Local Policy Maker Group (LPMG) Meeting

Thursday, February 28, 2019
5:30 p.m. – 7:30 p.m.
SamTrans Offices – Bacciocco Auditorium 2nd Floor
1250 San Carlos Ave., San Carlos

Agenda

1. Staff Report
2. Selection LPMG Vice Chair
3. Caltrain Business Plan
4. Caltrain Electrification Project
5. HSR Updates (Presented by California High-Speed Rail Authority Staff)
6. Public Comments
7. LPMG Member Comments/Requests
   a. Grade Separation Toolkit
8. Next Meeting
   a. Thursday March 28, 2019 at 5:30pm

All items on this agenda are subject to action
## Local Policy Maker Group Members

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<thead>
<tr>
<th>City / County</th>
<th>Representative</th>
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<tr>
<td>Atherton</td>
<td>Councilmember Cary Wiest</td>
<td>Vice Mayor Rick DeGolia</td>
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<td>Belmont</td>
<td>Councilmember Julia Mates</td>
<td>Mayor Davina Hurt</td>
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<td>Brisbane</td>
<td>Mayor Pro-Tempore Terry O'Connell</td>
<td>Councilmember Cliff Lentz</td>
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<td>Councilmember Cat Tucker</td>
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<td>Councilmember Shelly Masur</td>
<td>Councilmember Janet Borgens</td>
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<td>Councilmember Michael Salazar</td>
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<td>Mayor Mark Olbert</td>
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<td>San Francisco</td>
<td>Ms. Gillian Gillett</td>
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<td>San Jose</td>
<td>Councilmember Sergio Jimenez</td>
<td>Councilmember Devora &quot;Dev&quot; Davis</td>
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<td>Deputy Mayor Diane Papan</td>
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<td>Vice Mayor Patricia Mahan</td>
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CHAIR (JPB Member) Gillian Gillett
VICE CHAIR (LPMG Member) Emily Beach

2.25.19
Memorandum

Date: February 28, 2019
To: CalMod Local Policy Maker Group (LPMG)
From: Sebastian Petty, Senior Advisor
Re: Caltrain Business Plan

Project update
The following is one in a series of monthly project updates for the Caltrain Business Plan. These updates provide a high level summary of project activities and progress and are paired, when applicable, with a presentation that reflects project materials and messaging shared with stakeholder groups during the subject month. The following “February” update covers work completed in late January of 2019 and February of 2019.

ONGOING TECHNICAL WORK
In early 2019 the Caltrain Business Plan team continued intensive technical work on the plan. As reported in the January update, ongoing technical work has included the following activities;

• Development of ridership forecasts for all growth scenarios and interim years
• Continued service planning and analysis including;
  o Detailed terminal planning related to San Francisco and the Diridon Station Area
  o Development of additional options and variant concepts showing flexibility in service scenarios and highlighting connections to regional, megaregional and state networks
  o Initiation of network coding and analysis to dynamically simulate service concepts
• Specification and quantification of capital investments needed to support service scenarios including track and system upgrades, station modifications, fleet and support facilities and grade crossing improvements and separations
• Finalization of key inputs and assumptions into the integrated business model including the calculation of key operating and maintenance costs
• Ongoing organizational assessment work specifying key railroad functionalities, mapping of Caltrain organization and analysis of national and international comparison railroads
• Completion of initial community interface documentation and development of comparison corridor case studies
Public presentation of work resulting from this analysis will begin in March. A brief summary presentation of work already completed (and previously presented publicly) was provided to the CSCG and LPMG in February. This presentation was intended as brief “recap” of the project to date and was used to provide context for new group members. Because the material is repetitive of prior updates the presentation has not been included in this packet but is available on the Caltrain website and at caltrain2040.org.

MEETINGS AND OUTREACH

Stakeholder outreach and engagement activities continued in February with a number of events that covered material related to service planning. The following major meetings occurred in February;

- Update to the Sam Mateo County Transit District Board of Directors (February 6)
- Update to the Valley Transportation Authority Board of Directors (February 7)
- Reddit “Town Hall” (February 8)
- Caltrain Business Plan Ad Hoc Meeting (February 18)
- City and County Staff Coordinating Group Meeting (February 20)
- Caltrain Citizens Advisory Committee (February 20)
- Local Policy Maker Group Meeting (February 28)

The Project Partner Committee (PPC) held its regular, full meeting on February 5. Sub groups of the Project Partner Committee met to discuss the technical details of terminal planning for the North Terminal on February 5 and for the South Terminal on February 15.

NEXT STEPS

The first part of the Business Plan is focused on the development of a long-range service vision for the railroad accompanied by an assessment of the community-corridor interface and the Caltrain organization. The remainder of the project will be focused on the creation of the implementation plan, including a detailed business plan and funding approach. The Business Plan team will continue to provide monthly updates throughout the Business Plan. Over the next several months the team will provide significant updates on further service planning details, ridership projections, and capital and operating costs associated with each scenario.
Caltrain Business Plan

FEBRUARY 2019

LPMG

February 28, 2019

Caltrain Business Plan
Project Update
What is the Caltrain Business Plan?

What
Addresses the future potential of the railroad over the next 20-30 years. It will assess the benefits, impacts, and costs of different service visions, building the case for investment and a plan for implementation.

Why
Allows the community and stakeholders to engage in developing a more certain, achievable, financially feasible future for the railroad based on local, regional, and statewide needs.

What Will the Business Plan Cover?

Technical Tracks

Service
- Number of trains
- Frequency of service
- Number of people riding the trains
- Infrastructure needs to support different service levels

Business Case
- Value from investments (past, present, and future)
- Infrastructure and operating costs
- Potential sources of revenue

Community Interface
- Benefits and impacts to surrounding communities
- Corridor management strategies and consensus building
- Equity considerations

Organization
- Organizational structure of Caltrain including governance and delivery approaches
- Funding mechanisms to support future service
Where Are We in the Process?

Recap - Planning for Service in 2040
2040 Demand

The Caltrain corridor is growing

- Corridor expected to add 1.2 million people and jobs within 2 miles of Caltrain (+40%)¹
- 80% of growth expected in San Francisco and Santa Clara Counties

Major transit investments are opening new travel markets to Caltrain

- Downtown Extension and Central Subway to provide more direct connections to downtown San Francisco
- Dumbarton Rail, BART to San Jose, and improvements to Capitol Corridor and ACE to strengthen connectivity with East Bay
- HSR and Salinas rail extensions to increase interregional travel demand

¹Based on Plan Bay Area forecasts and approved projects by individual cities

2040 Land Use & Transportation Context

1/2 Mile Station Area

1 million people and jobs within 1/2 mile of Caltrain stations

2 Mile Station Area

4.2 million people and jobs within 2 miles of Caltrain stations

Indicates a station where substantial growth beyond Plan Bay Area forecasts is anticipated, but not yet approved.
Exploring the Potential Long Term Demand for Caltrain Service

Using Plan Bay Area numbers for projected growth in jobs and housing, an unconstrained model run of high frequency, all-day BART-like service in the Caltrain corridor suggests that by 2040 there could be underlying demand for approximately 240,000 daily trips on the system.

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<th>Description</th>
<th>2017: 92 Trains/Day</th>
<th>2040: ~360 Trains/Day</th>
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<td>Daily</td>
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<td>Off-Peak</td>
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Throughput Demand vs. Capacity

To comfortably serve the full potential market for rail in 2040, Caltrain would need to operate 8 trains per hour, per direction (TPHPD) with 10 car trains or 12 TPHPD with 8 or 10 car trains.

Seated capacity based on Stadler X2U with different door and bike car configurations. Does not include consideration of potential HSR capacity to serve demand.
In the Spring of 2019 the team will present three growth scenarios to the Board. One “baseline” scenario will reflect past and ongoing Blended System planning efforts while two new scenarios will explore higher levels of growth. Each scenario will provide a detailed picture of how the railroad could grow over the next 20-30 years. The Board will be asked to choose one of these growth scenarios as the “Service Vision” for the corridor.

In selecting a long range Service Vision the Board will answer the question “How should the railroad grow?” This will allow Caltrain to further optimize and refine the Vision while developing a Business Plan that builds towards the future in a consistent and efficient manner.

### 2040 Service Scenarios

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<th>Date</th>
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<td>2018</td>
<td>Current Operations</td>
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<td>2022</td>
<td>Start of Electrified Operations</td>
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<td>2033</td>
<td>High Speed Rail Phase 1</td>
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<td>2040</td>
<td>Service Vision</td>
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Amount of Investment: Number of Trains

High Growth: 10
Moderate Growth: 8
Baseline Growth: 6

Design Year: 2033
2040 Baseline Growth Scenario (6+4 Trains)

Features
- Blended service with up to 10 TPH north of Tamien (6 Caltrain + 4 HSR) and up to 10 TPH south of Tamien (2 Caltrain + 8 HSR)
- Three skip stop patterns with 2 TPH – most stations are served by 2 or 4 TPH, with a few receiving 6 TPH
- Some origin-destination pairs are not served at all

Passing Track Needs
- Less than 1 mile of new passing tracks at Millbrae associated with HSR station plus use of existing passing tracks at Bayshore and Lawrence

Options & Considerations
- Service approach is consistent with PCEP and HSR EIRs
- Opportunity to consider alternative service approaches later in Business Plan process

Baseline Growth Scenario – Full Day

Weekday Service
- 6 TPH during morning and evening peak periods (3 skip stop patterns at 2 TPH)
- 3 TPH during morning and evening off peak periods (3 skip stop patterns at 1 TPH)
- HSR operates 4 TPH during peak period and 3 TPH during off-peak periods

Weekend Service
- 3 TPH during morning and evening peak periods (3 skip stop patterns at 1 TPH)
- HSR operates three trains per hour

Charts depict Caltrain arrivals only
Baseline Growth – South of Tamien

Weekday Service

- Caltrain: 2 TPH with skip stop service
- HSR: 8 TPH during peak periods and 4 TPH during off-peak periods

Weekend Service

- HSR: 4 TPH throughout the day

Charts depict Caltrain arrivals only

Moderate Growth Scenario (8+4 Trains)

Features
- A majority of stations served by 4 TPH local stop line, but Mid-Peninsula stations are serviced with 2 TPH skip stop pattern
- Express line serving major markets – some stations receive 8 TPH
- Timed local/express transfer at Redwood City

Passing Track Needs
- Up to 4 miles of new 4-track segments and stations: Hayward Park to Hillsdale, at Redwood City, and a 4-track station in northern Santa Clara county (Palo Alto, California Ave, San Antonio or Mountain View. California Ave Shown)

Options & Considerations
- To minimize passing track requirements, each local pattern can only stop twice between San Bruno and Hillsdale - in particular, San Mateo is underserved and lacks direct connection to Millbrae
- Each local pattern can only stop once between Hillsdale and Redwood City
- Atherton, College Park, and San Martin served on an hourly or exception basis
### Moderate Growth Scenario – Full Day

#### Weekday Service

- 8 TPH during morning and evening peak periods (4 local and 4 express trains)
- 6 TPH during early AM, midday, and evenings (2 local and 4 express trains)
- HSR operates 4 TPH during peak period and 3 TPH during off-peak periods

#### Weekend Service

- 6 TPH during early AM, midday, and evenings (2 local and 4 express trains)
- HSR operates 3 TPH

Charts depict Caltrain arrivals only

### Moderate Growth – Capitol & Blossom Hill

#### Weekday Service

- Caltrain: 4 TPH throughout the day
- HSR: 8 TPH during peak periods and 4 TPH during off-peak periods

#### Weekend Service

- Caltrain: 4 TPH throughout the day
- HSR: 4 TPH throughout the day

Assumes 4 track turnaround at Blossom Hill station

Charts depict Caltrain arrivals only
Moderate Growth – Morgan Hill & Gilroy

**Weekday Service**
- Caltrain: 2 TPH during peak periods and 1 TPH during off-peak periods
- HSR: 8 TPH during peak periods (3 stopping at Gilroy) and 4 TPH during off-peak periods (2 stopping at Gilroy)

**Assumes 4 track turnaround at Blossom Hill station**

**Charts depict Caltrain arrivals only**

**Weekend Service**
- Caltrain: 1 TPH throughout the day
- HSR: 4 TPH throughout the day (2 stopping at Gilroy)

High Growth Scenarios (12+4 Trains)

**Features**
- Nearly complete local stop service – almost all stations receiving at least 4 TPH
- Two express lines serving major markets – many stations receive 8 or 12 TPH

**Passing Track Needs**
- Requires up to 15 miles of new 4 track segments: South San Francisco to Millbrae, Hayward Park to Redwood City, and northern Santa Clara County between Palo Alto and Mountain View stations (shown: California Avenue to north of Mountain View)

**Options & Considerations**
- SSF-Millbrae passing track enables second express line; this line cannot stop north of Burlingame
- Tradeoff between infrastructure and service along Mid-Peninsula - some flexibility in length of passing tracks versus number and location of stops
- Flexible 5 mile passing track segment somewhere between Palo Alto and Mountain View
- Atherton, College Park, and San Martin served on an hourly or exception basis
High Growth Scenario – Full Day

**Weekday Service**

- 12 TPH during morning and evening peak periods (4 local and 8 express trains)
- 6 TPH during early AM, midday, and evenings (2 local and 4 express trains)
- HSR operates 4 TPH during peak period and 3 TPH during off-peak periods

**Weekend Service**

- 6 TPH during early AM, midday, and evenings (2 local and 4 express trains)
- HSR operates 3 TPH

Charts depict Caltrain arrivals only

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High Growth – Capitol & Blossom Hill

**Weekday Service**

- Caltrain: 4 TPH throughout the day
- HSR: 8 TPH during peak periods and 4 TPH during off-peak periods

**Weekend Service**

- Caltrain: 4 TPH throughout the day
- HSR: 4 TPH throughout the day

Assumes 4 track turnaround at Blossom Hill station

Charts depict Caltrain arrivals only
High Growth – Morgan Hill & Gilroy

Weekday Service

- Caltrain: 2 TPH during peak periods and 1 TPH during off-peak periods
- HSR: 8 TPH during peak periods (3 stopping at Gilroy) and 4 TPH during off-peak periods (2 stopping at Gilroy)

Weekend Service

- Caltrain: 1 TPH throughout the day
- HSR: 4 TPH throughout the day (2 stopping at Gilroy)

Assumes 4 track turnaround at Blossom Hill station  Charts depict Caltrain arrivals only

Next Steps
Additional Service Planning

Terminal Planning

Ongoing Work

- Detailed terminal planning working sessions underway in partnership with San Francisco and San Jose staff
- Key topics in San Jose
  - Platform configuration at Diridon and Tamien
  - Turnback opportunities at Blossom Hill
  - Interface with Capitol Corridor and ACE
- Key topics in San Francisco
  - Service levels to Salesforce Transit Center and 4th & Townsend
  - Ongoing needs at 4th & King
- Continued exploration of service variability and options at terminals within each “Growth Scenario”
Rail Simulation

1. Collect and Input Data into Model
   - Infrastructure
   - Rolling stock
   - Timetable

2. Code Model for Future Scenarios
   - Baseline Growth
   - Moderate Growth
   - High Growth

3. Conduct Model Simulation Runs
   Determines how reliably service scenarios can be operated and iterate as needed

4. Present Model Results
   Summarizes methodology, assumptions, and findings for each scenario and define next steps

Explorations
The project team is exploring options and variability within the service scenarios as well as how these scenarios might be further adapted to interface with planned and potential passenger rail investments throughout the region. Examples:

1. Further options and variations within growth scenarios
2. Potential Second Transbay Tube
3. Potential Dumbarton rail connection
4. ACE/Capitol Corridor connections
5. Monterey County connection / extension
Costing

1. Gathering Partner Costs
   - Gather information on the cost estimates of partner and city projects (including grade seps) that touch the Caltrain corridor

2. Developing Capital Cost Estimates
   - Develop capital cost estimates of additional infrastructure and fleet improvements needed to support service scenarios

3. Cost Allocation
   - Assign infrastructure improvement costs in each of the growth scenarios

Capital Costs
Business Case Analysis

Building the Business Case

The business case will help the Board select a 2040 Service Vision with a fully informed understanding of what their choice means for the long-term costs and outcomes of the system and to the region as a whole. Once the Board has selected a long range Service Vision the business case can then be further optimized and detailed.

Examples of Major Inputs and Factors Considered within the Business Case Include

- Infrastructure Investments and Renewals
- Fleet Planning and Phasing
- Current and Future Operations
- Ridership and Travel Demand
- Operating Costs and Revenues
- Policy Assumptions
- Direct & Indirect Jobs
- User Benefits
- Societal Benefits
- Land Value
Community Interface & Outreach Update

Key Themes
Community Interface Meeting Results

Service Levels & Schedules
Travel demand and mode split goals in relation to existing and anticipated roadway congestion

Physical Corridor
Grade crossings, grade separations, and the stretches of fencing, walls, and vegetation in between

Land Development
Placemaking, jobs-housing balance, transit-oriented development, and zoning changes

Station Connectivity & Access
Local first/last mile solutions, multi-modal access, and equitable incentive programs
Upcoming Outreach & Community Interface Assessment Activities

Public Outreach

- Project Stakeholders: Continued meetings and engagement
- Public Forums: At SPUR and online (Reddit)
- Community Meetings: Second round of public meetings
- Online Open House: Hosted on project website

Community Interface

- Jurisdiction Meetings: Second round of meetings with jurisdictions
- Technical Documents: Definitions memo and Comparison Corridor Best Practices memo

Website: www.Caltrain2040.org

FOR MORE INFORMATION
WWW.CALTRAIN.COM
Memorandum

Date: February 28, 2019
To: CalMod Local Policy Maker Group (LPMG)
From: John Funghi, CalMod Chief Officer; Casey Fromson, Gov. Affairs Director
Re: Caltrain Electrification Project E-Update

CALMOD KICKS OFF SAFETY CAMPAIGN

Electrification of the Caltrain corridor means big improvements for the Caltrain community, such as reduced noise, better service, and improved air. It also means electric overhead lines will be installed to power the new trains.

These electric overhead lines can also be dangerous and even life-threatening, and so CalMod is introducing a safety campaign highlighting the following rules to keep everyone safe:
• **Be aware of overhead lines**
  Electric overhead lines carry 25,000 volts of electricity and can be dangerous. Treat all overhead lines with respect.

• **Keep yourself and objects away**
  Never approach overhead lines with things like ladders, antennas, metallic balloons, and most importantly, yourself!

• **Stay away from damaged lines**
  If you see a downed or otherwise damaged overhead line, stay at least 25 feet away.

**ELECTRIFICATION INFRASTRUCTURE UPDATE**

In February, crews began foundation installation in San Jose and Santa Clara while continuing pole installation from South San Francisco to Menlo Park. Crews also continued grouting and notching work in the four San Francisco Tunnels.

To sign up for weekly construction updates or for more construction information, visit [CalMod.org/Construction](http://CalMod.org/Construction).
ELECTRIC VEHICLE UPDATE

Interior equipment installation is now occurring in six of the car shells. The upper level is taking shape, as workers install mounting brackets and flooring. First article inspections continued in February, along with static and fatigue testing.

To view more images, visit CalMod.org/gallery.

PUBLIC MEETINGS

Sunnyvale Community Meeting – March 7, 2019 at 6:30 p.m.

For more details, and a full list of upcoming meetings, please visit CalMod.org/events.

DETAILED PROGRESS REPORT

- PowerPoint presented to Caltrain Board on February 7, 2019
- December Monthly Progress Report presented to Caltrain Board on February 7, 2019
Memorandum

Date:       February 28, 2019
To:         Local Policy Maker Group (LPMG)
From:       Boris Lipkin, Northern California Regional Director
Re:         California High-Speed Rail Program Update

STATEWIDE UPDATE
The high-speed rail program has been in the news over the last week since the Governor’s State of the State. With lots of questions being asked, below please find additional information about the State of the State and the recent letter from the Federal Railroad Administration.

CEO Brian Kelly’s Statement on Governor Newsom’s State of the State Address
"The Governor has called for setting a priority on getting high speed rail operating in the only region in which we have commenced construction—the Central Valley. We are eager to meet this challenge and expand the project’s economic impact in the Central Valley.

Importantly, he also reaffirmed our commitment to complete the environmental work statewide, to meet our “bookend” investments in the Bay Area and Los Angeles and to pursue additional federal and private funding for future project expansion. We welcome this direction and look forward to continuing the important work on this transformative project.”

Here is a link to Mr. Kelly’s statement on the Authority’s website here: http://www.hsr.ca.gov/docs/newsroom/2019_BK_Statement_SOS.PDF

Here is a link to Governor Newsom’s State of the State address: https://www.gov.ca.gov/2019/02/12/state-of-the-state-address/

CEO Brian Kelly’s Statement on the Federal Railroad Administration Letter
Yesterday [March 20, 2019] the Federal Railroad Administration (FRA) sent a letter to the California High-Speed Rail Authority advising that it intends to terminate our grant agreement and de-obligate the $928 million in federal funds for the project. The FRA further advised that it is also exploring options to recover the Federal ARRA funds that have already been expended on the environmental documents for the full 520-mile system and for construction in the Central Valley.

The FRA communicated that it has determined that the Authority has failed to comply with the terms of the grant agreements. This determination is both ill-advised and misguided. We are preparing a formal response to the FRA’s letter. Our commitment to delivering the requirements of the grant agreements remains.

We intend to deliver the California high-speed rail program including all Phase 1 environmental documents for the San Francisco to LA/Anaheim system. And we are focusing on advancing the Merced to Bakersfield line as outlined by Governor Newsom in his State of the State address. We are continuing our efforts to deliver this transformational program and to expand the economic
and environmental benefits to the thousands of hard-working families in the Central Valley. Onward.

In Northern California, the planning, project development, and environmental clearance work will continue apace. Key decisions on the timing of construction in the region will come several years from now as the program develops and we work to identify additional funds.

Construction Update
On February 15, the Authority celebrated the completion of the State Route 99 Realignment project in Central Fresno. Other construction activities continue in the Central Valley with significant progress in Madera County, where the bridge deck for the Avenue 8 overcrossing is mostly complete, and in downtown Fresno, where workers are nearing completion of the excavation for the high-speed rail crossing under State Route 180. These activities, along with other, ongoing activities in Construction Packages 1-4, translates into a total of 2,573 construction labor worker jobs as of January 31, 2019.

Follow all construction updates at https://buildhsr.com/construction_update/

NORTHERN CALIFORNIA UPDATE

San Francisco to San Jose Project Section
On January 31, the Authority’s Project Development Committee unanimously approved advancing the date the Authority will identify a Preferred Alternative for the San Francisco to San Jose Project Section from December 2019 to September 2019. This matches the identification of the Preferred Alternative for the San Jose to Merced Project Section and will give the Authority Board of Directors an opportunity to evaluate the Preferred Alternative for both Northern California project sections at the same time at the September Board meeting. There will be extensive outreach to the working groups and the public in July and August leading up to the Board meeting in September.

Community Working Group Meetings
In February 2019, the Authority began the next round of Community Working Group (CWG) meetings in both the San Francisco to San Jose and San Jose to Merced Project Sections. Discussion topics at these meetings include a discussion of the rationale for the identification of a preferred alternative, a presentation by the Early Train Operator (Deutsche Bahn), and an outreach update. The meeting dates and locations are as follows:

- February 21: San Jose CWG at Edenvale Branch Library, San Jose
- March 5: Morgan Hill – Gilroy CWG at Morgan Hill Community and Cultural Center
- March 12: San Mateo County CWG at Millbrae Community Center
- March 14, 2019: South Peninsula CWG at Sunnyvale Community Center
- March 18, 2019: San Francisco CWG at Bay Area Metro Center, San Francisco
Meeting materials will be posted on the Authority’s website as they become available under *Community Meetings* for the respective project sections.

San Francisco to San Jose Project Section
San Jose to Merced Project Section

**New Project Section Flyover Videos**

New flyover videos have been posted to the main page of each project section and will be shown at the current round of working group meetings. Please check them out!

San Francisco to San Jose Project Section Flyover
San Jose to Merced Project Section Flyover

**RECENT AND UPCOMING OUTREACH ACTIVITIES**
- February 2: Shasta/Hanchett Park Neighborhood Association Meeting
- February 19: Santa Clara City Council Study Session
- February 21: San Jose Community Working Group
- March 5: Morgan Hill-Gilroy Community Working Group
- March 12: San Mateo County Community Working Group
- March 13: Mobility Partnership Meeting
- March 14: South Peninsula Community Working Group
- March 18: San Francisco Community Working Group
MEETING AGENDA

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<tr>
<th>Introduction from the Regional Director</th>
<th>Rationale for Preferred Alternative</th>
<th>Early Train Operator</th>
<th>Outreach Update</th>
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Introductions | Preferred Alternative | Early Train Operator | Outreach Update
SAN FRANCISCO TO SAN JOSE ENVIRONMENTAL PROCESS & IDENTIFYING A PREFERRED ALTERNATIVE

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<td>(45-day comment period)</td>
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<td>March 2021</td>
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<td>Final EIR/S &amp; ROD</td>
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<th>Regulatory Checkpoints</th>
<th>May 2016</th>
<th>March 2019</th>
<th>October 2019</th>
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<tr>
<td>A</td>
<td>Purpose &amp; Need</td>
<td>Alternatives A &amp; B</td>
<td>Identification of Preliminary LEDPA</td>
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<td>Range of EIS Reasonable Alternatives</td>
<td>Draft Compensatory Mitigation Plan</td>
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<tr>
<th>Community Outreach</th>
<th>Introductions</th>
<th>Preferred Alternative</th>
<th>Early Train Operator</th>
<th>Outreach Update</th>
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SAN JOSE TO MERCED ENVIRONMENTAL PROCESS & IDENTIFYING A PREFERRED ALTERNATIVE

--- | --- | --- | ---
Environmental Milestones

2009-2017: Summer/Fall 2018
- Project Definition

2018: September 2019
- Preferred Alternative

2019: December 2019
- Draft EIR/S (45-day comment period)

2020: November 2020
- Final EIR/S & ROD

Regulatory Checkpoints

A: Purpose & Need
- Alternatives 1-3
- Range of EIR/S Reasonable Alternatives

B: Alternatives 1-4
- Range of EIR/S Reasonable Alternatives

C: Identification of Preliminary LEDPA
- Draft Compensatory Mitigation Plan
- 408 Determination

Community Outreach
- Introductions
- Preferred Alternative
- Early Train Operator
- Outreach Update

EVALUATION CRITERIA

STEP ONE
Range of Alternatives
- Prop 1A & HSR Business Plan
- HSR Purpose & Need
- HSR Design Criteria
- Feasibility

STEP TWO
Evaluation of Alternatives
- Federal & State Regulations
- Practicability
- Environmental Differentiators

STEP THREE
Board Identification of the Preferred Alternative
- Stakeholder Input on Staff Recommended PA

Community Outreach
- Introductions
- Preferred Alternative
- Early Train Operator
- Outreach Update
PROPOSITION 1A & HSR BUSINESS PLAN

Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century Key Design Features:

- Identifies HSR station cities
- Identifies travel time between key city pairs (e.g. San Francisco to Los Angeles)
- >200 MPH with <5 minute headways
- Following existing transportation or utility corridors and preserving wildlife movement, where feasible
- Access to other modes of transit and minimize sprawl
- Financially viable

PURPOSE & NEED

- Service to more than 90% of the population of California
- Capable of operating at speeds of up to 220 mph
- Consistent with Proposition 1A
**HSR DESIGN CRITERIA**

**Must meet HSR design standards:**
- Speed
- Performance
- Comfort
- Safety
- Operations
- Maintenance

**FEASIBILITY**

**Constructible**
- Construction access and work windows
- Proven construction methods
- Minimize construction impacts

**Affordable**
- Cost effective
- Meet Business Plan funding constraints
- Good steward of public funds

**Maintainable**
- Cost effective
- Durable (100 year service life)
PREFERRED ALTERNATIVE CRITERIA

System Performance, Operations, & Costs
- Alignment length
- Proximity to transit corridors
- Locational effects
- Speed and travel time
- Capital Costs
- O&M Costs

Preferred Alternative Criteria

Environmental Factors
- Analysis will determine which factors are differentiators
- Parks and Recreation Areas
- Historical Sites
- Wetlands
- Environmental Justice

Community Factors
- Acres affected
- Commercial properties
- Residential units
- Schools
- Additional factors identified by communities

Introductions  Preferred Alternative  Early Train Operator  Outreach Update

KEY FEDERAL AND STATE ENVIRONMENTAL REGULATIONS

Federal Regulations
- Federal Clean Water Act (Sections 401, 402, 404, and 408) – Water quality, Wetlands and Waters of the U.S.; federal flood control projects
- Rivers and Harbors Act (Section 10) – Navigable waters
- U.S. Department of Transportation Act (Section 4(f)) – Publicly-funded Recreational Facilities, Wildlife Refuges, Listed Historic Resources
- National Historic Preservation Act (Section 106) – Cultural Resources
- Civil Rights Act (Title VI) – Environmental Justice
- Federal Endangered Species Act (Section 7) – Biological Resources
- National Environmental Policy Act – Environmental review of federal actions

State Regulations
- California Environmental Quality Act – Environmental review of state actions
- California Endangered Species Act (Section 2081) – Rare, Threatened, and Endangered Species
- California Fish and Game Code (various sections) – Biological Resources
- Streambed Alteration (Section 1600 et seq.) – Lake and Streambed Alteration
- Porter-Cologne Water Quality Control Act – Waters of the state; water quality
- San Francisco Bay Conservation and Development Commission (McAteer-Petris Act) – San Francisco Bay resources, Shoreline Uses, and Public Access

Introductions  Preferred Alternative  Early Train Operator  Outreach Update
POTENTIAL ENVIRONMENTAL FACTORS

- Aesthetics and Visual Quality
- Agricultural Farmland
- Air Quality and Global Climate Change
- Archaeological Resources
- Biological Resources
- Cultural and Historic Resources
- Electromagnetic Fields and Electromagnetic Interference
- Environmental Justice
- Geology, Soils, Seismicity, and Paleontological Resources
- Hazardous Materials and Waste
- Hydrology and Water Resources
- Noise and Vibration
- Parks, Recreation, and Open Space
- Public Utilities and Energy
- Regional Growth
- Safety and Security
- Socioeconomics and Communities
- Station Planning, Land Use, and Development
- Transportation
- Wetlands and Aquatic Resources

SOUTHERN CALIFORNIA STAFF REPORTS

Introductions Preferred Alternative Early Train Operator Outreach Update

Introductions Preferred Alternative Early Train Operator Outreach Update
PUBLIC INPUT ON PREFERRED ALTERNATIVE

STEP ONE
Range of Alternatives

STEP TWO
Evaluation of Alternatives

STEP THREE
Authority collects stakeholder input on Preferred Alternative

Board Identification of the Preferred Alternative

Introductions | Preferred Alternative | Early Train Operator | Outreach Update | Public Comment

EARLY TRAIN OPERATOR
Jorge Rios and Hayden West, Early Train Operator
Our Vision

We want that people can’t imagine life without rail

EARLY TRAIN OPERATOR (ETO)
Deutsche Bahn
DB Group

ETO Goals

Team

Business Transfer Approach

Phases and Processes

Transit Oriented Development

California High-Speed Rail
DB Group is one of the largest rail operators in the world.

- **20,800** Miles rail network
- **8,500** "Call a Bike" make us Germany's largest bicycle rental company
- **5,700** train stations
- **25,000** DB passenger trains per day in Germany
- **2.7 billion** passengers per year in trains and buses

**DB’s Value Chain**

We are covering the entire value chain in the railway business.

1. **Feasibility & Finance**
2. **Design**
3. **Build Construction**
4. **Testing & Commissioning**
5. **Operate**
6. **Maintain**

Source: Deutsche Bahn AG / Jet-Foto Kranert
Source: Deutsche Bahn AG / Claus Weber
Source: Deutsche Bahn AG / Pablo Castagnola
Source: Deutsche Bahn AG / Andreas Sahlmann und Kai Michael Neuhold
Source: Deutsche Bahn AG / Oliver Lang
ETO Goals

Goals

SYSTEM READINESS
OPERATIONAL READINESS
SUSTAINABLE OPERATIONS
Team

Business Partners

ACI  Operating high speed rail networks

DB  California engineering bench strength and expertise

Small Business Partners

sagent  ACUMEN  RVB

KL BARTLETT
Business Transfer Approach

1. System Delivery:
   Advise, support and influence all phases of the Rail System

2. Operational Readiness:
   Develop all Deliverables required for Revenue Service

3. Revenue Operation:
   Franchise Agreement negotiations

CHSR/ETO Business Transition from Project Delivery to Operations
Phases and Processes

Phase 1 and 2

Phase 1 Consulting
- General Consulting Services & Key Deliverables
  - System & Operational Readiness
    - Performance specifications
    - Service integration
    - Planning & Forecasting
  - Operations Plan
  - Maint. Plan
  - Alignment with Authority

Phase 2 Franchise Agreement
- Operation Phase
  - Franchise Agreement
  - Pre-Operation
    - Mobilization & Training
    - Performance specifications
    - Small Business participation
    - Safety, Marketing & Passenger info
  - Initial Operation
    - 2nd Phase Financial plan
    - T&C for Systems, Track & Vehicles
    - FRA Certification

Revenue Service
05 Phases and Processes

Implementation and Validation Process of Phase 1 and 2

- Ridership and Revenue Forecasting Review
- Railway Operations Concept
- Requirements Specification
- Draft of O&M Plan
- Cost and Revenue Estimate
- Business Plan Analysis

Iterations & Life Cycle Cost Optimization

Implementation Process of the ETO Phase 2

Pre-Operations

- Franchise Agreement Negotiation
- Mobilization and End state plans
- Infrastructure and Rolling stock T&C System Readiness
- Handover to TOC & Trial Operations Operational Readiness

Ramp-Up

- Start of Revenue service Operations

Stable Operations

06 California High-Speed Rail

STATE CONNECTIVITY - ACCESS TO OPPORTUNITIES

Source: Deutsche Bahn AG / Bartlomiej Banaszak
06 California High Speed Rail

State Connectivity, Economic Development and Access to Opportunities
(DB - Reference Case)

The largest rail construction site in Germany
Upgraded and new lines between Nuremberg and Berlin

Co-financed by the European Union
Trans-European Transport Network (TEN-T)

Germany

33 DB Engineering & Consulting USA Inc. | Early Train Operator California High-Speed Rail | 02.19.2019

34 DB Engineering & Consulting USA Inc. | Early Train Operator California High-Speed Rail | 02.19.2019
Transit Oriented Development (TOD)
Station Design
Walkability/Accessibility

Features of a modern train station
07 TOD
Scales of Influence

Each of the different scales must be analyzed for each specific location working from the scale of the region down to the scale of the street.

Integration of Communities with High-Speed Rail
(DB Reference Case - economic growth of the town Montabaur in Germany)

- 13.8 Mio € CAPEX station
- 2,500 pax/d
- 2,200 created jobs
- 500 car parking spaces
- 205 Mio € private investment
- 80 companies on site

Source: Stadt Montabaur

38 DB Engineering & Consulting USA Inc. | Early Train Operator California High-Speed Rail | 02.19.2019
OUTREACH UPDATE

Morgan Galli, Interim Northern California Regional Stakeholder Manager

SAN FRANCISCO TO SAN JOSE
Community Outreach
Fall 2018/Winter 2019

City/County of San Francisco
San Mateo County
Santa Clara County
Next Steps

- In-language meetings and materials
  - North Fair Oaks (Spanish)
- Service provider meetings and small groups
- Informational tabling and sharing at community events
SAN JOSE TO MERCED COMMUNITY OUTREACH

Next Steps

- In-language meetings and materials
  - Gardner Neighborhood (Spanish)
  - Santa Clara County Vietnamese Community (Vietnamese)
- Service provider meetings and small groups
- Informational tabling and sharing at community events

NORTHERN CALIFORNIA OUTREACH

<table>
<thead>
<tr>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tbody>
<tr>
<td>PA</td>
<td>DEIR/S</td>
<td>DEIR/S</td>
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<tr>
<td>Open Houses and Public Hearing</td>
<td>Summer</td>
<td>Winter</td>
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<tr>
<td>Open Houses</td>
<td>Open Houses</td>
<td>Public Comment</td>
</tr>
<tr>
<td>Community Working Group Meetings</td>
<td>Winter</td>
<td>Spring</td>
</tr>
</tbody>
</table>

Ongoing Outreach

PA = Preferred Alternative
DEIR/S = Draft Environmental Impact Report/Statement
FEIR/S & ROD = Final Environmental Impact Report/Statement & Record of Decision

San Francisco to San Jose Project Section
San Jose to Central Valley Wye Project Extent

Statewide
NorCal Update
Community Outreach
UPCOMING WORKING GROUP MEETINGS

WINTER 2019

San Jose CWG
February 21, 6:00 to 8:30 p.m.
Edenvale Branch Library
San Jose, CA

San Mateo County CWG
March 12, 2019, 6:00 to 8:00 p.m.
Millbrae Community Center
Millbrae, CA

Morgan Hill-Gilroy CWG
March 5, 6:00 to 8:00 p.m.
Morgan Hill Community & Cultural Center
Morgan Hill, CA

South Peninsula CWG
March 14, 2019, 6:00 to 8:00 p.m.
Sunnyvale Community Center
Sunnyvale, CA

San Francisco CWG
March 18, 2019, 6:00 to 8:00 p.m.
Bay Area Metro Center
San Francisco, CA

Introductions
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Early Train Operator
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SAN FRANCISCO TO SAN JOSE FLYOVER VIDEO
https://www.youtube.com/watch?v=T7YH8pOk7oQ
SAN JOSE TO MERCED FLYOVER VIDEO
https://www.youtube.com/watch?v=_Wn3ynHNZ3A&feature=youtu.be

THANK YOU & HOW TO STAY INVOLVED

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WEBSITE www.hsr.ca.gov
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California High-Speed Rail Authority
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instagram.com/cahsra
facebook.com/CaliforniaHighSpeedRail
twitter.com/cahsra
youtube.com/user/CAHighSpeedRail