actual work days will be fewer.

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Potholing

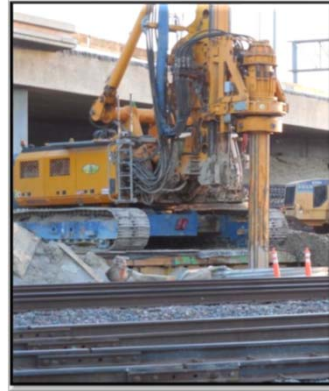


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Pole Foundation Work



DrillTech on track foundation train



DrillTech off-track OCS Drill Rig



Will take place on and off track



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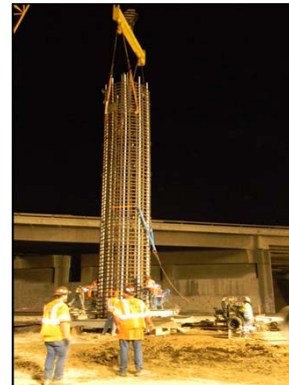
Pole Installation



On/off-track crane for installation



Wide flange & square poles



Foundation Rebar Cage



Approximately 180' pole spacing



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Wire Installation



Will take place on-track

Caltrain**CalMod**

Construction Impacts

- Daytime & night work from 8pm- 6am
- Some 24 hour weekend work
- Crews will utilize acoustical barrier blankets and position lights away from homes
- Dedicated hotline for construction complaints

**Caltrain**



Public Outreach

- Subscribe to Weekly Updates
 - Visit calmod.org/construction
- Project Email and Hotline
- Construction Outreach Office
- Community Meetings
 - November 2017 RWC & Fair Oaks Meeting
 - Future meeting before pole, wire, and switching station installation



Public Outreach

- Physical Notices

Caltrain P.O. Box 3000
San Carlos, CA 94070-1300

Estimado Vecino de Caltrain,
Durante los próximos tres meses, Caltrain estará trabajando en el corredor del ferrocarril en la zona para mejorar el servicio del Caltrain como parte del Programa Corredor Electrificación Project. Las actividades previstas durante este tiempo incluyen la instalación de instalaciones electrificadas, reemplazo de conductores de la línea, reemplazo de sistemas de señalización, y modernización de la línea para mejorar el servicio para la instalación y operación del servicio de transporte modernizado. Después del electrificación de la línea, se espera que el tiempo de viaje sea más rápido para el sistema actual de contacto.

Los trabajos tendrán lugar durante el día y la noche. Actividades de noche se realizarán entre las 8:00 p.m. y las 5:00 a.m. No dude en llamar por cualquier comentario que usted pueda tener. Para llegar al sitio y para obtener más información de noche, el equipo utilizará métodos de trabajo nocturno y utilizará luces ajustadas de colores y áreas restringidas de acceso.

El proyecto de electrificación permitirá que Caltrain opere más silenciosamente, más rápido, más frecuente, más seguro, y con servicios más cómodos. Mayor capacidad y mejor servicio ayudará a Caltrain a satisfacer la creciente demanda de servicio más cómodo y rápido la longitud de la línea regional. Los nuevos trenes eléctricos están programados para operar en el 2021.

No se disculpa por los inconvenientes que pueden sufrir mientras trabajamos para entregar estos beneficios críticos a nuestras comunidades.

Por favor visite nuestro sitio web en www.caltrain.com/PCEP para obtener actualizaciones de construcción. Gracias por su paciencia y comprensión.

Provided
Red Cross Mail
1575 Project
P.O.
Alameda, Inc.

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Dear Caltrain Neighbor:

Over the next three months, Caltrain will be performing work on the railroad corridor in your area of the Peninsula Corridor Electrification Project. The anticipated activities during this time include testing soil conditions, inspecting signal/communication equipment, and tree trimming/removal activities, and operation of modernized transit service. After tree trimming/removal occurs, crews will be overhead contact system.

Work will take place during the day and at night. Night activities will occur between 8:00 p.m. and 5:00 a.m. To mitigate noise and other impacts during nighttime activities, we will position lights away from residential, roadways, and business areas.

The electrification project will allow Caltrain to operate quieter, cleaner, more frequent and/or faster, and provide improved service. The new electric trains are scheduled to be operational in 2021.

We apologize for any inconvenience you might experience while we work to deliver these critical benefits to our communities.

Please visit our website at www.caltrain.com/PCEP for weekly construction notice updates. Thank you for your patience and understanding as we deliver these critical benefits to our communities.

[@Caltrain](#) [#CalModTrain](#) [Caltrain.com/PCEP](#) [650-399-9050](#)
[www.facebook.com/caltrain](#) [calmod@caltrain.com](#) [Para traducción léase al 1-800-832-2200](#)

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CALTRAIN MODERNIZATION PROGRAM
Test Pile Construction Activities

DAY TIME WORK
08/28/17 - 09/1/17

ANTICIPATED WORK HOURS
7:00 a.m. - 5:00 p.m.

CREWS CONDUCTING WORK IN YOUR AREA TO INSTALL AND TEST FOUNDATION PILES

During the week of August 28, Caltrain electrification crews will be working in your area to construct one test pile foundation for integrity testing. The piles will be installed within the Caltrain right-of-way.

Crews will be conducting the work over a two day period between Monday, August 28 and Friday, September 1, between the hours of 7 a.m. and 5 p.m. Crews will return at a later date to test the integrity of the installed piles.

Main construction activities include:

- Survey and layout of proposed pile test location
- Trucks and equipment working near Caltrain right-of-way
- Drill holes for placement of test piles
- Pour concrete and install rebar
- Backfill holes to cover work areas

We apologize for any inconvenience this may cause. The field team will work as quickly as possible. Thank you for your patience and understanding as we deliver these critical benefits to our communities.

Please visit our website at www.caltrain.com/PCEP/construction to sign-up for weekly construction updates.

We appreciate your patience during construction.





Contact Information

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9 a.m. - 5 p.m. Monday - Friday

CalMod.org/construction

[t](#) [f](#) [@caltrain](#)



Grade Crossing Project

- Purpose: Safety Improvements
- Location: Broadway, Main & Whipple
- Activities: New pavement marking, tactile warning on sidewalks, guardrails and new pedestrian gates
- Impacts: Partial sidewalk and lane closures during the day
- Status: Work expected to be complete by August 2018

