






**Peninsula Corridor
Electrification Update Meeting**


Burlingame Community Meeting
July 18, 2018




Agenda

- Project Overview Recap
- Project Update
 - Progression & Changes
 - Construction Activities
- Electrification Infrastructure
 - Burlingame Activities
- Questions








Caltrain System



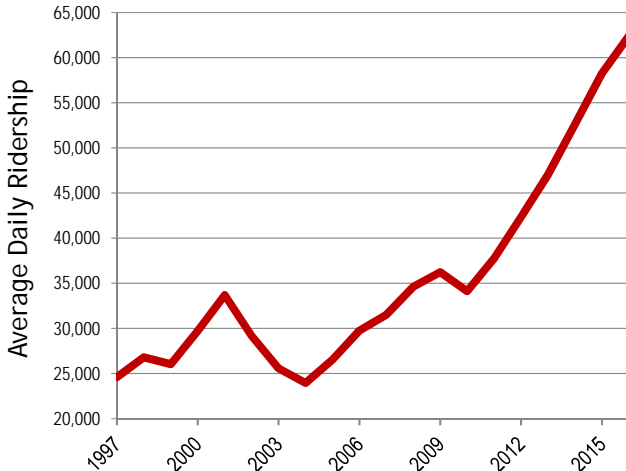
JBP owns right-of-way from SF to San Jose

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



Union Pacific owns

Ridership



| Year | Average Daily Ridership |
|------|-------------------------|
| 1997 | 25,000 |
| 1998 | 26,000 |
| 1999 | 27,000 |
| 2000 | 28,000 |
| 2001 | 34,000 |
| 2002 | 28,000 |
| 2003 | 25,000 |
| 2004 | 24,000 |
| 2005 | 26,000 |
| 2006 | 29,000 |
| 2007 | 31,000 |
| 2008 | 34,000 |
| 2009 | 36,000 |
| 2010 | 34,000 |
| 2011 | 38,000 |
| 2012 | 42,000 |
| 2013 | 48,000 |
| 2014 | 55,000 |
| 2015 | 62,000 |

CalMod

At Capacity Today



Bi-directional commute with riders standing on trains going southbound and northbound

Caltrain**CalMod**

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 | 2028 |
| 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.

**Caltrain**



Regional Transportation Needs

- US 101 and Interstate 280 Congested
- Corridor supports growing economy
- 75% Caltrain riders commute to work
- 60% are choice riders



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 |



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Service Benefits

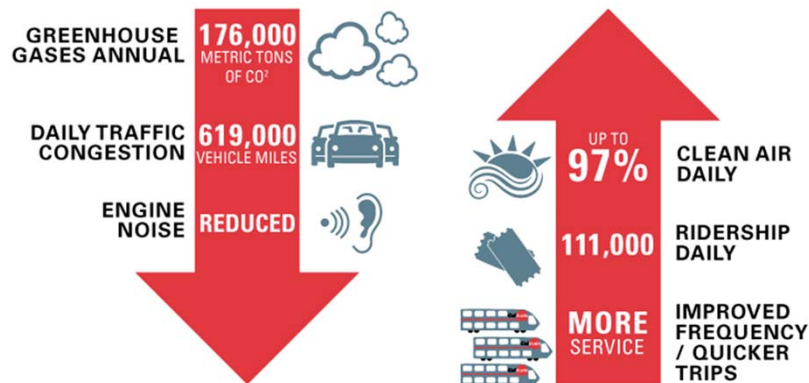
| Metric | Today | PCEP |
|-------------------------------|------------|------------|
| Example Baby Bullet Train | | |
| Retain 5-6 stops | 60 minutes | 45 minutes |
| Retain SF to SJ 60 minutes | 6 stops | 13 stops |
| Example Redwood City Station | | |
| Train stops / peak hour | 3 | 5 |



Note: Prototypical Train and Schedule

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Key Regional Benefits (2040)



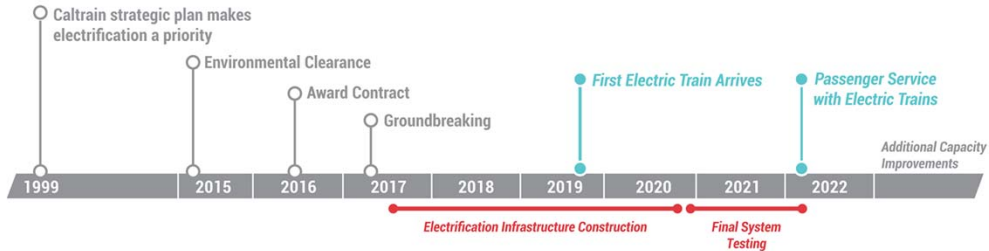
Note: 2013 BAC Report, generates \$2.5B economic activity and 9,600 jobs





Schedule

MILESTONES



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

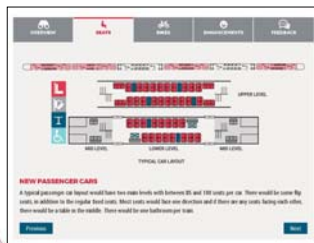


Note: Schedule Subject to Change



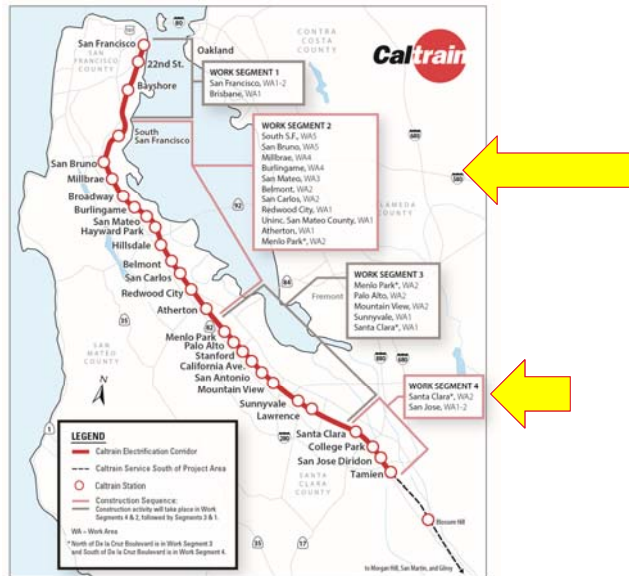
Electric Train

- 2016 Capacity Board Decision (bike to seat ratio, onboard bathrooms, upper doors 'not precluded')
- 2017 Design Progressing w/ Additional Public Input (exterior design, Seat colors, Bike Storage, ADA restroom)
- 2018 Virtual Reality 360 Tour

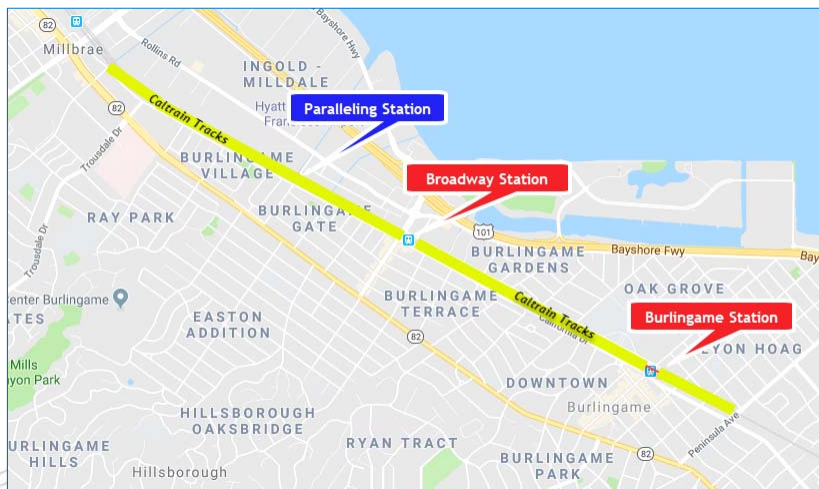


CalMod Construction Phasing

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



CalMod Burlingame



Burlingame Project Area 2.9 miles



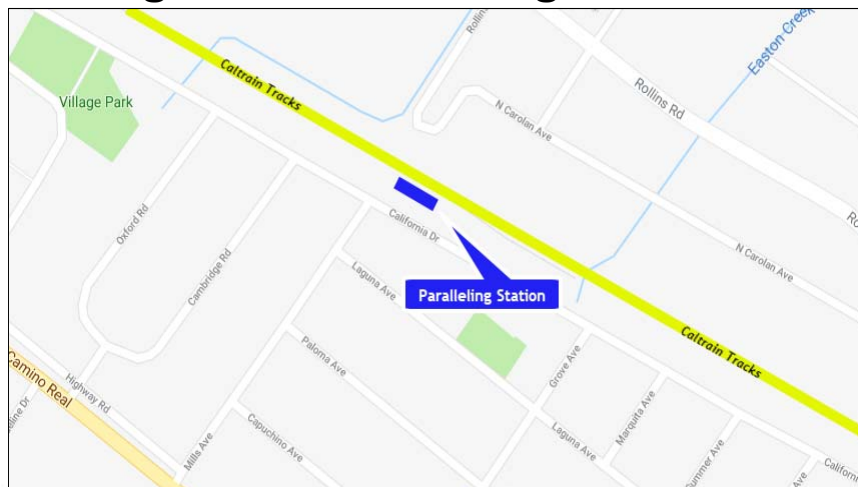


Field Work Progression

| | |
|------------------|--|
| 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 |
| Work In Progress | <ul style="list-style-type: none"> • Tree Pruning/Removal • Potholing • Foundation Installation |
| Future Work | <ul style="list-style-type: none"> • Overhead Contact System Pole Installation • Overhead Contact System Wire Installation • Paralleling Station |



Burlingame – Paralleling Station



Burlingame Project Area 2.9 miles





Future Construction Activities

Burlingame

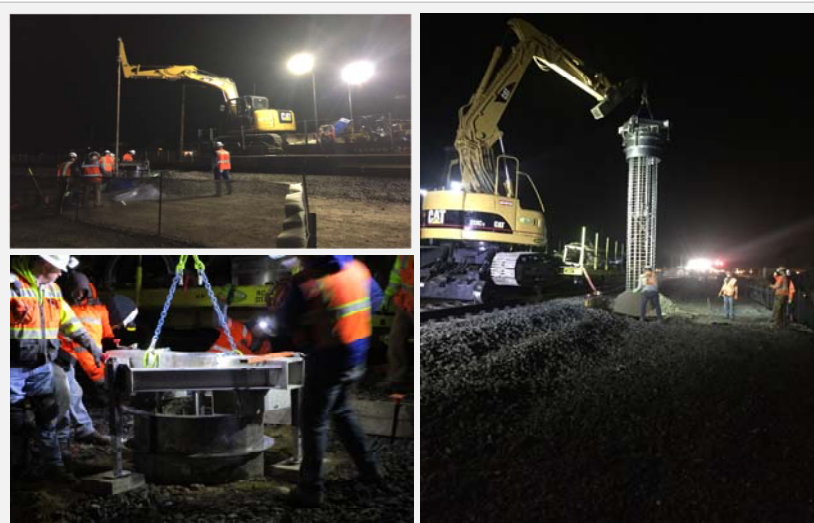
| Date | Work Activity | Expected Duration* |
|-------------|-------------------------|--------------------|
| In Process | Potholing | 1-2 months |
| In Process | Tree Pruning/Removal | 1-2 months |
| In Progress | Foundation Installation | 1-2 months |
| Fall 2018 | Pole/Wire Installation | 4-5 months |
| Late 2018 | Paralleling Station | 3-5 months |



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



Foundation Installation



On Track Equipment



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Pole Information

- 3,000 Installed throughout Corridor
 - 139 poles in Burlingame
- Pole Spacing: ~180' apart
- Pole Height: 30-45.5'

**Caltrain****CalMod**

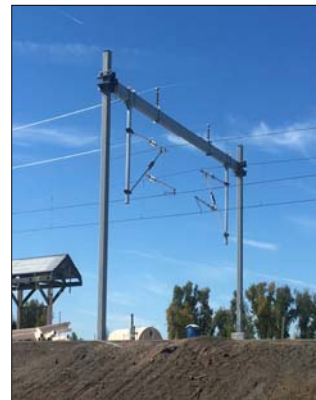
Pole Styles Burlingame



Single Track Cantilever



Two Track Cantilever



Portals



Example of Poles Currently Planned for Use in Burlingame

Caltrain

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Pole Installation



Current Pole Installation



CalMod

Stringing Wire



On-track Equipment





Construction Impacts


- Daytime work and night work from 8 p.m.- 6 a.m.
- Some 24 hour weekend work
- Crews will utilize acoustical barrier blankets and position lights away from homes
- Dedicated hotline for construction complaints




Public Outreach

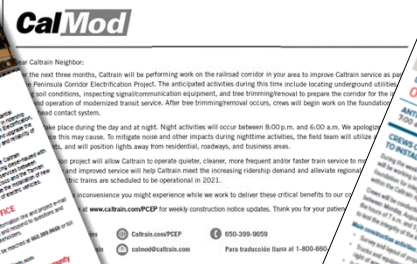
- Subscribe to Weekly Updates
 - Visit www.calmod.org/get-involved
- Additional Community Meetings
- Social Media
- Construction Outreach Office

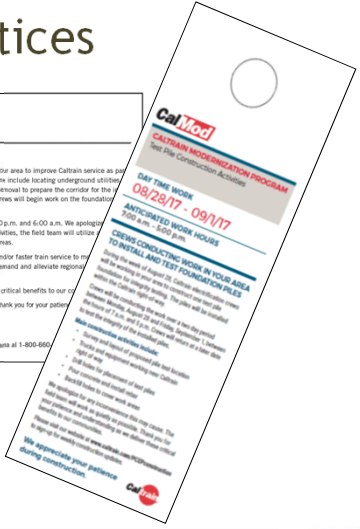







Public Outreach Physical Notices







Construction Contact Information

Email: calmod@caltrain.com

Phone: 650.399.9659

Toll Free: 800.660.4287

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www.calmod.org