



## CalMod Local Policy Maker Group (LPMG)

Thursday, June 25, 2015

6:00 PM – 7:30 PM

SamTrans Offices - Bacciocco Auditorium 2<sup>nd</sup> Floor  
1250 San Carlos Ave., San Carlos

### Agenda

1. JPB Staff Report
2. Information/Discussion
  - a. Additional Feedback on May EMU Procurement Presentations  
(<http://www.caltrain.com/Assets/Caltrain+Modernization+Program/Meetings/Agenda+Packet+05.28.2015+V2.pdf>)
  - b. Advanced Signal System - CBOSS PTC Update  
(Attachment A)
  - c. Real Estate Update  
(Attachment B)
3. Public Comments
4. LMPG Member Comments / Requests
5. Next Meeting In-person: August 27, 2015 at 6:00pm

Note Member Request: Future Grade Separation Presentation / Discussion



## Memorandum

**Date:** June 25, 2015

**To:** CalMod Local Policy Maker Group (LPMG)

**From:** Marian Lee, CalMod Executive Officer

**Re:** **Advanced Signal System - CBOSS PTC**

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The system, known as Communications Based Overlay Signal System (CBOSS) Positive Train Control (PTC), is an advanced signal system that will equip the corridor with federally-mandated safety technology by December 2015 and increase system capacity to help accommodate future increases in ridership demand. The system will be interoperable with other rail systems that access the Caltrain corridor.

The LPMG has received several presentations on the project throughout the construction phase and an update on the project status is timely.

The presentation is attached and a link to a recently created video on the project is located here: [https://www.youtube.com/watch?v=RudWu\\_DB6Tw](https://www.youtube.com/watch?v=RudWu_DB6Tw)



## Advanced Signal System Update (CBOSS PTC)

LPMG Meeting  
June 25, 2015

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## [CBOSS PTC Video](#)

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## Context

## Caltrain Modernization Program

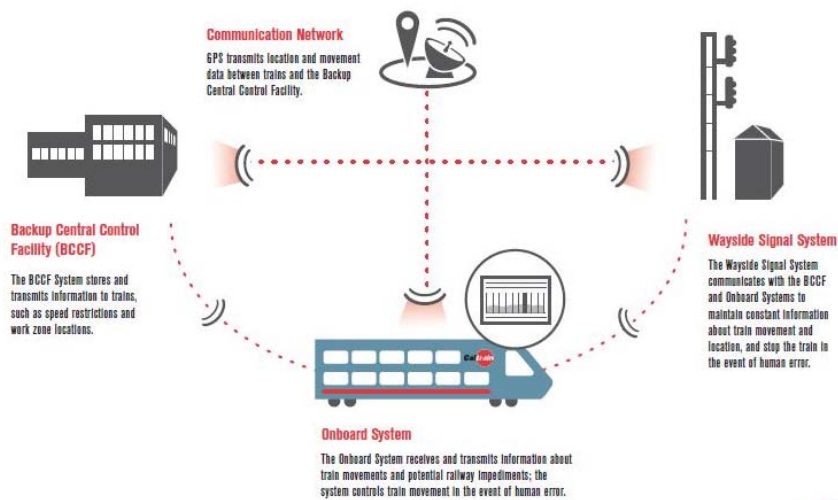
- Projects
  - ➔ Advanced Signal System (2015)
  - Peninsula Corridor Electrification Project (2020)



## Project Description

- Communications Based Overlay Signal System (CBOSS) Positive Train Control (PTC)
- Fiber Optic Network
- Project Requirements
  - Includes federal mandate (PTC)
  - Improves Caltrain performance
- Project Partners
  - FRA, UP, CHSRA, JPB
- Needed for Blended System

## How the Project Works



## CBOSS PTC Requirements

- PTC
  - Prevent train to train collisions
  - Prevent over speed derailments
  - Prevent incursions into established work zones
  - Prevent movement through a misaligned switch
  - Interoperability
- CBOSS
  - Enhanced crossing safety / performance
  - Improved headways and operational flexibility
  - Enforcement of scheduled station stops
  - Schedule management
  - Employee In Charge

## Project Benefits



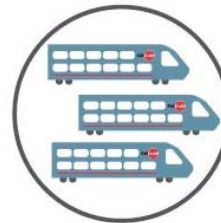
### Improved Safety

- Eliminate risk of train-to-train collisions
- Reduce risk of over speed derailments
- Provide additional safety for railroad workers



### Increased Reliability & Operating Performance

- Provide better schedule management
- Enforce scheduled station stops
- Improve grade crossing performance from reduced gate downtime



### Capacity Benefits

- Minimize spacing between trains
- Start and stop more quickly
- Provide faster and/or more frequent service

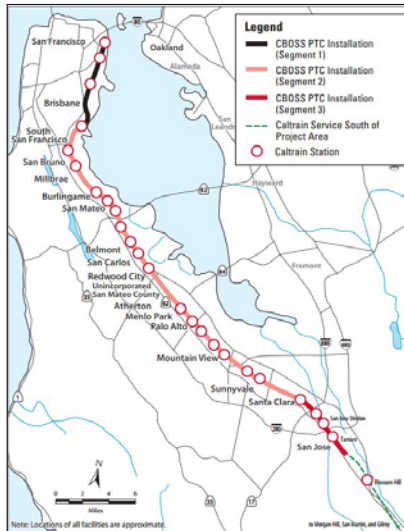
## Project Total Cost and Milestones

Description	Cost (in millions)	Milestones
Project Planning and Procurement	\$5	2010 - 2011
Phase 1 - Critical Design	\$25	2012 – 2013
Phase 2 - Final Design, Data Communications Subsystem & Fiber Backbone Installation	\$51	2013 – 2015
Phase 3 / 4 - Installation, Testing, Commissioning	\$150	2014 – 2016 (Revenue service December 2015)
<b>Total</b>	<b>\$231</b>	

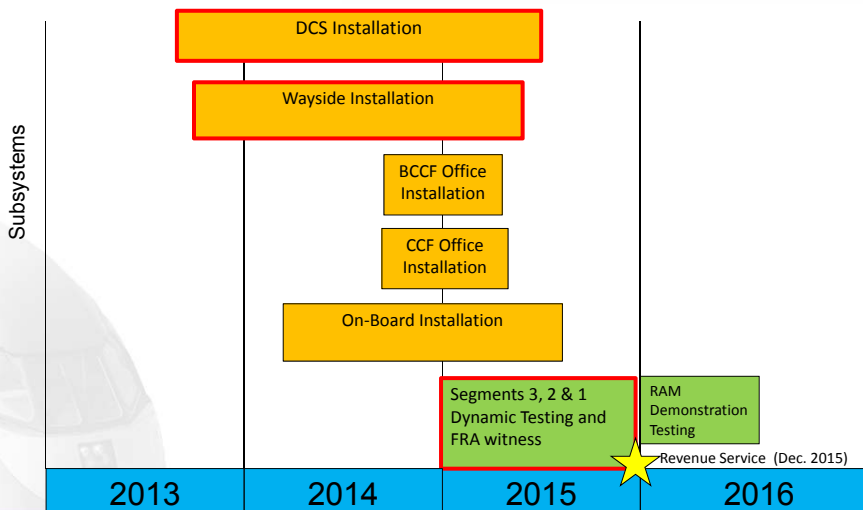
## Installation

# Construction South to North

- Segment 3 (8 miles)**
- SJ
- Santa Clara (S of Lafayette St)
  
- Segment 2 (36 miles)**
- Santa Clara (N of Lafayette St)
- Sunnyvale
- Mountain View
- Palo Alto
- Menlo Park
- Atherton
- Redwood City
- SMC
- San Carlos
- Belmont
- San Mateo
- San Bruno
- SSF (S of Oyster Point)
  
- Segment 1 (8 miles)**
- SSF (N of Oyster Point)
- Brisbane
- SF



# Milestones (Entire Corridor)

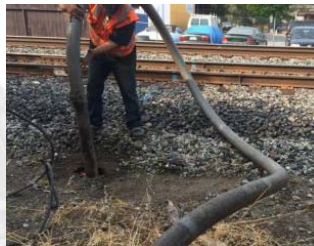


Note: Red frame, public may notice activity



## Data Communications Subsystem (DCS)\*

- Potholing, boring, conduit, fiber, base stations
- Segment 3: 100% complete
- Remaining work: San Mateo, San Bruno, San Francisco (including tunnels)



Potholing



Preparing to install fiber

\* Public may notice activity

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## Wayside\*

- Modules installed at key system points, work includes associated gate activity
- 100% complete



\* Public may notice activity

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## (Backup) Central Control Facility

- Modify BCCF space and install equipment
- BCCF Work: 100% complete
- CCF: Connectivity to BCCF established
- Preparing for testing of control center functions

## Onboard Equipment

- Install vehicles with equipment at CEMOF as part of regular maintenance
- Vehicle Installation: 74% complete



Onboard Equipment



Simulator for training

## Testing

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## Testing (Static & Dynamic\*)

- Ongoing verification / validation
- DAX Testing
  - Test specific roadway crossings; train travels 4 miles either side of crossing to reach full speed
  - Notification sent prior to work
  - All segments: 100% complete
- Field Integration Testing (FIT) Preparation
  - Testing all components with train
  - Multiple nights a week; ~3-4 hours per night
  - Scheduled testing begin S to N: Summer 2015
  - Notification will be sent prior to work

\* Public may notice activity

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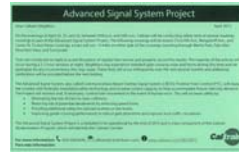
## Testing Continued

- Federal Railroad Administration (FRA) Testing
  - At FRA's discretion, onsite visit
  - Could start summer 2015
- Reliability & Maintainability (RAM) Demonstrations Testing
  - In-service monitoring of how the system performs
  - Scheduled January to June 2016

## Public Outreach

## Outreach To Date

- Activities
  - CSCG (7 meetings)
  - LPMG (5 meetings, next 6/25/15)
  - One-on-one (each of the 17 cities/3 counties)
  - Community Groups, as requested (8 meetings)
- Communication tailored to location
  - Direct mailers (40), flyers stations
  - Website, social media, email, phone
  - City/County staff coordination



## Complaints (since Sept. 2013)

- First 12 months
  - 5 people (noise, foliage disturbed, mud on street)
  - General questions about the project
- Next 15 months
  - 3 people (noise)
  - General questions about the project

## Next Steps

- Activities
  - Community Groups Meetings (as requested)
- Communication
  - Direct mailer residents
  - Website, social media, email, phone
  - Separate installation and testing notices
- Ongoing City/County staff coordination

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## Questions

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## Memorandum

**Date:** June 25, 2015

**To:** CalMod Local Policy Maker Group (LPMG)

**From:** Marian Lee, CalMod Executive Officer

**Re: Real Estate Update**

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At the June JPB meeting, Caltrain staff provided an update on the real estate process for the Peninsula Corridor Electrification Project (PCEP). The LPMG will receive the same presentation (attached).

As identified in the PCEP Environmental Impact Report (EIR), there is a limited need for acquisition of new right-of-way (ROW) for two Traction Power Facilities (TPF) and Overhead Contact System (OCS) poles and wires. In most cases, the OCS poles will be placed within the Caltrain ROW. Where ROW is needed for the OCS outside the ROW, it is slivers of land, not complete parcels and does not include any buildings. In some areas, there is also a need for an Electrical Safety Easement (ESZ).

As the design is further refined, the total number of impacted parcels is expected to decrease, compared to the Final EIR number. The process with property owners will be friendly.



# Peninsula Corridor Electrification Project Real Estate Process

LPMG  
June 25, 2015



## Real Estate Need

- Project Need
  - Traction Power Facilities
  - Overhead Contact System Poles
  - Electric Safety Zone
- Identified in FEIR
- Approach
  - Friendly
  - Eminent Domain (only if needed)



## Scope

- Most project improvements within right of way (ROW)
- Limited land needed outside of ROW
  - Narrow strips for poles and ESZ
  - 2 TPF outside of rail right of way

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## Scope continued

Number of Parcels	San Francisco County	San Mateo County	Santa Clara County	Total
PCEP ROW Needs (Fee and Easement)	5	102	56	163

Note: Based on FEIR

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## Process

- Friendly
  - Contact property owners
  - Appraisal and negotiate
  - Written offer
  - Closing
- Eminent Domain (only if needed)
  - Additional time
  - Use cooperative agreement with VTA, SamTrans and City and County of San Francisco
- Complete acquisition by fall 2017

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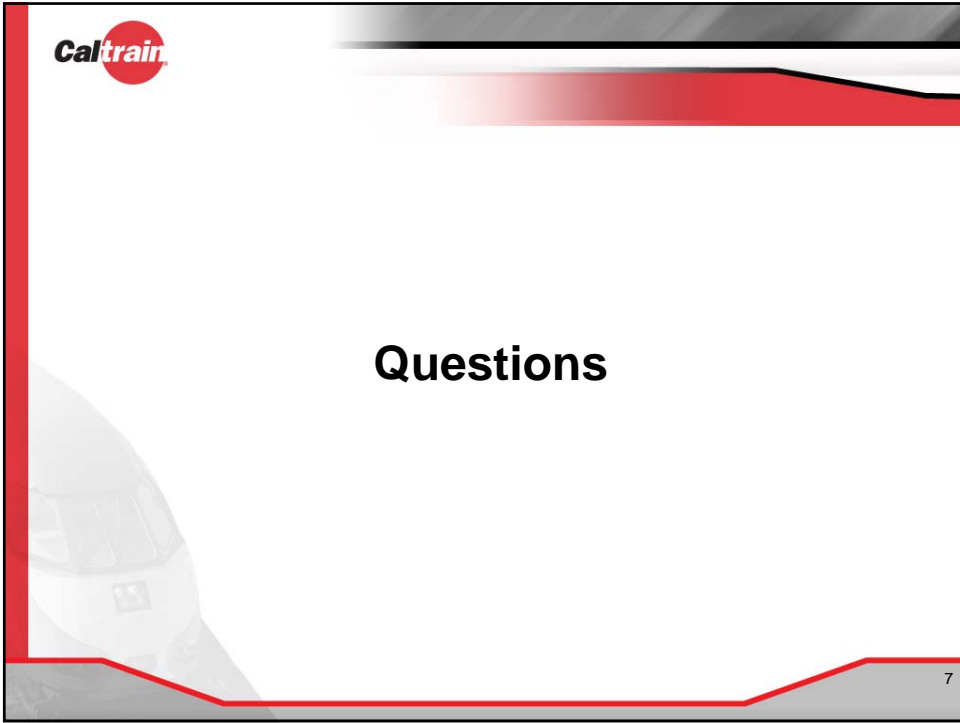
## Next Steps

- May to Summer
  - Contact property owners
  - Begin appraisal process
- JPB Items to Come (Summer)
  - Delegation of Authority
  - Cooperative Agreements with VTA, SamTrans, and City and County of San Francisco
  - Secure real estate services contract

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# Questions





**CalMod Local Policy Maker Group (LPMG)  
Summary Meeting Notes for May 28, 2015**

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**Summary Notes**

The purpose of these notes is to capture key discussion items and actions identified for subsequent meetings.

**Members Present**

City / County	Representative or Alternate	Present	
		Yes	No
Atherton	C. Wiest	X	
Belmont	C. Stone	X	
Brisbane	C. Lentz	X	
Burlingame	J. Root	X	
Menlo Park	R. Cline		X
Millbrae	R. Holober	X	
Mountain View	C. Clark		X
Palo Alto	P. Burt	X	
Redwood City	B. Pierce		X
San Bruno	K. Ibarra		X
San Carlos	R. Collins	X	
San Francisco	S. Gygi	X	
San Jose	A. Kalra		X
San Mateo	Jack Mathews	X	
Santa Carla	Jamie Matthews		X
South San Francisco	K. Matsumoto	X	
Sunnyvale	J. Davis		X

**CHAIR** – Supervisor Adrienne Tissier

**VACANT SEAT(S)**: San Francisco County, San Mateo County, Santa Clara County

**CALMOD TEAM PRESENT**: D. Chung, D. Couch, C. Fromson, M. Lee



## JPB Staff Report

- The CBOSS PTC installation work is nearing completion and testing activities are increasing. On June 6 and 7, there will be a bus bridge in place at the Bayshore, 22<sup>nd</sup> Street and 4<sup>th</sup> and King Stations while work takes place in the SF tunnels. Extensive outreach to customers is taking place to make sure they know about the service change. A presentation on the CBOSS PTC project will occur at the July meeting.
- As identified in the EIR process, there are slivers of land that need to be acquired by fee or easement adjacent to the right-of-way for the Electric Safety Zone (ESZ) and Overhead Contact System (OCS). In the coming weeks, after additional review of the design, the real estate team will begin reaching out to property owners, starting in the southern part of the corridor. Should you or your constituents have any questions about the process, please call 650.508.6499 or [calmod@caltrain.com](mailto:calmod@caltrain.com)

*LPMG members' key comments include the following:*

- *One member asked about potential impacts to buildings along the right-away. (Staff noted that there are no buildings that need to be acquired for the OSC or ESZ. A presentation on the real estate process will occur at the July meeting.)*

*Public Speakers:*

- *A public speaker stated the DB RFP contains language on a signal redesign that appears to be very expensive and duplicative of the CBOSS PTC System. (Staff Note: The main change to the signal system will be a switch from the current DC system to an AC power system, which is needed for the electrified infrastructure. The signal system upgrade will not replace the CBOSS PTC system but will be integrated with the CBOSS PTC system. The scope of work includes new wayside equipment and new wiring in the signal houses. Much of the current equipment is reaching the end of its useful life and the upgrade is timely).*
- *A public speaker expressed support for the LPMG discussing the topic of grade separations. The speaker also expressed support for the LPMG becoming more involved in the planning for the downtown extension to the Transbay Terminal Center as it will be a very important future Caltrain station.*



## Information/Discussion Items

### EMU Procurement: Boarding Height Compatibility with HSR

The LPMG received a presentation on different EMU boarding height strategies that will not preclude level boarding and shared platforms with high speed rail trains in the future. While level boarding and high speed rail service is not part of the electrification project, decisions today about Caltrain's EMU car design will set the height at which Caltrain can achieve level boarding in the future and at which stations Caltrain could have shared platforms with high speed rail.

The presentation outlined the staff recommendation to procure vehicles with two sets of doors but keep the high doors sealed and place seats in front of the doors. When more information is known about the blended system, the JPB will reevaluate use of the doors and potential vehicle reconfigurations. Between May and June, staff will provide the same information and presentation to other agencies / stakeholders as requested. The feedback from these public meetings will help inform the draft RFP and JPB action on the final RFP at the July 2, 2015 meeting.

*LPMG members' key comments include the following:*

- *One member asked why HSR is at a different height and if it is possible for HSR to modify their trains to be closer to Caltrain's height. (Ben Tripousis, Northern California Regional Director from the California High Speed Rail Authority, provided an explanation that the HSR trains that board at the ~50 height are able to meet their speed requirements and are better suited for their statewide needs.)*
- *One member asked about the fare evasion rates for Caltrain. (Staff responded that based on ridership and fare revenue data, it appears that fare evasion is not a significant issue.)*
- *One member expressed support for highlighting the imbalance of state/federal dollars spent on the corridor compared to the economic value the corridor provides for the state. The member also stated that it is important to clarify elements that can increase capacity verse improve service. The member was interested in information about how and when additional capacity improvements, beyond electrification, are needed.*
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- *One member asked a clarifying question about whether or not trains can run closer together to increase capacity. (Staff responded that yes, with CBOSS PTC and EMUs, the trains can run closer together and increase the number of trains in the peak hour.)*
- *One member asked if it was possible to add more high blocks at stations instead of modifying trains. (Staff responded that Caltrain did not look in detail at the strategy of different heights within a platform, the focus has been on modifying the vehicle to meet different heights.)*
- *One member stated the importance of the Transbay Terminal Center for HSR and Caltrain. The member stressed the importance of making the station function more efficiently through reducing dwell times and providing common platform heights.*
- *One member questioned the logic of making so many changes to the whole system, based on one SF station interested in common platform heights. Raising all the platforms to ~50" would have significant impacts. (Brian Dykes, from Transbay Joint Powers Authority, explained that platform interoperability at Transbay Terminal Center is critical and makes sense for the rest of the system for recoverability when there are incidents on the tracks.)*
- *One member asked about the operation logistics of the traps. The member also asked if funding for platform improvements was available and how the construction phasing would occur. (Staff responded there are several operational disadvantages to the traps option which is why staff is recommending the two sets of door option. Construction efforts would be a multi-year process and be very complicated to do while maintaining daytime service for customers.)*

*Public Speakers:*

- *A public speaker expressed interest in the Federal Railroad Administration (FRA) thoughts on the common platform height topic.*
- *A public speaker stated the importance of the Transbay Terminal Center. The speaker also expressed support for common platform heights because they could be less expensive than dedicated platforms and enable a better experience for riders.*



## EMU Procurement: Seats / Standees / Bikes / Bathrooms

The JPB will need to provide policy guidance on balancing seats, standee space, bikes on board and bathrooms in the new EMU cars. The presentation that was provided to the LPMG outlined the staff recommendations for these elements: increase overall seats/standees/ bike capacity; apply a ratio of nine seats for every one bike space onboard; invest in wayside bike capacity such as e-lockers; provide more comfort for standees; and no bathrooms onboard.

*LPMG members' key comments include the following:*

- *One member expressed support for providing more information, such as on the electronic station signs, about when the bike cars have reached capacity. The member also expressed support for developing a system that has a more predictable, and frequent schedule.*
- *Several members expressed concern about the recommendations for no bathrooms on the trains.*
- *One member suggested charging to use the onboard bathroom.*

*Public Speakers:*

- *A public speaker supported France's recent train order of 840 trains for \$10 billion. Train length is also very important because 700 feet is needed so two Caltrain trains can fit on the same platform at Transbay Transit Center. The train has many benefits and is "revolutionary."*

## **Public Comments**

- *A public speaker suggested Caltrain follow similar fare evasion prevention practices used in UK and make sure at 4<sup>th</sup> and King customers are not allowed to board until they have paid.*

## **LPMG Member Comments/Requests**

- None