Local Policy Maker Group (LPMG) Meeting

Thursday, September 27, 2018
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. Caltrain Business Plan
3. Caltrain Electrification Project
4. HSR Updates (Presented by California High-Speed Rail Authority Staff)
5. Public Comments
6. LPMG Member Comments/Requests
   a. Grade Separation Toolkit
7. Next Meeting
   a. Thursday, October 25, 2018 at 5:30pm

All items on this agenda are subject to action
Memorandum

Date: September 27, 2018
To: Local Policy Maker Group (LPMG)
From: Sebastian Petty, Caltrain
Re: Caltrain Business Plan Update

PROJECT UPDATE
The following is the third 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 with an annotated presentation that reflects project materials and messaging shared with stakeholder groups during the subject month. The following “September” update covers work completed in late August and September of 2018.

ONGOING TECHNICAL WORK
The Caltrain Business Plan consulting team is continuing technical work on the Business Plan. Key areas of focus for the team during September have included:

- Continued development of technical modeling tools and approaches that will be used to support the articulation of a 2040 service vision and accompanying business case. Key areas of focus include the development of service and operational planning tools, the specification of a ridership demand model, and the development of an integrated business modeling tool. The consultant team is also working to develop a detailed framework of assumptions and explorations that will be tested and evaluated as part of the technical work program.
- Ongoing interviews and research related to the organizational assessment and initial data gathering related to the identification of peer organizations
- Initiation of formal outreach and interviews with local jurisdictions as part of the community interface assessment

MEETINGS AND OUTREACH
The Project Partner Committee (PPC) held its third meeting on September 4th and provided initial input and feedback on a draft of the attached presentation materials covering the month of September.

The enclosed “September” outreach materials have also gone to the following additional stakeholder groups during August:
• JPB Ad Hoc Committee (September 17)
• City/County/Staff Coordinating Group (September 19)
• Local Policy Makers Group (September 27)

In addition to the above meetings, Caltrain staff also presented more general information about the Business Plan process to the following groups during the month of September;

• The Redwood City Chamber of Commerce (September 13)
• City of Sunnyvale Public Meeting (September 17)

Starting with the October Board meeting, the team will begin an expanded “quarterly” outreach push with an increased number of meetings and presentations anticipated to occur during the October and November timeframe.

AUGUST PRESENTATION
As referenced above, the Business Plan team has developed the attached “September” slide deck to support stakeholder outreach activities in September. This deck was presented to the PPC in draft on their September 4th meeting and was subsequently refined for presentation to the Ad Hoc Committee, CSCG and LPMG in September.

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 process similar to this one. This regular cycle of materials will be paired with more extensive, milestone-based outreach to an expanded group of stakeholders and the public. The first wave of expanded outreach begins with the special session of the October JPB meeting on October 4th.

The monthly October project update and stakeholder meetings will cover the following topics (subject to refinement and change):

• Introduction of “growth scenarios” concept
• Focus on the “planned and programmed” growth scenario
• Discussion of service planning assumptions and evaluation criteria
• Outcomes from initial community interface meetings with local jurisdictions
Rounding out the 2040 Vision
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
Recap of Last Month
Recap from Last Month

Planning within Constraints

The Caltrain corridor is not a blank slate. Over the past decade, the JPB and its partners have made major policy decisions that inform and bound how the railroad will grow and evolve in the future.

- **2008**: CHSRA specifies its alignment
- **2011-2013**: “Blended System” introduced
- **2013-2017**: CHSRA Business Plan confirms Blended System
- **2013-2017**: Senate Bills 1029 and 557 provide Prop 1A funds and codify 2-track blended system
- **2013-2017**: Peninsula Corridor Electrification Program environmentally cleared
- **2013-2017**: Receipt of Federal Full Funding Grant Agreement
- **2013-2017**: Full Notice to Proceed issued
Decisions and commitments that have already been made on the corridor bring three fundamental service planning questions into tension with one another:

1. **Service Differentiation**
   How can local, regional and high speed services be blended and balanced on the corridor to best serve multiple markets?

2. **Peak Service Volume**
   How much growth in peak train traffic volume can the corridor support and what kinds of growth may be required to meet long term demand?

3. **Service Investments**
   What types of investments into operations, systems and infrastructure will be required to achieve the desired types and volumes of service?
Planning within the Corridor-Community Interface

Planning for a long range Service Vision also requires a specific focus on the interface between the rail corridor and the communities it serves. This means thinking about what changes or strategies can be employed in the corridor to maximize the opportunities and benefits of the railroad provides while addressing challenges and mitigating impacts.

Recap from Last Month

Analysis

• Document interface between the railroad and its surroundings
• Understand how the interface could change as the railroad and its surrounding communities grow
• Describe how the corridor-community interface is “managed” today including decision-making, project delivery and funding
• Compare with approaches used by national and international peer rail corridors

Outcomes

• Work with the communities to identify opportunities for how the corridor, not just individual projects, could be better managed to achieve both community and railroad goals
• This includes considering both the appetite and need for a corridor-wide approach to address at-grade crossings
Do you have any questions related to the key Service and Community Interface issues we discussed last month?
Focus on Service
Service Practices and Priorities

Exploring the Market for Service
Planning for the Service We Want

Best Practices
Goals to strive for as we plan the 2040 Service Vision

Balancing Priorities
Considerations that will shape the 2040 Service Vision
Seamless Network Integration

The Caltrain service is part of a statewide, regional and local transportation network.

To get the most out of this network, individual operators must plan, coordinate and administer their services in a way that enhances connectivity and achieves a seamless experience for the customer.
Timed, well-coordinated transfers increase the useability of the rail system and help provide high quality service to a larger range of travel markets. Well coordinated transfers are one tool that can help the system balance the competing goals of coverage vs. travel time and service to high demand markets.
With clock-face scheduling, trains arrive and depart at consistent intervals, like every 10 minutes. This simplicity makes it easy for customers to remember train schedules, which cuts down on travel planning complexity.

This practice is commonplace in many countries with high-quality transit systems.
Expanded all-day service makes the system more useful to a range of different customers and helps build new markets.
Continuous Improvement

Thoughtful long range service planning ensures that capacity, frequency, and connectivity all improve over time.

- **Today**
- **Introduction of Electrified Service**
- **Introduction of Blended Service**
- **2040 Service Vision**
### Balancing Frequency & Travel Time

Working within Pre-Established System Constraints, We Can Blend…

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Frequency &amp; Travel Time</th>
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<tbody>
<tr>
<td><strong>Frequent Service to Many Stations</strong></td>
<td>with slower travel time due to many stops</td>
</tr>
<tr>
<td><strong>Fast Travel Time to Fewer Stations</strong></td>
<td>with longer wait times at skipped stations</td>
</tr>
<tr>
<td><strong>A Balance of Travel Time and Frequency</strong></td>
<td>with transfers required</td>
</tr>
</tbody>
</table>
Balancing Market & Coverage Service

Priorities

Market-Focused Service

Coverage-Focused Service

Stations

Ridership  Number of Trains
Decisions and commitments that have already been made on the corridor bring three fundamental service planning questions into tension with one another:

1. **Service Differentiation**
   How can local, regional and high speed services be blended and balanced on the corridor to best serve multiple markets?

2. **Peak Service Volume**
   How much growth in peak train traffic volume can the corridor support and what kinds of growth may be required to meet long term demand?

3. **Service Investments**
   What types of investments into operations, systems and infrastructure will be required to achieve the desired types and volumes of service?
Which service “Best Practices” are most important to your jurisdiction? Are there any best practices that we are missing?

How do you think we should approach balancing competing service needs?
Exploring the Market for Service
Understanding the Market for Caltrain Today

1. **Ridership is highly concentrated at a few stations**
   - The busiest 8 stations account for nearly ¾ of all ridership and nearly all ridership growth over the past 20 years
   - The least busy 8 mainline stations and the San Jose – Gilroy stations have lost ridership over the last 20 years
   - One in four Caltrain riders do not use the station closest to their origin or destination due to differences in service levels and accessibility

2. **Caltrain serves multiple markets in both directions**
   - Existing riders primarily commute to four major employment centers (San Francisco, Redwood City, Palo Alto, and Mountain View) plus several mid-sized hubs
   - AM peak period ridership exhibits a 64%-36% northbound-southbound split

3. **Today caltrain captures a small, but significant percentage of the overall travel market along the peninsula**
   - Caltrain captures roughly 8-10% of regional peak hour travel markets along the Peninsula
   - There appears to be significant market growth opportunities, both overall and for off-peak and Gilroy markets
Understanding the Market for Caltrain Today

Existing Ridership

Caltrain Average Weekday Ridership (Thousands)
1997 – 2017

- 2001 Dot Com Bust
- 2004 Baby Bullets
- 2008 Great Recession
- 2010 Tech Boom
Today, Ridership is Highly Concentrated at a Few Stations

Change in Ridership (Thousands)  
1998 – 2017

- Top 8 Stations: 4th & King, Millbrae, Hillsdale, Redwood City, Palo Alto, Mountain View, Sunnyvale, San Jose Diridon
- Middle 8 Stations: 22nd Street, Burlingame, San Mateo, San Carlos, Menlo Park, California Ave, Santa Clara, Tamien
- Bottom 8 Stations: Bayshore, South San Francisco, San Bruno, Hayward Park, Belmont, San Antonio, Lawrence, College Park
- Gilroy Service: Capitol, Blossom Hill, Morgan Hill, San Martin, Gilroy

Source: 1998-2017 Passenger Counts
There is a Relationship Between Service Levels and Ridership

Ridership is highly concentrated at station with high service levels. Under existing conditions, Caltrain stations may be grouped into four tiers: the Top 8 (Baby Bullet), Middle 8, Bottom 8, and Gilroy stations. The Top 8 have accounted for 87% of ridership growth over the past 20 years, while the Bottom 8 and Gilroy stations have lost ridership over the same time period.

<table>
<thead>
<tr>
<th>Station Tier</th>
<th>Peak Period Trains</th>
<th>Ridership</th>
<th>% of Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 8</td>
<td>&gt;45</td>
<td>36,600</td>
<td>73%</td>
</tr>
<tr>
<td>Middle 8</td>
<td>30-45</td>
<td>9,800</td>
<td>19%</td>
</tr>
<tr>
<td>Bottom 8</td>
<td>&lt;30</td>
<td>3,280</td>
<td>7%</td>
</tr>
<tr>
<td>Gilroy</td>
<td>3</td>
<td>580</td>
<td>1%</td>
</tr>
</tbody>
</table>
Not All Riders Use the Station Closest to Them

If riders used the stations closest to their actual trip origin/destination, existing ridership demand would be more spread out across stations.

Source: 2014 On-Board Survey updated with 2017 Passenger Counts by Station
Caltrain Serves Multiple Markets in Both Directions...

**Weekday Morning Ridership by Direction**

- **Boardings**
- **Alightings**

**SB (Southbound)**
- 4th & King
- 22nd Street
- Bayshore
- South San Francisco
- San Bruno
- Milbrae
- Burlingame
- San Mateo
- Hayward Park
- Hillsdale
- Belmont
- San Carlos
- Redwood City
- Menlo Park
- Palo Alto
- California Avenue
- San Antonio
- Mountain View
- Sunnyvale
- Lawrence
- Santa Clara
- College Park
- San Jose Diridon
- Tannem
- Capitol
- Blossom Hill
- Morgan Hill
- San Martin
- Gilroy

**NB (Northbound)**

- Limited activity in Santa Clara County south of Mountain View

Source: 2017 Passenger Count

Emerging employment hubs in northern San Mateo County have relatively low activity due to low service levels and access constraints.

Northbound demand primarily driven by trips to Palo Alto, Redwood City, and San Francisco/BART.

Limited travel within Santa Clara County besides Palo Alto. Diridon Station primarily serves as park-and-ride for areas farther south.
...But Demand is Still Highly Concentrated Within Top Markets

Source: 2014 On-Board Survey updated with 2017 Passenger Counts by Station
Today, Caltrain Captures a Modest Percentage of the Regional Travel Market

Peak Period Caltrain Mode Share: 8%  
Off-Peak Caltrain Mode Share: 2%

Average Hourly Person-Trips  
Crossing San Mateo-San Francisco County Line

Source: 2017 BART and Caltrain Passenger Counts and 2017 Vehicle Counts (Adjusted for Passenger Occupancy)
Today, Caltrain Captures a Modest Percentage of the Regional Travel Market

Average Hourly Person-Trips Traveling Mid-Peninsula (at Burlingame / Millbrae Border)

Source: 2017 Caltrain Passenger Counts and 2017 Vehicle Counts (Adjusted for Passenger Occupancy)
Today, Caltrain Captures a Modest Percentage of the Regional Travel Market

Average Hourly Person-Trips
Traveling North of Morgan Hill

Source: 2017 Caltrain Passenger Counts and 2017 Vehicle Counts (Adjusted for Passenger Occupancy)
Today, Caltrain ridership during off-peak and weekend periods is 70-80% lower than during peak periods.

In contrast, total volume of regional travel is only 10-20% less, while BART travel in San Mateo County is 50-60% less.

There is likely an underserved market for off-peak Caltrain service.

<table>
<thead>
<tr>
<th>Facility</th>
<th>As % of Peak Hour Volume</th>
<th>As % of Weekday Daily Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Midday Hour</td>
<td>Evening Hour</td>
</tr>
<tr>
<td>BART</td>
<td>45%</td>
<td>36%</td>
</tr>
<tr>
<td>Caltrain</td>
<td>15%</td>
<td>23%</td>
</tr>
<tr>
<td>101 and 280 Freeways</td>
<td>97%</td>
<td>70%</td>
</tr>
</tbody>
</table>
Exploring the Market for Caltrain Service

What is the Potential, Long-Term Demand for Caltrain Service?

Purpose
- Understand the underlying long range, order-of-magnitude demand for rail service in the Caltrain corridor.
- Establishes a rough, quantified benchmark that informs how a long range service vision can be calibrated and scaled

Methodology
- Use VTA – C/CAG Model updated with latest Plan Bay Area land use forecasts
- Develop a sensitivity test using an imaginary, high frequency, unconstrained service plan that includes:
  - Realistic train times (60-80 minutes SF-SJ)
  - High level of sustained all-day service (8 to 16 trains per hour per direction. These frequencies are comparable to many sections of the BART system)
Exploring the Potential Long Term Demand for Caltrain Service

This sensitivity test suggests that providing BART-like frequencies on the Caltrain Corridor has the potential to yield BART-like ridership. Today, Caltrain serves approximately 1,300 daily passengers per mile between San Francisco and Tamien Stations, while BART serves approximately 5,200 passengers per mile along its Richmond-Daly City and Fremont-Daly City trunk lines. The sensitivity test suggests Caltrain has a long term (2040) unconstrained demand of about 4,600 passengers per mile, comparable to BART’s core service in San Francisco and the inner East Bay. However, demand per mile south of Tamien is approximately 1/10th demand north of Tamien.
Remember….Planning within Constraints

Decisions and commitments that have already been made on the corridor bring three fundamental service planning questions into tension with one another:

1. **Service Differentiation**
   How can local, regional and high speed services be blended and balanced on the corridor to best serve multiple markets?

2. **Peak Service Volume**
   How much growth in peak train traffic volume can the corridor support and what kinds of growth may be required to meet long term demand?

3. **Service Investments**
   What types of investments into operations, systems and infrastructure will be required to achieve the desired types and volumes of service?
What is your reaction to the analysis of Caltrain’s existing and potential market demand?

What additional kinds of data about Caltrain ridership and markets would you like to see?

To what extent do you think this information should inform the development of a Service Vision?
Focus on the Business Case
Why Do We Need A Business Case?

A Business Case for The Service Vision
The project team will develop at least two “growth scenarios” or versions of a long range “Service Vision.” Each version of the potential service vision will have a business case that lays out the cumulative costs and benefits associated with it.

A Framework for Decision-making
The business case helps the JPB Board select a 2040 Service Vision with a fully informed understanding of what their choice means for the long-term costs and benefits of the system. Once the Board has selected a long range Service Vision the business case can then be further optimized and detailed.
Building an Integrated Business Model (IBM)

The IBM evaluates changes to the Caltrain System by integrating a broad range of data inputs and analysis. It is a tool that supports the active and informed management of Caltrain’s business.

Major Inputs to the IBM Include

- Railroad Network
- Fleet
- Current and Future Operations
- Ridership and Travel Demand
- Finances
- Policy Assumptions
- Infrastructure Investments
Example Outputs

Example outputs extracted from Metrolinx RER Business Case (Toronto)

Capital Expenditure Estimates
Supporting Different Service Levels

Analysis of Operating Costs and Cost Drivers
Example Outputs

Example outputs extracted from Metrolinx RER Business Case (Toronto)

Detailed Analysis and Breakdown of System Costs and Benefits
Wider Economic Benefits of Caltrain and Communities

Outside of the IBM, User Benefits and Regional Economic Benefits will be Calculated for the Following Major Categories:

- **Direct & Indirect Jobs**: Economic impact model captures effects on regional employment
- **User Benefits**: Benefits from travel time/cost savings as well as safety improvements
- **Societal Benefits**: Societal benefits including public health and environmental benefits
- **Land Value**: Influence of increased rail service on the value of land arounds stations
SHARING SESSION

What kinds of costs and benefits are most meaningful to your community?

Are there any other specific types of costs or benefits you think Caltrain should try to analyze and quantify?
Memorandum

Date: September 27, 2018
To: CalMod Local Policy Maker Group (LPMG)
From: John Funghi, CalMod Chief Officer; Casey Fromson, Gov. Affairs Director
Re: Caltrain Electrification Project Update

ELECTRIC VEHICLE UPDATE

The first cab car shell is now ready to begin interior assembly. September was a busy time, with three trainsets in production. The cab cars of the second trainset are underway, with structural testing being conducted on one and welding being done on the other.

View more pictures at www.CalMod.org/Gallery.
ELECTRIFICATION INFRASTRUCTURE UPDATE

San Francisco Tunnel Work and Weekend Service Closure

Inside one of the SF Tunnels looking South

To accommodate the brand new electric trains, construction crews will begin work in the four San Francisco tunnels starting in October. Crews will create additional clearance in the tunnel sides to accommodate the new trains and will install anchor bolts in the tunnel ceilings to facilitate the installation of the overhead contact system that will power the new electric trains. For more information visit [CalMod.org/SFtunnels](http://CalMod.org/SFtunnels).

In order to facilitate work in the tunnels, trains will not operate on weekends between San Francisco and Bayshore Stations from October 6, 2018 to late Spring 2019. Caltrain service will stop at Bayshore Station and a bus bridge will transport passengers to the 22nd and 4th & King Stations. Weekday service will not be impacted. For more service information visit [www.Caltrain.com/SFweekendClosure](http://www.Caltrain.com/SFweekendClosure).
First Mile of Wire Installed

The first mile of wire for Caltrain Electrification has been installed in San Bruno. Crews continue to pothole for utilities in South San Francisco to San Jose. Crews also continued construction of the traction power substation in San Jose which will provide power to the overall system once electrified.

To sign up for weekly construction updates or for more construction information visit CalMod.org/Construction.

Public Meetings Re: Construction Activities

Occurred
- Burlingame, August 1
- San Francisco, August 21
- Palo Alto, August 28
- Brisbane Council, September 6
- San Francisco, September 10
- Mountain View, September 12
- San Francisco, September 13
- Sunnyvale, September 17
- San Francisco, September 25

Upcoming
- San Mateo, October 2

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

DETAILED PROGRESS REPORT
To view the detailed Monthly Progress Report, please visit:
http://www.caltrain.com/projectsplans/CaltrainModernization/CalMod_Document_Library.html
Location of Active Work

As of: September 13, 2018
Type of Work

- Potholing
- Tree Pruning
- Foundation Installation
- Traction Power Facilities Construction
- Pole Installation
- Wire Stringing
San Francisco Tunnel Work

• Work on the four San Francisco Tunnels:
  – Overhead Contact System Installation
  – Grouting and Notching
  – Drainage and Track Work

• Pre-construction: September 2018

• 24 hour/day weekend work
Caltrain Service During Tunnel Work

• Weekends - Oct 6, 2018 to Spring 2019
  – Caltrain service north of the Bayshore Station will be suspended on the weekends
  – Bus service will be provided from Bayshore to 4th and King and 22nd Street stations

• Weekday service will remain unchanged

• Caltrain service south of Bayshore unchanged

• Bus schedule at www.caltrain.com/busbridge
Weekend SF Caltrain Closure Outreach

- Station Signage and Announcements
- Onboard Signage and Announcements
- Station Ambassadors
  - Weekend prior to first closure and every closure weekend
- News Releases and Media Advisory
- Paid and Organic Social Media Campaigns
  - Nextdoor, Twitter, Facebook
- Paid Print and Digital Ads
- E-Newsletters
- Dedicated Webpage
  - Alert on every Caltrain page and from homepage
  - Includes Transit Alternatives
- Coordination with stakeholders:
  - Cities, Counties, Chambers, Event Organizers and Community Based Organizations
- Alerts on 511.org
- Google Maps Alert
- Customer Service Number Message
- Physical Mailers to residents near tunnels
# Community Outreach Events

<table>
<thead>
<tr>
<th>August 2018</th>
<th>September 2018</th>
<th>October 2018</th>
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<tbody>
<tr>
<td>SF (8/21)</td>
<td>Brisbane (9/6)</td>
<td>San Mateo (10/2)</td>
</tr>
<tr>
<td>Palo Alto (8/28)</td>
<td>South Beach, Rincon, Mission Bay NA (9/10)</td>
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<td></td>
<td>Mountain View (9/12)</td>
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<td></td>
<td>Mission Bay CAC (9/13)</td>
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<td></td>
<td>Sunnyvale (9/17)</td>
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<td></td>
<td>Potrero Hill Boosters (9/24)</td>
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CALMOD CONTACT INFORMATION

WEBSITE 🌐 CalMod.org

PHONE 📞 650-399-9659
       800-660-4287 (Toll Free)

EMAIL 📧 CalMod@caltrain.com

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         San Mateo, CA 94403
         9 a.m. - 5 p.m. Monday - Friday

FACEBOOK 🌐 www.facebook.com/caltrain

TWITTER 🌐 @caltrain
Due to the August 2018 LPMG meeting being cancelled, this update includes elements from both the August and September updates so some elements are repeated from the August memo.

CALIFORNIA HIGH-SPEED RAIL 2018 SUSTAINABILITY REPORT

On August 16, the California High-Speed Rail Authority (Authority) issued its 2018 Sustainability Report, the third annual report of its kind. It provides a status report on the Authority’s efforts to deliver the greenest infrastructure program in the country.

This report details the progress the Authority is already making in fulfilling a commitment to Californians to curb air pollution and greenhouse gas (GHG) emissions, protect endangered species and transition to a sustainable, low carbon future. For instance, future high-speed rail stations and service facilities will be designed to be net-zero energy, meaning they will produce at least as much energy on-site as they consume over the course of a year.

In the Central Valley, construction crews are using the cleanest Tier 4 equipment and the Authority is offsetting the emissions being generated by the construction. Beyond just the construction, the Authority is also committed to operating using 100 percent renewable energy to deliver a high-quality transportation system that benefits Californians both now and for generations to come.

High-speed rail is a cornerstone of California’s aggressive efforts to tackle climate change, protect the environment and enhance quality of life. The full report, a highlight sheet, and the “Get the Facts” fact sheet and videos can all be found online here.

SAN FRANCISCO TO SAN JOSE PROJECT SECTION

Preliminary Engineering for Project Definition Review
The Authority is in the middle of the environmental review process for the elements that will be necessary to bring high-speed rail onto the existing Caltrain corridor. With the Caltrain Electrification project heavily into construction, the Authority is now in the process of environmentally clearing the set of investments that will be made in the corridor focused on allowing high-speed trains to run.

As part of the environmental review process, the Authority conducted a Preliminary Engineering for Project Definition (PEPD) review with jurisdictions along the corridor. The objective of this review was for local jurisdictions to better understand the design elements, provide feedback to the regional design team on the preliminary designs, and to discuss areas of interest or concern for each jurisdiction. The design review included the specific parameters and scope of the project elements necessary for high-speed
trains to run between San Jose and San Francisco while meeting the Authority’s requirements for the statewide system. The Authority hosted the first round of office hours between July 23 and August 30 and met with the City and County of San Francisco, San Francisco International Airport, Brisbane, San Bruno, Millbrae, Burlingame, City of San Mateo, Belmont, San Carlos, Redwood City, Atherton, Menlo Park, Palo Alto, Mountain View, City of Santa Clara, VTA, Sunnyvale, and the County of San Mateo. The Authority received feedback during these meetings on a broad range of topics including information on planned or expected projects in or around the corridor (i.e., grade separations, housing and other commercial developments, pedestrian crossings and road closures), the planned safety modifications that the Authority is proposing, as well as noise, traffic and aesthetic impacts.

Information that we received about planned or expected projects will inform both the design team as they do their work as well as the planning team so that they can incorporate these projects into the Connecting Communities Strategy (CCS). As we described in June, the CCS is an effort that the Authority has undertaken to identify relevant projects, understand community priorities, figure out their interface with the high-speed rail program, and help cities pursue a variety of State funding sources provided by the Authority’s partner agencies. The planning team is in the process of reaching out to the cities that expressed interest in the CCS to schedule meetings to discuss potential partnerships and funding opportunities through various statewide initiatives.

A second round of PEPD review with select jurisdictions (if there are significant changes from what was developed so far) is anticipated for November 2018. The Authority thanks the city, county and agency staff that took time out of their busy schedules to meet with us to help inform our project design.

Community Working Groups
The Authority has three Community Working Groups (CWGs) in the San Francisco to San Jose Project Section – the San Francisco County CWG, the San Mateo County CWG, and the newly reformed Southern Peninsula CWG (which encompasses the areas of Santa Clara County along the proposed alignments north of San Jose). The formation of the South Peninsula CWG reflects feedback the Authority has received regarding the overlap between the Santa Clara County CWG and the San Jose CWG, which were intended to focus on the San Francisco to San Jose Project Section and the San Jose to Merced Project Section, respectively. Due to stakeholder input, the Authority decided to reorganize these groups. The former Santa Clara County CWG will now be the South Peninsula CWG and will focus on jurisdictions along the corridor within Santa Clara County but north of San Jose. The San Jose CWG will focus on jurisdictions within the City of San Jose and generally on the efforts underway in the San Jose to Merced Project Section.

CWGs members in both project sections represent neighborhood associations and disadvantaged communities as well as business/economic, transit advocacy, and environmental stakeholders. The Authority has scheduled the following San Francisco to San Jose Project Section CWG meetings:

- **October 15, 2018** - South Peninsula CWG at Santa Clara Central Park Library (6:00 - 8:00 p.m.)
- **October 22, 2018** - San Mateo County CWG at Millbrae Community Center (6:00 - 8:00 p.m.)
- **October 24, 2018** - San Francisco County CWG at SPUR (6:30 - 8:30 p.m.)

The purpose of these meetings is to: 1) Re-engage CWG members by providing a Statewide Program update, noting how changes in Executive Leadership and the 2018 Business Plan have impacted the program statewide and in the San Francisco to San Jose Project Section; 2) provide a San Francisco to San Jose Project Section update by reviewing what has been happening/progress to date, the planned project elements, recent and upcoming outreach and engagement opportunities, and updates on the Connecting Community Strategies process; 3) give CWG members and stakeholders the opportunity to interact directly with high-speed rail staff to learn more about the Project Section and the environmental
review process; and 4) to understand insights, questions and priorities for environmental review, stakeholder engagement and outreach and project implementation.

In the San Jose to Merced Project Section, the Authority is currently undergoing a process to reaffirm membership for the San Jose CWG and will take on this process for the Morgan Hill-Gilroy CWG in the coming weeks. The next round of CWG meetings for the San Jose to Merced Project Section will occur in November 2018.

SAN JOSE TO MERCED TO SAN JOSE PROJECT SECTION

The 2018 Business Plan outlines a new concept that would extend electrification south of San Jose to Gilroy. The new concept would have high-speed rail service operating in a blended system with Caltrain largely within the existing Caltrain/Union Pacific Railroad (UPPR) corridor. This concept would consist of primarily a three-track system south of Diridon Station with two electrified passenger tracks for high-speed rail and Caltrain and one unelectrified track for UPRR to maintain their service. This concept is intended to allow for the Authority to have fewer modifications to existing infrastructure and fewer impacts to private property. The Authority has developed the horizontal footprint for the three tracks using the existing corridor (wherever feasible) and is currently overlaying the vertical interfaces (e.g. would adding another track require a road to be depressed a bit more to allow a new rail bridge to be added?) and systems requirements (e.g. locations of overhead catenary system portals every approximately 1,500 – 2,000 feet) as we advance the design of this new alternative.

The Authority has and will continue to coordinate its planning, engineering, and environmental analyses of this new alignment alternative (as well as the other alternatives that were developed in 2016/2017) with city and county staff, elected officials, and other stakeholders between San Jose and Merced. At the same time, the Authority is actively engaged in the planning and coordination around the future vision for Diridon Station and the surrounding area through the Diridon Integrated Station Concept Plan, the Station Area Advisory Group and the Diridon Joint Powers Advisory Board.

RECENT AND UPCOMING OUTREACH ACTIVITIES

- August
  o August 11: Salesforce Transit Center Opening
  o August 14: Morgan Hill High-Speed Rail Day
  o August 16: City of San Jose CWG
- September
  o September 11 – 13: National High Speed Rail Leadership Summit
  o September 12 – 14: Global Climate Action Summit
  o September 15: Sunnyvale State of the City
  o September 20: Meet the Primes Workshop in Gilroy
  o September 24: Assemblymember Evan Low State of the District
  o September 24: Gilroy City Council/Gilroy Unified School District Joint Meeting
- October
  o October 2: Town of Atherton Rail Committee
  o October 3: Presentation to Morgan Hill Realtors
  o October 14: Transportation Museum in San Carlos
  o October 15: South Peninsula Community Working Group Meeting
- October 18: San Martin Neighborhood Alliance
- October 22: San Mateo County Community Working Group Meeting
- October 23: Delmas Park Neighborhood Association Presentation
- October 24: San Francisco County Community Working Group Meeting
AGENDA

• 2018 Sustainability Report

• San Francisco to San Jose Preliminary Engineering for Project Definition (PEPD) Review

• San Jose to Merced Project Section Update

• Outreach Update
Our goal – create the cleanest infrastructure project in the nation

Our commitments:

» Net-zero emissions in construction
» Zero emissions trains powered by 100 percent renewable energy
» Net-zero energy stations
» Catalyst for more sustainable development

Top sustainable infrastructure project in North America for the second year in a row per the GRESB Infrastructure Assessment

Key to tackling climate change and reaching a low-carbon future
RESULTS: AIR QUALITY

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<th>ROG</th>
<th>PM</th>
<th>BC</th>
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<tr>
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<td>Nitrogen Oxide</td>
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<td>Particulate Matter</td>
<td>Black Carbon</td>
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In addition:
- Over 1,300 lifetime tons of air pollution offset to date
- Additional 3,500 tons of pollution reduction annually in operation
RESULTS: AVOIDING GHG EMISSIONS

Exhibit 21: 2017 Materials Management (in Tons)

64,489 Concrete Recycling
38,802 Asphalt Recycling
11,063 Mixed Recycling
3,311 Metals Recycling
2,306 Organics
361 Recycled Wood
326 Materials Landfilled
RESULTS: OFFSETTING GHG EMISSIONS

- 200 trees planted to date will:
  » Offer shade
  » Improve air quality
  » Provide recreation benefits in West Fresno
  » Offset 600 tons of GHG over their lifetime
- Partnering with Tree Fresno and California Urban Forestry Coalition on additional planting
RESULTS: JOBS AND ECONOMIC ACTIVITY

Providing Benefits Now:
- 45% of workers to date live in disadvantaged communities
- 154 of 463 small businesses are located in disadvantaged communities

54% of total project expenditures occurred in disadvantaged communities throughout California, spurring economic activity in these areas.
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION (PEPD)
UPDATE ON SECTION PROGRESS

• Engagement with Cities on PEPD:

✓ Round 1 Office Hours – Completed!

  Key Themes
  » Planned or expected projects (i.e., grade separations, housing and other commercial developments)
  » Key design features: safety modifications within existing ROW, minimal impacts
  » Safety, noise, traffic and aesthetic impacts
  » Connecting Communities Strategy (CCS) process
  » Questions: environmental schedule, coordination with Caltrain, train speed, etc.

☐ Round 2 Office Hours: November

Preview draft design that will be included in the Draft EIR/S.
PROCESS FOR DEVELOPING AN ALTERNATIVE

Project Definition

1. Identify Concept
2. Lay Out Track and Station Horizontal Footprint
3. Overlay Vertical Interfaces
4. Overlay Systems Requirements
5. Conduct Technical Analyses

We are here
**KEY ALTERNATIVE INPUTS**

**BASIC CONCEPT**
- At-grade alignment using existing Caltrain/UPRR Corridor
- Primarily 3 tracks (2 electrified passenger tracks, one unelectrified freight track)*
- Blended operations with 110 mph max speed

**KEY DESIGN CRITERIA**
- Priority: stay within the existing railroad rights-of-way while maintaining 110 mph speed
  - Use Caltrain/HSR Blended system criteria to reduce need for additional property
- Maintain functionality for Caltrain service to existing Caltrain Stations
- Minimize modifications to existing infrastructure where practical
- Improve corridor safety through continuous fencing and four-quad gates at grade crossings

*Note: There are three existing tracks north of Diridon that would be expanded to four tracks and a passing siding for UPRR would be added in Coyote Valley*
OUTREACH UPDATE
City and County Staff Meetings

Purpose: Review current projects and potential funding opportunities for Disadvantaged Communities (SF 535) and Low-Income Communities (AB 1550).

COMPLETE
- Brisbane
- Millbrae
- Burlingame
- Redwood City
- Palo Alto
- Sunnyvale
- City of Santa Clara
- San Jose
- VTA
- Morgan Hill
- Gilroy

SCHEDULED
- San Bruno (9/27)
- County of San Mateo – North Fair Oaks – (10/3)

TO BE SCHEDULED
- San Francisco
- South San Francisco

Next Step: October Community Working Group Meetings

Purpose: Review findings from Community Priority Exercises with CWGs and meetings with city and county staff.
COMMUNITY WORKING GROUPS

South Peninsula CWG
October 15, 6-8 PM
Santa Clara County Public Library
City of Santa Clara, CA

San Mateo County CWG
October 22, 6-8 PM
Millbrae Public Library
Millbrae, CA

San Francisco CWG
October 24, 6:30-8:30 PM
SPUR Urban Center
San Francisco, CA

• South Peninsula (formerly Santa Clara County) CWG

• Topics
  » 2018 Business Plan
  » Range of Alternatives
  » Environmental Process Update
  » Connecting Communities Strategy Update

• Additional NorCal CWG Meetings – November (Dates TBD)
  » San Jose CWG
  » Morgan Hill-Gilroy CWG
SELECT OUTREACH ACTIVITIES

• August
  » Salesforce Transit Center Opening
  » Morgan Hill High-Speed Rail Day
  » City of San Jose CWG

• September
  » National High-Speed Rail Leadership Summit
  » Global Climate Action Summit
  » Sunnyvale State of the City
  » Asm. Evan Low State of the District
  » Gilroy City Council and Gilroy Unified School District Joint Meeting

• October
  » 10/2: Town of Atherton Rail Committee
  » 10/14: Transportation Museum in San Carlos
  » Community Working Group Meetings
THANK YOU & STAY INVOLVED

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