



## Peninsula Corridor Electrification Project

### Draft Environmental Impact Report

Public Meeting



### **Purpose of Tonight's Meeting**

- Provide an overview of Draft Environmental Impact Report (Draft EIR)
- Receive comments, including formal written comments
  - All substantive comments (oral/written) will be considered, but only substantive written comments will receive written responses in Final EIR
- Review next steps in the process



## Meeting Guidelines

- Meeting purpose to obtain comments on the DEIR
- Please respect one another and provide constructive input
- Speakers will be called one person at a time after presentation.
- Tonight is about listening to comments; we won't be responding to comments tonight.
- Be aware of time constraints
- Focus comments on the Peninsula Corridor Electrification Project and environmental analysis
- Please no cell phone usage during meeting

3



## Context

4

## Caltrain Modernization Program

- ~\$1.5 Billion Early Investment Program
  - CBOSS PTC (2015)
  - Peninsula Corridor Electrification Project (2019)
- Caltrain/HSR Blended System



5

## Project History

- JPB Strategic Plan (1999, 2004)
- Conceptual Design (2002)
- Draft EA/EIR (2004)
- 35% design complete (2008)
- Final EA/EIR & Finding of No Significant Impact (FONSI) (2009)
- State clearance postponed

6

## 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				█	█	█	█



\*Schedule subject to change

7

## PCEP DEIR

8

## CEQA Requirements

- Identify environmental baseline
- Analyze direct, indirect and cumulative impacts
- Compare impacts to significance criteria
- Identify feasible mitigation for significant impacts
- Consider alternatives
- “Reasonable worst-case” assumptions as conservative approach

9

## Project Purpose and Need

- Improve Caltrain system performance
- Increase service & ridership
- Increase revenue & reduce cost
- Reduce environmental impacts
- HSR compatible electrical infrastructure

10

## Project Description

Area	Project	Service*
51+ miles San Francisco to San Jose (Tamien Station)	Electrification: <ul style="list-style-type: none"> <li>Overhead Contact System (OCS)</li> <li>Traction Power Facilities</li> </ul> Electric Multiple Units (EMUs)	Up to 79 mph More service: <ul style="list-style-type: none"> <li>6 trains/per peak hour/per direction (12 trains per hour)</li> <li>Restore Atherton &amp; Broadway service</li> </ul> Mixed diesel / EMU fleet Cont. Caltrain diesel service to Gilroy Cont. tenant service

\* Based on prototypical schedule produced for DEIR

## Visual Simulation



## Right of Way Needs

- Most in Caltrain ROW
- Traction Power Facilities
  - 2 substations
  - Up to ~1.5 acres total
- OCS (Poles/Wires)
  - Based on 35% design
  - ~2 out of 102 miles of OCS alignment

13

## Electric Safety Zone Need

- Easement for safety
  - No trees within 10 ft. of OCS
  - No structures within 6 ft. of OCS
- Guidance
  - 25kV properties
  - Industry standards
- Up to ~18 acres along 51+ mile corridor
  - ~22 miles out of 102 miles along both sides of ROW

14

## DEIR Structure

DEIR	Environmental Clearance
Project Analysis (2020)	Yes
Cumulative Analysis (2040)	No

Note: 2013 JPB/CHSRA New Agreement identifies JPB as lead agency for environmental clearance of the PCEP and CHSRA as lead agency for environmental clearance of the HSR Blended System.

## Key Regional Benefits

Benefit	2020	2040 (all EMU + DTX)
Total Ridership (Daily)	69,000	111,000
Reduced Vehicle Miles Travelled (Daily)	235,000	619,000
Reduced Air Pollution (Daily)	56% to 84%	77% to 96%
Reduced Greenhouse Gases (Annual)	68,000 Metric Tons of CO <sub>2</sub> equivalent	177,000 Metric Tons of CO <sub>2</sub> equivalent



## Environmental Impact Issues

- Key Impact Areas
  - Construction Noise; Operational Aesthetics; Traffic
- Other CEQA Subject Areas
  - Air Quality, Biological Resources, Cultural Resources, Electromagnetic Fields/Interference (EMF/EMI), Geology, Seismicity and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Waste, Hydrology and Water Quality, Land Use and Recreation, Operational Noise; Population and Housing, Public Services and Utilities; Other Transportation
- Cumulative Impacts
- Alternative Analysis

17

## Stakeholder Key Concerns

- Trees
- Overhead Contact System
- Noise
- Electromagnetic Fields/Interference
- Local Traffic
- Station Access
- Freight

18

## Trees

- Along Caltrain route (SF to Gilroy): ~19,000
- Worst-Case Impact
  - Removal of 2,200 trees
  - Pruning of 3,600 trees
- Mitigation Strategies
  - Avoidance and Minimization (OCS Pole Options)
  - Replacement Plan
  - Significant after mitigation (aesthetics)

19

## Overhead Contact System

- Poles and Wires
  - Poles ~200 feet apart along rail corridor
  - Poles 30 to 50 feet tall
  - Wires between poles
- Project Impact
  - Changes in visual aesthetics along tracks and at Caltrain stations
- Mitigation Strategies
  - OCS design & treatments
  - Less than significant after mitigation (aesthetics)

20

## Visual Simulation



## Visual Simulation

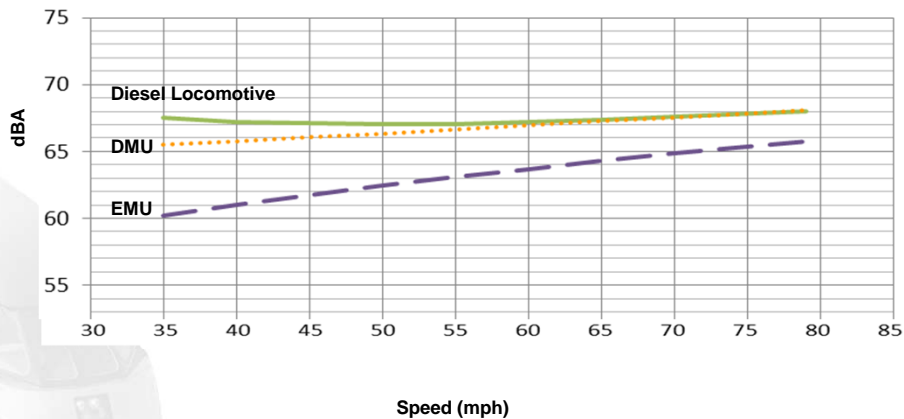


## Noise

- Project Noise
  - EMUs quieter than diesel locomotives
  - More trains result in more horn soundings\*
  - TPF (Traction Power Facilities)
- Noise Study Results
  - 49 locations analyzed
  - Significant impact at one TPF in SSF (FTA thresholds)
- Mitigation Strategies
  - Design treatment
  - Less than significant after mitigation

\* Note: Train horns required by federal law

## Operational Train Noise Levels



## Electromagnetic Fields/ Electromagnetic Interference

- EMF: Electrical and magnetic fields
  - Generated from OCS, electric trains, and TPF
  - EMF levels less than health thresholds for General Public exposure along ROW
- EMI: Effect on equipment
  - Potential effects on sensitive electronic equipment
  - Design treatment mitigation
  - Less than significant after mitigation

25

## Local Traffic

- Overall Traffic Congestion Reduction
- Project Impacts\*
  - More trains increase gate down time
  - EMUs decrease gate down time
  - More riders increase local traffic at stations
  - 82 intersections studied (21 impacted)
- Mitigation Strategies
  - Signal improvements
  - Local roadway improvements
  - Significant impact at 9 intersections after mitigation

\*Note: CBOSS, which minimizes gate down time, is assumed to be in place

26

## Station Access / Egress

- Bicycle Access
  - Continuation of bikes on board program
  - Continuation of wayside facility improvements
- Pedestrian Access
  - All stations adequate except at the 4th and King Terminus
  - Access improvements in partnership with San Francisco
- Parking Demand
  - Demand exceeds supply at 7 stations
  - ~1,000 riders may not be realized due to parking deficit
- On-Going Improvements with Local Agencies
  - Caltrain Access Program Policy
  - Caltrain Bicycle Access and Parking Plan

27

## Freight Rail

- Existing Tunnel and Bridge Constraints
- Project Evaluation
  - Vertical clearance impact from OCS
  - Constrained operating window from FRA waiver temporal separation requirement\*
- No Project-Level Impact
  - Tunnel notching /track lowering mitigation
  - Existing freight can be accommodated

\*Note: May not be needed if FRA rulemaking on Alternative Compliant Vehicle in place

28

## Alternatives

- 51 Scoping Alternatives
- Screened Alternatives
  - Feasibility
  - Project purpose and need
  - Environmental effect
- Analyzed in DEIR
  - The No Project Alternative
  - Diesel Multiple Unit Alternative (*public interest*)
  - Dual-Mode Multiple Unit Alternative (*public interest*)
  - OCS Construction Alternative: Factory Train

29

## Cumulative Analysis

30

## Cumulative Analysis

- Project Contributions to Cumulative Impacts
- Cumulative Projects
  - Rail Projects in Caltrain Corridor
  - Other Transportation Projects
  - Local Development along Corridor
- Key Rail Projects
  - High Speed Rail (HSR) Blended Service
  - SF Downtown Extension and Transbay Transit Center
  - Tenant railroad service expansions

31

## HSR Blended System

- Conceptual cumulative analysis only
- HSR service
  - 2 to 4 trains per peak hour/per direction
  - Up to 110 mph
- Improvements
  - Stations at SJ (Diridon), Millbrae, SF (Transbay Transit Center)
  - RWC Station TBD
  - System improvements, grade separations, passing tracks, maintenance yard

32



## Key Cumulative Effects

- Beneficial Effects
  - Air Quality/Reduced GHG
  - Regional Traffic
- Potential Adverse Effects
  - Aesthetics/Land Use
  - Noise and Vibration
  - Local Traffic
  - Freight Rail
- Mitigation of Caltrain funding contribution on a fair-share basis / existing agreements

## Next Steps

## Key Milestones

- Notice of Preparation (1/31/13 – 3/18/13)
  - Circulated widely
  - 4 public meetings
- Develop DEIR (Mar 2013 – Feb 2014)
  - Reviewed comments
  - Surveys / technical analysis
  - Riders / community outreach
  - Agency coordination
  - Stakeholder/cities coordination

35

## Key Milestones, Continued

- ➔ DEIR Comment Period (2/28/14 – 4/29/14)
  - Notice of Availability, circulated widely
  - DEIR available website, libraries, clearinghouse
  - 4 public meetings
  - 60-day comment period (longer than required)
  - [www.caltrain.com/electrification](http://www.caltrain.com/electrification)
- Final EIR (Fall 2014)
- JPB Certification /Adoption (Winter 2014)

36



## Public DEIR Meetings

### Caltrain Office

1250 San Carlos Ave., San Carlos

**Tuesday, March 18, 2014**

Public Meeting: 6pm-8pm

### Redwood City Library

1044 Middlefield Rd, Redwood City

**Wednesday, April 2, 2014**

Public Meeting: 6pm-8pm

### San Jose Main Library

150 E San Fernando St, San Jose

**Monday, April 7, 2014**

Public Meeting: 6pm-8pm

### UCSF Mission Bay

Genentech Hall Room N114

600 16<sup>th</sup> St, San Francisco

**Wednesday, April 9, 2014**

Public Meeting: 6pm-8pm

37



## Public Comments

- Each speaker limited to 3 minutes
  - If large number of speakers, may be reduced to 2 minutes
- All comments will be considered
- Only written comments will be responded to in the Final EIR

38



## Comments on DEIR

- All substantive comments (oral/written) will be considered
- Substantive written comments will receive written responses in Final EIR
- Encourage stakeholders to attend public meetings
- Written comments can be submitted to:
  - Email: [electrification@caltrain.com](mailto:electrification@caltrain.com)
  - Mail: Caltrain, Attn: Stacy Cocke, P.O. Box 3006 San Carlos, CA 94070