



Caltrain Modernization Program

Transbay Joint Powers Authority
Citizen Advisory Group
January 14, 2014



About Caltrain

- Diesel commuter rail system
- San Francisco to San Jose area
- 77 mile corridor, 32 stations
- 92 trains / weekday
- Ridership: ~ 50,000 / weekday



Beneficial Partnership

- Caltrain
 - Prioritized electrification
 - Owns corridor
 - Needs funding
- CHSRA
 - Needs electrified corridor
 - Needs corridor to SF
 - Brings funding

California High-Speed Train Map, Statewide Overview



April 2010

Blended System Vision

Community-driven Approach

2-track System (Primarily)

Up to 110 mph

Partially Grade Separated

6 Caltrains / per peak hour per direction

Up to 4 HSR trains / per peak hour per
direction*

*Based on LTK computer model simulation (March 2012)

Policies

- 2012 CHSRA Business Plan
- 2012 Regional 9-party Funding MOU
- 2013 JPB/CHSRA New Agreement

Caltrain Modernization (Early Investment)

- \$1.5 Billion Regional Funding Plan
- Projects
 - Advanced Signal System (2015)
 - Corridor Electrification and EMUs (2019)



Advanced Signal System

Communications Based Overlay Signal System (CBOSS)
Positive Train Control (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
- Caltrain
 - Enhanced crossing safety / performance
 - Improved headways and operational flexibility
 - Enforcement of scheduled station stops
 - Schedule management
 - Employee In Charge

Delivery Milestones

Description	Milestones
Project Planning and Procurement	2010 - 2011
Phase 1 - Critical Design	2012 – 2013
Phase 2 - Final Design, Data Communications Subsystem & Fiber Backbone Installation	2013 – 2014
Phase 3/4 - Installation, Testing, Commissioning	2014 – 2016 (Revenue service Oct. 2015)

Segments – South to North

Segment 1 (SSF – SF) 8 Miles

Segment 2 (Santa Clara - SSF) 36 Miles

Segment 3 (San Jose - Santa Clara) 8 Miles

Segment 3
SJ
Santa Clara (S of Lafayette St)

Segment 2
Santa Clara (N of Lafayette St)
Sunnyvale
Mountain View
Palo Alto
Menlo Park
Atherton
Redwood City
San Mateo County
San Carlos
Belmont
San Mateo
San Bruno
SSF (S of Oyster Point)

Segment 1
SSF (N of Oyster Point)
Brisbane
SF



Corridor Electrification and Electric Multiple Units (EMUs)



Scope

- Area
 - 51+ miles
 - SF to Tamien in SJ
- Service
 - Up to 79mph
 - 6 trains / hour / direction
 - Mixed-fleet service (interim period)
- 25KV AC Electric Service
 - Poles, OCS, Traction Power Facilities



Delivery Milestones

Activity	2013	2014	2015	2016	2017	2018	2019
Stakeholder Outreach	█	█	█	█	█	█	█
Establish Owner's Team	█						
Environmental Clearance	█	█					
Procure/Select Contractor Team		█	█				
Design/Manufacture/Build				█	█	█	█

*Design Build Delivery Method Approved by JPB September 2013

CalMod Partnerships

- Boards / Elected Officials
 - Joint Powers Board (JPB); Local Policy Maker Group (LPMG); City Councils / Committees
- Advisory Committees
 - Citizen Advisory Committee; Bicycle Advisory Committee
- Staff
 - City / County Staff Coordination Group; Peninsula Corridor Working Group
- Community Leaders / Advocacy Organizations

Blended System

Caltrain/HSR Blended System

- Revenue Service (2026 – 2029)
- Continued Planning
- Additional Investments TBD
 - Caltrain extension to SF downtown
 - HSR stations
 - Grade separations
 - Passing tracks
 - Maintenance facility

Q/A

