





Electric Multiple Units (EMU)

- Progress on Master Program Schedule, updated Contract Deliverables Requirement List, and updated System Safety and Quality Assurance Plans
- Design coordination meetings held with Federal Railroad Administration, Federal Transit Administration (FTA)
- Conceptual Design Reviews completed
- Preliminary Design Reviews to commence in September
- System-wide interface being addressed



Electric Train Outreach: Phased

- 2016 Capacity Board Decision (bike to seat ratio, onboard bathrooms, upper doors)
- ➔ • 2017 Design Progressing, Additional Public Input (bike storage, seat colors, signage content, etc.)
- 2018 Virtual Reality 360 Tour





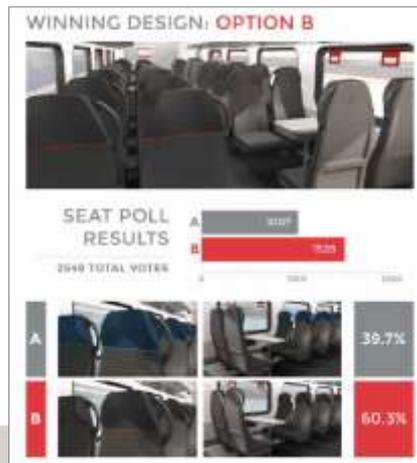
EMU Seat Outreach

- Public Poll from July 20 to July 28
- Over 2,500 votes
- Station Outreach with Seat Samples

DATE	STATION	CITY
July 24	4 th & King	San Francisco
July 25	San Mateo	San Mateo
July 28	Diridon	San Jose



EMU Seat Public Poll Winning Design





EMU Onboard Bike Storage Outreach

- Public Poll from August 8 to September 1
- Station Outreach with Samples



EMU Bike Outreach Events

Date	Time	Event
August 8	9:00 a.m. - 6:00 p.m.	Silicon Valley Bike Summit Mt. View
August 9 & 10	7:30 a.m. - 7:00 p.m.	4 th & King Station outreach
August 14	4:30 p.m. - 6:30 p.m.	Redwood City Station outreach
August 15	4:30 p.m. - 7:00 p.m.	Palo Alto Station outreach
August 16	5:30 p.m. - 8:00 p.m.	Menlo Park Block Party
August 22 to Sept. 1	9:00 a.m. - 6:00 p.m. Monday through Friday	Project Outreach Office 2121 S. El Camino, San Mateo
August 24	5:45 p.m.	Bicycle Advisory Committee





Next Steps

- Capture feedback on design elements
- Continue rollout of key design features for public input and education
 - Onboard Bike Storage Designs: Occurring Now
 - Interior Destination Sign Content: Fall 2017
- Public feedback paired with technical analysis
- Virtual Reality Tour: 2018

A large photograph of a CalMod high-speed train in motion, viewed from a low angle. The train is white with a red stripe and is traveling on a track under a clear blue sky. The "CalMod" logo is overlaid in the top left corner of the image.

Construction Update

Peninsula Corridor Electrification Project

The Caltrain logo, a red circle with the word "Caltrain" in white, is located in the bottom right corner of the slide.



Electrification - Infrastructure

Design Build Contract	<ul style="list-style-type: none"> Advanced Issued for Construction (IFC) Overhead Contact System (OCS) layout design in Segment 2 work areas 5 Design review coordination with local jurisdictions 65% location-specific and typical signal design Advanced typical 95% communication system and traction power system designs Continued potholing
Tunnel Modifications	<ul style="list-style-type: none"> Union Pacific Railroad (UPRR) comments on the 95% design drawings and specifications are under review 100% Plans and Specifications completion targeted for end of August
Centralized Equipment Maintenance and Operations Facility (CEMOF)	<ul style="list-style-type: none"> Build out concepts being evaluated



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Field Work Status

Work Completed to Date	<ul style="list-style-type: none"> Utility Survey Geotechnical Investigations Soil Resistivity Testing Site Surveys Disposal of Soil from Geotechnical Investigations Signal Cable Inspections
Work In Progress and Upcoming	<ul style="list-style-type: none"> OCS Foundation Potholing Signal Cable Potholing Tree Pruning and Removal OCS Foundation Construction
Future Work	<ul style="list-style-type: none"> Overhead Utility Relocation OCS Pole Installation OCS Wire Installation





Foundation Work

- Excavation
- Rebar and Anchor Installation
- Electrical Grounding
- Concrete Fill
- Foundation work within the South San Francisco Station area will be completed by SSF Station Improvement Project
- Foundations for San Bruno Station area were installed as part of the San Bruno Grade Separation



Pole Foundation Work

Will take place on and off track



Above: DrillTech on track foundation train



Right: Drilltech off-track OCS Drill Rig



CalMod

OCS Wire Installation

Will take place on-track

**Caltrain****CalMod**

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

**Caltrain**



Ongoing Public Outreach

- Weekly Updates
 - Visit caltrain.com/pcepconstruction
- Pre-Construction Community Meetings
 - July 13: San Bruno and South San Francisco area
 - August 23: Millbrae and Burlingame area
- Construction Outreach Office, M-F, 9:00 am to 6:00 pm



Construction Advisory Teams

- Will Provide Construction Updates to Community Representatives
- Divided by Work Segment
- Monthly Meetings During Construction in Segment
- 3 Members per City
 - Business Representative, Neighborhood Association, Civic Leader
 - Designated by LPMG Member

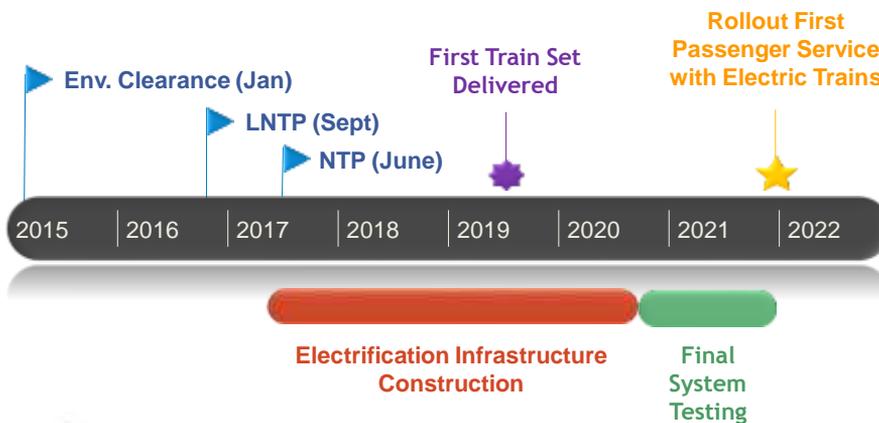




Construction Contact Information
Email: calmod@caltrain.com Phone: 650.399.9659 Toll Free: 800.660.4287
2121 S. El Camino Real, Suite A-100 San Mateo, CA 94403 9 a.m. - 6 p.m. Monday-Friday
www.caltrain.com/pcepconstruction



Schedule



Note: **Schedule Subject to Change**





Funding Update

- FTA Core Capacity Grant of \$647m approved on May 23
 - \$73 approved previous years
 - \$100m approved FY 2017 Budget
 - \$100m recommended FY 2018 Budget
- Project is fully funded
- JPB approved \$1.98b budget on June 1



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Budget & Expenditures

	Budget	Costs This Quarter	Costs to Date	Estimate at Completion
Electrification	\$ 697M	\$ 49M	\$ 132M	\$ 697M
EMU	\$ 551M	-	\$14M	\$ 551M
Separate Contract & Support Costs	\$ 417M	\$ 9M	\$ 108M	\$ 417M
Contingency	\$ 315M	-	-	\$ 315M
PCEP Total	\$ 1,980M	\$58M	\$ 254M	\$1,980M

Note: Budget / Expenditures as of **June 30, 2017**



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Safety

- San Francisco 16th Street crossing - no overhead wire
- Night inspections of potholing and utility location work performed
- Revised Safety and Security Management Plan
- Received 65% Safety and Certification Design checklists for OCS and Traction Power Substations



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Real Estate

Segment	Appraisal Packages Needed	Appraisals Completed	Acquisition Offers Presented	Acquisition Offers Accepted
Segment 1	8	0	0	0
Segment 2	27	26	25	15
Segment 3	11	4	0	0
Segment 4	9	9	8	0
Total	55	39	33	15

Note: As of June 30, 2017



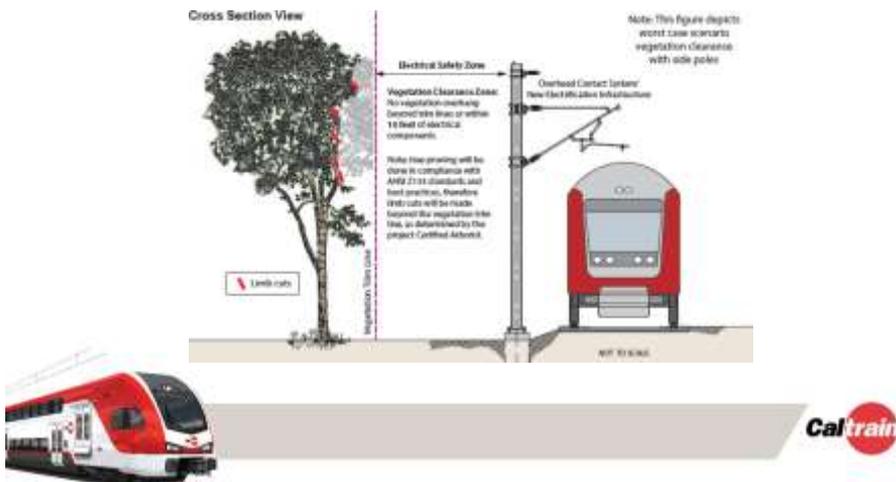
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CalMod

Tree Pruning and Replacement

- Vegetation cleared for Electrical Safety Zone





Tree Mitigation Commitment

- Avoidance, Minimization, Replacement
- Applies to Private, Public and JPB property
 - Per City or County replacement ratio outside JPB property
 - Per environmental permits, where applicable
 - 1:1 within JPB property
 - Provide replacement if pruning more than 25% (all property)



Tree Mitigation Status

- Segment 2 & 4 jurisdictions
 - Tree Plans and staff coordination complete
 - Permits in progress
 - Tree pruning and removal starting in August
- Segment 1 & 3 jurisdictions
 - Tree Plans and staff coordination in next few months
 - Tree pruning and removal anticipated to start spring/summer 2018





CalMod

Early Pole Relocation

- Accommodates Caltrain/HSR pole locations for blended service speeds in select locations
- Minimizes post-PCEP construction impacts to Caltrain
- Environmental evaluation and consideration by JPB and FTA
- Track straightening after CHSRA environmental clearance
- Funded by CHSRA



Caltrain



Early OCS Relocation, cont.

- Contract change to Balfour Beatty
 - ~11.5 miles, includes northbound and southbound track
 - ~450 foundations (out of 3,700 total PCEP foundations)
 - Most less than 1 ft shift
- Potential contract change to Stadler
 - Cant deficiency (allows increased speed through curves)
 - Technical evaluation underway



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Discussion



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