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
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

<table>
<thead>
<tr>
<th>Description</th>
<th>Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Planning and Procurement</td>
<td>2010 - 2011</td>
</tr>
<tr>
<td>Phase 1 - Critical Design</td>
<td>2012 – 2013</td>
</tr>
<tr>
<td>Phase 2 - Final Design, Data Communications Subsystem &amp; Fiber Backbone Installation</td>
<td>2013 – 2014</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder Outreach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish Owner’s Team</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Clearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procure/Select Contractor Team</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design/Manufacture/Build</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*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