



BOARD OF DIRECTORS 2020

DAVE PINE, CHAIR
DEVORA "DEV" DAVIS, VICE CHAIR
JEANNIE BRUINS
CINDY CHAVEZ
RON COLLINS
STEVE HEMINGER
CHARLES STONE
SHAMANN WALTON
MONIQUE ZMUDA

JIM HARTNETT
EXECUTIVE DIRECTOR

AGENDA
PENINSULA CORRIDOR JOINT POWERS BOARD
Bacciocco Auditorium, 2nd Floor
1250 San Carlos Avenue, San Carlos CA

March 5, 2020 – Thursday

(Immediately following the 8:30 am Special Board Meeting or 9:00 am, whichever is later)

1. Call to Order / Pledge of Allegiance
2. Swearing-in of Steve Heminger Representing the San Francisco Municipal Transportation Agency (SFMTA)
3. Roll Call
4. Public Comment For Items Not on the Agenda

Comments by each individual speaker shall be limited to two (2) minutes. Items raised that require a response will be deferred for staff reply.

5. Consent Calendar

Members of the Board may request that an item under the Consent Calendar be considered separately

- | | |
|--|--------|
| a. Approve Special and Regular Meeting Minutes of February 6, 2020 | MOTION |
| b. Receive Key Caltrain Performance Statistics | MOTION |
| c. Receive State and Federal Legislative Update | MOTION |

Approved by the Finance Committee

- | | |
|---|------------|
| d. Accept Statement of Revenues and Expenditures for January 2020 | MOTION |
| e. Disposition of Taylor Dunn Electric Carts | MOTION |
| f. Authorize the Application for and Receipt of Annual Cap and Trade Funding for the Peninsula Corridor Electrification Project (PCEP) | RESOLUTION |
| g. Authorize the Executive Director to execute Amendment No. 2 to Supplemental Agreement No. 2 with Pacific Gas and Electric for construction of 115 kilovolt Interconnections for the Peninsula Corridor Electrification Project | RESOLUTION |

Peninsula Corridor Joint Powers Board

6. Report of the Chair
 - a. Resolution of Appreciation for former Director Cheryl Brinkman RESOLUTION
7. Report of the Executive Director
 - a. Peninsula Corridor Electrification Project Monthly Progress Report INFORMATIONAL
 - b. Monthly Report on Positive Train Control Project INFORMATIONAL
8. Report of the Citizens Advisory Committee INFORMATIONAL
9. *Report of the Work Program-Legislative-Planning (WPLP) Committee*
 - a. Caltrain Business Plan - Update Covering January & February 2020 INFORMATIONAL
 - b. Senate Bill 797 Implementation INFORMATIONAL
10. Report from Special Counsel Ad Hoc Committee: Award of Contract to Olson Remcho LLP for Special Counsel Services RESOLUTION
11. Correspondence
12. Board Member Requests
13. General Counsel Report
 - a. Closed Session: Conference with Real Property Negotiators
Government Code Section 54956.8:
Property Location: Near intersection of Asbury Street (vacated) and Caltrain tracks, San Jose, CA, APN 259-09-049
Agency Negotiators: Joan L. Cassman, General Counsel and Brian Fitzpatrick Director, Real Estate & Development
Negotiating Parties: Union Pacific Railroad Company
Under negotiation: Price and terms of payment
14. Date/Time of Next Regular Meeting: Thursday, April 2, 2020 at 9:00 am, San Mateo County Transit District Administrative Building, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA
15. Adjourn

INFORMATION FOR THE PUBLIC

All items appearing on the agenda are subject to action by the Board. Staff recommendations are subject to change by the Board.

If you have questions on the agenda, please contact the JPB Secretary at 650.508.6242. Agendas are available on the Caltrain website at www.caltrain.com. Communications to the Board of Directors can be emailed to board@caltrain.com.

Free translation is available; Para traducción llama al 1.800.660.4287; 如需翻译,请电 1.800.660.4287

Location, Date and Time of Regular Meetings

Regular meetings are held at the San Mateo County Transit District Administrative Building located at 1250 San Carlos Avenue, San Carlos, one block west of the San Carlos Caltrain Station on El Camino Real, accessible by SamTrans bus Routes ECR, 260, 295 and 398. Additional transit information can be obtained by calling 1.800.660.4287 or 511.

The JPB meets regularly on the first Thursday of the month at 9:00 a.m. The JPB Citizens Advisory Committee meets regularly on the third Wednesday of the month at 5:40 p.m. at the same location. Date, time and place may change as necessary.

Public Comment

If you wish to address the Board, please fill out a speaker's card located on the agenda table and hand it to the JPB Secretary. If you have anything that you wish distributed to the Board and included for the official record, please hand it to the JPB Secretary, who will distribute the information to the Board members and staff.

Members of the public may address the Board on non-agendized items under the Public Comment item on the agenda. Public testimony by each individual speaker shall be limited to two minutes and items raised that require a response will be deferred for staff reply.

Accessible Public Meetings/Translation

Written materials in appropriate alternative formats, disability-related modification/accommodation, as well as sign language and foreign language interpreters are available upon request; all requests must be made at least 72 hours in advance of the meeting or hearing. Please direct requests for disability-related modification and/or interpreter services to the Title VI Administrator at San Mateo County Transit District, 1250 San Carlos Avenue, San Carlos, CA 94070-1306; or email titlevi@samtrans.com; or request by phone at 650-622-7864 or TTY 650-508-6448.

Availability of Public Records

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at 1250 San Carlos Avenue, San Carlos, CA 94070-1306, at the same time that the public records are distributed or made available to the legislative body.

Peninsula Corridor Joint Powers Board
Board of Directors
1250 San Carlos Avenue, San Carlos CA 94070

MINUTES OF FEBRUARY 6, 2020
SPECIAL MEETING

MEMBERS PRESENT: C. Brinkman, J. Bruins (arrived at 8:39 am), C. Chavez, R. Collins, D. Davis (Vice Chair), D. Pine (Chair) (arrived at 8:40 am), C. Stone, S. Walton (arrived at 8:40 am), M. Zmuda

MEMBERS ABSENT: None

STAFF PRESENT: J. Hartnett, J. Cassman, M. Bouchard, C. Boland, J. Brook

1. CALL TO ORDER

Vice Chair Dev Davis called the meeting to order at 8:34 am.

2. ROLL CALL

Assistant District Secretary Christine Boland called the roll and confirmed a quorum.

3. GENERAL COUNSEL REPORT

Closed Session: Public Employee Performance Evaluation Pursuant To Government Code Section 54957(B)(1) Title: Executive Director

Public Comment:

Roland Lebrun, San Jose, stated that the eight-car Stadler EMU (electric multiple unit) would not fit the Centralized Equipment Maintenance and Operations Facility (CEMOF) and also called for the resignation of Michelle Bouchard, Chief Operating Officer, Rail.

The Board convened a closed session at 8:36 am.

The Board reconvened into open session at 9:01 am.

Jim Hartnett, Executive Director, reported no disclosures from the closed session.

4. ADJOURN

The special meeting adjourned at 9:02 am.

**Peninsula Corridor Joint Powers Board
Board of Directors Meeting
1250 San Carlos Avenue, San Carlos CA**

MINUTES OF FEBRUARY 6, 2020

MEMBERS PRESENT: D. Pine (Chair), C. Brinkman, J. Bruins, C. Chavez, R. Collins, D. Davis, C. Stone, S. Walton, M. Zmuda

MEMBERS ABSENT: None

STAFF PRESENT: J. Hartnett, C. Mau, J. Cassman, M. Bouchard, A. Chan, J. Funghi, D. Hansel, S. Murphy, M. Jones, S. Petty, C. Boland, J. Brook

1. CALL TO ORDER / PLEDGE OF ALLEGIANCE

Chair Dave Pine called the meeting to order at 9:05 am.

|

2. ROLL CALL

Assistant District Secretary Jean Brook called the roll and confirmed a quorum.

3. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA

Roland Lebrun, San Jose, suggested eliminating the baby bullet, size of electric vehicle units, and employee relations.

Jeff Carter, Millbrae, expressed support for Seamless Bay Area.

4. CONSENT CALENDAR

Motion/Second: Stone/Collins approved the Consent Calendar, as amended to item 4.a., below:

Ayes: Brinkman, Bruins, Chavez, Collins, Davis, Stone, Walton, Zmuda, Pine

Noes: None

Absent/Abstain: None

a. Approve Meeting Minutes of January 9, 2020

Director Chavez requested two amendments to the January 9, 2020 Minutes, as follows:

Page 2, Consent Calendar, item 6.g., Adopt Resolution 2020-02, Adopting the Peninsula Corridor Joint Powers Board's 2019 Title VI Program:

"Director Chavez requested a brief presentation at the Committee or Board level to see how the Title VI issue is being addressed."

Page 2, Consent Calendar, item 6.b., Received Key Caltrain Performance Statistics

“Director Chavez requested that a discussion take place between SamTrans and Valley Transportation Authority and other operators regarding a regional approach to recruiting bus operators, with particular outreach to women.”

- b. **Receive Key Caltrain Performance Statistics**
- c. **Receive State and Federal Legislative Update**
- d. **Accept Statement of Revenues and Expenditures for December 2019**
- e. **Approved By Resolution No. 2020-4, Authorize an Amendment to the Contract with Eide Bailly LLP for Financial Audit Services**
- f. **Diridon Integrated Station Concept Plan – Acceptance of Decision 3 of Concept Layout**

Vice Chair Davis clarified that the project was approved conceptually, with no specific decisions on funding, timelines, or track numbers yet.

Approved by the Work Program-Legislative-Planning Committee:

- g. **Approved by Resolution No. 2020-5, Adoption of the Caltrain Rail Corridor Use Policy**

Public Comment:

Jeff Carter, Millbrae, commented on the Rail Corridor Use Policy (RCUP) and retention of Caltrain land for future uses.

- h. **Caltrain Business Plan - Update Covering December 2019 and January 2020**

5. REPORT OF THE CHAIR

a. Board Committee Appointments

- Director Monique Zmuda would replace Director Walton on the Finance Committee. Chair Pine expressed appreciation to Director Walton for his service on the committee.
- Director Bruins was appointed to chair the Local Policy Makers Group;

Chair Pine provided the following updates:

A Request for Proposals (RFP) for special Legal Counsel services was developed following discussion at the Board’s workshop in November. Four firms were invited to interview and the finalist would be brought to the Board in March for award of contract.

- The Governance ad-hoc committee (Walton Chavez and Pine) would hold its first meeting in February with the assistance of facilitator Grace Crunican.
- Attended a seven-agency meeting regarding Senate Bill 797; a sales tax funding measure.

6. REPORT OF THE EXECUTIVE DIRECTOR

Jim Hartnett, Executive Director, provided the following updates:

- Seven party meetings for potential funding measure: there was good participation, the group scheduled three meetings successive, and a tentative informational item to be brought to the Board
- Draft resolution circulated for comments; refining language; will be agendaized for the February Work Program-Legislative-Planning (WPLP) Committee, and an information item to be scheduled for the March Board meeting
- Means-based fare: MTC (Metropolitan Transportation Commission) is working hard to get pilot program off the ground now "Clipper start program" staff focused on the launch, including anticipated an marketing launch in April, discount go live in May (Caltrain, BART, Muni, Golden Gate bus and ferry) will come back to the Board for contracts.
- Clipper Executive Board created a task force on fare integration and coordination, Jim Hartnett will chair the task force, the first meeting will be the end of this month, and will update Board on milestone studies
- Organizational assessment, organizational capacity ARUP retained by Caltrain to assess organizational capacity to achieve recommendations in the Business Plan, the is effort underway and kicked off this week with interviews, and provide Governance Ad Hoc Committee work

Director Chavez asked about the scope of the ARUP contract, capacity on rail side, and leveraging staff. Michelle Bouchard, Chief Operating Officer, Rail, spoke about various workstreams: assessing the efficacy of the shared services, understanding overall railroad capacity, and looking at the TASI contract with other ongoing studies.

Director Charles Stone and Director Cheryl Brinkman commended staff on the fare study and equity issue.

a. Peninsula Corridor Electrification Project Monthly Report and Quarterly Report

John Funghi, Chief Officer, Caltrain Planning/CalMod, provided a monthly update on the electrification project; highlights included foundation work, the interconnection pole subcontractor, tunnel modifications, EMU (electric multiple unit) contracts, operational tests, program financials, FTA (Federal Transit Administration) project management oversight consultant quarterly report, and Balfour Beatty's completion date.

Director Brinkman reported that the PCEP Ad Hoc Committee discussed foundation productivity, Balfour Beatty construction progress, and accountability.

Public Comment:

Roland Lebrun, San Jose, commented on tunnel poles, EMU schedules, dual-speed solutions, and tracks circuits.

Mr. Hartnett expressed appreciation for the contributions by Ms. Bouchard.

b. Monthly Report on Positive Train Control Project

Ms. Bouchard provided an update on interoperability testing with Amtrak, safety certification timeframes, operational budget, and critical safety system maintenance.

Director Brinkman thanked the City and County of San Francisco for their collaboration.
Public Comment:

Roland Lebrun, San Jose, commented on PTC (positive train control) deadlines and expenditures.

7. REPORT OF THE CITIZENS ADVISORY COMMITTEE

Brian Shaw, Chair, Caltrain Citizens Advisory Committee, provided an update; highlights included Mr. Shaw's nomination as CAC Chair with Adrian Brandt as Vice-Chair, CAC requests and comments, and future CAC agenda items.

8. DELEGATION OF AUTHORITY TO THE GENERAL MANAGER/CEO TO EXECUTE REVENUE-NEUTRAL AGREEMENTS FOR CALTRAIN SPECIAL EVENT SERVICE

Catherine David, Principal Planner, Caltrain Operations Planning, discussed key objectives, including mitigating financial risk, providing adequate services, and establishing partnerships (Oracle Park, Chase Center, Levi Stadium, SAP, etc.) to increase ridership.

Approved by Resolution No. 2020-6

Motion/Second: Chavez/Davis

Ayes: Brinkman, Bruins, Chavez, Collins, Davis, Stone, Walton, Zmuda, Pine

Noes: None

Absent: None

9. REPORT OF THE WORK PROGRAM-LEGISLATIVE-PLANNING (WPLP) COMMITTEE

Mr. Hartnett said the RCUP (Rail Corridor Use Policy) informs Caltrain of potential limited property opportunities not earmarked for current or future use. He outlined policy goals (sustainable transportation, value creation, equity, complete communities) and strategic objectives (encouraging transit, supporting development, generating revenue streams, leveraging capital projects land acquisitions, workforce development). He noted the limitations and emphasized the importance to Caltrain staff and Board values.

a. Recommend Adoption of Transit-Oriented Development (TOD) Policy

Brian Fitzpatrick, Director of Real Estate and Property Development, provided a presentation, highlights included the following: purpose and scope of TOD policy; history of Board and WPLP meetings; preliminary findings from RCUP; Board and WPLP comments from previous meetings; overview of economics of requiring affordable housing, replacement parking and potential soil remediation; BART and VTA TOD policies in regards to affordable housing; WPLP recommendation for affordable housing; and, Board adoption of the TOD policy.

Director Bruins left the meeting at 10:41 am

Mr. Fitzpatrick and Mr. Hartnett responded to Board questions, which included the following: details on the percentage of developable opportunities, right of first refusal, hotels as allowable use, and density requirements,

The meeting recessed at 10:48 am and reconvened at 10:58 am.

Public Comment:

Leora Tanjuatco, San Mateo Housing Leadership Council, expressed support for prioritizing affordable housing on public land.

Jonathan Erwin Frank, Tenant Attorney, commented on the Surplus Land Act, its requirements, and expressed support for right of first refusal.

Vaughn Wolffe, Pleasanton, discussed factors on increasing housing prices and restricting empty investment properties.

Jeff Carter, Millbrae, expressed support for the TOD, affordable housing, and station parking.

Justin Wang, Greenbelt Alliance, discussed affordable housing near transit contributing to climate goals while supplying riders who would more likely take transit.

Adina Levin, Friends of Caltrain, commented on Caltrain numbers differing from Bart and VTA numbers, height and density standards, parking, and grade separation.

Kelsey Banes, Peninsula for Everyone, discussed access to quality housing for veterans and people rebuilding their lives with no access to transportation otherwise.

Rob Nielsen, Palo Alto, expressed support for 30 percent inclusionary goal and the minimum height requirement.

Roland Lebrun, San Jose, discussed TOD, railroad ties, complexity of raised stations, re-thinking Redwood junction for Caltrain for two stops.

Eric Zigman, Executive Director, Golden Gate Regional Center, discussed serving people with multiple disabilities with affordable housing near transit.

Director Zmuda asked about Request for Proposals (RFPs) in regards to the nonprofit sector and affordable developers. Mr. Fitzpatrick said the objective is to set goals that reflect Caltrain values created at this meeting and encourage affordable developers to compete.

Director Stone said the issue of housing on transit agency land is a bit more complex compared to other government land. He expressed support for TOD and discussed hotel based housing.

Director Walton expressed support for omitting hotels from the policy.

Director Collins expressed support for setting a higher standard for minimum affordability levels as the right thing to do.

Chair Pine said the Board has set a good example for standards for analyzing complex issues in this policy, with this policy and its 30 percent minimum.

Approved by Resolution No. 2020-7

Motion/Second: Davis/Brinkman moved to approve the Transit-Oriented Development (TOD) policy with an amendment to designate a 50-unit, four-stories-per-acre minimum requirement on residential projects, as recommended by staff.

Ayes: Brinkman, Chavez, Collins, Davis, Stone, Walton, Zmuda, Pine

Noes: None

Absent: Bruins

Director Walton left the meeting at 11:35 am

10. CORRESPONDENCE

Correspondence was included in the Board's reading folders and on line.

11. BOARD MEMBER REQUESTS

None.

12. GENERAL COUNSEL REPORT

None.

13. DATE/TIME OF NEXT REGULAR MEETING: Thursday, March 5, 2020 at 9:00 am, San Mateo County Transit District Administrative Building, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA

14. ADJOURN

The meeting adjourned at 11:36 am in memory of retired Bus Maintenance Supervisor, Elliott Rivas; husband of Bus Transportation Manager, Ana Rivas.

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: **KEY CALTRAIN PERFORMANCE STATISTICS – JANUARY 2020**

ACTION

Staff Coordinating Council recommends that the Board receive the Performance Statistics Report for January 2020.

SIGNIFICANCE

Staff will provide monthly updates to Key Caltrain Performance Statistics, Caltrain Shuttle Ridership, Caltrain Promotions, Special Event Updates, Digital Metrics, Social Media Analytics and News Report Coverage.

BUDGET IMPACT

There is no budget impact.

MONTHLY UPDATE

In January 2020, Caltrain's Average Weekday Ridership (AWR) increased by 2.8 percent to 64,806 from January 2019 AWR of 63,044. The total number of passengers who rode Caltrain in January 2020 increased by 3.3 percent to 1,539,666 from 1,491,101 January 2019 ridership.

This month ticket sales increased from January 2019 for:

- One Way tickets: 11.1 percent
- ED One Way tickets: 12.1 percent
- Day Passes: 5.0 percent
- ED Day Passes: 0.7 percent

This month ticket sales decreased from January 2019 for:

- Monthly Passes: 2.7 percent
- ED Monthly Passes: 6.0 percent

Caltrain Mobile Ticketing accounted for approximately 6.4 percent (97,992 rides) of January 2020 rides and 7.8 percent (\$691,859) of January 2020 Monthly Ticket Sales Revenue. The number of Eligible Go Pass Employees remained relatively the same to

82,723 from 82,712 from January 2019. The number of participating Go Pass Companies decreased to 118 from 125 from January 2019. Total Farebox Revenue increased by 13.5 percent to \$8,812,385 from \$7,764,277 in January 2019. The increase in fare revenue was primarily due to an increase in Go Pass revenue.

On-time performance (OTP) for January 2020 was 95.4 percent compared to 94.4 percent OTP for January 2019. In January 2020, there were 913 minutes of delay due to mechanical issues compared to 411 minutes in January 2019.

Looking at customer service statistics, there were 6.3 complaints per 100,000 passengers in January 2020 compared with 6.5 in January 2019.

Shuttle ridership for January 2020 increased 0.2 percent from January 2019. When the Marguerite shuttle ridership is removed, the impact to ridership was a decrease of 1.2 percent. For station shuttles:

- Millbrae-Broadway shuttle: 188 average daily riders
- Weekend Tamien-San Jose shuttle: 24 average daily riders

Due to ongoing service issues with the Shuttle Contractor (MV Transportation) as a result of staffing shortage, there were a total of 490 DNOs (Did Not Operate) trips for Caltrain shuttles in January 2020. After months of decreases, DNOs increased after the holiday season. There is continued service loses beyond previously implemented service reductions and suspensions to match available operator counts. The Menlo Park Midday Shuttle, one of the two Twin Dolphin and one of the two Belle Haven vehicles remain temporarily discontinued.

Table A
January 2020

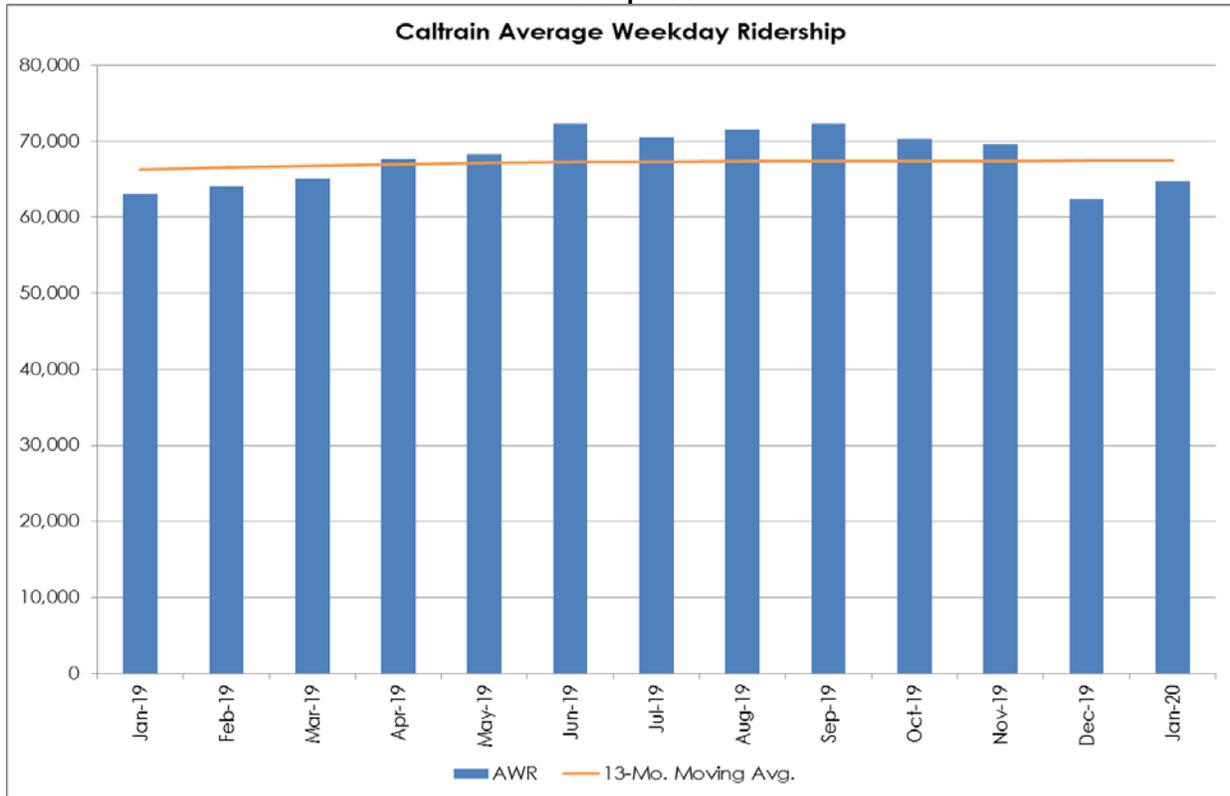
	FY2019	FY2020	% Change
Total Ridership	1,491,101*	1,539,666	3.3%
Average Weekday Ridership	63,044*	64,806	2.8%
Total Farebox Revenue	\$ 7,764,277	\$ 8,812,385	13.5%
On-time Performance	94.4%	95.4%	1.1%
Average Weekday Caltrain Shuttle Ridership	7,958	7,970	0.2%

Fiscal Year to Date

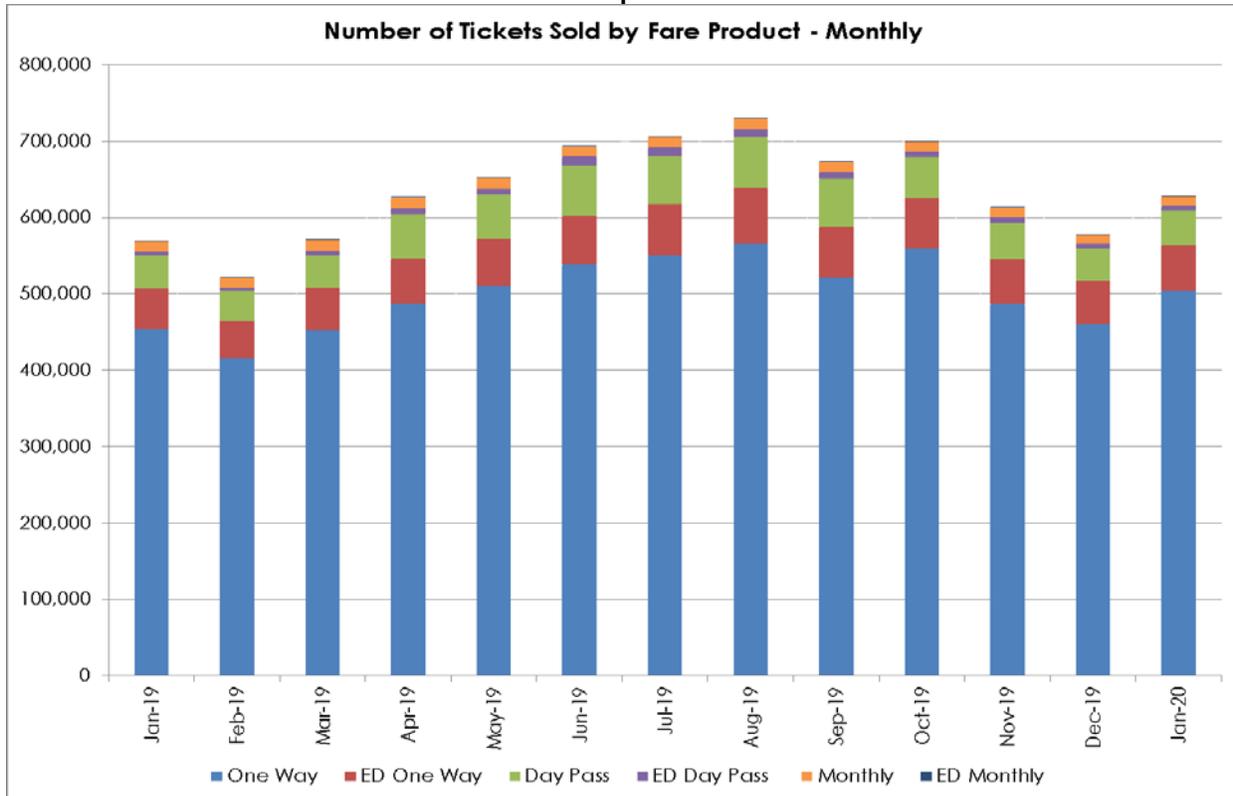
	FY2019	FY2020	% Change
Total Ridership	10,751,429*	11,127,997*	3.5%
Average Weekday Ridership	66,922*	68,813*	2.8%
Total Farebox Revenue	\$ 58,848,938	\$ 62,006,935	5.4%
On-time Performance	93.1%	93.6%	0.5%
Average Weekday Caltrain Shuttle Ridership	8,125	8,421	3.6%

* = Items revised due to calibration to the ridership model

Graph A



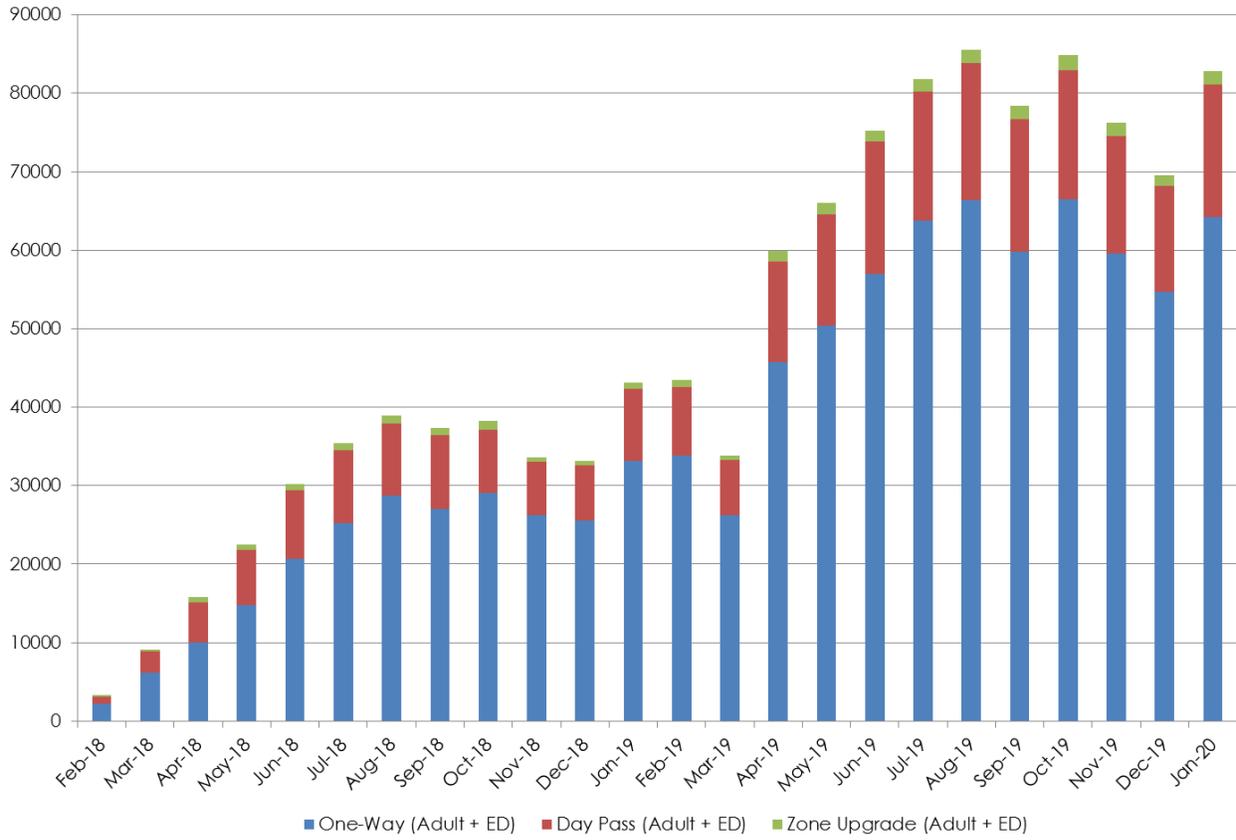
Graph B



*Go Passes tracked by Monthly Number of Eligible Employees (not by Sales)

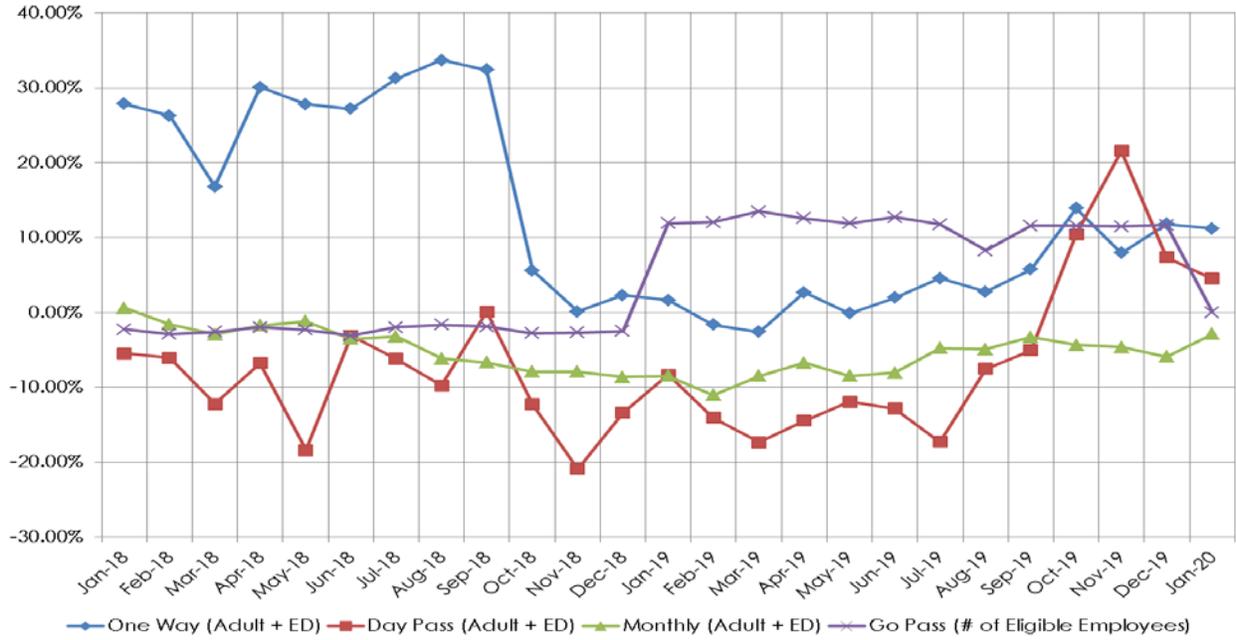
Graph C

Caltrain Mobile Ticketing - Monthly Sales

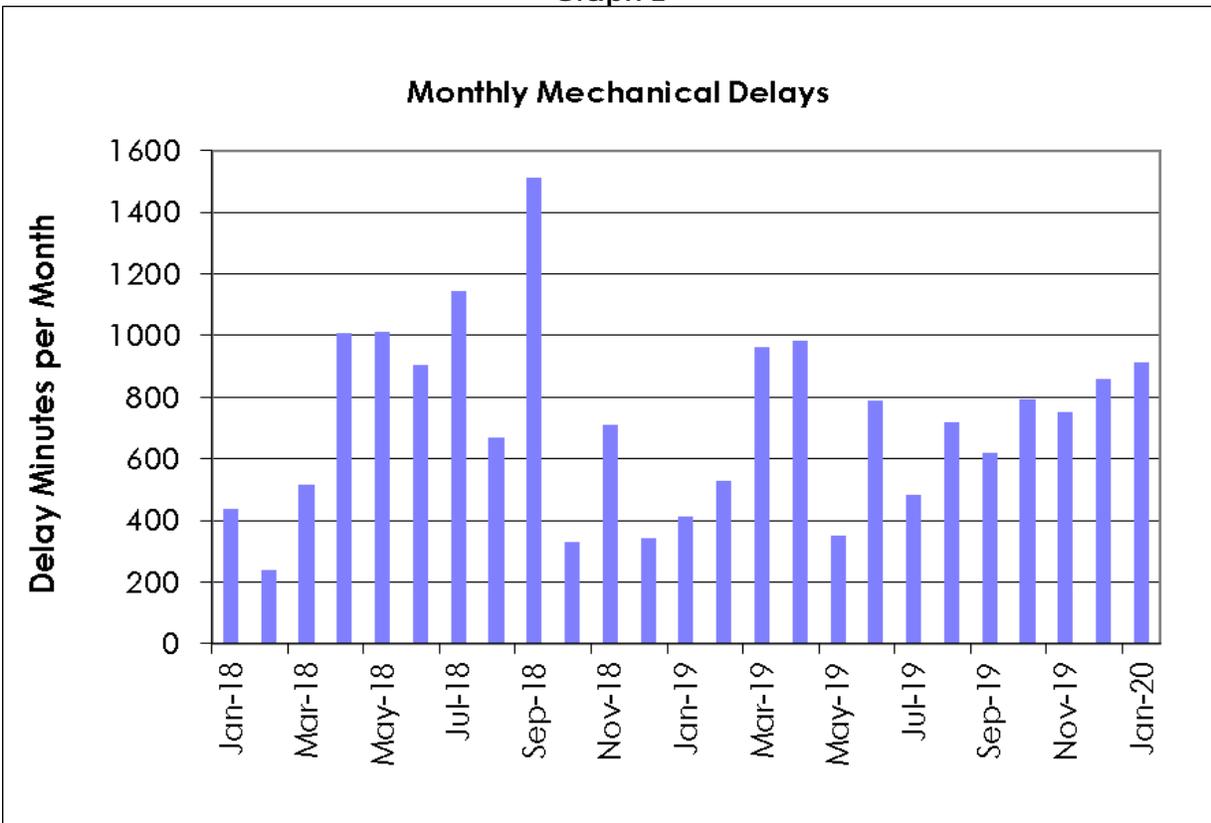


Graph D

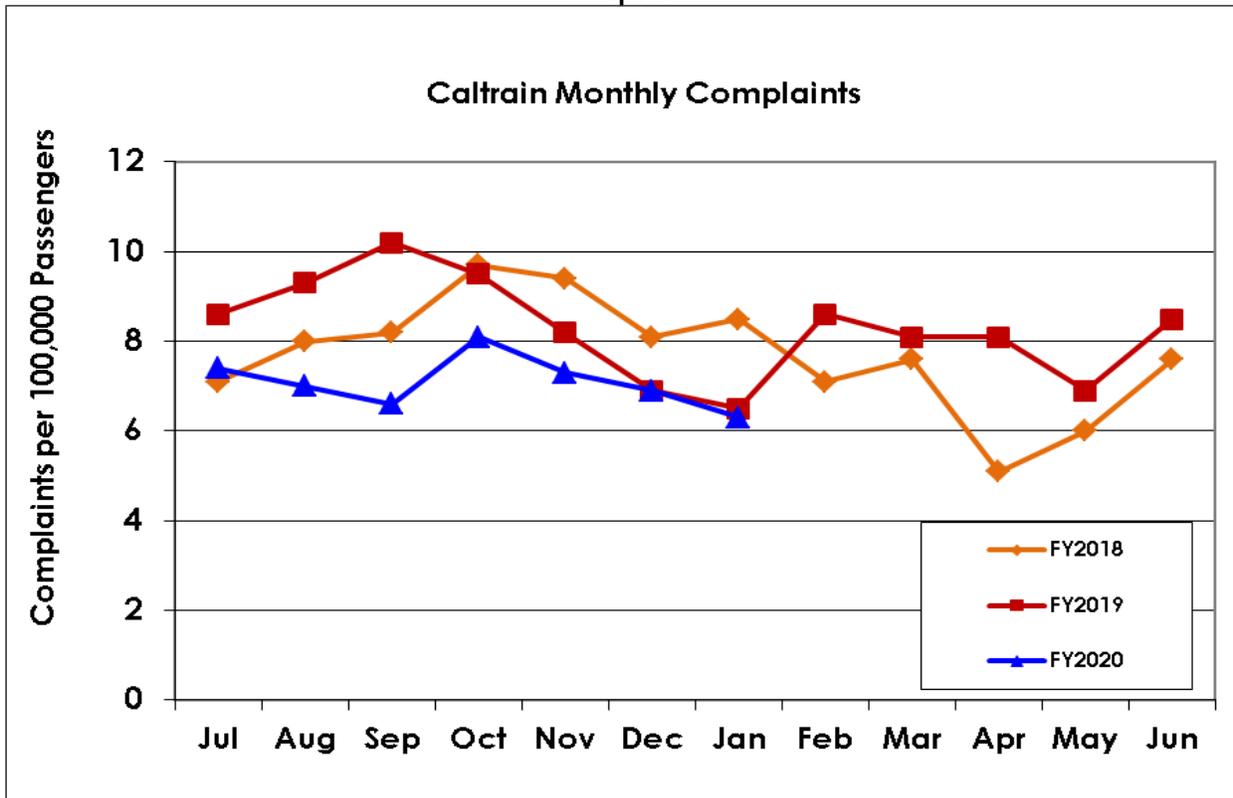
Number of Tickets Sold: Year to Year (Same Month Last Year) % Change



Graph E



Graph F



Caltrain Promotions – January 2020

MLK Train – Caltrain partnered with the Northern California Dr. Martin Luther King, Jr. Community Foundation (NorCalMLK Foundation) to run the annual special Celebration Train honoring the life and legacy of Dr. Martin Luther King, Jr. The Celebration Train ran on January 20, 2020 and stopped in San Jose, Palo Alto and San Mateo. Ridership for the 2020 Celebration Train was 841, which represents an eight percent decrease compared to 2019. Caltrain promoted the special celebration event through boosted organic social media, a press release, Caltrain’s website and through partnerships with the NorCalMLK Foundation and San Mateo County’s Martin Luther King, Jr. Day communications. Caltrain printed a commemorative ticket which was distributed to Celebration Train passengers. Caltrain staff offered fun MLK trivia and prizes on their way to San Francisco.

Caltrain Mobile Parking – The Caltrain Mobile Ticketing App officially launched a new pay for parking functionality on January 1, 2020. This much anticipated feature allows riders to pay for their daily parking ticket through the app without having to interact with a station ticket machine. Communications issued a news release, an updated video asset for landing page and organic social media. Advertising strategies included a geo-fenced mobile display ad campaign circling all Caltrain stations/lots and social media campaign, overlay targeting San Mateo and Santa Clara counties. Printed take-ones were placed onboard the trains and customer facing decals were placed on all station ticket machines. Messaging will be ongoing throughout the Giants season when app usage is at its highest.

Caltrain Digital Metrics - JAN 2020



New Followers

+118

Jan 20 - 181,897

Dec 19 - 181,736

Jan 19 - 175,891

Caltrain.com Sessions

Jan 20 - 832,838

Dec 19 - 794,690

Jan 19 - 726,454

Monthly Yelp & FB Rating



(2 Jan reviews)

Top Tagged Issues

1. Delays (25)

2. MLK Train (22)

3. HVAC (5)

4. Lost Found (4)

*Tag metrics impacted due to staff opening.

Social Engagement Video Views

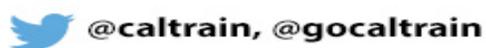
674,656 (Dec - 437,611)

Content Impressions

3,283,517 (Dec - 4.3M)

Interactions

25,830 (Dec - 54,619)



Twitter Impression Spikes Jan, 2020

Your Tweets earned **1.8M impressions** over this **31 day** period



Jan 14
 313 Engine Failure
 25 Incident Delay Mins
 702 M o E Delay Mins
 1066 Total Delay Mins

- Impressions of Tweets
- Paid Impressions
- Tweets Sent

Impressions sometimes appear the day after an incident as Twitter users view the post the next day.

Caltrain News Coverage Report – January 2020



Total # of articles: 65 (compared to 115 in December)

Prepared by:

Patrice Givens, Administrative Analyst II
 James Namba, Marketing Specialist
 Jeremy Lipps, Social Media Officer

650.508.6347
 650.508.7924
 650.622.7845

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Seamus Murphy
Chief Communications Officer

SUBJECT: **STATE AND FEDERAL LEGISLATIVE UPDATE**

ACTION

Staff Coordinating Council recommends the Board receives the attached memos. Staff will provide regular updates to the Board in accordance with Legislative Program.

SIGNIFICANCE

The 2020 Legislative Program establishes the principles that will guide the legislative and regulatory advocacy efforts. Based on those principles, staff coordinates closely with our Federal and State advocates on a wide variety of issues that are considered in Congress and the State legislature. The attached reports highlight the recent issues and actions that are relevant to the Board.

Prepared By: Casey Fromson, Government and
Community Affairs Director

650-508-6493

February 14, 2020

TO: Peninsula Corridor Joint Powers Board Members

FROM: Mike Robson and Trent Smith, Edelstein Gilbert Robson & Smith, LLC
Joshua W. Shaw and Matt Robinson, Shaw / Yoder / Antwih, Inc.

RE: **STATE LEGISLATIVE UPDATE – February 2020**

Overview

Roughly one month into the second year of the two-year legislative session, things are picking up in Sacramento. The deadline for two-year bills to pass out of their house of origin was January 31. A few hundred bills failed to meet this deadline and are officially dead for the rest of session.

February 21 is the bill introduction deadline for new bills in the second year of session. We will begin to see a higher proportion of bills introduced everyday as we near this deadline. In the meantime, new bills will begin to be set for their first policy committee hearings and two-year bills will for their first hearings in their second house.

Legislation

AB 145 (Frazier) High Speed Rail Confirmation of Board Members. This bill, by the Chair of the Assembly Transportation Committee, was introduced last year with a lot of media attention. It is a byproduct of Assemblymember Frazier's displeasure with management of High Speed Rail and came on the heels of an informational hearing he held in January of 2019. This bill would require that the five voting members of the High Speed Rail Authority appointed by the Governor be subject to Senate confirmation.

The bill passed out of the Assembly 72-0 and was sent to the Senate.

AB 1350 (Gonzalez) – Youth Transit Passes. This bill would require transit agencies to offer free transit passes to individuals 18 years old and under in order to be eligible for funding from Local Transportation Funds provided through the Transportation Development Act (TDA), State Transit Assistance through TDA, and Low Carbon Transit Operations Program through the Greenhouse Gas Reduction Fund.

The bill passed out of the Assembly 75-0 and will move to the Senate.

AB 1991 (Friedman) – Passenger Tramway Transit Systems. This bill would allow passenger tramways to qualify for the Transit and Intercity Rail Capitol Program.

It will be heard in the Assembly Transportation and Natural Resources Committees in the coming months.

AB 1992 (Friedman) – Climate Resiliency in Transportation Infrastructure. This bill would require that forecasted impacts of climate change be addressed in the California Plan and Transportation Asset Management Plan to ensure that the state adequately plans for adapting the built environment to climate change.

It will also be heard in the Assembly Transportation and Natural Resources Committees in the coming months.

SB 50 (Wiener) – Affordable Housing around Public Transit. This bill would have required a local government to grant an equitable communities incentive, which would reduce local zoning standards in job and transit rich areas if the local government has not adopted a local flexibility plan that has been approved by the Department of Housing and Community Development. The bill would have also required a neighborhood multifamily project containing up to four dwelling units to be subject to a streamlined approval process.

In late January, SB 50 was pulled from the Senate Appropriations Committee and sent to the Senate floor for a vote. The bill failed 18-15, with 6 senators not voting. It was then brought up again and failed with the same vote count.

It is interesting to note that the votes were not aligned by party affiliation, but rather by the influence of each Senators' locals.

The bill is dead for the rest of session.

Statewide Competitive Grant Programs

Below is a list of major competitive grant programs administered by the State from which transit and rail projects are eligible/can be funded.

Transit and Intercity Rail Capital Program (TIRCP)

The TIRCP was created to fund capital improvements to modernize California's intercity rail, bus, ferry, and rail transit systems to reduce emissions, expand and improve transit service and ridership, integrate rail services and improve transit safety. Funds available are estimated at \$450-500 million for Cycle 4 but could change on auction proceeds and changing cash flow requirements of already awarded projects.

Important Dates:

January 2020 – Applications Due

April 2020 – CalSTA Award Announcement

Solutions for Congested Corridors Program (SCCP)

The SCCP provides funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the state. The program makes \$250 million available annually (programmed in 2-year increments) for projects that implement specific transportation performance improvements.

Important Dates:

October 2019 – Guidelines Adopted

January 2020 – Applications Due

June 2020 – Program Adoption

Local Partnership Program (LPP)

The LPP is intended to provide local and regional transportation agencies that have passed sales tax measures, developer fees, or other imposed transportation fees with a continuous appropriation of \$200 million annually from the Road Maintenance and Rehabilitation Account to fund road maintenance and rehabilitation, sound walls, and other transportation improvement projects. The Competitive program is funded at \$100 million annually.

Important Dates:

October 2019 – Guidelines Adopted

January 2020 – Applications Due

June 2020 – Program Adoption

Trade Corridor Enhancement Program (TCEP)

The TCEP provides funding for infrastructure improvements on federally designated Trade Corridors of National and Regional Significance, on the Primary Freight Network as identified in California Freight Mobility Plan, and along other corridors that have a high volume of freight movement. There is approximately \$300 million provided per year (programmed in 2-year increments) for the competitive program.

Important Dates:

January 2020 – Guidelines Adopted

March 2020 – Applications Due

June 2020 – Program Adoption

Grade Separation Funding

Below is a list of the funding sources that we are aware of and/or that have been used to fund grade separations in the recent years. The funding sources below are managed across various state agencies and departments, including the Public Utilities Commission (PUC), the California State Transportation Agency (CalSTA), the California Transportation Commission (CTC), and Caltrans.

PUC Section 190 Grade Separation Program – The Program is a [state funding program](#) to grade separate crossings between roadways and railroad tracks and provides approximately \$15 million annually, transferred from Caltrans. Agencies apply to the PUC for project funding.

State Transportation Improvement Program – The STIP, managed by Caltrans and programmed by the CTC, is primarily used to fund highway expansion projects throughout the state, but also supports grade separations. The STIP is programmed every two years (currently the 2018 STIP added \$2.2 billion in new funding). Local agencies receive a share of STIP funding, as does the State. The STIP is funded with gasoline excise tax revenues.

Transit and Intercity Rail Capital Program – The TIRCP is managed by CalSTA and is available to fund rail and transit projects that reduce greenhouse gas emissions. The program receives funding from Cap and Trade and the recently created Transportation Improvement Fee to the tune of approximately \$500 million per year. The TIRCP is programmed over 5 years, with the most recent cycle beginning in May 2018. Caltrain received \$160 million for the CalMod project.

Proposition 1A – This \$9.9 billion Bond Act is the primary funding source for the high-speed rail project and has been used to fund a very limited number of grade separation projects in the past, including in the City of San Mateo.

Caltrain

State Legislative Matrix 2/10/2020

Bill Number (Author)	Summary	Location	Position
<p>AB 145 (Frazier D)</p> <p>High-Speed Rail Authority: Senate confirmation.</p>	<p>Existing law creates the High-Speed Rail Authority with specified powers and duties relative to development and implementation of a high-speed train system. The authority is composed of 11 members, including 5 voting members appointed by the Governor, 4 voting members appointed by the Legislature, and 2 nonvoting legislative members. This bill would provide that the members of the authority appointed by the Governor are subject to appointment with the advice and consent of the Senate.</p> <p>Introduced: 12/13/2018</p>	Senate Rules	Watch Closely
<p>AB 1350 (Gonzalez D)</p> <p>Free youth transit passes: eligibility for state funding.</p>	<p>Existing law declares that the fostering, continuance, and development of public transportation systems are a matter of state concern. Existing law authorizes the Department of Transportation to administer various programs and allocates moneys for various public transportation purposes. This bill would require transit agencies to offer free youth transit passes to persons 18 years of age and under in order to be eligible for state funding under the Mills-Deddeh Transit Development Act, the State Transit Assistance Program, or the Low Carbon Transit Operations Program. The bill would also require a free youth transit pass to count as a full price fare for purposes of calculating the ratio of fare revenues to operating costs.</p> <p>Amended: 1/15/2020</p>	Senate Rules	Watch
<p>AB 1991 (Friedman D)</p> <p>Transit and Intercity Rail Capital Program: passenger tramways.</p>	<p>Existing law establishes the Transit and Intercity Rail Capital Program, which is funded in part by a continuously appropriated allocation of 10% of the annual proceeds of the Greenhouse Gas Reduction Fund, to fund transformative capital improvements that will modernize California's intercity, commuter, and urban rail systems and bus and ferry transit systems to achieve certain policy objectives. Existing law requires the Transportation Agency to evaluate applications for funding under the program and to approve a multiyear program of projects, as specified, and requires the California Transportation Commission to allocate funding to applicants pursuant to the program of projects approved by the agency. This bill would expand the purpose of the program to authorize funding for passenger tramway transit systems. By expanding the purposes for which continuously appropriated moneys may be used, the bill would make an appropriation.</p> <p>Introduced: 1/27/2020</p>	Assembly Transportation	Pending
<p>AB 2012 (Chu D)</p> <p>Free senior transit passes: eligibility for state funding.</p>	<p>Existing law declares that the fostering, continuance, and development of public transportation systems are a matter of state concern. Existing law authorizes the Department of Transportation to administer various programs and allocates moneys for various public transportation purposes. This bill would require transit agencies to offer free senior transit passes to persons over 65 years of age in order to be eligible for state funding under the Mills-Deddeh Transit Development Act, the State Transit Assistance Program, and the Low Carbon Transit Operations Program. The bill would require those free senior transit passes to count as full price fares for purposes of calculating the ratio of fare revenues to operating costs.</p>	Assembly Print	Watch

<p>AB 2057 (Chiu D)</p> <p>San Francisco Bay area: public transportation.</p>	<p>Introduced: 1/28/2020</p> <p>Existing law creates the Metropolitan Transportation Commission as a local area planning agency for the 9-county San Francisco Bay area with comprehensive regional transportation planning and other related responsibilities. Existing law creates various transit districts located in the San Francisco Bay area, with specified powers and duties relative to providing public transit services. This bill would state the intent of the Legislature to later enact legislation relating to public transportation in the 9-county San Francisco Bay area.</p> <p>Introduced: 2/3/2020</p>	<p>Assembly Print</p>	<p>Pending</p>
<p>ACA 1 (Aguiar-Curry D)</p> <p>Local government financing: affordable housing and public infrastructure: voter approval.</p>	<p>(1)The California Constitution prohibits the ad valorem tax rate on real property from exceeding 1% of the full cash value of the property, subject to certain exceptions.This measure would create an additional exception to the 1% limit that would authorize a city, county, city and county, or special district to levy an ad valorem tax to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of public infrastructure, affordable housing, or permanent supportive housing, or the acquisition or lease of real property for those purposes, if the proposition proposing that tax is approved by 55% of the voters of the city, county, or city and county, as applicable, and the proposition includes specified accountability requirements. The measure would specify that these provisions apply to any city, county, city and county, or special district measure imposing an ad valorem tax to pay the interest and redemption charges on bonded indebtedness for these purposes that is submitted at the same election as this measure.This bill contains other related provisions and other existing laws.</p> <p>Amended: 3/18/2019</p>	<p>Assembly Reconsideration</p> <p>2/10/2020 #2 ASSEMBLY MOTION TO RECONSIDER</p>	<p>Support</p>
<p>SB 43 (Allen D)</p> <p>Carbon intensity and pricing: retail products.</p>	<p>The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The state board is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to ensure that statewide greenhouse gas emissions are reduced to at least 40% below the 1990 level by 2030.This bill would require the state board, no later than January 1, 2022, to submit a report to the Legislature on the findings from a study, as specified, to determine the feasibility and practicality of assessing the carbon intensity of all retail products subject to the tax imposed pursuant to the Sales and Use Tax Law, so that the total carbon equivalent emissions associated with such retail products can be quantified.This bill contains other existing laws.</p> <p>Amended: 7/1/2019</p>	<p>Assembly 2 year</p>	<p>Watch</p>
<p>SB 50 (Wiener D)</p> <p>Planning and zoning: housing development: streamlined approval: incentives.</p>	<p>(1)Existing law authorizes a development proponent to submit an application for a multifamily housing development that satisfies specified planning objective standards to be subject to a streamlined, ministerial approval process, as provided, and not subject to a conditional use permit.This bill would authorize a development proponent of a neighborhood multifamily project located on an eligible parcel to submit an application for a streamlined, ministerial approval process that is not subject to a conditional use permit. The bill would define a "neighborhood multifamily project" to mean a project to construct a multifamily structure on vacant land, or to convert an existing structure that does not require substantial exterior alteration into a multifamily structure, consisting of up to 4 residential dwelling units and that meets local height, setback, and lot coverage zoning requirements as they existed on July 1, 2019. The bill would also define "eligible</p>	<p>Senate Dead</p>	<p>Watch</p>

	parcel" to mean a parcel that meets specified requirements, including requirements relating to the location of the parcel and restricting the demolition of certain housing development that may already exist on the site.This bill contains other related provisions and other existing laws. Amended: 1/6/2020		
SB 146 (Beall D) Peninsula Rail Transit District.	Existing law, operative under certain conditions, redesignates the Peninsula Corridor Study Joint Powers Board as the Peninsula Rail Transit District, comprised of 9 members appointed from various governing bodies situated in the City and County of San Francisco and the Counties of San Mateo and Santa Clara, with specified powers.This bill would repeal the provisions relating to the Peninsula Rail Transit District. Introduced: 1/18/2019	Assembly 2 year	Watch Closely
SB 147 (Beall D) High-Speed Rail Authority.	The California High-Speed Rail Act creates the High-Speed Rail Authority to develop and implement a high-speed train system in the state, with specified powers and duties. Existing law authorizes the authority, among other things, to keep the public informed of its activities.This bill would revise that provision to instead authorize the authority to keep the public informed through activities, including, but not limited to, community outreach events, public information workshops, and newsletters posted on the authority's internet website. Introduced: 1/18/2019	Assembly 2 year	Watch Closely
SB 278 (Beall D) Metropolitan Transportation Commission.	The Metropolitan Transportation Commission Act creates the Metropolitan Transportation Commission as a local area planning agency to provide comprehensive regional transportation planning for the region comprised of the 9 San Francisco Bay area counties. The act requires the commission to continue to actively, on behalf of the entire region, seek to assist in the development of adequate funding sources to develop, construct, and support transportation projects that it determines are essential.This bill would also require the commission to determine that those transportation projects are a priority for the region.This bill contains other related provisions and other existing laws. Amended: 3/28/2019	Assembly Desk	Watch

Total Measures: 11

Total Tracking Forms: 11

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Caltrain As of February 21, 2020 Federal Transportation Report

President Introduces FY 2021 Budget Request

On February 10, President Donald Trump released his Administration's FY 2021 budget request. The budget request includes:

- \$1 billion for the Better Utilizing Investments to Leverage Development (BUILD) grant program, level with current funding--FY 2020 enacted levels.
- \$1.9 billion for the Capital Investment Grant (CIG) Program, an \$89 million decrease from FY 2020 enacted levels. Does include \$100 million for the Peninsula Corridor Electrification project.
- \$50 billion from the Highway Trust Fund for the highway program; consistent with the Fixing America's Surface Transportation (FAST) Act and a \$3.6 billion increase from FY 2020 enacted levels.
- \$11 billion for transit infrastructure grants, a \$536 million increase from FY 2020 enacted levels.

In addition, the Administration outlined its request for a new 10-year, \$1 trillion surface transportation reauthorization proposal, \$810 billion of which will be dedicated to supporting the U.S. Department of Transportation's (DOT) highway, transit, safety, and rail programs. Along with the \$810 billion request, the reauthorization proposal requests \$190 billion for other infrastructure improvements including: \$60 billion for a new mega-projects program, including transit and rail capital investments; and \$20 billion for a Mass Transit State-of-Good-Repair Program to reduce the nation's transit state-of-good-repair backlog.

House Democrats Unveil Infrastructure Framework

On January 29, House Democrats introduced their [infrastructure framework](#), which House Speaker Nancy Pelosi (D-Calif.) said will create jobs, rebuild America, address the climate crisis, reduce carbon pollution, improve safety, and spur economic activity. The plan is expected to cost \$760 billion over a five-year period, although Democrats have not identified funding for their ambitious infrastructure goals. The climate plan, according to House Transportation and Infrastructure (T&I) Committee Chairman Peter DeFazio (D-Ore.), will include provisions such as requiring federal buildings to be carbon-neutral and transitioning to renewable fuels for aviation. He also said to expect the plan to include proposals to improve rail and transit options

“as a more efficient way to move passengers than short-haul airlines and automobiles.”
Highlights from the proposal include:

- \$329 billion for modernizing highways and highway safety investments, including funding for [47,000 structurally deficient bridges](#)
- \$105 billion in transit investment, including increased investment in zero-emission buses and modernization of the Capital Investment Grant Program
- \$55 billion in rail investments
- \$30 billion in airport investments
- \$50.5 billion for clean water and wastewater infrastructure
- \$10 billion in water infrastructure improvements, including enhanced funding for resiliency projects
- \$19.7 billion for harbor infrastructure
- \$2.7 billion for Brownfield restoration
- \$25.4 billion for drinking water programs, including funding for communities dealing with PFAS contamination.
- \$34.3 billion for clean energy programs, with an emphasis on renewable energy and zero emissions
- \$86 billion for broadband and communications, with an emphasis on expanding broadband to underserved communities
- \$12 billion in public safety communications programs, including the implementation of a Next Generation 9-1-1 system to help first responders better assess the nature of an emergency

Prior to the rollout, House T&I Committee Republicans released a list of surface transportation principles encouraging Congress to reduce the Highway Trust Fund’s reliance on fuel taxes, prioritize technological innovation, streamline permitting, and address rural infrastructure needs. They also expressed support for streamlining infrastructure project delivery through the President’s proposal to overhaul NEPA.

On the Senate side, Senate Finance Chairman Chuck Grassley (R-Iowa) has been working with Senate Environment and Public Works (EPW) Chairman John Barrasso (R-Wyo.) on funding details for the \$287 billion, five-year [surface transportation bill](#) that the EPW Committee passed on July 30, 2019. The Senate Banking Committee (oversees transit) and the Senate Commerce, Science, and Transportation Committee (oversees rail) still need to pass their bills, while the Senate Finance Committee continues to work on a funding mechanism for the package.

NEPA Overhaul Proposal Released by Trump Administration

The White House Council on Environmental Quality (CEQ) [released a proposed rule](#) on January 9, to overhaul enforcement of the National Environmental Policy Act (NEPA). For the last 50 years, NEPA has required agencies to evaluate how pipelines, highways, and some oil and gas development affect the environment and nearby communities. These changes would update how federal agencies implement the law, which has been criticized by the current administration for hindering project development. During a news conference, President Donald Trump said, "From Day One, my administration has made fixing this regulatory nightmare a top priority. And we

want to build new roads, bridges, tunnels, highways bigger, better, faster, and we want to build them at less cost." Environmentalists say the proposed changes would allow the government to look the other way when projects contribute a considerable amount of greenhouse gases into the atmosphere. Public comments are being accepted until March 10, 2020.

House Ways and Means Committee Holds Hearing on Financing Infrastructure

On January 28, the House Ways and Means Committee held a [hearing](#) entitled, "Paving the Way for Funding and Financing Infrastructure Investments to address the need for funding and investment in infrastructure." The hearing focused on options to pay for infrastructure investments including gas taxes, Build America Bonds, and the Highway Trust Fund. Both Democrats and Republicans indicated a desire to see increases in infrastructure funding. Reps. Blumenauer (D-OR), Larson (D-CT), Sanchez (D-CA), LaHood (R-IL), Panetta (D-CA), and Walorski (R-IN) spoke in favor of raising the gas tax. Reps. Reed (R-NY) and Rice (R-SC) spoke in opposition of raising the gas tax. This hearing was not focused on the recent rollout of an infrastructure framework, or reauthorization, but on general funding ideas for infrastructure.

Witnesses included:

Joung Lee

Director of Policy and Government Relations, American Association of State Highway and Transportation Officials

- [Testimony](#)

Dr. Philip Fischer

Founder, eBooleant Consulting LLC, and Former Head of Fixed Income and Municipal Bond Strategy, Global Banking & Markets, Bank of America Merrill Lynch

- [Testimony](#)

Laura L. Canter

Executive Vice President and Division Director of the Finance Programs Division, Massachusetts Development Finance Agency

- [Testimony](#)

Diane Gutierrez-Scaccetti

Commissioner, New Jersey Department of Transportation

- [Testimony](#)

DJ Gribbin

Founder, Madrus LLC

- [Testimony](#)

Grants

U.S. Department of Transportation (DOT) – BUILD Grants

The FY 2020 Consolidated Appropriations Act provided \$1 billion for BUILD. BUILD provides a unique opportunity for the DOT to invest in road, rail, transit and port projects that promise to achieve national objectives. Funds for the FY 2020 BUILD Transportation grants program are to

be awarded on a competitive basis for surface transportation infrastructure projects that will have a significant local or regional impact. All applications are due by May 18, 2020.

U.S. Department of Transportation (DOT) – Nationally Significant Freight and Highway Projects (INFRA) Grants

The INFRA program provides federal financial assistance to highway and freight projects of national or regional significance. The program utilizes selection criteria that promote projects with national and regional economic vitality goals, while leveraging nonfederal funding to increase the total investment by state, local and private partners. INFRA promotes the incorporation of innovative technology, such as broadband deployment and intelligent transportation systems. Eligible INFRA project costs may include reconstruction; rehabilitation; acquisition of property, including land related to the project and improvements to the land; environmental mitigation; construction contingencies; equipment acquisition; and operational improvements directly related to system performance. **All applications are due by February 25, 2020. For more information, please visit the [Funding Opportunity Announcement via Grants.gov](#).**

U.S. Department of Transportation (DOT), Federal Transit Administration (FTA) – Low or No Emission Program (Low-No Program)

The main purpose of this program is to support the transition of the nation's transit fleet to the lowest polluting and most energy efficient transit vehicles. The Low-No Program provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses, including acquisition, construction and leasing of required supporting facilities. **All applications are due by March 17, 2020. For more information, please visit the [Funding Opportunity Announcement via Grants.gov](#).**

U.S. Department of Transportation (DOT), Federal Transit Administration (FTA) – Grants for Buses and Bus Facilities Program

This program makes federal resources available to states and direct recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. Funding is provided through formula allocations and competitive grants. A sub-program, the Low- or No-Emission Vehicle Program, provides competitive grants for bus and bus facility projects that support low and zero-emission vehicles. **All applications are due by March 30, 2020. For more information, please visit the [Funding Opportunity Announcement via Grants.gov](#).**

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board
THROUGH: Jim Hartnett
Executive Director
FROM: Derek Hansel
Chief Financial Officer
SUBJECT: **STATEMENT OF REVENUES AND EXPENSES FOR THE PERIOD ENDING
JANUARY 31, 2020**

ACTION

Staff proposes that the Board of Directors accept and enter into the record the Statement of Revenues and Expenses for the month of January 2020.

This staff report provides a brief discussion of significant items and trends on the attached Statement of Revenues and Expenses through January 31, 2020. The statement has been designed to follow the Agency-wide line item rollup as included in the adopted budget. The columns have been designed to provide easy comparison of year-to-date prior to current actuals for the current fiscal year including dollar and percentage variances. In addition, the current forecast of Revenues and Expenses is compared to the Adopted Budget for Fiscal Year 2020.

SIGNIFICANCE

Annual Forecast: The annual forecast was updated for the February board meeting based on actual revenue and expense trends through December 2019. The forecast was derived by analyzing trends and reviewing details with cost center managers. The forecast will be updated again for the April board meeting.

Forecast Revenues: Total revenue (page 1, line 17) is forecast \$2.3 million higher than budget. This is primarily driven by higher Farebox Revenue (page 1, line 1) which is \$3.1 million higher than budget due to adopted fare changes (Go Pass fare increased by 20%, Clipper discount reduced to \$0.25, and implementation of the means based fare pilot program). Other Income (page 1, line 5) is higher than budget by \$0.4M due to parking citation revenue. This is partially offset by Shuttles (page 1, line 3) due to a reduction in service.

The Use of Reserves (page 1, line 13) is \$1.1 million lower than budget primarily due to the increased fare revenue.

Forecast Expenses: Total Expense (page 1, line 49) is \$0.6 million lower than budget. The variance is primarily due to lower expense trends. Shuttles Services (page 1, line 26) is \$0.2 million lower than budget due to a labor shortage of drivers causing a reduction in service. Professional Services (page 1, line 41) is lower than budget by \$0.2 million as a result of delays in various planning studies. Facilities & Equipment Maintenance (page 1, line 31) is lower than budget by \$0.1 million due to delayed start of various survey work.

Year to Date Revenues: As of January year-to-date actual, the Total Revenue (page 1, line 17) is \$5.2 million higher than the prior year. This is primarily driven by Farebox Revenue (page 1, line 1), Other Income (page 1, line 5) and JPB Member Agencies Contributions (page 1, line12).

Year to Date Expenses: As of January year-to-date actual, the Total Expense (page 1, line 49) is \$3.9 million higher than the prior year-to-date actual. This is primarily due to increases in Rail Operator Service (page 1, line 23), in Fuel and Lubricants (page1, line 27), in Wages & Benefits (page 1, line 38), in Professional Services (page 1, line 41) and Long Term Debt Expense (page 1, line 47). The increases are partially offset by decreases in Security Services (page 1, line 25), Claims, Payments and Reserves (page1, line 30) and Managing Agency Admin OH cost (page 1, line 39).

Other Information: Starting in January 2019, the Agency modified the basis of reporting from accrual basis to modified cash basis (only material revenues and expenses are accrued) in monthly financial statements. The change in the accounting basis is not retroactively reflected in the prior year actual. As such, the monthly variance between the prior year and the current year actual may show noticeable variances for some line items on the financial statements.

BUDGET IMPACT

There are no budget amendments for the month of January 2020.

STRATEGIC INITIATIVE

This item does not achieve a strategic initiative.

Prepared By :	Soe Aung, Accountant III	650-622-8020
	Jennifer Ye, Manager, General Ledger	650-622-7890

PENINSULA CORRIDOR JOINT POWERS BOARD
STATEMENT OF REVENUE AND EXPENSE
Fiscal Year 2020
January 2020

	YEAR TO DATE					% OF YEAR ELAPSED				58.3%
	PRIOR		CURRENT		CURRENT AS A % OF BUDGET	APPROVED		ANNUAL		
	ACTUAL	ACTUAL	\$ VARIANCE	% VARIANCE		BUDGET	FORECAST	\$ VARIANCE	% BUDGET	
REVENUE										
OPERATIONS:										
1 Farebox Revenue	58,848,938	62,006,935	3,157,998	5.4%	58.5%	106,000,000	109,050,000	3,050,000	2.9%	1
2 Parking Revenue	3,018,576	2,908,100	(110,476)	(3.7%)	54.5%	5,335,000	5,335,000	-	0.0%	2
3 Shuttles	1,179,715	1,074,402	(105,312)	(8.9%)	42.9%	2,503,200	2,395,314	(107,886)	(4.3%)	3
4 Rental Income	1,154,931	1,212,066	57,135	4.9%	58.8%	2,060,540	2,060,540	-	0.0%	4
5 Other Income	1,469,419	2,116,206	646,787	44.0%	120.7%	1,753,450	2,153,450	400,000	22.8%	5
6										6
7 TOTAL OPERATING REVENUE	65,671,578	69,317,711	3,646,132	5.6%	58.9%	117,652,190	120,994,304	3,342,114	2.8%	7
8										8
CONTRIBUTIONS:										
9										9
10 AB434 Peninsula & TA Shuttle Funding	1,036,341	1,236,127	199,786	19.3%	71.1%	1,737,950	1,737,950	-	0.0%	10
11 Operating Grants	3,832,854	3,022,962	(809,892)	(21.1%)	56.7%	5,327,497	5,327,497	-	0.0%	11
12 JPB Member Agencies	17,240,500	19,450,239	2,209,739	12.8%	65.0%	29,921,971	29,921,971	-	0.0%	12
13 Use of Reserves			-	0.0%	0.0%	1,064,614	-	(1,064,614)	(100.0%)	13
14										14
15 TOTAL CONTRIBUTED REVENUE	22,109,695	23,709,328	1,599,633	7.2%	62.3%	38,052,032	36,987,418	(1,064,614)	(2.8%)	15
16										16
17 GRAND TOTAL REVENUE	87,781,273	93,027,039	5,245,766	6.0%	59.7%	155,704,222	157,981,722	2,277,500	1.5%	17
18										18
19										19
EXPENSE										
20										20
OPERATING EXPENSE:										
21										21
22										22
23 Rail Operator Service	50,346,147	52,526,621	2,180,474	4.3%	57.8%	90,817,696	90,817,696	-	0.0%	23
24 Positive Train Control	20,481	123,766	103,286	504.3%	5.2%	2,400,000	2,400,000	-	0.0%	24
25 Security Services	3,767,857	3,343,364	(424,493)	(11.3%)	51.1%	6,544,183	6,544,183	-	0.0%	25
26 Shuttles Services	2,244,237	2,302,009	57,772	2.6%	43.5%	5,290,100	5,061,300	(228,800)	(4.3%)	26
27 Fuel and Lubricants	5,971,678	6,668,918	697,241	11.7%	60.6%	11,003,417	11,003,417	-	0.0%	27
28 Timetables and Tickets	6,429	44,738	38,309	595.9%	31.2%	143,500	143,500	-	0.0%	28
29 Insurance	2,454,655	2,529,169	74,514	3.0%	56.1%	4,506,064	4,506,064	-	0.0%	29
30 Claims, Payments, and Reserves	384,808	(105,484)	(490,291)	(127.4%)	(11.1%)	951,794	951,794	-	0.0%	30
31 Facilities and Equipment Maint	1,139,768	1,218,611	78,843	6.9%	36.5%	3,339,391	3,228,522	(110,869)	(3.3%)	31
32 Utilities	1,074,623	1,126,713	52,090	4.8%	53.5%	2,105,422	2,105,422	-	0.0%	32
33 Maint & Services-Bldg & Other	627,910	691,560	63,650	10.1%	44.1%	1,567,930	1,567,930	-	0.0%	33
34										34
35 TOTAL OPERATING EXPENSE	68,038,592	70,469,986	2,431,394	3.6%	54.8%	128,669,496	128,329,828	(339,669)	(0.3%)	35
36										36
ADMINISTRATIVE EXPENSE										
37										37
38 Wages and Benefits	5,934,843	6,988,811	1,053,968	17.8%	57.9%	12,066,711	12,066,711	-	0.0%	38
39 Managing Agency Admin OH Cost	3,690,003	2,315,860	(1,374,143)	(37.2%)	45.4%	5,098,065	5,098,065	-	0.0%	39
40 Board of Directors	13,238	9,964	(3,274)	(24.7%)	68.2%	14,600	14,600	-	0.0%	40
41 Professional Services	981,282	1,921,950	940,668	95.9%	45.0%	4,275,583	4,050,583	(225,000)	(5.3%)	41
42 Communications and Marketing	176,439	190,429	13,989	7.9%	63.2%	301,500	301,500	-	0.0%	42
43 Other Office Expenses and Services	1,467,547	1,534,514	66,967	4.6%	58.2%	2,638,494	2,625,494	(13,000)	(0.5%)	43
44										44
45 TOTAL ADMINISTRATIVE EXPENSE	12,263,352	12,961,528	698,176	5.7%	53.1%	24,394,953	24,156,953	(238,000)	(1.0%)	45
46										46
47 Long Term Debt Expense	852,563	1,580,521	727,958	85.4%	59.9%	2,639,773	2,639,773	-	0.0%	47
48										48
49 GRAND TOTAL EXPENSE	81,154,507	85,012,035	3,857,528	4.8%	54.6%	155,704,222	155,126,554	(577,669)	(0.4%)	49
50										50
51 NET SURPLUS / (DEFICIT)	6,626,766	8,015,004	1,388,238	20.9%		(0)	2,855,168	2,855,169		51

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Derek Hansel
Chief Financial Officer

Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: **DISPOSITION OF TAYLOR DUNN ELECTRIC CARTS**

ACTION

Staff Coordinating Council recommends the Board authorize the Executive Director, or his designee, to dispose of six Taylor Dunn electric carts (Vehicles), in compliance with the Peninsula Corridor Joint Powers Board's (JPB) procurement policy.

SIGNIFICANCE

The proposed action will implement the JPB's policy to routinely dispose of surplus vehicles that are no longer viable for service through sale by sealed bid, public auction, or negotiation, donation to a non-profit agency, recycling, transfer to another public agency, trade-in as part of a new procurement, recycling, donation to a non-profit entity, or by discarding as scrap. The Vehicles included in the proposed action will be disposed of by public auction.

BUDGET IMPACT

The Vehicles were originally purchased in 2007 with a mix of federal and local funds. While the estimated fair market value is less than \$5,000 for each vehicle, any net proceeds greater than \$5,000 received from the sale of each vehicle will be returned to the Federal Transit Administration.

BACKGROUND

The Vehicles have been in use at the Central Equipment, Maintenance and Operations Facility, in San Jose. They have reached the end of their useful lives and have been identified for disposal.

Procurement Administrator II: Brian Geiger

650.508.7973

Project Manager: Lawrence Leung, Manager, Rail Contracts and Budget 650.508.6328

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: April Chan
Chief Officer, Planning, Grants and Transportation Authority

SUBJECT: **AUTHORIZE THE APPLICATION FOR AND RECEIPT OF ANNUAL CAP AND TRADE FUNDING FOR THE PENINSULA CORRIDOR ELECTRIFICATION PROJECT**

ACTION

Staff Coordinating Council (SCC) recommends the Board authorize the Executive Director, or his designee to:

1. Apply for and receive \$1.78 million in California Low Carbon Transportation Operations Program (LCTOP) funds from the State of California Department of Transportation (Caltrans) for the Peninsula Corridor Electrification Project (PCEP); and
2. Take such actions as may be necessary to give effect to this resolution, including filing and executing annual cap-and-trade funding applications, certifications and assurances, authorized agent forms, related amendments and any other documentation required for the Peninsula Corridor Joint Powers Board (JPB) to apply for and receive LCTOP funds.

SIGNIFICANCE

The LCTOP is one of several funding programs that are part of a broad-based State effort to invest cap-and-trade auction proceeds to reduce greenhouse gas emissions as required under California's climate action law, A.B. 32. These funds are distributed annually on a formula basis to transit agencies and Metropolitan Planning Organizations, including the Metropolitan Transportation Commission in the Bay Area. Similar to the State Transit Assistance program, transit agencies receive a portion of the funds directly based on operating revenues. Caltrans is the administering agency for the funds and requires eligible funding recipients to submit annual resolutions by authorizing agency officer(s) to execute and process the application materials associated with LCTOP funds. Caltrans also requires applicants to specify the projects to receive the LCTOP funds within the resolution.

For Fiscal Year (FY) 2020, the JPB's allocation of LCTOP funding is \$1.78 million. The Board has previously committed \$9 million in LCTOP funds to the PCEP as part of the

seven-party supplemental memorandum of understanding and SCC recommends these funds be allocated to the PCEP in keeping with the agreement.

BUDGET IMPACT

There is no budget impact associated with this action. A total of \$9 million in LCTOP funds are included in the overall funding plan for PCEP. To date, \$5.4 million of this amount has been received for PCEP. With the FY20 allocation, that total will increase to \$7.18 million.

BACKGROUND

The LCTOP provides capital funding as well as operational assistance for expanded transit service to reduce greenhouse gas emissions and improve mobility. The LCTOP program is funded annually with 5 percent of the auction proceeds from the State's cap-and-trade program.

Prepared by: Rebecca Arthur, Senior Grants Analyst

650.508.6368

RESOLUTION NO. 2020 – 7

**BOARD OF DIRECTORS, PENINSULA CORRIDOR JOINT POWERS BOARD
STATE OF CALIFORNIA**

* * *

**AUTHORIZING THE APPLICATION FOR AND RECEIPT OF ANNUAL CAP AND TRADE FUNDING
FOR THE PENINSULA CORRIDOR ELECTRIFICATION PROJECT**

WHEREAS, the Peninsula Corridor Joint Powers Board (JPB) is an eligible project sponsor and may receive State cap and trade funding from the Low Carbon Transit Operations Program (LCTOP) now or sometime in the future for transit projects; and

WHEREAS, the statutes related to State-funded transit projects require a local or regional implementing agency to abide by various regulations; and

WHEREAS, Senate Bill 862 (2014) named the California Department of Transportation (Caltrans) as the administrative agency for the LCTOP; and

WHEREAS, Caltrans has developed guidelines for the purpose of administering and distributing LCTOP funds to eligible project sponsors, including the JPB; and

WHEREAS, the JPB wishes to use Fiscal Year (FY) 2020 LCTOP funds allocated to the JPB for the Peninsula Corridor Electrification Project (PCEP); and

WHEREAS, the PCEP will electrify the Caltrain commuter rail line, providing improved transit service and reduced greenhouse gas emissions that will benefit disadvantaged communities, as identified by the State of California, in Santa Clara, San Mateo, and San Francisco Counties, and provide electric multiple unit train cars to operate on the newly-electrified rail line; and

WHEREAS, the Staff Coordinating Council recommends that the JPB Board of Directors authorize the Executive Director, or his designee, to:

1. Apply for and receive \$1,781,703 in FY2020 LCTOP funds for the PCEP; and
2. File and execute annual cap-and-trade funding applications, certifications and assurances, authorized agent forms, agreements, related amendments, and any other documents required for the JPB to apply for and receive LCTOP funding.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Peninsula Corridor Joint Powers Board, hereby:

1. Agrees to comply with all conditions and requirements set forth in the annual certifications and assurances, authorized agent forms and any applicable statutes, regulations and guidelines for all Low Carbon Transit Operations Program-funded transit projects; and
2. Authorizes the Executive Director, or his designee, to apply for and receive from the California Department of Transportation \$1,781,703 in FY2020 LCTOP funds for the Peninsula Corridor Electrification Project, which will electrify the Caltrain commuter rail line, providing improved transit service and reduced greenhouse gas emissions; and
3. Authorizes the Executive Director, or his designee, to take such actions as may be necessary to give effect to this resolution, including filing and executing annual cap-and-trade funding applications, certifications and assurances, authorized agent

forms, agreements, related amendments, and any other documentation that may be required for the JPB to apply for and receive LCTOP funds.

Regularly passed and adopted this 5th day of March 2020, by the following vote:

AYES:

NOES:

ABSENT:

Chair, Peninsula Corridor Joint Powers Board

ATTEST:

JPB Secretary

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: John Funghi
Chief Officer, Caltrain Modernization Program

SUBJECT: **AUTHORIZE THE EXECUTIVE DIRECTOR TO EXECUTE AMENDMENT NO. 2 TO SUPPLEMENTAL AGREEMENT NO. 2 WITH PACIFIC GAS AND ELECTRIC FOR CONSTRUCTION OF 115 KILOVOLT INTERCONNECTIONS FOR THE PENINSULA CORRIDOR ELECTRIFICATION PROJECT**

ACTION

Staff Coordinating Council recommends the Board authorize an amendment to Supplemental Agreement No. 2 with Pacific Gas and Electric (PG&E), entitled "Construction of Caltrain Construction of 115 Kilovolt (kV) Interconnections," in support of the Peninsula Corridor Joint Powers Board's (JPB) Peninsula Corridor Electrification Project (PCEP), at a cost not to exceed \$25 million, for a new total authorized amount of \$27.8 million for Supplemental Agreement No. 2.

Staff Coordinating Council's recommendation is contingent upon approval of the Change Management Board.

SIGNIFICANCE

Implementation of the PCEP will require a 115-kV interconnection from the PG&E substation to the Caltrain substations in San Jose and South San Francisco. Construction of the 115-kV interconnections will be performed by PG&E, under an amendment to Supplemental Agreement No. 2.

Supplemental Agreement No. 2, PG&E Oversight of Caltrain Design and Construction of 115 kilovolt (kV) Interconnections and Environmental Review of PG&E Infrastructure Build Outs, was previously approved by the Board in September 2016 for \$1 million. PG&E's scope of work for this Agreement included oversight of the design and construction of the 115kV interconnections and environmental review and permitting support. An amendment to Supplemental Agreement No. 2 was approved by the Board on February 1, 2018 for \$1.8 million because the level of effort from PG&E to oversee the design and construction of the interconnections was greater than anticipated. Amendment No. 2 to the Agreement will add construction of the 115-kV interconnections in San Jose and in South San Francisco to PG&E's scope of work.

At this time, staff estimates that construction of the 115-kV interconnections will be

accomplished for an amount not to exceed \$25 million.

BUDGET IMPACT

The construction cost for the 115kV interconnections was originally estimated in 2017 at \$20 million to be funded from the contingency included in the Board-approved PCEP Budget. The JPB was recently notified by PG&E that this work will be subject to an Income Tax Component of Contribution tax, which is estimated at \$5 million, for a total estimate of \$25 million for the 115kV interconnections.

The estimated \$25 million cost will be funded from the contingency included in the Board-approved PCEP Budget if approved by the Change Management Board. Staff will present the proposed action to the Change Management Board on February 26.

BACKGROUND

Design and construction of the 115kV interconnections was originally expected to be performed by Balfour Beatty (BBII) through a change order to BBII's design-build contract with PCEP.

BBII performed the design of the interconnections through a subcontractor, TRC, but notified the JPB on December 12, 2019 that TRC decided not to pursue the construction component of the change order.

Staff reached out to BBII and TRC to find out whether TRC would change its decision about not pursuing the construction component of the change order but learned that TRC's decision was final. Staff also reached out to PG&E about having PG&E construct the interconnections under an existing agreement with the JPB. PG&E agreed to construct the interconnections under a second amendment to Supplemental Agreement No. 2.

Staff evaluated three options for construction of the interconnections and has determined that construction of the interconnections as proposed by PG&E would be the most cost effective option and would have the shortest total schedule duration. The table below compares the cost and schedule for each option.

Options	Cost	Schedule
Change Order to BBII	\$26M - \$30M	21 - 24 months
New PCEP Construction Contract	\$24M - \$28M	24 - 27 months
Amendment to PG&E Supplemental Agreement No. 2	NTE \$25M	17 - 19months

Prepared By: Liria Larano, Deputy Chief, CalMod Program

650.622.7828

RESOLUTION NO. 2020 – 8

**BOARD OF DIRECTORS, PENINSULA CORRIDOR JOINT POWERS BOARD
STATE OF CALIFORNIA**

* * *

**AUTHORIZING AMENDMENT NO. 2 TO SUPPLEMENTAL AGREEMENT NO. 2 WITH PACIFIC
GAS AND ELECTRIC FOR CONSTRUCTION OF 115 KILOVOLT INTERCONNECTIONS FOR THE
PENINSULA CORRIDOR ELECTRIFICATION PROJECT**

WHEREAS, on January 8, 2015, pursuant to Resolution No. 2015-03, the Peninsula Corridor Joint Powers Board (JPB) certified a Final Environmental Impact Report for the Peninsula Corridor Electrification Project (PCEP) and approved the PCEP; and

WHEREAS, the PCEP will require connection and support infrastructure from Pacific Gas and Electric (PG&E) for the implementation of the project; and

WHEREAS, in October 2015, pursuant to Resolution No. 2015-51, the JPB executed a Master Agreement with PG&E to govern PG&E services in connection with the PCEP, as set forth in a series of supplemental agreements; and

WHEREAS, pursuant to Resolution No. 2016-50, the JPB executed Supplemental Agreement No. 2, entitled "PG&E Oversight of Caltrain Design and Construction of 115 Kilovolt (kV) Interconnections and Environmental Review of PG&E Infrastructure Build Outs," in the not-to-exceed amount of \$1 million; and

WHEREAS, pursuant to Resolution No. 2018-05, the JPB executed Amendment No. 1 to Supplemental Agreement No. 2 to increase the cost by \$1.8 million to reflect the higher-than-anticipated level of effort required from PG&E to oversee the design and construction of the interconnections; and

WHEREAS, construction of the interconnections was originally expected to be performed by TRC, a subcontractor to Balfour Beatty infrastructure, Inc. (BBII), through a change order to BBII's design-build contract with the JPB; and

WHEREAS, TRC notified the JPB on December 12, 2019 that TRC decided not to pursue the construction component of the work; and

WHEREAS, JPB staff evaluated three options for construction of the interconnections and has determined that PG&E's proposal is the most cost-effective option and has the shortest total duration; and

WHEREAS, the JPB now desires PG&E to provide construction of the critical power infrastructure of 115 kV interconnections required to support PCEP; and

WHEREAS, the Staff Coordinating Council recommends, and the Finance Committee and PCEP Ad Hoc Advisory Committee concur, that the Board authorize a second amendment to Supplemental Agreement No. 2 in an amount not to exceed \$25 million, for a total authorized not-to-exceed amount of \$27.8 million.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Peninsula Corridor Joint Powers Board authorizes a second amendment of Supplemental Agreement No. 2 with Pacific Gas & Electric for construction of 115 kilovolt interconnections for the Peninsula Corridor Electrification Project in an amount not to exceed \$25 million, for a new total, authorized not-to-exceed amount of \$27.8 million.

Regularly passed and adopted this 5th day of March, 2020 by the following vote:

AYES:

NOES:

ABSENT:

Chair, Peninsula Corridor Joint Powers Board

ATTEST:

JPB Secretary

**PENINSULA CORRIDOR JOINT POWERS
BOARD RESOLUTION NO. 2020 - 9**

**EXPRESSING APPRECIATION
TO
CHERYL BRINKMAN**

WHEREAS, CHERYL BRINKMAN was first appointed to the Caltrain Board of Directors by the City Selection Committee, representing the City and County of San Francisco in 2017; and

WHEREAS, CHERYL BRINKMAN has always had the region's best interests at heart in making each decision during her tenure, which engendered widespread respect and high regard from her colleagues, staff and other community leaders; and

WHEREAS, CHERYL BRINKMAN has been an effective steward of the Caltrain Electrification project, pushing for transparency and accountability as work is done to deliver modernized, more frequent Caltrain service with expanded capacity; and

WHEREAS, CHERYL BRINKMAN was a strong advocate for the Caltrain Business Plan, which set a Service Vision showing how Caltrain can build upon electrification and continue to grow through 2040 and be part of a larger regional rail network; and

WHEREAS, CHERYL BRINKMAN pushed Caltrain to use renewable power, supporting the move to Community Clean Energy programs so as to reduce the agency's carbon footprint; and

WHEREAS, CHERYL BRINKMAN supported development of the Rail Corridor Use Plan, which identified what land should be reserved for railroad expansion and growth, and the Transit Oriented Development Policy, to allow development of other properties that supports complete communities, including much needed affordable housing; and

WHEREAS, CHERYL BRINKMAN fought to expand cyclists' access to the system, supporting the Bike Parking Management Plan to expand wayside services such as bike lockers and bike share programs; and

WHEREAS, during CHERYL BRINKMAN'S tenure, she was a leader and an advocate, dedicated to fulfilling the agency's mission and improving the lives of San Francisco residents; and

NOW, THEREFORE, BE IT RESOLVED that the Caltrain Board of Directors hereby commends and expresses its sincere appreciation to **CHERYL BRINKMAN** for her outstanding service to Caltrain and her many accomplishments on the Caltrain Board of Directors.

Regularly passed and adopted this 5th day of March, 2020.

Chair, Caltrain JPB





Memorandum

Date: February 24, 2020
To: Board of Directors
From: Jim Hartnett, Executive Director
Subject: March 5, 2020 JPB Board Meeting Executive Director's Report

- **On-time Performance –**
 - **Through February 23:** The preliminary February 2020 OTP was 93.3 percent compared to 92.2 percent for February 2019.
 - **January:** The January 2020 OTP was 95.4 percent compared to 94.4 percent for January 2019.
 - **Vehicle on Tracks –** There were two days, January 11 and 29, with a vehicle on the tracks that caused train delays.
- **SF Weekend Service Closure –** Caltrain's San Francisco tunnel construction work, which is needed for the electrification of Caltrain, requires six weekend service closures. Crews are installing the overhead contact system as part of the electrification project.

Trains will terminate at Bayshore station. Caltrain will NOT operate service to 22nd Street or San Francisco stations on the following weekends:

- Saturday, February 22 and Sunday, February 23
- Saturday, February 29 and Sunday, March 1
- Saturday, March 7 and Sunday, March 8
- Saturday, March 14 and Sunday, March 15
- Saturday, March 21 and Sunday, March 22
- Saturday, March 28 and Sunday, March 29

On these weekends, free SamTrans bus service replace train service between the Bayshore and San Francisco stations. Buses are ADA accessible and will have limited capacity for luggage and bikes onboard.

To learn more, visit www.caltrain.com/SFWeekendClosure.

- **Caltrain 2020 Annual Passenger Count** – This year the annual weekday and weekend counts will be conducted in Spring 2020 (from late March to May). In previous years, the counts were conducted in the Winter during the lowest ridership season and rainy season, which may impact ridership. Collection of data during the Spring would represent average annual ridership. Counts will not be conducted on Easter and limited counts will be conducted on SF Giants Games, SJ Sharks Games, Warriors Games and other events so that special event ridership does not skew survey data. Key summary findings will be presented to the JPB Board and the Key Findings Report will be available by Fall.
- **CAC Meeting** – The Citizens Advisory Committee met on Wednesday, February 19, in San Carlos. Zhenlin Guan, Deputy Director – Project Delivery, provided a presentation on the CalMod/Electrification update. Julian Jest, Market Research Analyst, provided a presentation on the Customer Satisfaction Survey. Joe Navarro, Deputy Chief – Rail Operations, provided the Staff Report. The next CAC meeting is scheduled for Wednesday, March 18, in San Carlos.
- **BAC Meeting** – The next Bicycle Advisory Committee meeting is scheduled for Thursday, March 19, in San Carlos.
- **Special Event Train Service**

Services Provided:

- **SF 49ers Post-Season** – The 49ers hosted two playoff home games in January. Caltrain operated one extra pre-game train with limited stops and one extra post-game local train from Mountain View to San Francisco for both weekend games. Total riders alighting and boarding at Mountain View station was 3,313.
- **Warriors Regular Season** – The Golden State Warriors hosted seven games in January. One post-event special train for the 1/4, 1/16 and 1/18 games. Total post-game additional riders, boarding at San Francisco station in January was 2,050. Year-to-date post-game additional riders, boarding at San Francisco station in December was 12,930.

The Golden State Warriors hosted six games in February. Event ridership will be provided in April.

- **San Jose Sharks Regular Season** – The Sharks hosted four games in January. Total post-game additional riders, boarding at San Jose Diridon station in January was 617. Total year-to-date post-game additional riders, boarding at San Jose Diridon station in January, was 6,370, which represents a two percent decrease compared to the same number of games in the 2018/2019 season.

The Sharks hosted five games in February. Event ridership will be provided in April.

- **Caltrain NorCalMLK Celebration Train** – The Caltrain NorCalMLK Celebration Train operated on Monday, January 20, 2020. The 10-car train departed San Jose Diridon at 9:35 a.m. and made limited stops at Palo Alto and San Mateo prior to its arrival at San Francisco. Total ridership alighting at San Francisco station was 841, which represents an eight percent decrease compared to 2019 ridership.
- **Giants Fanfest** – On Saturday, February 8, in coordination with the Giants, Caltrain provided one extra pre-event train with limited stops and one extra post-event Millbrae Express train to Giants fans for the event. Event ridership will be provided in April.

This year Caltrain, along with BART and Golden Gate Ferry, participated in Oracle Park's 1st Transportation booth at Fanfest. Caltrain staff provided free Caltrain giveaways and 2020 service information.

- **President's Day** – On Monday, February 17, 2020, in observance of the President's Day Holiday, Caltrain operated a Modified Schedule (a Saturday schedule with four extra trains in each direction and including one round trip from Gilroy to SF).

Services Scheduled:

- **San Jose Sharks** – The Sharks will host six games in March. Caltrain will track post-game ridership at SJ Diridon station for all home games. No extra special trains are planned. For weeknight and Saturday night games, the last northbound train departs SJ Diridon station at 10:30 p.m. or 15 minutes after the game ends but departs no later than 10:45 p.m.
- **Warriors Regular Season** – The Golden State Warriors will host nine games in March. In coordination with Chase Center, Caltrain will operate

regular service for all home games and continues to monitor ridership as well as identify the need for additional or modified post-game service. Caltrain will track post-game service ridership at SF Station for all home games.

- **Giants Baseball** – Baseball service begins with an exhibition game against the Oakland A's at Oracle Park on Tuesday, March 24. The regular season home opener against the Los Angeles Dodgers will be on Friday, April 3 at 1:35 p.m. Caltrain will operate extra pre-event service for all weekday afternoon games and all weekend games. Caltrain will operate post-game service including Millbrae express service for weeknight games and all weekend games. Caltrain will provide baseball service for all home games, including the exhibition games and home opener.

- **Capital Projects –**

The Capital Projects information is current as of February 14, 2020 and is subject to change between February 14 and March 5, 2020 (Board Meeting).

- **San Mateo 25th Avenue Grade Separation Project:** Raise the elevation of the alignment from Hillsdale Boulevard to south of the Highway 92 Overcrossing in the city of San Mateo. The project creates a grade separation at 25th Avenue, relocates the Hillsdale Station to the north, and creates two new east-west street grade-separated connections at 28th and 31st Avenues in San Mateo.

Painting and deck waterproofing of the 31st Avenue Bridge steel bridge was completed. Construction of the abutment backwalls of the 28th Avenue Bridge was completed. Construction of ramp and stair walls for the future relocated Hillsdale Station by 28th Avenue continued. Construction of the platform for the relocated Hillsdale station near 28th Avenue is in progress. Construction of MSE Wall D (between the Pedestrian Underpass and 31st Avenue), and MSE Wall E (between 31st Avenue and existing Hillsdale station) was completed. Retaining walls on the west side of 28th and 31st Avenue continued. Construction of the east sides of 28th & 31st Avenues cannot proceed until the track shift associated with the temporary Hillsdale station closure is in place.

Trackwork installation continues from Highway 92 to 28th Avenue. Electrical work for a new signal house and intermediate signal is in progress. Construction began for the pump station that will support drainage at the future depressed 31st Avenue roadway section.

The temporary closure of the Hillsdale Station, to allow completion of the project, is now forecast to occur in the Spring of 2020 until Fall of 2020. During the temporary closure, enhanced bus and shuttle service to the Belmont Station will be provided to minimize the temporary passenger inconvenience.

The original San Mateo Parking Track (i.e., Bay Meadows Set-Out track) was removed to support the construction of the grade separation. The San Mateo City Council has scheduled another study session for February 18, 2020 to follow up on the Community Meeting and City Council Study Session that was held in January 2020 to review the feasibility analyses that were conducted.

- **South San Francisco Station Improvements:** Replace the existing side platforms with a new centerboard platform, construction of a new connecting pedestrian underpass to the two new plazas in downtown South San Francisco to the west and the shuttle area to east. Upon completion, the hold-out rule at this station will be removed that currently impacts the overall system operational efficiency.

In February, shoring that is required to structurally support the existing trackway and station is in progress. This work is necessary to allow construction of the new pedestrian underpass and the station platform. Due to proximity of the shoring to the tracks, much of the work is being performed during limited service and/or non-revenue hours.

- **Marin and Napoleon Bridge Rehabilitation Project:** This state of good repair project will perform repairs at the Marin St. Bridge and replace the Napoleon St. Bridge. Both bridges are in the City of San Francisco located south of the 22nd Street Station. The repairs at Marin Street are primarily for concrete spalling and cracks, and deficient walkways and handrails. The Napoleon St. bridge concrete spans will be removed and replaced with elevated soil berm structures and the main steel span will be replaced with a new steel span. The span replacement at Napoleon Street will require a partial weekend service outage in which a bus bridge will be provided to shuttle patrons between Bayshore and 4th & King Stations during the outage. The project will install security fencing to deter encampments, and, also include track improvements in the vicinity of the bridges.

Currently, the project is completing the design phase and is revising the bridge structure and construction staging to address constructability issues with working adjacent to an existing City storm drain box culvert and the Electrification project. The advertisement of the construction contract is

planned for early-2020 and construction to occur from the Summer of 2020 to Summer 2021.

- **Ticket Vending Machine (TVM) Rehabilitation:** Upgrade the existing TVM Server and retrofit and refurbish two existing TVM machines to become prototypes for new TVM's so that the machines are capable of performing the functions planned for the current Clipper program. The new machines will be able to dispense new Clipper cards (excluding discount Clipper cards that require verification of eligibility) and have the ability of increasing the cash values of existing Clipper cards. The scope of the original contract was increased to include upgrades to the credit card reader and the database.

The upgraded credit card readers were installed in the TVM's at the San Jose Diridon Station and is now in revenue operations. The upgrading to new credit card readers is now being implemented at all remaining stations throughout the system. This first phase of the project is expected to complete in April 2020. The option for retrofitting 12 additional TVM's, if executed, would follow the acceptance of the 2 prototypes. Full funding for the option is not yet secured. There is an additional phase for the rehabilitation of 28 TVM's that was partially funded in the FY20 Capital Budget.

- **Mary and Evelyn Avenue Traffic Signal Preemption Project:** Perform upgrades to train approach warning systems at the Mary Avenue and Evelyn Avenue crossings in Sunnyvale. The project will improve vehicle safety at the at-grade crossings by increasing the traffic signal advance warning times for approaching trains in order to clear vehicles at the crossings. This project will mimic the previously completed traffic signal preemption project that was completed in 2014 in Redwood City, Palo Alto and Mountain View. This project is being funded through the State of California Public Utilities Commission Section 130 program to eliminate hazards at existing grade crossings.

The 100% design is now on hold pending design coordination with the Electrification project. The 100% crossing design by the Electrification project is not yet available and is needed in order for this project's design to be completed. A revised schedule will be provided upon receipt of the Electrification information.

- **FY19/FY20 Grade Crossing Improvements:** This project is a continuation of the ongoing grade crossing program to improve the safety at grade crossings in accordance with Grade Crossing Hazards Analysis for the entire corridor. This analysis prioritized the crossings and we have

proceeded with the work in phases based on funding availability. 10 crossings were improved in 2018 under the FY16 budget authorization. Due to budget constraints, the FY19/FY20 scope is limited to five (5) crossings to be improved. The five crossings selected to be improved in this phase are 1st, 2nd, and 3rd Avenues in San Mateo, and, Glenwood and Oak Grove Avenues in Menlo Park. Work items that are included are the installation of signals, fences, gates, curbs, lighting and signs.

The 65% final design submittal was received at the end of December. Review comments have been received from the City of Menlo Park and is pending review comments from the City of San Mateo. Advertisement of the construction contract is planned for the Summer of 2020 with construction beginning in early 2021 and lasting until Fall of 2021.

- **Churchill Avenue Grade Crossing Improvements:** This project will make pedestrian and bicycle access improvements, and, safety improvements to the Churchill Avenue crossing in the city of Palo Alto. The project scope includes the widening of the sidewalks, associated relocation of pedestrian gates, and installing new vehicle pavement markings and markers.

The project began in December 2019 and is currently in the design phase that is expected to continue until the Fall of 2020. Advertisement for construction will follow and construction is scheduled to occur in 2021.

- **Broadband Wireless Communications for Railroad Operations:** This project is to provide wireless communications system to provide enhanced capabilities for the monitoring of the railroad operations and maintenance, and, provide Wi-Fi capability for passengers. This project is funded through a grant from the Transit and Intercity Rail Capital Program (TIRCP). Currently, the project is currently only approved for the planning/design phase.

The project is currently continuing the planning/design phase that began in November 2019. The current schedule calls for the planning/design efforts to complete by the summer of 2020. Advertisement for construction is dependent upon additional funding being secured.

- **F-40 Locomotive Mid-Life Overhaul Project:** Perform mid-life overhaul of three F40PH2C locomotives. The mid-life overhaul of the locomotives includes the complete disassembly of the main diesel engine, overhauling by reconditioning re-usable main frame components and re-assembly with new engine components and replacement of the Separate Head-End Power (SEP-HEP) unit and all electrical components of the SEP-HEP compartment. All areas of the locomotive car body, trucks, wheels and

electrical components shall be reconditioned to like-new condition or replaced with new material. The work will be completed off-site at contractor's (Motive Power) facility location at Boise, Idaho. The three locomotives are Locomotive #'s 920, 921 and 922.

Locomotives #'s 920 and 921 were shipped to the vendor's facility in Idaho in February and March of 2018, and, #922 was shipped in April 2019. Locomotive 920 and 921 have been released and inward facing cameras were installed in both vehicles. Locomotive #920 been returned service. Locomotive #922 is still undergoing refurbishment at the vendor's facility and expected to be returned in March 2020.

- **MP-36 Locomotive Mid-Life Overhaul Project:** Perform mid-life overhaul of six MP-36-3C Locomotives. The mid-life overhaul of the locomotives includes the complete disassembly of the main diesel engine, overhauling by reconditioning re-usable main frame components and re-assembly with new engine components and the replacement of the Separate Head-End Power (SEP-HEP) unit and all electrical components of the SEP-HEP compartment. All areas of the locomotive car body, trucks, wheels and electrical components shall be reconditioned to like-new condition or replaced with new material. The project work shall be completed off-site at the contractor's facility location.

The Request for Proposal (RFP) was advertised on November 11, 2019 and vendor's proposals were received on January 31, 2020. The review of proposals is currently in progress to be followed by contract negotiations. Award of the contract is planned for Spring 2020. The 6 locomotives to be overhauled are Locomotive #'s 923, 924, 925, 926, 927 & 928. In order to maintain daily service, only 1 to 2 of these locomotives will be released at a time for overhaul that is expected to take approximately 8 months per locomotive. Due to this restriction, the overall completion of this work is expected to take approximately 4 years.

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: John Funghi
Chief Officer, Caltrain Modernization Program

SUBJECT: **PENINSULA CORRIDOR ELECTRIFICATION PROJECT MONTHLY PROGRESS
REPORT**

ACTION

Staff Coordinating Council recommends the Board receive the Peninsula Corridor Electrification Project (PCEP) Monthly Progress Report (MPR). The MPR is available online under "Reports and Presentations" at this webpage: http://www.caltrain.com/projectsplans/CaltrainModernization/CalMod_Document_Library.html. No action required.

SIGNIFICANCE

Staff prepares and submits a report covering the PCEP on a monthly basis.

BUDGET IMPACT

There is no impact on the budget.

BACKGROUND

The MPR is intended to provide funding partners, stakeholders, and the public a PCEP overview and an overall update on project progress. This document provides information on the scope, cost, funding, schedule, and project implementation.

Prepared by: Josh Averill, Program Management Administrator

650.508.6453



Modernization Program
Peninsula Corridor Electrification Project (PCEP)



January 2020 Monthly Progress Report

January 31, 2020

Funding Partners



Federal Transit Administration (FTA) Core Capacity
FTA Section 5307 (Environmental / Pre Development only)
FTA Section 5307 (Electric Multiple Unit (EMU) only)



Prop 1B (Public Transportation Modernization & Improvement Account)
Caltrain Low Carbon Transit Operations Cap and Trade



Proposition 1A
California High Speed Rail Authority (CHSRA) Cap and Trade



Carl Moyer Fund



Bridge Tolls (Funds Regional Measure (RM) 1/RM2)



San Francisco County Transportation Authority (SFCTA)/San Francisco
Municipal Transportation Agency (SFMTA)



San Mateo County Transportation Authority (SMCTA) Contribution
SMCTA Measure A



Santa Clara Valley Transportation Authority (VTA) Measure A
VTA Contribution



City and County of San Francisco (CCSF) Contribution

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Table of Contents

	Page
1.0 Background	1-1
2.0 Executive Summary.....	2-1
2.1. Monthly Dashboards	2-2
2.2. Funding Partners Participation in PCEP	2-5
2.3. Schedule	2-7
2.4. Budget	2-9
2.5. Board Actions	2-9
2.6. Government and Community Affairs	2-10
3.0 Electrification – Infrastructure	3-1
3.1. Electrification	3-1
3.2. Supervisory Control and Data Acquisition	3-2
3.3. Tunnel Modification	3-3
4.0 Electric Multiple Units	4-1
4.1. Electric Multiple Units	4-1
4.2. Centralized Equipment Maintenance and Operations Facility Modifications	4-1
5.0 Safety	5-1
6.0 Quality Assurance	6-1
7.0 Schedule	7-1
8.0 Budget and Expenditures	8-1
9.0 Change Management	9-1
10.0 Funding	10-1
11.0 Risk Management	11-1
12.0 Environmental	12-1
12.1. Permits	12-1
12.2. Mitigation Monitoring and Reporting Program (MMRP)	12-1
13.0 Utility Relocation	13-1
14.0 Real Estate.....	14-1
15.0 Third Party Agreements.....	15-1
16.0 Government and Community Affairs.....	16-1
17.0 Disadvantaged Business Enterprise (DBE) Participation and Labor Statistics	17-1
18.0 Procurement	18-1
19.0 Timeline of Major Project Accomplishments	19-1

List of Tables

	Page
Table 2-1 Schedule Status	2-9
Table 2-2 Budget and Expenditure Status.....	2-9
Table 3-1 Work Progress by Segment	3-1
Table 6-1 Quality Assurance Audit Summary	6-2
Table 7-1 Schedule Status	7-1
Table 7-2 Critical Path Summary	7-2
Table 7-3 Schedule Hold Points	7-2
Table 8-1 Electrification Budget & Expenditure Status	8-1
Table 8-2 EMU Budget & Expenditure Status	8-2
Table 8-3 PCEP Budget & Expenditure Status	8-2
Table 8-4 Third Party Improvements/CNPA Budget & Expenditure Status	8-2
Table 8-5 Budget Transfers of Contingency	8-3
Table 15-1 Third-Party Agreement Status	15-1

List of Figures

	Page
Figure 2-1 PCEP Work Segments	2-1
Figure 2-2 Expenditure – Planned vs. Actual	2-2
Figure 2-3 Spending Rate vs Required.....	2-3
Figure 2-4 Construction Contract Budgets.....	2-3
Figure 2-5 OCS Foundation Production.....	2-4
Figure 2-6 Contractor Completion Schedule	2-4
Figure 10-1 Funding Plan	10-1
Figure 11-1 Monthly Status of Risks.....	11-2
Figure 11-2 Risk Classification	11-3
Figure 17-1 DBE Participation	17-1

List of Appendices

	Page
Appendix A – Acronyms	A-1
Appendix B – Funding Partner Meetings	B-1
Appendix C – Schedule.....	C-1
Appendix D – Standard Cost Codes.....	D-1
Appendix E – Change Order Logs.....	E-1
Appendix F – Risk Table	F-1
Appendix G – MMRP Status Log	G-1

1.0 BACKGROUND

Over the last decade, Caltrain has experienced a substantial increase in ridership and anticipates further increases in ridership demand as the San Francisco Bay Area's population grows. The Caltrain Modernization (CalMod) Program, scheduled to be implemented by 2021, will electrify and upgrade the performance, operating efficiency, capacity, safety, and reliability of Caltrain's commuter rail service.

The PCEP is a key component of the CalMod Program and consists of converting Caltrain from diesel-hauled to Electric Multiple Unit (EMU) trains for service between the San Francisco Station (at the intersection of Fourth and King Streets in San Francisco) and the Tamien Station in San Jose. Caltrain will continue Gilroy service and support existing tenants.

An electrified Caltrain will better address Peninsula commuters' vision of environmentally friendly, fast and reliable service. Electrification will modernize Caltrain and make it possible to increase service while offering several advantages in comparison with existing diesel power use, including:

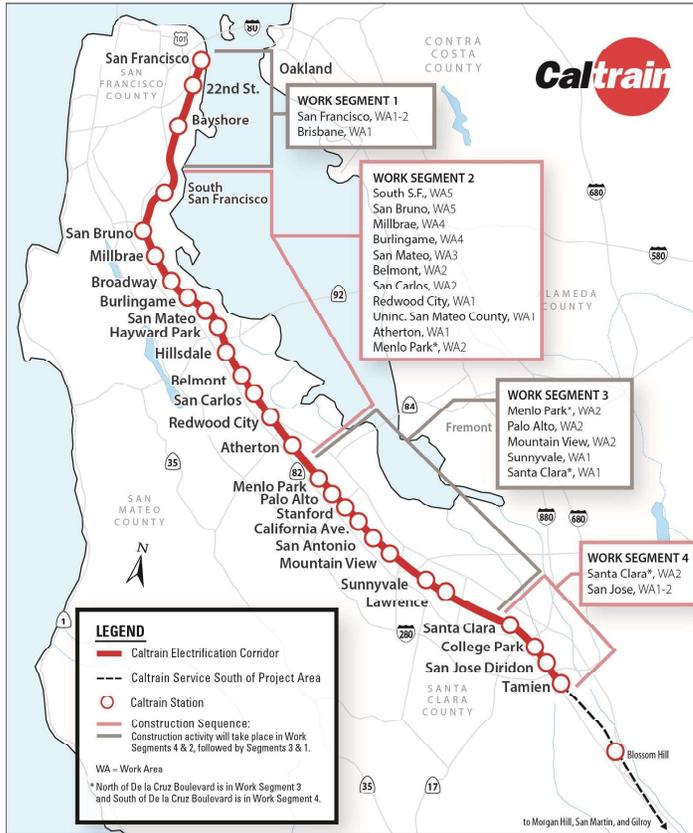
- **Improved Train Performance, Increased Ridership Capacity and Increased Service:** Electrified trains can accelerate and decelerate more quickly than diesel-powered trains, allowing Caltrain to run more efficiently. In addition, because of their performance advantages, electrified trains will enable more frequent and/or faster train service to more riders.
- **Increased Revenue and Reduced Fuel Cost:** An electrified Caltrain will increase ridership and fare revenues while decreasing fuel costs.
- **Reduced Engine Noise Emanating from Trains:** Noise from electrified train engines is measurably less than noise from diesel train engines. Train horns will continue to be required at grade crossings, adhering to current safety regulations.
- **Improved Regional Air Quality and Reduced Greenhouse Gas Emissions:** Electrified trains will produce substantially less corridor air pollution compared with diesel trains even when the indirect emissions from electrical power generation are included. Increased ridership will reduce automobile usage, resulting in additional air quality benefits. In addition, the reduction of greenhouse gas emissions will improve our regional air quality, and will also help meet the state's emission reduction goals.

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2.0 EXECUTIVE SUMMARY

The Monthly Progress Report is intended to provide an overview of the PCEP and provide funding partners, stakeholders, and the public an overall update on the progress of the project. This document provides information on the scope, cost, funding, schedule, and project implementation. Work along the Caltrain Electrification Corridor has been divided into four work segments and respective work areas (WA) as shown in Figure 2-1. PCEP activities are described and summarized by segments and work areas.

Figure 2-1 PCEP Work Segments



In January, Electrification construction activities included installation of cables at Auzerais Avenue, a signal equipment case at Control Point (CP) Michael, and signal equipment at CP Alameda. Several other typical construction activities continued this month, including ductbank and conduit installation, installation of Overhead Catenary System (OCS) poles, down guys, assemblies, balance weights, and relocation of signal cables. No OCS foundations were installed this month because Balfour Beatty Infrastructure, Inc. (BBI) did not have the rebar cages and permits required to install the foundations.

Electric Multiple Unit work continues with Final Design Reviews (FDR) and First Article Inspections (FAI). Electrical tests have been conducted on all seven cars of the first trainset.

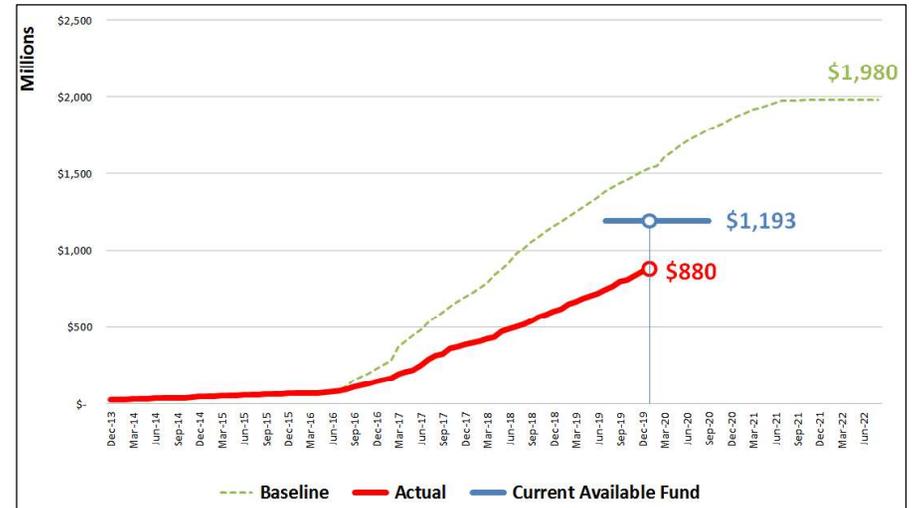
The Centralized Equipment Maintenance and Operations Facility (CEMOF) construction activities included work on the parts storage warehouse, relocation of ground wire, and installation of the fire suppression/water line.

In preparation for the upcoming Tunnel closures during which installation of the conductor rail and contact wire will be performed, crews installed and adjusted brackets, assembled insulated arms, and prepared submittals for review.

2.1 Monthly Dashboards

Dashboard progress charts are included below to summarize construction progress.

Figure 2-2 Expenditure – Planned vs. Actual



**Peninsula Corridor Electrification Project
Monthly Progress Report**

Figure 2-3 Spending Rate vs. Required

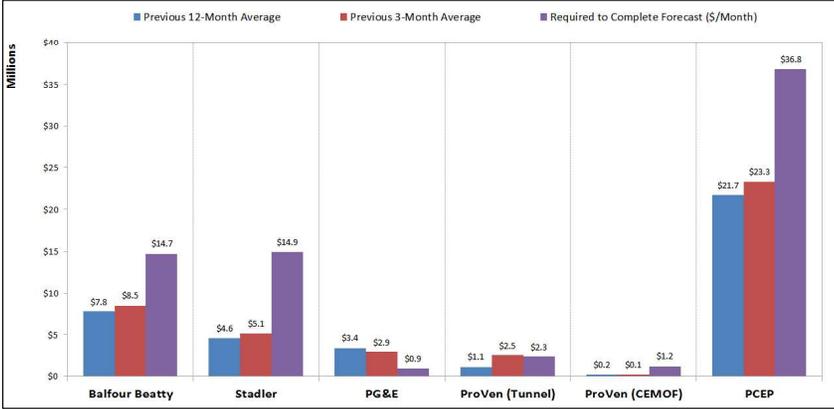
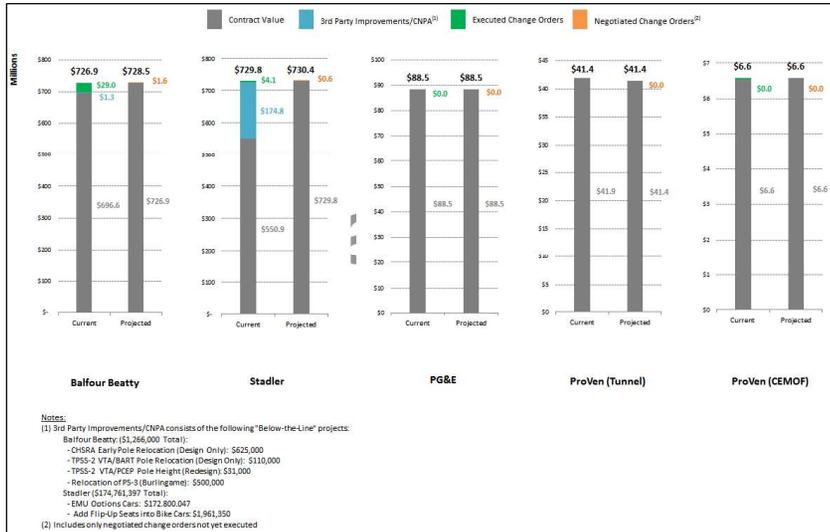


Figure 2-4 Construction Contract Budgets



**Peninsula Corridor Electrification Project
Monthly Progress Report**

Figure 2-5 OCS Foundation Production

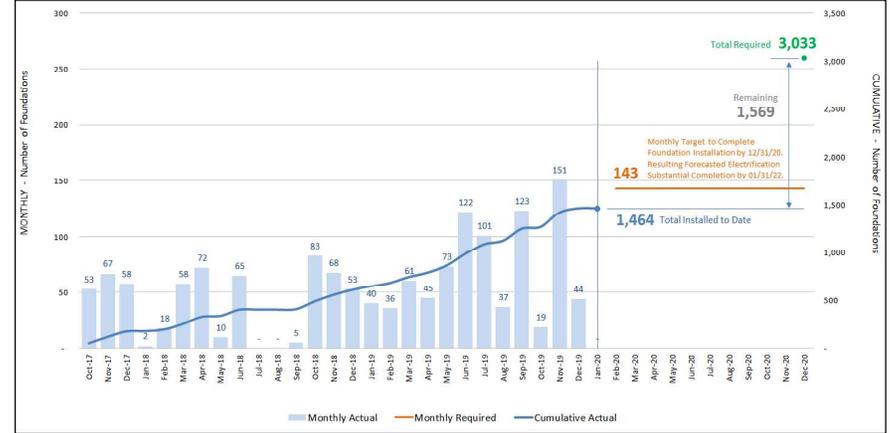
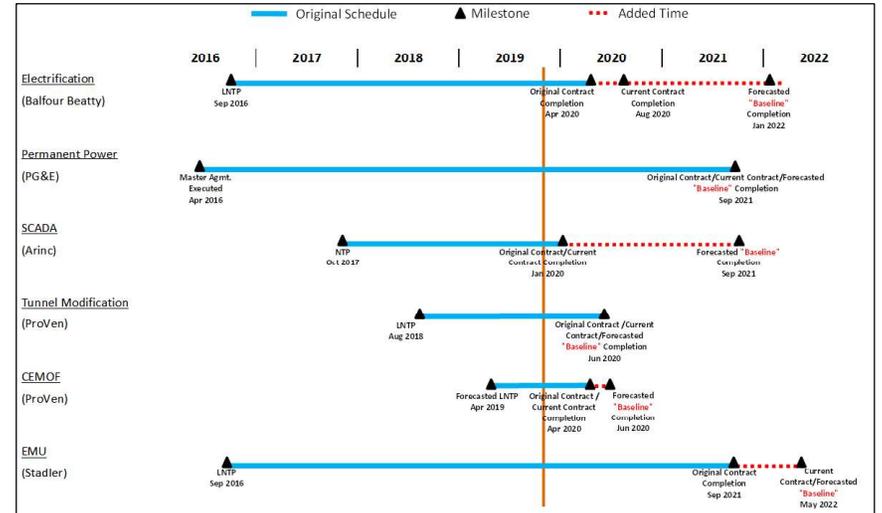


Figure 2-6 Contractor Completion Schedule



2.2. Funding Partners Participation in PCEP

The PCEP has a series of weekly, biweekly, monthly and quarterly meetings to coordinate all aspects of the program. The meetings are attended by project staff with participation by our funding partners in accordance with the Funding Partners Oversight Protocol. A summary of funding partner meetings and invitees can be found in Appendix B.

This section of the report provides a summary of the discussions and decisions made at the meetings and a list of funding partners who attended the meetings.

Electrification – Engineering Meeting – Weekly

Purpose: To discuss status, resolution and tracking of Balfour Beatty Infrastructure, Inc. (BBI) and electrification design-related issues, to discuss Supervisory Control and Data Acquisition (SCADA), the Tunnel Modification Project, and monitor the progress of utility relocation compared to schedule, and to discuss third-party coordination activities with Pacific Gas and Electric (PG&E), CHSRA, Union Pacific Rail Road (UPRR), Bay Area Rapid Transit, California State Department of Transportation (Caltrans), Positive Train Control (PTC) and others.

Activity this Month

Funding Partners: CHSRA: Ian Ferrier

Continued discussions on resolution of outstanding issues for the Design-Build (DB) contract, such as:

- Grade crossing designs, including progress of design and ongoing meetings with key stakeholders such as the Federal Railroad Administration (FRA), California Public Utilities Commission (CPUC) and local jurisdictions
- OCS foundation design, potholing status, and foundation installation sequencing
- Key right of way (ROW) acquisition issues as related to construction activities
- Review of key actions from weekly BBI progress meetings, status of critical submittals or Requests for Information (RFI), open non-conformance reports, and open critical issues from the Design Build (DB) contract
- The progression of the PG&E interconnections design and material procurement status, including interface with VTA on the design of Traction Power Substation (TPS) TPS-2 interconnection into PG&E's FMC Substation
- The progression of the PG&E single phase study, which will be required for the energization of the system
- Open design and construction issues on Traction Power Facilities
- Key interface points (foundation installation, signal design, etc.) between the PCEP and other major Peninsula Corridor Joint Powers Board (JPB) projects such as South San Francisco Station Project, 25th Avenue Grade Separation Project, and Broadway Grade Separation Project
- The utility relocation status
- Status of the upcoming work for the Tunnel OCS

- Updates on DB and program schedule, including key foundation and traction power facility milestones, PG&E Infrastructure buildout and power quality study status
- Upcoming changes to the contract in preparation for the Change Management Board (CMB) and specific contract change orders that require technical review and input

PCEP Delivery Coordination Meeting – Bi-Weekly

Purpose: To facilitate high-level coordination and information sharing between cross-functional groups regarding the status of the work for which they are responsible.

Activity this Month

Funding Partners: CHSRA: Ian Ferrier; SFCTA: Luis Zurinaga

The Federal Transit Administration (FTA) and the Funding Partners Quarterly meetings occurred on January 22. Contracts and Procurement is working on exercising the option term to extend contract 14-PCJPB-P-006 (LTK) – EMU Rail Vehicle Support Services for CalMod. In EMU design and manufacturing, FDRs and FAls are nearing closure with 54 of 64 FAls completed. The propulsion gearbox retest and teardown is projected for late January to early February, and the truck frame strength and fatigue tests were completed successfully. For the CEMOF upgrade, shoring for the South Pit has been completed and will follow with excavation, and the North Pit continues with potholing. In Design Build activities, potholing to support foundation installation continues in all areas of Segments 3 and 4, and discussions are ongoing to identify potholing needs in Segments 1 and 2. Drop tube installation for the Tunnel Modification Project has been progressing quickly, and is expected to be completed by January 9.

Systems Integration Meeting – Bi-Weekly

Purpose: To discuss and resolve issues with inter-system interfaces and to identify and assign Action Item Owners for interface points that have yet to be addressed.

Activity this Month

Funding Partners: CHSRA: Ian Ferrier

Bi-weekly PCEP interface meetings are held to monitor and determine appropriate resolution for systems integration issues. The systems integration database is being reviewed. Data was recovered from a corrupted database. A spreadsheet for keeping track of Action Items and the individual(s) assigned to these items is the primary tracking method while issues relating to the System Integration database are resolved. The electrification contractor now has a representative invited to attend the Bi-Weekly Systems Integration Meeting. The Systems Integration Lead also maintains contact with the EMU procurement team. The Traction Power SCADA team also holds bi-weekly status meetings. Coordination with the EMU procurement, PTC and Caltrain Capital Project managers responsible for delivery of the 25th Avenue Grade Separation Project, Marin Napoleon Bridge Rehabilitation Project, and the South San Francisco Station Project is ongoing. There is coordination with the Tunnel Modification Project and the CEMOF upgrades as well. Progress on activities including systems integration testing

Peninsula Corridor Electrification Project
Monthly Progress Report

activities, FRA, FTA and safety certification are being tracked. Systems Integration is working with the JPB Rail Activation Committee.

Master Program Schedule (MPS) Meeting – Monthly

Purpose: To review the status of the MPS and discuss the status of major milestones, critical and near critical paths, upcoming Board review items, and progress with the contracts, among others.

Activity this Month

Funding Partners: CHSRA: Ian Ferrier and Wai-On Su; VTA: Manolo Gonzalez-Estay, SFCTA: Luis Zurinaga

The overall schedule remains unchanged from last month. The forecasted Revenue Service Date (RSD) remains May 2022. The addition of approximately three and a half months of contingency yields an RSD of August 2022. The program critical path runs through the manufacturing and testing of EMU trainsets.

Risk Assessment Meeting – Monthly

Purpose: To identify risks and corresponding mitigation measures. For each risk on the risk register, mitigation measures have been identified and are being implemented. Progress in mitigating these risks is confirmed at the ongoing risk monitoring and monthly risk assessment meetings.

Activity this Month

Funding Partners: None:

One risk was retired and six risks were regraded.

Change Management Board (CMB) – Monthly

Purpose: To review, evaluate and authorize proposed changes to PCEP over \$200,000.

Activity this Month

The CMB was held on January 22.

Funding Partners: CHSRA: Simon Whitehorn; VTA: Edwin Castillo; SFCTA: Luis Zurinaga and Anna Harvey; SMCTA: Joe Hurley; Metropolitan Transportation Commission (MTC): Trish Stoops; FTA Project Management Oversight Consultant: Mike Eidlin and Brett Rekola

The CMB discusses major topics including potential changes to PCEP contracts, contingency usage, track access delays and Differing Site Conditions (DSC) field order updates.

Potential contract changes will follow the PCEP Change Order Procedure. Once approved changes are executed, they will be reported in the Change Management section (Section 9) of this report.

Peninsula Corridor Electrification Project
Monthly Progress Report

BBII Contract

Four changes were approved.

CEMOF Contract

No changes were identified for consideration.

Stadler Contract

No changes were identified for consideration.

SCADA Contract

No changes were identified for consideration.

Tunnel Modification Contract

No changes were identified for consideration.

Amtrak Contract

No changes were identified for consideration.

2.3. Schedule

The overall schedule remains unchanged from last month. The forecasted Revenue Service Date (RSD) remains as May 2022. The program critical path runs through the manufacturing and testing of EMU trainsets.

BBII continues to report an overall delay to substantial completion. JPB is working with BBII on the issue and is urging BBII to accelerate resolution.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Table 2-1 indicates major milestone dates for the MPS.

Table 2-1 Schedule Status

Milestones	Program Plan	Progress Schedule (January 2020) ¹
Arrival of First Vehicle in Pueblo, CO	N/A	09/01/2020
Arrival of First Vehicle at JPB (after Pueblo Testing)	N/A	02/26/2021
Segment 4 Completion	11/21/2019	02/14/2021 ²
o Interconnection from PG&E Substation to Traction Power Substation (TPS)	N/A	09/30/2020 ²
PG&E Provides Permanent Power	09/09/2021	09/09/2021
Electrification Substantial Completion	08/10/2020	01/31/2022 ²
Start Phased Revenue Service	N/A	02/01/2022 ²
RSD (w/o Risk Contingency)	12/09/2021	05/06/2022
FFGA RSD (w/ Risk Contingency)	08/22/2022	08/22/2022

Note:
¹ Dates may shift slightly as the update of this month's Progress Schedule is still in process.
² See "Notable Variances" in Section 7 for explanation on date shift.

2.4. Budget

A summary of the overall budget and expenditure status for the PCEP is provided in Table 2-2 below.

Table 2-2 Budget and Expenditure Status

Description of Work	Budget (A)	Current Budget (B) ¹	Cost This Month (C) ²	Cost To Date (D) ³	Estimate To Complete (E)	Estimate At Completion (F) = (D) + (E)
Electrification Subtotal	\$1,316,125,208	\$1,316,125,208	\$16,938,029	\$679,357,648	\$636,767,560	\$1,316,125,208
EMU Subtotal	\$664,127,325	\$664,127,325	\$845,071	\$198,241,413	\$465,885,911	\$664,127,325
PCEP TOTAL	\$1,980,252,533	\$1,980,252,533	\$17,783,100	\$877,599,061	\$1,102,653,472	\$1,980,252,533

Notes regarding tables above:
¹ Column B "Current Budget" includes executed change orders and awarded contracts.
² Column C "Cost This Month" represents the cost of work performed this month.
³ Column D "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

2.5. Board Actions

- Execute a one-year lease option term at San Mateo project office

Future anticipated board actions include:

- Shunt wire construction
- PG&E interconnect construction
- EMU Pantograph Inspection & Monitoring System contract

2.6. Government and Community Affairs

There were three outreach events this month.

3.0 ELECTRIFICATION – INFRASTRUCTURE

This section reports on the progress of the Electrification, SCADA, and Tunnel Modification components. A brief description on each of the components is provided below.

3.1. Electrification

The Electrification component of the PCEP includes installation of 138 miles of wire and overhead catenary system (OCS) for the distribution of electrical power to the EMUs. The OCS will be powered from a 25 kilovolt (kV), 60-Hertz, single phase, alternating current supply system consisting of two traction power substations (TPS), one switching station (SWS), and seven paralleling stations (PS). Electrification infrastructure will be constructed using a DB delivery method.

Activity This Month

- Continued to install OCS poles, down guys, assemblies, and balance weights in Segments 3 and 4.
- Potholed at proposed OCS locations and utility locations in all Segments in advance of foundation installation. BBII and PCEP also continued to resolve conflicts found during the potholing process, such as loose concrete, asphalt, and other debris, and continued designing solutions for those conflicts that cannot be avoided. The conflicts must be resolved before installation of foundations at those locations.
- Relocated signal cables and remove abandoned facilities found in conflict with planned OCS foundations as conflicts were identified.
- Continued to install formwork, rebar and high-voltage cable at TPS-2.
- Continued to install ductbank and manholes, drainage, and form and rebar work at TPS-1.
- Continued to install ductbank and manholes at PS-6.
- Continued grading work at PS-7.
- Continued to install ductbanks and manholes at SWS-1.
- Continued clearing and grubbing at PS-4.
- Continued to install signal ductbank and conduits in Segment 4.
- Installed cables at Auzerais Avenue, signal equipment case at Control Point (CP) Michael, and signal equipment kit at CP Alameda.
- Continued drilling of rails for impedance bond connections in Segments 1, 2, 3 and 4 at various control points and crossings.
- Continued installation of insulated joints (JIs) corridor wide.
- Progressed the OCS design with BBII in all segments, which included submittal and review of Design Change Notices for revised foundation locations.
- Coordinated design review with local jurisdictions for the OCS, traction power facilities, and bridge attachments design, including responses to comments from jurisdictions.

- Continued to review and coordinate signal and communication design submittals with BBII.
- Continued discussions with FRA and CPUC on grade crossing design.
- Continued to progress the TPS interconnection design for TPS-1 and TPS-2. Completed review of 90% design for TPS-2 and returned comments for contractor for incorporation. 90% TPS-1 interconnection is expected in the following month.
- Worked with BBII through Site Specific Work Plans (SSWP) for upcoming field work.
- Continued to work with PG&E and Silicon Valley Power (SVP) for the finalization of single phase studies and came to an agreement on steps to finalize the studies.
- PG&E continued work at East Grand and FMC substations.

A summary of the work progress by segment is provided in Table 3-1 below.

Table 3-1 Work Progress by Segment

Segment	Work Area	Foundations			Poles		
		Required ^{abc}	Completed this Month	Completed to Date	Required ^{ab}	Completed this Month	Completed to Date
1	Tunnels	32	0	32	32	0	0
	A	309	0	0	259	0	0
	B	237	0	0	177	0	0
2	5	243	0	184	208	0	160
	4	314	0	240	253	0	186
	3	174	0	63	140	0	36
	2	248	0	78	205	0	60
	1	206	0	79	154	0	33
3	2	512	0	192	442	0	0
	1	390	0	353	311	36	132
4	A	244	0	156	180	0	107
	B	131	0	87	124	0	70
	CEMOF	112	0	0	102	0	0
Total		3,152	0	1,464	2,587	36	784

Note:

- ^a Foundations required do not match poles required as guy foundations are needed in some locations for extra support.
- ^b The number of required poles and foundations fluctuate due to design changes.
- ^c 55 foundations in S2WA5 will be installed by South San Francisco and 64 foundations in S2WA3 will be installed by 25th Avenue.

Activity Next Month

- Continue installation of off-track foundations in Segment 3.
- Continue resolution of DSCs.
- Continue to install protective steel plates for protection of utilities during foundation installation.
- Continue to install OCS poles and assemblies in Segment 4.
- Continue work with BBII on field investigation activities and designs, which will include the progression of the OCS, traction power, bonding and grounding, signal systems, and other civil infrastructure such as overhead bridge protections.

Peninsula Corridor Electrification Project
Monthly Progress Report

- Pothole and clear obstructions at proposed OCS locations. Potholing will concentrate in Segments 3 and 4, as well areas of potential ROW needs in Segments 1 and 2.
- Continue construction at TPS-1 and TPS-2.
- Continue construction at PS-7, PS-4, PS-6, and the Switching Station.
- Continue to install conduit and foundations for signal and wayside power cubicle (WPC) units in Segment 4.
- Continue to install impedance bond connections.
- Continue to install IJs.
- Continue to install bridge attachments.
- Continue to coordinate with stakeholders on the consistent warning time solution and advance location-specific design.
- Continue to progress location-specific design for grade crossing system.
- Review BBII work plans for upcoming construction activities.
- Progress TPS-2 Interconnection Design to Issued for Construction and review 90% TPS-1 interconnection Design.
- Coordinate with PG&E on final design and construction for PG&E infrastructure.
- Coordinate with local jurisdictions to review designs.
- Continue tree pruning and removals.

3.2. Supervisory Control and Data Acquisition

SCADA is a system that monitors and controls field devices for electrification, including traction power substations (TPS), wayside power cubicles (WPC), and the OCS. SCADA will be integrated with the base operating system for Caltrain Operations and Control, which is the Rail Operations Center System. A separate control console will be established for the Power Director.

Activity This Month

- Submitted formal schedule for review and Monthly Progress Report.
- Worked on addressing comments to test procedures (ongoing).
- JPB returned comments to the contractor on six of the previously submitted test procedures.
- JPB returned Statement of No Objection status on eight of the submitted test procedures.

Activity Next Month

- Prepare and deliver the Monthly Report and the Monthly Schedule Update.
- Attend project status meetings.
- Support ongoing discussions concerning RFIs.
- Continue working to complete the database and display to 100% for all locations.

Peninsula Corridor Electrification Project
Monthly Progress Report

- Continue development of Test Procedures and respond to comments received from JPB.

3.3. Tunnel Modification

Tunnel modifications will be required on the four tunnels located in San Francisco. This effort is needed to accommodate the required clearance for the OCS to support electrification of the corridor. Outside of the PCEP scope, Caltrain Engineering has requested the PCEP team to manage completion of design and construction for the Tunnel 1 and Tunnel 4 Drainage and Track Rehabilitation Project. The Tunnel Drainage and Track Rehabilitation Project is funded separately from PCEP.

Activity This Month

- Installed and adjusted brackets in all tunnels.
- Continued review of and prepared responses for submittals and RFIs.
- Confirmed weekend closure dates from 2/22/20 to 3/28/20.
- Started the installation of the Portal Termination Structures at all tunnels.
- Completed assembling all insulated arms.

Activity Next Month

- Continue procuring OCS termination structures from steel shop drawings based on as-built survey of foundations and shop drawing approval.
- Review and respond to submittals, RFIs, and SSWPs as needed.
- Complete the installation of the drop tubes at all tunnels.
- Complete the installation of the brackets for the static and feeder wire.
- Complete the installation of all OCS termination structures.
- Start the installation of the archstones at South Portal Tunnel 4.
- Installation of the static and feeder wires starting from north to south (Tunnel 1 through Tunnel 4).
- Install fencing above tunnels.

4.0 ELECTRIC MULTIPLE UNITS

This section reports on the progress of the Electric Multiple Units (EMU) procurement and the Centralized Equipment Maintenance and Operations Facility (CEMOF) modifications.

4.1. Electric Multiple Units

The procurement of EMUs, or trainsets, from Stadler consists of a Base Order of 96 railcars, plus an Option Order of an additional 37 railcars, for a total of 133 railcars. The cars from these two orders will be combined and delivered as 19 seven-car Trainsets. The Base Order is funded from PCEP, and Option Order funded by a Transit and Intercity Rail Capital Program (TIRCP) grant. One more Option for additional cars is available.

Activity This Month

- FDRs remain to be completed for three systems. These software-based systems include 'Train Control,' 'Monitoring and Diagnostics,' and 'Car Control.' Completion is scheduled for early '2020 and must be performed before design conformance Type Testing commences in April 2020.
- FAls continue to be conducted, and 55 of 64 have been closed.
- Electrical tests have been conducted in Salt Lake City on all seven cars of Trainset No. 1.
- Car production rate continued to improve as parts and resource shortages are addressed.
- 28 car shells have been shipped from Stadler - Switzerland and 25 are onsite in Stadler's Salt Lake City facility. No change from last month, but consistent with Project Schedule.
- Two waiver requests remain with the FRA for review and disposition. One pertains to train alternate crashworthiness design standards and the other for a passenger emergency door opening system that is safer for the Caltrain System.

Activity Next Month

- Continue to close out system level FDRs and FAls.
- Commence Quality Assurance (QA) audits on critical USA-based sub-suppliers.
- Work with the FRA on closing out remaining open items.
- Finalize high-level door plug design.
- Finalize bike car flip-up seat and barrier design.
- Re-baseline Stadler trainset delivery and testing schedule on Caltrain property.
- PCEP and Caltrain Management meeting in Salt Lake City.

4.2. Centralized Equipment Maintenance and Operations Facility Modifications

The CEMOF Modifications Project will provide work areas to perform maintenance on new EMUs.

Activity This Month

- Continued processing submittals, RFIs, and SSWPs.
- Potholed the Boosted Water line.
- Started work on the Parts Storage Warehouse area.
- Relocated the Ground Wire.
- Installed fire suppression/water line at Parts Storage Warehouse.

Activity Next Month

- All activities are in the Parts Storage Warehouse area:
 - Compact Subgrade.
 - Install baserock.
 - Install sand and 10 millimeter membrane.
 - Install rebar.

5.0 SAFETY

Safety and Security requirements and plans are necessary to comply with applicable laws and regulations related to safety, security, and emergency response activities. Safety staff coordinates with contractors to review and plan the implementation of contract program safety requirements. Safety project coordination meetings continue to be conducted on a monthly basis to promote a clear understanding of project safety requirements as defined in contract provisions and program safety documents.

Activity This Month

- Project staff provided input and continued its participation in the BBII contractor workforce safety meetings. Project incidents continue to be reviewed with project staff to reinforce the application of recommended safety mitigation measures.
- Provided project safety updates at the FTA/Caltrain – PCEP Quarterly Meeting.
- Conducted a review of all 2019 employee injury incidents with BBII Safety in conjunction with its annual safety incentive submittal.
- Continued to provide input and oversight of the contractor SSWP safety provisions and ongoing safety construction oversight and inspections.
- Conducted the monthly project Safety and Security Certification and Fire/Life Safety Meetings.
- Investigated project incident occurrences and worked with the contractor representatives to identify incident root causes and develop safety and security mitigation measures.
- Conducted ongoing safety inspections of contractor field activities and performed pre-work site hazards assessment walks with BBII and subcontractor staff.
- Participated in weekly project coordination meetings with the contractor to review open issues and recommended action items.
- Provided project safety updates at the Caltrain Capital Projects Safety Committee Meeting.
- Participated in bi-weekly Rail Activation Committee meetings.

Activity Next Month

- Monthly safety communication meetings continue to be scheduled for the Project Safety and Security Certification Committee, Fire/Life Safety Committee, Rail Activation Committee, and other project-related contractor and JPB safety meetings to discuss safety priorities.
- Continue focus on performing site safety inspections on the OCS foundations, pole installations, potholing, Tunnel, and CEMOF work to assess safety work practices and identify additional opportunities for improvement. Conduct contractor equipment inspections as needed.
- Continue to meet with the PCEP contractors, JPB safety, and TransitAmerica Services, Inc. (TASI) to identify opportunities to further improve project safety performance and continue to reinforce lessons learned safety mitigation recommendations resulting from prior project incidents.

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6.0 QUALITY ASSURANCE

The Quality Assurance (QA) staff performs technical reviews for planning, implementing, evaluating, and maintaining an effective program to verify that all equipment, structures, components, systems, and facilities are designed, procured, constructed, installed, and maintained in accordance with established criteria and applicable codes and standards throughout the design, construction, startup and commissioning of the PCEP.

Activity This Month

- Staff meetings with BBII QA/Quality Control (QC) management representatives continue weekly.
- Continued review of BBII-generated Nonconformance Reports (NCR) and Construction Discrepancy Reports for proper discrepancy condition, cause, disposition, corrective and preventive action and verification of closure.
- Continued review and approval of Design Variance Requests for BBII and PGH Wong for QA/QC and inspection issues/concerns.
- Continued review of BBII QC Inspectors Daily Reports, Construction QC Reports and Surveillance Reports for work scope, performance of required duties, adequacy, non-conformances, test/inspection results, follow-up on unresolved issues, and preciseness.
- Continued review of BBII Material Receipt Reports, Certificates of Conformance, Certified Tests Reports, and Certificates of Analysis to ensure delivered project materials conform to specifications, and that contractually required quality and test support documents are adequate and reflect concise conditions per the purchase order requirements.
- Continued regularly scheduled design reviews and surveillances on project design packages.
- Conducted an audit of BBII Field Activities Rail Welding on second shift. Audit still on-going.
- Conducted audits of two RMA QC Labs in San Jose and Sacramento for the CEMOF project.

Table 6-1 below provides details on the status of audits performed through the reporting period.

Table 6-1 Quality Assurance Audit Summary

Quality Assurance Activity	This Reporting Period	Total to Date
Audits Conducted	2	106
Audit Findings		
Audit Findings Issued	3	68
Audit Findings Open	3	3
Audit Findings Closed	0	65
Non-Conformances		
Non-Conformances Issued	0	10
Non-Conformances Open	0	1
Non-Conformances Closed	0	9

Activity Next Month

- Conduct audits of three PGH Wong design packages.
- Complete audit of rail welding activities.
- Submit FTA required review and report of the adequacy of the Quality Management Plan implementation.

7.0 SCHEDULE

The overall schedule remains unchanged from last month. The forecasted Revenue Service Date (RSD) remains as May 2022. The program critical path runs through the manufacturing and testing of EMU trainsets.

Shown below, Table 7-1 indicates major milestone dates for the MPS.

Table 7-1 Schedule Status

Milestones	Program Plan	Progress Schedule (January 2020) ¹
Arrival of First Vehicle in Pueblo, CO	N/A	05/29/2020
Arrival of First Vehicle at JPB (after Pueblo testing)	N/A	09/01/2021
Segment 4 Completion	11/21/2019	02/14/2021 ²
o Interconnection from PG&E Substation to Traction Power Substation (TPS)	N/A	09/30/2020 ²
PG&E Provides Permanent Power	09/09/2021	09/09/2021
Electrification Substantial Completion	08/10/2020	01/31/2022 ²
Start Phased Revenue Service	N/A	02/01/2022 ²
RSD (w/o Risk Contingency)	12/09/2021	05/06/2022
FFGA RSD (w/ Risk Contingency)	08/22/2022	08/22/2022

Note:

¹ Dates may shift slightly as the update of this month's Progress Schedule is still in process.

² See "Notable Variances" for explanation on date shift.

Notable Variances

BBII continues to report an overall delay to substantial completion. JPB is working with BBII on the issue and is urging BBII to accelerate resolution.

Within the month of January, the following three observations were made relative to variances within the BBII schedule: signal design progression continues to advance at a rate slower than baseline productivity levels, no OCS foundations were installed, design of four paralleling stations continue to progress at a slow rate.

Items listed in Table 7-2 reflect the critical path activities/milestones for the PCEP.

Table 7-2 Critical Path Summary

Activity	Start	Finish
Manufacturing, Testing & Acceptance of Trainsets 1 - 14	08/13/2018	05/06/2022
RSD w/out Risk Contingency	05/06/2022	05/06/2022
FFGA RSD w/ Risk Contingency	08/22/2022	08/22/2022

Schedule Hold Points

Schedule Hold Points (SHP) represent key milestones on or near a schedule's critical path that are used as measurement points with respect to contingency drawdown. Delays to these key milestones have the potential to require a program to utilize available contingency. Table 7-3 below reflects the SHPs for the PCEP program schedule. The dates indicated reflect the planned completion dates for each SHP.

Table 7-3 Schedule Hold Points

Schedule Hold Point (SHP)	Date
FTA/PMOC Risk Refresh	08/30/2016 (A)
Begin EMU Manufacturing	12/04/2017 (A)
Arrival of 1 st Trainset in Salt Lake City	02/04/2019 (A)
Arrival of 1 st Trainset in Pueblo, CO	09/01/2020
Arrival of 1 st Trainset at JPB	02/26/2021
Segment 4 Completion	02/14/2021
Conditional Acceptance of 1 st Trainset	04/09/2021
System Electrified	01/31/2022
Begin Phased Revenue Service	02/01/2022
Conditional Acceptance of 14th Trainset	05/06/2022
FFGA RSD w/ Risk Contingency	08/22/2022

Note: "(A)" denotes an actual completion

**Peninsula Corridor Electrification Project
Monthly Progress Report**

8.0 BUDGET AND EXPENDITURES

The summary of overall budget and expenditure status for the PCEP and Third Party Improvements is shown in the following tables. Table 8-1 reflects the Electrification budget, Table 8-2 the EMU budget, Table 8-3 the overall PCEP budget, and Table 8-4 Third Party Improvements budget. Table 8-5 summarizes the budget transfers of contingency completed this month.

Table 8-1 Electrification Budget & Expenditure Status

Description of Work	Budget (A)	Current Budget (B) ¹	Cost This Month (C) ²	Cost To Date (D) ³	Estimate To Complete (E)	Estimate At Completion (F) = (D) + (E)
ELECTRIFICATION						
Electrification ⁽⁴⁾	\$696,610,558	\$725,630,965	\$8,573,249	\$372,247,940	\$353,383,025	\$725,630,965
SCADA	\$0	\$3,446,917	\$0	\$1,934,371	\$1,512,546	\$3,446,917
Tunnel Modifications	\$11,029,649	\$41,408,610	\$3,007,660	\$32,079,065	\$9,329,546	\$41,408,610
Real Estate	\$28,503,369	\$28,503,369	\$67,137	\$20,810,596	\$7,692,773	\$28,503,369
Private Utilities	\$63,515,298	\$92,451,380	\$2,175,563	\$76,006,458	\$16,444,923	\$92,451,380
Management Oversight ⁽⁵⁾	\$141,506,257	\$144,957,684	\$2,307,214	\$131,477,249	\$13,480,435	\$144,957,684
Executive Management	\$7,452,866	\$9,214,226	\$126,626	\$7,821,954	\$1,392,272	\$9,214,226
Planning	\$7,281,997	\$6,281,997	\$50,316	\$5,766,899	\$515,097	\$6,281,997
Community Relations	\$2,789,663	\$1,789,663	\$16,710	\$1,545,344	\$244,319	\$1,789,663
Safety & Security	\$2,421,783	\$3,691,387	\$119,911	\$3,052,499	\$638,888	\$3,691,387
Project Management Services	\$19,807,994	\$16,807,994	\$192,172	\$12,318,345	\$4,489,649	\$16,807,994
Engineering & Construction	\$11,805,793	\$11,805,793	\$253,956	\$9,749,050	\$2,056,744	\$11,805,793
Electrification Eng & Mgmt	\$50,461,707	\$50,461,707	\$771,879	\$46,183,506	\$4,278,201	\$50,461,707
Construction Management	\$0	\$2,790,608	\$520,690	\$2,373,712	\$416,896	\$2,790,608
IT Support	\$312,080	\$407,170	\$0	\$407,170	\$0	\$407,170
Operations Support	\$1,445,867	\$2,380,632	\$29,988	\$2,313,898	\$66,734	\$2,380,632
General Support	\$4,166,577	\$5,566,577	\$117,652	\$5,298,392	\$268,185	\$5,566,577
Budget / Grants / Finance	\$1,229,345	\$1,429,345	\$2,103	\$1,349,818	\$79,527	\$1,429,345
Legal	\$2,445,646	\$2,445,646	\$4,517	\$4,473,570	(\$2,027,924)	\$2,445,646
Other Direct Costs	\$5,177,060	\$5,177,060	\$100,694	\$4,115,214	\$1,061,846	\$5,177,060
Prior Costs 2002 - 2013	\$24,707,878	\$24,707,878	\$0	\$24,707,878	\$0	\$24,707,878
TASI Support	\$55,275,084	\$57,475,084	\$801,498	\$34,966,788	\$22,508,296	\$57,475,084
Insurance	\$3,500,000	\$4,543,588	\$0	\$4,543,588	\$0	\$4,543,588
Environmental Mitigations	\$15,798,320	\$14,972,644	\$1,366	\$691,777	\$14,280,868	\$14,972,644
Required Projects	\$17,337,378	\$14,253,335	\$4,342	\$833,272	\$13,420,063	\$14,253,335
Maintenance Training	\$1,021,808	\$1,021,808	\$0	\$1,021,808	\$0	\$1,021,808
Finance Charges	\$5,056,838	\$6,137,156	\$0	\$3,766,544	\$2,370,612	\$6,137,156
Contingency	\$276,970,649	\$181,322,667	N/A	N/A	\$102,734,824	\$102,734,824
Forecasted Costs and Changes	\$0	\$0	N/A	N/A	\$78,587,843	\$78,587,843
ELECTRIFICATION SUBTOTAL	\$1,316,125,208	\$1,316,125,208	\$16,938,029	\$679,357,648	\$636,767,560	\$1,316,125,208

Notes regarding tables above:
 1. Column B "Current Budget" includes executed change orders and awarded contracts.
 2. Column C "Cost This Month" represents the cost of work performed this month.
 3. Column D "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.
 4. Cost To Date for "Electrification" includes 5% for Contractor's retention until authorization of retention release.
 5. The agency labor is actual through December 2019 and accrued for January 2020.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Table 8-2 EMU Budget & Expenditure Status

Description of Work	Budget (A)	Current Budget (B) ¹	Cost This Month (C) ²	Cost To Date (D) ³	Estimate To Complete (E)	Estimate At Completion (F) = (D) + (E)
EMU	\$550,899,459	\$555,034,909	\$0	\$152,219,402	\$402,815,507	\$555,034,909
CEMOP Modifications	\$1,344,000	\$6,579,586	\$190,152	\$1,918,125	\$4,661,461	\$6,579,586
Management Oversight ⁽⁴⁾	\$64,139,103	\$63,113,984	\$628,200	\$41,125,724	\$21,988,260	\$63,113,984
Executive Management	\$5,022,302	\$6,263,136	\$93,973	\$4,863,970	\$1,399,166	\$6,263,136
Community Relations	\$1,685,614	\$985,614	\$10,244	\$634,067	\$351,548	\$985,614
Safety & Security	\$556,067	\$765,296	\$11,795	\$516,029	\$249,268	\$765,296
Project Mgmt Services	\$13,275,280	\$11,275,280	\$120,204	\$7,985,282	\$3,289,999	\$11,275,280
Eng & Construction	\$89,113	\$89,113	\$0	\$23,817	\$65,296	\$89,113
EMU Eng & Mgmt	\$32,082,556	\$30,581,014	\$173,703	\$18,823,768	\$11,757,245	\$30,581,014
Construction Management	\$0	\$1,501,543	\$78,500	\$446,359	\$1,055,184	\$1,501,543
IT Support	\$1,027,272	\$952,089	\$8,488	\$576,815	\$375,275	\$952,089
Operations Support	\$1,878,589	\$1,878,589	\$17,143	\$352,457	\$1,526,132	\$1,878,589
General Support	\$2,599,547	\$2,599,547	\$48,555	\$2,289,880	\$309,667	\$2,599,547
Budget / Grants / Finance	\$712,123	\$1,012,123	\$2,682	\$897,211	\$114,912	\$1,012,123
Legal	\$1,207,500	\$1,207,500	\$1,733	\$1,223,195	(\$15,695)	\$1,207,500
Other Direct Costs	\$4,003,139	\$4,003,139	\$61,180	\$2,492,876	\$1,510,263	\$4,003,139
TASI Support	\$2,740,000	\$2,789,493	\$26,719	\$93,093	\$2,696,400	\$2,789,493
Required Projects	\$0	\$38,263	\$0	\$38,263	\$0	\$38,263
Insurance	\$4,500,000	\$3,927,821	\$0	\$538,280	\$3,389,541	\$3,927,821
Finance Charges	\$1,941,800	\$3,761,482	\$0	\$2,308,527	\$1,452,955	\$3,761,482
Contingency	\$38,562,962	\$28,881,787	N/A	N/A	\$29,192,686	\$29,192,686
Forecasted Costs and Changes	\$0	\$0	N/A	N/A	(\$310,899)	(\$310,899)
EMU SUBTOTAL	\$664,127,325	\$664,127,325	\$845,071	\$198,241,413	\$465,885,911	\$664,127,325

Notes regarding tables above:
 1. Column B "Current Budget" includes executed change orders and awarded contracts.
 2. Column C "Cost This Month" represents the cost of work performed this month.
 3. Column D "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.
 4. The agency labor is actual through December 2019 and accrued for January 2020.

Table 8-3 PCEP Budget & Expenditure Status

Description of Work	Budget (A)	Current Budget (B) ¹	Cost This Month (C) ²	Cost To Date (D) ³	Estimate To Complete (E)	Estimate At Completion (F) = (D) + (E)
Electrification Subtotal	\$1,316,125,208	\$1,316,125,208	\$16,938,029	\$679,357,648	\$636,767,560	\$1,316,125,208
EMU Subtotal	\$664,127,325	\$664,127,325	\$845,071	\$198,241,413	\$465,885,911	\$664,127,325
PCEP TOTAL	\$1,980,252,533	\$1,980,252,533	\$17,783,100	\$877,599,061	\$1,102,653,472	\$1,980,252,533

Notes regarding tables above:
 1. Column B "Current Budget" includes executed change orders and awarded contracts.
 2. Column C "Cost This Month" represents the cost of work performed this month.
 3. Column D "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Table 8-4 Third Party Improvements/CNPA Budget & Expenditure Status

Description of Work	Budget (A)	Current Budget (B) ¹	Cost This Month (C) ²	Cost To Date (D) ³	Estimate To Complete (E)	Estimate At Completion (F) = (D) + (E)
CHSRA Early Pole Relocation	\$1,000,000	\$1,000,000	\$8,806	\$740,332	\$259,668	\$1,000,000
PS-3 Relocation (Design)	\$500,000	\$500,000	\$0	\$150,000	\$350,000	\$500,000
TPSS-2 VTA/PCEP Pole Relocation (Design)	\$110,000	\$110,000	\$0	\$93,500	\$16,500	\$110,000
TPSS-2 VTA/PCEP Pole Height (Redesign)	\$31,000	\$31,000	\$0	\$0	\$31,000	\$31,000
EMU Option Cars	\$172,800,047	\$172,800,047	\$933,120	\$53,292,490	\$119,507,557	\$172,800,047
Add Flip-Up Seats into Bike Cars	\$1,961,350	\$1,961,350	\$0	\$0	\$1,961,350	\$1,961,350
CNPA TOTAL	\$176,402,397	\$176,402,397	\$941,926	\$54,276,322	\$122,126,075	\$176,402,397

Notes regarding tables above:

- ¹ Column B "Current Budget" includes executed change orders and awarded contracts.
- ² Column C "Cost This Month" represents the cost of work paid this month.
- ³ Column D "Cost To Date" includes actuals (amount paid) to date.

Table 8-4 shows improvements outside of the scope of PCEP that are funded with non-PCEP funds. These improvements are implemented through the PCEP contracts. In FTA terminology, these efforts are categorized as Concurrent Non-Project Activities (CNPA).

- CHSRA Early Pole Relocation: Relocation of 196 OCS poles as part of PCEP. Implementing these pole relocations minimizes future cost and construction impacts. This scope is funded by the CHSRA.
- PS-3 Relocation (Design): Relocate PS-3 (Burlingame) as part of PCEP to avoid a future conflict with the Broadway Grade Separation Project (BGSP). This scope is funded by the BGSP.
- TPSS-2 VTA/PCEP Pole Relocation and Height (Design): Design changes due to the relocation of VTA/BART Pole at TPSS-2 location and pole height redesign for live line clearances. This scope is funded by the VTA.
- EMU Option Cars: Exercise Stadler Contract Option for 37 additional EMUs. This scope is funded with a combination of TIRCP and matching local funds.
- Add Flip-Up Seats into Bike Cars: Stadler contract change order to add four additional flip-up seats in each of the two unpowered (bike) cars per trainset (eight total per trainset). This scope is funded by Caltrain outside of the PCEP.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Table 8-5 Budget Transfers of Contingency

Transfer	Description	Contingency ¹
ELECTRIFICATION		
BBI-053-CCO-025C	Addition of OCS Shunt Wires in Segments 2 & 4 – Pole Assembly Materials Only	\$884,500
BBI-053-CCO-066A	Increase Quantity for Contaminated Soils (Bid Unit Price Item #1)	\$950,000
PROV-070-CCO-027	Grout Quantity Underrun (Credit)	(\$1,216,000)
BT-023	TASI Signal Cable Relocation	\$2,200,000
ELECTRIFICATION SUBTOTAL		\$2,818,500
EMU		
BT-025	Michael Yard Commissioning Upgrades Budget Savings	(\$500,000)
PROV-071-CCO-001	Change Casing Size of Siphon Line to Schedule 80 PVC Pipe	\$3,849
PROV-071-CCO-002	Leakage test for IW line	\$1,339
PROV-071-CCO-003	Roughen surface of existing concrete	\$3,159
PROV-071-CCO-004	Change Catch Basin Size from 24"X24" to 36" Round	\$14,415
PROV-071-CCO-005	Hand Dig around Communication Lines	\$906
PROV-071-CCO-008	Change Storm Drain Line A Material from 12-inch RCP Pipe to 12-inch PVC Pipe	\$3,583
PROV-071-CCO-009	Demolition of Existing Exterior Light	\$1,558
EMU SUBTOTAL		(\$471,191)
PCEP TOTAL		\$2,347,309

Notes regarding tables above:

- ¹ Budget amount transferred from project contingency. A negative amount represents a credit to contingency.

Table 8-5 shows budget transfers of project contingency implemented during the current monthly reporting period. This table includes contingency transfers for both executed contract change orders as covered under Section 9.0 and uses of contingency for Program budget line items outside the five PCEP contracts.

Appendix D includes costs broken down by Standard Cost Code (SCC) format. This format is required for reporting of costs to the FTA. The overall project total in the SCC format is lower than the project costs in table 8-3. This is due to the exclusion of costs incurred prior to the project entering the Project Development phase.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

9.0 CHANGE MANAGEMENT

The change management process establishes a formal administrative work process associated with the initiation, documentation, coordination, review, approval and implementation of changes that occur during the design, construction or manufacturing of the PCEP. The change management process accounts for impacts of the changes and ensures prudent use of contingency.

Currently the PCEP contracts are BBII, CEMOF, Stadler, SCADA, Tunnel Modifications, and Amtrak.

A log of all executed change orders can be found in Appendix E.

Executed Contract Change Orders (CCO) This Month

Electrification Contract

Change Order Authority (5% of BBII Contract) 5% x \$696,610,558 = \$34,830,528

Date	Change Number	Description	CCO Amount
12/17/2019	BBII-053-CCO-025C	Addition of OCS Shunt Wires in Segments 2 & 4 – Pole Assembly Materials Only	\$884,500
01/07/2020	BBII-053-CCO-066A	Increase Quantity for Contaminated Soils (Bid Unit Price Item #1)	\$950,000
Total			\$1,834,500

¹ (When indicated) Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

EMU Contract

Change Order Authority (5% of Stadler Contract) 5% x \$550,899,459 = \$27,544,973

Date	Change Number	Description	CCO Amount
	None		\$0
Total			\$0

¹ (When indicated) Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

CEMOF Contract

Change Order Authority (10% of ProVen Contract) 10% x \$6,550,777 = \$655,078

Date	Change Number	Description	CCO Amount
1/16/2020	PROV-071-CCO-001	Change Casing Size of Siphon Line to Schedule 80 PVC Pipe	\$3,849
1/13/2020	PROV-071-CCO-002	Leakage test for IW line	\$1,339
1/15/2020	PROV-071-CCO-003	Roughen surface of existing concrete	\$3,159
1/9/2020	PROV-071-CCO-004	Change Catch Basin Size from 24"X24" to 36" Round	\$14,415
1/15/2020	PROV-071-CCO-005	Hand Dig around Communication Lines	\$906
1/17/2020	PROV-071-CCO-008	Change Storm Drain Line A Material from 12-inch RCP Pipe to 12-inch PVC Pipe	\$3,583
1/16/2020	PROV-071-CCO-009	Demolition of Existing Exterior Light	\$1,558
Total			\$28,809

¹ (When indicated) Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

SCADA Contract

Change Order Authority (15% of ARINC Contract) 15% x \$3,446,917 = \$517,038

Date	Change Number	Description	CCO Amount
	None		\$0
Total			\$0

¹ (When indicated) Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

Tunnel Modification Contract

Change Order Authority (10% of ProVen Contract)² 10% x \$38,477,777 = \$3,847,778

Date	Change Number	Description	CCO Amount
1/25/2020	PROV-070-CCO-027	Grout Quantity Underrun	(\$1,216,000)
Total			(\$1,216,000)

¹ (When indicated) Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

² Tunnel modification contract (\$38,477,777) includes: Notching (\$25,281,170) and Drainage (\$13,196,607).

³ Third Party Improvements/CNPA Projects that are funded with non-PCEP funds.

Amtrak AEM-7 Contract

Change Order Authority (Lump Sum) Up to \$150,000

Date	Change Number	Description	CCO Amount
	None		\$0
Total			\$0

Notes:

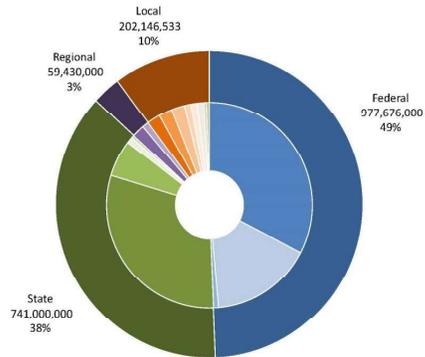
¹ When the threshold of 75% is reached, staff may return to the Board to request additional authority.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

10.0 FUNDING

Figure 10-1 depicts a summary of the funding plan for the PCEP. It provides a breakdown of the funding partners as well as the allocated funds. As previously reported, FTA awarded amendments to include \$67 million in Fiscal Year 2019 Section 5307 formula funds, and the next \$100 million in Core Capacity funds, in the existing grants for the project.

Figure 10-1 Funding Plan



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Fund Source	Amount	%
FTA Core Capacity	\$647,000,000	22.67%
FTA Section 5307 (EMU only)*	\$315,000,000	15.91%
FTA Section 5307 (Environmental / Pre-Development only)	\$15,676,000	0.79%
Prop 1A	\$600,000,000	30.30%
High Speed Rail Cap and Trade	\$113,000,000	5.71%
Transit & Intercity Rail Capital Program	\$20,000,000	1.01%
Prop 1B (Public Transportation Modernization & Improvement Account)	\$8,000,000	0.40%
Bridge Toll Funds (RM1/RM2)	\$39,430,000	1.99%
Carl Moyer	\$20,000,000	1.01%
SFCTA/SFMTA**	\$41,382,178	2.09%
SMCTA Measure A	\$41,382,178	2.09%
VTA Measure A	\$41,382,177	2.09%
Santa Clara (VTA) 7-Party MOU Contribution	\$20,000,000	1.01%
San Francisco 7-Party MOU Contribution	\$20,000,000	1.01%
San Mateo (SMCTA) 7-Party MOU Contribution	\$20,000,000	1.01%
Caltrain Low Carbon Transit Operations Cap and Trade	\$9,000,000	0.45%
Prior Local Contribution	\$9,000,000	0.45%
Total	\$1,980,252,533	

Notes:

*Includes necessary fund transfer with SMCTA

**Includes \$4M CMAQ Transfer considered part of SF local contribution

11.0 RISK MANAGEMENT

The risk management process is conducted in an iterative fashion throughout the life of the project. During this process, new risks are identified, other risks are resolved or managed, and potential impacts and severity modified based on the current situation. The Risk Management team's progress report includes a summary on the effectiveness of the Risk Management Plan, any unanticipated effects, and any correction needed to handle the risk appropriately.

The Risk Management team meets monthly to identify risks and corresponding mitigation measures. Each risk is graded based on the potential cost and schedule impacts they could have on the project. This collection of risks has the greatest potential to affect the outcome of the project and consequently is monitored most closely. For each of the noted risks, as well as for all risks on the risk register, mitigation measures have been identified and are being implemented. Progress in mitigating these risks is confirmed at monthly risk assessment meetings attended by project team management and through continuous monitoring of the Risk Management Lead.

The team has identified the following items as top risks for the project (see Appendix F for the complete Risk Table):

1. The contractor may not complete and install signal design including two-speed check modifications within budget and schedule.
2. Extent of differing site conditions and associated redesign efforts results in delays to the completion of the electrification contract and increases program costs.
3. Potential that modifications to the PTC database and signal software are not completed in time for cutover and testing.
4. Additional property acquisition is necessitated by changes in design.
5. Contractor generates hazardous materials that necessitate proper removal and disposal in excess of contract allowances and expectations.
6. Rejection of Design Variance Request (DVR) for Auto Transformer Feeder (ATF) and static wires results in cost and schedule impacts to PCEP.
7. Sub-optimal contractor sequencing when progressing design and clearing foundation locations may result in construction inefficiencies.
8. Changes to PTC implementation schedule could delay completion of the electrification work. Cost and schedule of BBII contract could increase as a result of change in PTC system.
9. Track access does not comply with contract-stipulated work windows.
10. Potential that vehicles will not receive timely notification from FRA of compliance with acceptable alternate crash management standards.

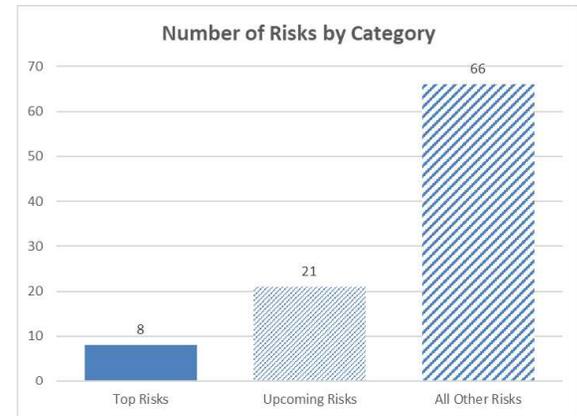
Activity This Month

- Updated risk descriptions, effects, and mitigations based upon weekly input from risk owners. Monthly cycle of risk updating was completed based on schedules established in the Risk Identification and Mitigation Plan.

- Updated risk retirement dates based upon revisions to the project schedule and input from risk owners.
- Continued weekly monitoring of risk mitigation actions and publishing of the risk register.
- The Risk Management team attended Project Delivery, Electrification, and Systems Integration meetings to monitor developments associated with risks and to identify new risks.

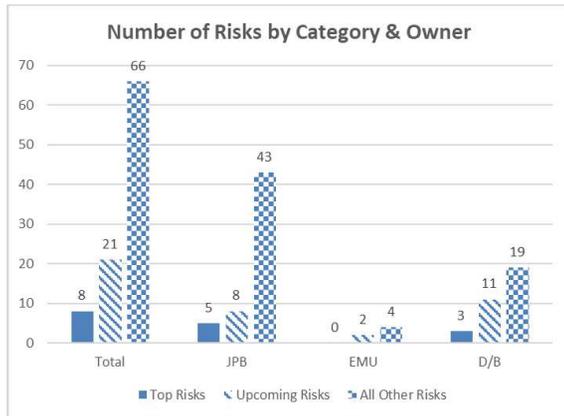
Figures 11-1 and 11-2 show the risks identified for the program. Risks are categorized as top risk, upcoming risk, and all other risks. The categories are based on a rating scale composed of schedule and cost factors. Top risks are considered to have a significantly higher than average risk grade. Upcoming risks are risks for which mitigating action must be taken within 60 days. All other risks are risks not falling into other categories.

Figure 11-1 Monthly Status of Risks



Total Number of Active Risks = 95

Figure 11-2 Risk Classification



Total Number of Active Risks = 95

Activity Next Month

- Conduct weekly monitoring of risk mitigation actions and continue publishing risk register.
- Update risk descriptions, effects, mitigations and retirement dates based on weekly monitoring and attendance at key project meetings.
- Convene Risk Assessment Committee meeting.
- Conduct Monte Carlo analysis for cost of risk.

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**Peninsula Corridor Electrification Project
Monthly Progress Report**

12.0 ENVIRONMENTAL

12.1. Permits

The PCEP has obtained the required environmental permits from the following agencies/federal regulations: Section 106 of the National Historic Preservation Act of 1966 (NHPA), Section 7 of the Endangered Species Act (ESA), United States Army Corps of Engineers, San Francisco Bay Regional Water Quality Control Board (SFWQCB), the California Department of Fish and Wildlife, and the San Francisco Bay Conservation Development Commission.

Activity This Month

- None

Activity Next Month

- None

12.2. Mitigation Monitoring and Reporting Program (MMRP)

The California Environmental Quality Act (CEQA) requires that a Lead Agency establish a program to monitor and report on mitigation measures that it has adopted as part of the environmental review process. The PCEP team has prepared a MMRP to ensure that mitigation measures identified in the PCEP Environmental Impact Report are fully implemented during project implementation. PCEP will implement the mitigation measures through its own actions, those of the DB contractor and actions taken in cooperation with other agencies and entities. The status of each mitigation measure in the MMRP is included in Appendix G.

Activity This Month

- Environmental compliance monitors were present during project activities (OCS pole foundation installation, potholing for utility location, duct bank and manhole installation, tree trimming/removal, conduit installation, signal case installation, grading, traction power station form and drainage work, removal of abandoned signal cable, etc.) occurring in areas that required environmental compliance monitoring. The monitoring was conducted in accordance with measures in the MMRP in an effort to minimize potential impacts on sensitive environmental resources.
- Noise and vibration monitoring also occurred during project activities, and non-hazardous soil was removed from the ROW.
- Environmentally Sensitive Area (ESA) delineation (staking and/or fencing) occurred to delineate jurisdictional waterways and other potentially sensitive areas that should be avoided during upcoming construction activities. Wildlife exclusion fencing installation and monitoring occurred adjacent to portions of the alignment designated for wildlife exclusion fencing. Protocol-level surveys for a sensitive avian species were initiated at previously identified potential habitat locations.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

- Best management practices (BMP) installation (e.g., silt fencing, straw wattles, soil covers) occurred at equipment staging areas and other work areas throughout the alignment in accordance with the project-specific Stormwater Pollution Prevention Plan (SWPPP). An assessment of two existing subsurface pipes by a certified Asbestos Consultant occurred during this reporting period, and a specification describing the methods for removal and disposal is currently in progress.
- A certified Asbestos Consultant finalized specifications describing the removal, disposal, and monitoring methods for two (2) existing subsurface pipes within the ROW.

Activity Next Month

- Environmental compliance monitors will continue to monitor project activities (OCS pole foundation installation, pot holing for utility location, duct bank and manhole installation, tree trimming/removal, conduit installation, case installation, traction power station drainage work, grading, clear and grub, removal of abandoned signal cables, etc.) occurring in areas that require environmental compliance monitoring in an effort to minimize potential impacts on sensitive environmental resources in accordance with the MMRP.
- Noise and vibration monitoring of project activities will continue to occur and non-hazardous soil will continue to be removed.
- Biological surveyors will continue to conduct pre-construction surveys for sensitive wildlife species ahead of project activities. Pre-construction nesting bird surveys during the nesting bird season will commence (nesting bird season is defined as February 1 through September 15), and protocol-level surveys for a sensitive avian species will continue.
- BMPs installation will continue in accordance with the project-specific SWPPP, and ESA staking and fencing will continue to occur, to delineate jurisdictional waterways, and other potentially sensitive areas, that should be avoided during upcoming project activities.
- Wildlife exclusion fencing will continue to be installed prior to upcoming construction activities adjacent to potentially suitable habitat for sensitive wildlife species.

13.0 UTILITY RELOCATION

Implementation of the PCEP requires relocation or rerouting of both public and private utility lines and/or facilities. Utility relocation will require coordination with many entities, including regulatory agencies, public safety agencies, federal, state, and local government agencies, private and public utilities, and other transportation agencies and companies. This section describes the progress specific to the utility relocation process.

Activity This Month

- Worked with all utilities on review of overhead utility line relocations based on the current design.
- Coordinated with individual utility companies on relocation plans and schedule for incorporation with Master Program Schedule.
- Coordinated work with communications utilities on review of relocation design.
- Continued to coordinate relocation work for SVP and Palo Alto Power facilities.
- Continued to coordinate relocation by communication cable owners such as AT&T and Comcast.
- Conducted utility coordination meeting to discuss overall status and areas of potential concern from the utilities.

Activity Next Month

- Coordinate with individual utility owners on the next steps of relocations, including support of any required design information.
- Update the relocation schedule as information becomes available from the utility owners.
- Continue to review relocation design SVP, Palo Alto Power, and communications companies and coordinate relocation field work.
- Continue communication relocations in all Segments.
- Continue SVP and Palo Alto Power relocations in Segment 3.

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14.0 REAL ESTATE

The PCEP requires the acquisition of a limited amount of real estate. In general, Caltrain uses existing Right of Way (ROW) for the PCEP, but in certain locations, will need to acquire small portions of additional real estate to expand the ROW to accommodate installation of OCS supports (fee acquisitions or railroad easements) and associated Electrical Safety Zones (ESZ) (easements). There are two larger full acquisition areas required for wayside facilities. The PCEP Real Estate team manages the acquisition of all property rights. Caltrain does not need to acquire real estate to complete the EMU procurement portion of the PCEP.

Of the parcels identified at the beginning of the project, there remain only five owners from whom the agency requires possession; of which two are in redesign.

The Real Estate team's current focus is working to identify new parcels and acquire them in conjunction with the project schedule.

- Staff has defined a process to ensure that BBII conveys new needs as soon as possible.
 - BBII must justify and JPB must approve all new parcels.
- Design needs to progress to enable BBII to identify exact acquisition areas.
- Staff is conducting pre-acquisition activities as appropriate.
- JPB has approved four new parcels to date.

Activity This Month

- Continued negotiations with Willowbend Apartment's legal counsel.
- Staff reviewing potential new pole locations and providing feedback to the design team.
- Staff engaged internal signal team and BBII signal team to determine potential Real Estate interests.
- Review of proposed ESZs from BBII.
- Preparation of First Written Offer package for KB Homes. Reviewed ESZ requirements for KB Homes to confirm acquisitions.
- Reviewing parcel acquisition options for Marchese parcel with Santa Clara Valley Water District.
- Potholing was completed at Diridon Hospitality site. Working with engineers to finalize design.
- Staff is actively working with PG&E and VTA to gain access to their properties for potholing. Submitted acquisition information package/plan to PG&E for their review and working with VTA to develop safety procedures for working near each agency's operating ROW.
- Finalizing appraisal map for Britannia Gateway, which requires PG&E approval.

Activity Next Month

- Continue to negotiate for all open parcels.

- Continue review of ESZ needs submitted by BBII compared to direction from contract.
- Continue to meet with internal signal team and BBII signal team to determine potential Real Estate interests.
- Commence appraisals for PG&E parcel, Google parcel, South San Francisco parcel and memorandum appraisal update for Willowbend.
- Review the acquisition of the Marchese parcel. Continue discussions with PG&E to finalize possession date.
- Confirm new acquisitions associated with the Stephens, Ideal Charter and Gray Sonora parcels.
- Safety group to coordinate with VTA safety to comply with their permitting requirements.
- Confirm ROW acquisitions with City of San Jose.
- Finalize design for Diridon Hospitality and meet with their real estate and design team.
- Work with City of San Jose to resolve underlying street interests.
- Continue to work with Segment 3 and 4 owners for early access to pothole.
- Make offers on the parcel for which appraisals have been completed.
- Actively participate in Foundation/Pothole and Gannett Fleming weekly meetings.
- Continue to work with project team to identify and analyze new potential parcels.
- Map newly identified parcels.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

15.0 THIRD PARTY AGREEMENTS

Third-party coordination is necessary for work impacting public infrastructure, utilities, ROW acquisitions, and others. Table 15-1 below outlines the status of necessary agreements for the PCEP.

Table 15-1 Third-Party Agreement Status

Type	Agreement	Third-Party	Status
Governmental Jurisdictions	Construction & Maintenance ¹	City & County of San Francisco	Executed
		City of Brisbane	Executed
		City of South San Francisco	Executed
		City of San Bruno	Executed
		City of Millbrae	Executed
		City of Burlingame	Executed
		City of San Mateo	Executed
		City of Belmont	Executed
		City of San Carlos	Executed
		City of Redwood City	Executed
		City of Atherton	In Process
		County of San Mateo	Executed
		City of Menlo Park	Executed
		City of Palo Alto	Executed
		City of Mountain View	Executed
		City of Sunnyvale	Executed
		City of Santa Clara	Executed
	County of Santa Clara	Executed	
	City of San Jose	Executed	
	Condemnation Authority	San Francisco	In Process
San Mateo		Executed	
Santa Clara		Executed	
Utilities	Infrastructure	PG&E	Executed
	Operating Rules	CPUC	Executed
Transportation & Railroad	Construction & Maintenance	Bay Area Rapid Transit	Executed ²
	Construction & Maintenance	California Dept. of Transportation (Caltrans)	Not needed ³
	Trackage Rights	UPRR	Executed ²

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Notes regarding table above:

- ¹ Agreements memorialize the parties' consultation and cooperation, designate respective rights and obligations and ensure cooperation between the JPB and the 17 cities and three counties along the Caltrain ROW and within the PCEP limits in connection with the design and construction of the PCEP.
- ² Utilizing existing agreements.
- ³ Caltrans Peer Process utilized. Formal agreement not needed.

16.0 GOVERNMENT AND COMMUNITY AFFAIRS

The Community Relations and Outreach team coordinates all issues with all jurisdictions, partner agencies, government organizations, businesses, labor organizations, local agencies, residents, community members, other interested parties, and the media. In addition, the team oversees the BBII's effectiveness in implementing its Public Involvement Program. The following PCEP-related external affairs meetings took place this month:

Presentations/Meetings

- Palo Alto Community Meeting
- Mountain View Community Meeting
- Local Policy Makers Group

Third Party/Stakeholder Actions

- Santa Clara County Bridge Attachments – Design Change Notice Drawings

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**Peninsula Corridor Electrification Project
Monthly Progress Report**

17.0 DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION AND LABOR STATISTICS

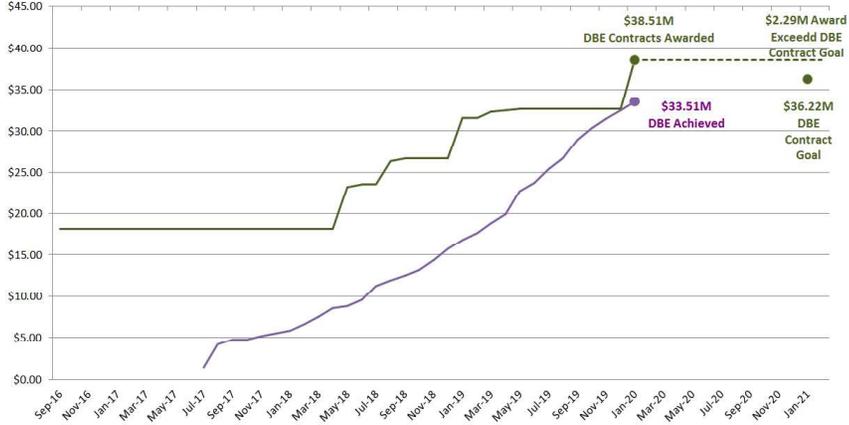
BBII proposed that 5.2% (\$36,223,749) of the total DB base contract value (\$696,610,558) would be subcontracted to DBEs.

Activity This Month

As expressed in Figure 17-1 below, to date:

- **\$33,506,461** has been paid to DBE subcontractors.
- BBII reports that **\$38.51M** of DBE contracts have been awarded (to be verified).
- **4.8%** has been achieved.

Figure 17-1 DBE Participation



Activity Next Month

In order to reach the 5.2% DBE participation goal, BBII has proposed the following key actions:

“In the month of February, 2020, we continue to anticipate increasing our DBE commitments to firms who we are currently negotiating pricing on proposed work or Professional Services Agreements. We are optimistic about the prospect of making future awards to DBE firms. We also anticipate that the existing project work will increase resulting in expanded work for current DBE subcontractors.”

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Peninsula Corridor Electrification Project
Monthly Progress Report

18.0 PROCUREMENT

**Invitation for Bids (IFB)/Request for Quotes (RFQ)/ Request for Proposals (RFP)
Issued this Month:**

- None

Bids, Quotes, Proposals in Response to IFB/RFQ/RFP Received this Month:

- None

Contract Awards this Month:

- None

Work Directive (WD)/Purchase Order (PO) Awards & Amendments this Month:

- Multiple WDs & POs issued to support the program needs

In Process IFB/RFQ/RFP/Contract Amendments:

- Amendment to Memorandum of Understanding (MOU) – Bus Bridge Services for Tunnel Modifications Project – SamTrans

Upcoming Contract Awards/Contract Amendments:

- None

Upcoming IFB/RFQ/RFP to be Issued:

- RFP – Pantograph Inspection and Monitoring System
- RFQ – Scissor Lift Work Platform

Existing Contracts Amendments Issued:

- Letter to Exercise Option Term – LTK – 14-PCJPB-P-006 – EMU Rail Vehicle Support Services for CalMod

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**Peninsula Corridor Electrification Project
Monthly Progress Report**

19.0 TIMELINE OF MAJOR PROJECT ACCOMPLISHMENTS

Below is a timeline showing major project accomplishments from 2001 to 2017:

Date	Milestone
2001	Began federal National Environmental Policy Act (NEPA) Environmental Assessment (EA) / state EIR clearance process
2002	Conceptual Design completed
2004	Draft NEPA EA/EIR
2008	35% design complete
2009	Final NEPA EA/EIR and Finding of No Significant Impact (FONSI)
2014	RFQ for electrification RFI for EMU
2015	JPB approves final CEQA EIR JPB approves issuance of RFP for electrification JPB approves issuance of RFP for EMU Receipt of proposal for electrification FTA approval of Core Capacity Project Development
2016	JPB approves EIR Addendum #1: PS-7 FTA re-evaluation of 2009 FONSI Receipt of electrification best and final offers Receipt of EMU proposal Application for entry to engineering to FTA Completed the EMU Buy America Pre-Award Audit and Certification Negotiations completed with Stadler for EMU vehicles Negotiations completed with BBII, the apparent best-value electrification firm JPB approves contract award (LNTP) to BBII JPB approves contract award (LNTP) to Stadler FTA approval of entry into engineering for the Core Capacity Program Application for FFGA
2017	FTA finalized the FFGA for \$647 million in Core Capacity funding, met all regulatory requirements including end of Congressional Review Period (February) FTA FFGA executed, committing \$647 million to the project (May) JPB approves \$1.98 billion budget for PCEP (June) Issued NTP for EMUs to Stadler (June 1) Issued NTP for electrification contract to BBII (June 19) Construction began (August) EMU manufacturing began (October) Issued NTP for SCADA to Rockwell Collins (ARINC) (October) Issued NTP for CEMOF Facility Upgrades to HNTB (November)

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Date	Milestone
2018	Completed all PG&E agreements JPB approves contract award to Mitsui for the purchase of electric locomotives and Amtrak for overhaul services, storage, acceptance testing, training, and shipment of locomotive to CEMOF JPB approves authorization for the Executive Director to negotiate final contract award to ProVen for tunnel modifications and track rehabilitation project JPB approves contract award (LNTP) to ProVen for tunnel modifications Issued NTP to ProVen for tunnel modifications (October) Amended contract with ProVen to include OCS in the tunnels (November)
2019	JPB approves contract award to ProVen for CEMOF modifications (February) JPB approves LNTP to ProVen for CEMOF modifications (April) JPB approves NTP to ProVen for CEMOF modifications (September)

Peninsula Corridor Electrification Project
Monthly Progress Report

APPENDICES

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Appendix A – Acronyms

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Peninsula Corridor Electrification Project
Monthly Progress Report

AIM	Advanced Information Management	EA	Environmental Assessment
ARINC	Aeronautical Radio, Inc.	EAC	Estimate at Completion
BAAQMD	Bay Area Air Quality Management District	EIR	Environmental Impact Report
BBII	Balfour Beatty Infrastructure, Inc.	EOR	Engineer of Record
CAISO	California Independent System Operator	EMU	Electric Multiple Unit
CalMod	Caltrain Modernization Program	ESA	Endangered Species Act
Caltrans	California Department of Transportation	ESA	Environmental Site Assessments
CDFW	California Department of Fish and Wildlife	FAI	First Article Inspection
CEMOP	Centralized Equipment Maintenance and Operations Facility	FEIR	Final Environmental Impact Report
CEQA	California Environmental Quality Act (State)	FENTP	Full Notice to Proceed
CHSRA	California High-Speed Rail Authority	FFGA	Full Funding Grant Agreement
CIP	Capital Improvement Plan	FONSI	Finding of No Significant Impact
CNPA	Concurrent Non-Project Activity	FRA	Federal Railroad Administration
CPUC	California Public Utilities Commission	FTA	Federal Transit Administration
CTC	Centralized Traffic Control	GO	General Order
DB	Design-Build	HSR	High Speed Rail
DBB	Design-Bid-Build	ICD	Interface Control Document
DBE	Disadvantaged Business Enterprise	IFC	Issued for Construction
DEMP	Design, Engineering, and Management Planning	ITS	Intelligent Transportation System
		JPB	Peninsula Corridor Joint Powers Board
		LNTP	Limited Notice to Proceed

Peninsula Corridor Electrification Project
Monthly Progress Report

MMRP	Mitigation, Monitoring, and Reporting Program	RFI	Request for Information
MOU	Memorandum of Understanding	RFP	Request for Proposals
MPS	Master Program Schedule	RFQ	Request for Qualifications
NCR	Non Conformance Report	ROCS	Rail Operations Center System
NEPA	National Environmental Policy Act (Federal)	ROW	Right of Way
NHPA	National Historic Preservation Act	RRP	Railroad Protective Liability
NMFS	National Marine Fisheries Service	RSD	Revenue Service Date
NTP	Notice to Proceed	RWP	Roadway Worker Protection
OCS	Overhead Contact System	SamTrans	San Mateo County Transit District
PCEP	Peninsula Corridor Electrification Project	SCADA	Supervisory Control and Data Acquisition
PCJPB	Peninsula Corridor Joint Powers Board	SCC	Standard Cost Code
PG&E	Pacific Gas and Electric	SPUR	San Francisco Bay Area Planning and Urban Research Association
PHA	Preliminary Hazard Analysis	SFBCDC	San Francisco Bay Conservation Development Commission
PMOC	Project Management Oversight Contractor	SFCTA	San Francisco County Transportation Authority
PS	Paralleling Station	SFMTA	San Francisco Municipal Transportation Authority
PTC	Positive Train Control	SFRWQCB	San Francisco Regional Water Quality Control Board
QA	Quality Assurance		
QC	Quality Control		
QMP	Quality Management Plan	SOGR	State of Good Repair
QMS	Quality Management System	SSCP	Safety and Security Certification Plan
RAMP	Real Estate Acquisition Management Plan	SSMP	Safety and Security Management Plan
RE	Real Estate	SSWP	Site Specific Work Plan

Peninsula Corridor Electrification Project
Monthly Progress Report

SWS	Switching Station
TASI	TransitAmerica Services Inc.
TBD	To Be Determined
TPS	Traction Power Substation
TVA	Threat and Vulnerability Assessment
UPRR	Union Pacific Railroad
USACE	United States Army Corp of Engineers
USFWS	U.S. Fish and Wildlife Service
VTA	Santa Clara Valley Transportation Authority

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Appendix B – Funding Partner Meetings

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**Peninsula Corridor Electrification Project
Monthly Progress Report**

**Funding Partner Meeting Representatives
Updated January 31, 2020**

Agency	CHSRA	MTC	SFCTA/SFMTA/CCSF	SMCTA	VTA
FTA Quarterly Meeting	<ul style="list-style-type: none"> • Boris Lipkin • Simon Whitehorn • Wai Siu (info only) 	<ul style="list-style-type: none"> • Anne Richman 	<ul style="list-style-type: none"> • Luis Zurinaga 	<ul style="list-style-type: none"> • April Chan • Peter Skinner 	<ul style="list-style-type: none"> • Jim Lawson
Funding Partners Quarterly Meeting	<ul style="list-style-type: none"> • Boris Lipkin • Simon Whitehorn • John Popoff 	<ul style="list-style-type: none"> • Trish Stoops 	<ul style="list-style-type: none"> • Luis Zurinaga 	<ul style="list-style-type: none"> • April Chan • Peter Skinner 	<ul style="list-style-type: none"> • Krishna Davey
Funding Oversight (monthly)	<ul style="list-style-type: none"> • Kelly Doyle 	<ul style="list-style-type: none"> • Anne Richman • Kenneth Folan 	<ul style="list-style-type: none"> • Anna LaForte • Maria Lombardo • Luis Zurinaga • Monique Webster • Ariel Espiritu Santo 	<ul style="list-style-type: none"> • April Chan • Peter Skinner 	<ul style="list-style-type: none"> • Jim Lawson • Marcella Rensi • Michael Smith
Change Management Board (monthly)	<ul style="list-style-type: none"> • Bruce Armistead • Boris Lipkin • Simon Whitehorn 	<ul style="list-style-type: none"> • Trish Stoops • Kenneth Folan 	<ul style="list-style-type: none"> • Luis Zurinaga • Tilly Chang (info only) 	<ul style="list-style-type: none"> • Joe Hurley 	<ul style="list-style-type: none"> • Krishna Davey • Jim Lawson • Nuria Fernandez (info only)
Master Program Schedule Update (monthly)	<ul style="list-style-type: none"> • Wai Siu 	<ul style="list-style-type: none"> • Trish Stoops 	<ul style="list-style-type: none"> • Luis Zurinaga 	<ul style="list-style-type: none"> • Joe Hurley 	<ul style="list-style-type: none"> • Jim Lawson
Risk Assessment Committee (monthly)	<ul style="list-style-type: none"> • Wai Siu 	<ul style="list-style-type: none"> • Trish Stoops 	<ul style="list-style-type: none"> • Luis Zurinaga 	<ul style="list-style-type: none"> • Joe Hurley 	<ul style="list-style-type: none"> • Krishna Davey
PCEP Delivery Coordination Meeting (bi-weekly)	<ul style="list-style-type: none"> • Wai Siu 	<ul style="list-style-type: none"> • Trish Stoops 	<ul style="list-style-type: none"> • Luis Zurinaga 	<ul style="list-style-type: none"> • Joe Hurley 	<ul style="list-style-type: none"> • Krishna Davey
Systems Integration Meeting (bi-weekly)	<ul style="list-style-type: none"> • Wai Siu 	<ul style="list-style-type: none"> • Trish Stoops 	<ul style="list-style-type: none"> • Luis Zurinaga 	<ul style="list-style-type: none"> • Joe Hurley 	<ul style="list-style-type: none"> • Krishna Davey

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**Peninsula Corridor Electrification Project
Monthly Progress Report**

Appendix D - Standard Cost Codes

Description of Work	FFGA Baseline Budget (A)	Approved Budget (B)	Cost This Month (C)	Cost To Date (D)	Estimate To Complete (E)	Estimate At Completion (F) = (D) + (E)
10 - GUIDEWAY & TRACK ELEMENTS	\$14,256,739	\$27,308,610	\$754,431	\$24,438,446	\$3,393,659	\$27,832,105
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	\$2,500,000	\$2,500,000	\$0	\$66,807	\$2,433,193	\$2,500,000
10.07 Guideway: Underground tunnel	\$8,110,649	\$24,808,610	\$754,431	\$24,371,638	\$960,466	\$25,332,105
10.07 Allocated Contingency	\$3,646,090	\$0	\$0	\$0	\$0	\$0
30 - SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	\$2,265,200	\$6,579,586	\$190,152	\$1,918,125	\$4,676,512	\$6,594,637
30.03 Heavy Maintenance Facility	\$1,344,000	\$6,579,586	\$190,152	\$1,918,125	\$4,676,512	\$6,594,637
30.03 Allocated Contingency	\$421,200	\$0	\$0	\$0	\$0	\$0
30.05 Yard and Yard Track	\$500,000	\$0	\$0	\$0	\$0	\$0
40 - SITEWORK & SPECIAL CONDITIONS	\$255,072,402	\$268,579,560	\$4,044,981	\$158,516,037	\$113,973,311	\$272,489,348
40.01 Demolition, Clearing, Earthwork	\$3,077,685	\$3,077,685	\$55,000	\$4,076,000	(\$998,315)	\$3,077,685
40.02 Site Utilities, Facilities Relocation	\$62,192,517	\$93,328,599	\$2,400,021	\$75,030,233	\$19,298,366	\$94,328,599
40.02 Allocated Contingency	\$25,862,000	(\$0)	\$0	\$0	(\$0)	(\$0)
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	\$2,200,000	\$3,150,000	\$950,000	\$4,750,000	\$264,172	\$5,014,172
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks	\$32,579,208	\$32,579,208	\$80,625	\$1,797,495	\$31,156,713	\$32,954,208
40.05 Site structures including retaining walls, sound walls	\$568,188	\$568,188	\$0	\$0	\$568,188	\$568,188
40.06 Pedestrian / bike access and accommodation, landscaping	\$804,933	\$764,933	\$0	\$0	\$764,933	\$764,933
40.07 Automobile, bus, van accessways including roads, parking lots	\$284,094	\$284,094	\$0	\$0	\$284,094	\$284,094
40.08 Temporary Facilities and other indirect costs during construction	\$107,343,777	\$114,216,852	\$559,335	\$72,862,309	\$43,196,207	\$116,058,516
40.08 Allocated Contingency	\$20,160,000	\$20,610,000	\$0	\$0	\$19,438,953	\$19,438,953
50 - SYSTEMS	\$504,445,419	\$521,476,559	\$10,566,705	\$139,737,566	\$410,247,646	\$549,985,212
50.01 Train control and signals	\$97,589,149	\$99,483,668	\$523,084	\$25,695,871	\$76,251,111	\$101,946,982
50.01 Allocated Contingency	\$1,651,000	\$0	\$0	\$0	\$0	\$0
50.02 Traffic signals and crossing protection	\$23,879,905	\$23,879,905	\$0	\$0	\$23,879,905	\$23,879,905
50.02 Allocated Contingency	\$1,140,000	\$1,140,000	\$0	\$0	\$1,140,000	\$1,140,000
50.03 Traction power supply: substations	\$69,120,009	\$72,744,787	\$1,536,503	\$31,734,771	\$53,522,272	\$85,257,043
50.03 Allocated Contingency	\$31,755,013	\$27,990,895	\$0	\$0	\$27,763,958	\$27,763,958
50.04 Traction power distribution: catenary and third rail	\$253,683,045	\$275,765,995	\$8,507,118	\$82,248,935	\$220,185,090	\$302,434,025
50.04 Allocated Contingency	\$18,064,000	\$12,908,011	\$0	\$0	(\$0)	(\$0)
50.05 Communications	\$5,455,000	\$5,455,000	\$0	\$57,989	\$5,397,011	\$5,455,000
50.07 Central Control	\$2,090,298	\$2,090,298	\$0	\$0	\$2,090,298	\$2,090,298
50.07 Allocated Contingency	\$18,000	\$18,000	\$0	\$0	\$18,000	\$18,000
60 - ROW, LAND, EXISTING IMPROVEMENTS	\$35,675,084	\$35,675,084	\$67,137	\$18,651,261	\$17,023,823	\$35,675,084
60.01 Purchase or lease of real estate	\$25,927,074	\$25,927,074	\$67,137	\$18,522,687	\$7,404,387	\$25,927,074
60.01 Allocated Contingency	\$8,748,010	\$8,748,010	\$0	\$0	\$8,748,010	\$8,748,010
60.02 Relocation of existing households and businesses	\$1,000,000	\$1,000,000	\$0	\$128,574	\$871,426	\$1,000,000
70 - VEHICLES (96)	\$625,544,147	\$625,657,938	\$568,466	\$187,100,728	\$436,758,557	\$623,859,285
70.03 Commuter Rail	\$589,167,291	\$592,327,115	\$568,466	\$186,562,448	\$405,438,717	\$592,001,165
70.03 Allocated Contingency	\$9,472,924	\$6,499,071	\$0	\$0	\$5,026,368	\$5,026,368
70.06 Non-revenue vehicles	\$8,140,000	\$8,067,821	\$0	\$538,280	\$7,529,541	\$8,067,821
70.07 Spare parts	\$18,763,931	\$18,763,931	\$0	\$0	\$18,763,931	\$18,763,931
80 - PROFESSIONAL SERVICES (applies to Cats. 10-50)	\$323,793,010	\$330,261,209	\$1,591,229	\$291,580,230	\$63,652,398	\$355,232,628
80.01 Project Development	\$130,350	\$130,350	\$0	\$280,180	(\$149,830)	\$130,350
80.02 Engineering (not applicable to Small Starts)	\$180,227,311	\$187,284,094	(\$453,661)	\$195,144,132	(\$3,170,932)	\$191,973,200
80.02 Allocated Contingency	\$1,866,000	\$5,045	\$0	\$0	\$101,942	\$101,942
80.03 Project Management for Design and Construction	\$72,029,265	\$74,332,188	\$1,282,350	\$71,385,729	\$17,567,279	\$88,953,008
80.03 Allocated Contingency	\$9,388,080	\$8,000,396	\$0	\$0	\$8,000,396	\$8,000,396
80.04 Construction Administration & Management	\$23,677,949	\$25,347,671	\$722,806	\$15,145,352	\$16,111,711	\$31,257,063
80.04 Allocated Contingency	\$19,537,000	\$17,867,277	\$0	\$0	\$11,957,886	\$11,957,886
80.05 Professional Liability and other Non-Construction Insurance	\$3,500,000	\$4,581,851	\$0	\$4,581,851	\$0	\$4,581,851
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	\$7,167,275	\$6,341,599	\$35,391	\$5,003,127	\$7,459,067	\$12,462,194
80.06 Allocated Contingency	\$556,000	\$556,000	\$0	\$0	\$0	\$0
80.07 Surveys, Testing, Investigation, Inspection	\$3,287,824	\$3,388,781	\$4,342	\$39,858	\$3,348,923	\$3,388,781
80.08 Start up	\$1,797,957	\$1,797,957	\$0	\$0	\$1,797,957	\$1,797,957
80.08 Allocated Contingency	\$628,000	\$628,000	\$0	\$0	\$628,000	\$628,000
Subtotal (10 - 80)	\$1,761,052,001	\$1,815,538,546	\$17,783,100	\$821,942,392	\$1,049,725,907	\$1,871,668,298
90 - UNALLOCATED CONTINGENCY	\$162,620,295	\$105,233,750	\$0	\$0	\$49,103,998	\$49,103,998
Subtotal (10 - 90)	\$1,923,672,296	\$1,920,772,296	\$17,783,100	\$821,942,392	\$1,098,829,904	\$1,920,772,296
100 - FINANCE CHARGES	\$6,998,638	\$9,898,638	\$0	\$6,075,070	\$3,823,568	\$9,898,638
Total Project Cost (10 - 100)	\$1,930,670,934	\$1,930,670,934	\$17,783,100	\$828,017,462	\$1,102,653,472	\$1,930,670,934

Appendix E – Change Order Logs

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**Peninsula Corridor Electrification Project
Monthly Progress Report**

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Change Order Logs

Electrification Contract

Change Order Authority (5% of BBII Contract)				5% x \$696,610,558 = \$34,830,528	
Date	Change Number	Description	CCO Amount	Change Order Authority Usage ¹	Remaining Authority
08/31/17	BBI-053-CCO-001	Track Access Delays Q4 2016	\$85,472	0.25%	\$34,745,056
02/28/18	BBI-053-CCO-003	Deletion of Signal Cable Meggering (Testing)	(\$800,000)	(2.30%)	\$35,545,056
02/21/18	BBI-053-CCO-004	Field Order for Differing Site Condition Work Performed on 6/19/17	\$59,965	0.17%	\$35,485,091
03/12/18	BBI-053-CCO-006	Track Access Delays for Calendar Quarter 1 2017	\$288,741	0.83%	\$35,196,350
04/24/18	BBI-053-CCO-002	Time Impact 01 Associated with Delayed NTP	\$9,702,667	0.00% ²	-
04/24/18	BBI-053-CCO-008	2016 Incentives (Safety, Quality, and Public Outreach)	\$750,000	0.00% ²	-
05/31/18	BBI-053-CCO-009	16th St. Grade Crossing Work Removal from BBII Contract	(\$685,198)	(1.97%)	\$35,881,548
05/31/18	BBI-053-CCO-012	2017 Incentives (Safety, Quality, and Public Outreach)	\$1,025,000	0.00% ²	-
06/25/18	BBI-053-CCO-010	Pothole Change Of Shift	\$300,000	0.86%	\$35,581,548
06/25/18	BBI-053-CCO-013	Field Order for Signal Cable Relocation (FO# 31)	\$95,892	0.28%	\$35,485,656
06/25/18	BBI-053-CCO-015	TASI Pilot Transportation 2017	\$67,345	0.19%	\$35,418,311
06/26/18	BBI-053-CCO-005	Field Orders for Signal Cable Relocation (FO#s 26, 30)	\$191,836	0.55%	\$35,226,475
06/28/18	BBI-053-CCO-014	Field Orders for Signal Cable Relocation (FO-36 & FO-38)	\$145,694	0.42%	\$35,080,781
06/29/18	BBI-053-CCO-007	Track Access Delays for Calendar Quarter 2 2017	\$297,512	0.85%	\$34,783,269
06/29/18	BBI-053-CCO-011	Field Orders for Differing Site Condition (FO#s Partial 07A, 08-14)	\$181,013	0.52%	\$34,602,256
06/29/18	BBI-053-CCO-017	Field Order for NorCal Utility Potholing (FO# 27)	\$93,073	0.27%	\$34,509,183
06/29/18	BBI-053-CCO-018	Field Order for NorCal Utility Potholing (FO# 29)	\$76,197	0.22%	\$34,432,986
06/29/18	BBI-053-CCO-020	Field Orders for Differing Site Condition (FO#s 15-19)	\$118,364	0.34%	\$34,314,622
7/19/2018	BBI-053-CCO-019	Field Order for NorCal Utility Potholing (FO-032)	\$88,956	0.26%	\$34,225,666
7/19/2018	BBI-053-CCO-021	As In-Service (AIS) Drawings for Segment 2 and 4 Signal Design (CN-009)	\$105,000	0.30%	\$34,120,666
7/25/2018	BBI-053-CCO-022	CEMOF Yard Traction Power Feed (CN-008)	\$332,700	0.96%	\$33,787,966
7/31/2018	BBI-053-CCO-028	Sonic Echo Impulse Testing	\$4,541	0.01%	\$33,783,425
7/31/2018	BBI-053-CCO-026	TASI Pilot Transportation 2018 (CNC-0022)	\$50,409	0.14%	\$33,733,016
7/31/2018	BBI-053-CCO-027	Signal Cable Relocation (FOs-040 & 051)	\$196,114	0.56%	\$33,536,902
9/27/2018	BBI-053-CCO-030	Delete Spare 115k Disconnect Switches	(\$19,000)	(0.05%)	\$33,555,902
9/28/2018	BBI-053-CCO-031	Bldg A HVAC and FOB Card Reader Systems	\$76,500	0.22%	\$33,479,402
9/28/2018	BBI-053-CCO-025A	Addition of Shunt Wire at Transverse Utility Crossing Locations - Design	\$925,000	2.66%	\$32,554,402
9/28/2018	BBI-053-CCO-016A	UPRR MT-1 Pole Relocation - Design Changes	\$903,000	0.00% ²	-
9/28/2018	BBI-053-CCO-024A	PG&E Utility Feed Connection to TPS#1 and TPS#2 (Design Only)	\$727,000	0.00% ²	-
12/17/2018	BBI-053-CCO-032	PS-2 Site Relocation (Design Only)	\$291,446	0.84%	\$32,262,956
1/17/2019	BBI-053-CCO-023	Insulated Rail Joints	\$2,694,519	0.00% ²	-
1/17/2019	BBI-053-CCO-029	CHSRA Early Pole Relocation (Design Only)	\$625,000	0.00% ^{2,3}	-
2/5/2019	BBI-053-CCO-040A	Increase in Potholing Quantity (unit price contract bid item by 25%)	\$1,662,500	4.77%	\$30,600,456

Change Order Authority (5% of BBII Contract)

Date	Change Number	Description	CCO Amount	Change Order Authority Usage ¹	Remaining Authority
3/5/2019	BBI-053-CCO-042A	TPSS-2 VTA/BART Pole Relocation (Design Only) (CNPA funded by VTA)	\$110,000	0.32% ³	\$30,490,456
3/11/2019	BBI-053-CCO-036	Field Order for Signal Cable Relocation (FO-064)	\$86,538	0.25%	\$30,403,918
3/20/2019	BBI-053-CCO-035	Millbrae Avenue Existing Overhead Barrier	(\$40,000)	(0.11)%	\$30,443,918
3/19/2019	BBI-053-CCO-046	Training in Design Software and Potholing	\$136,611	0.39%	\$30,307,307
4/8/2019	BBI-053-CCO-041	Grade Crossing Warning System (CN59) – 5 mph Speed Check	\$446,982	1.28%	\$29,860,325
5/30/2019	BBI-053-CCO-044	Additional Daytime Potholing (Increase Quantity by 500 in Segment 4)	\$150,000	0.43%	\$29,710,325
6/6/2019	BBI-053-CCO-048	Power Metering Devices	\$101,908	0.29%	\$29,608,417
6/13/2019	BBI-053-CCO-045	Incentive Payment for 2018	\$1,025,000	0.00% ²	-
6/13/2019	BBI-053-CCO-024B	PG&E Utility Feed Connection to TPS #1 and TPS#2 (Material On Hand)	\$1,600,000	4.59%	\$28,008,417
6/24/2019	BBI-053-CCO-043	PS-5 Site Relocation (Design Only)	\$348,000	1.00%	\$27,660,417
6/24/2019	BBI-053-CCO-054	Change Design Sequence for OCS Foundations	\$37,500	0.11%	\$27,622,917
7/1/2019	BBI-053-CCO-040B	Increase Quantity for Utilities Potholing (Bid Item #9)	\$1,867,700	5.36%	\$25,755,217
7/10/2019	BBI-053-CCO-033A	Relocation of PS3 (Design) (CNPA funded by BGSP)	\$500,000	1.44 % ³	\$25,255,217
8/15/2019	BBI-053-CCO-047	CEMOF Slot Drains (Design Only)	\$69,000	0.20%	\$25,186,217
8/16/2019	BBI-053-CCO-055	Sheriff's Deputy in Segment 4B	\$4,644	0.01%	\$25,181,573
9/3/2019	BBI-053-CCO-037	Field Orders for Signal Cable Relocation (FO-053 & FO-059)	\$184,576	0.53%	\$24,996,997
9/7/2019	BBI-053-CCO-057	Mediator with Technical Expertise	\$0	0.00%	\$24,996,997
9/27/2019	BBI-053-CCO-061	Interconnect Renaming of Circuit Numbers	\$58,058	0.17%	\$24,938,939
9/27/2019	BBI-053-CCO-063A	Track Access Delays - Quarter 1 2018 (Partial)	\$343,496	0.99%	\$24,595,443
10/21/2019	BBI-053-CCO-064	TPS-2 VTA Pole Height Redesign (CNPA funded by VTA)	\$31,000	0.09% ³	\$24,564,443
11/15/2019	BBI-053-CCO-038	Field Order for Signal Cable Relocation (FO-079 & FO-085)	\$187,764	0.54%	\$24,376,680
11/26/2019	BBI-053-CCO-025B	Addition of OCS Shunt Wires in Segments 2 & 4 - Wire Assembly Materials Only	\$144,370	0.41%	\$24,232,310
12/11/2019	BBI-053-CCO-065A	Foundation Inefficiencies S2WA5	\$401,501	1.15%	\$23,830,809
12/17/2019	BBI-053-CCO-025C	Addition of OCS Shunt Wires in Segments 2 & 4 – Pole Assembly Materials Only	\$884,500	2.54%	\$22,946,309
1/7/2020	BBI-053-CCO-066A	Increase Quantity for Contaminated Soils (Bid Unit Price Item #1)	\$950,000	2.73%	\$21,996,309
Total			\$30,286,405	36.85 %	\$21,996,309

Notes:

- When the threshold of 75% is reached, staff may return to the Board to request additional authority.
- Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.
- Third party improvements/CNPA projects that are funded with non-PCEP funds.

EMU Contract

Change Order Authority (5% of Stadler Contract)				5% x \$550,899,459 = \$27,544,973	
Date	Change Number	Description	CCO Amount	Change Order Authority Usage ¹	Remaining Authority
09/22/2017	STA-056-CCO 001	Contract General Specification and Special Provision Clean-up	\$0	0.00%	-
10/27/2017	STA-056-CCO 002	Prototype Seats and Special Colors	\$55,000	0.20%	\$27,489,973

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Change Order Authority (5% of Stadler Contract)				5% x \$550,899,459 = \$27,544,973	
Date	Change Number	Description	CCO Amount	Change Order Authority Usage ¹	Remaining Authority
11/02/2017	STA-056-CCO 003	Car Level Water Tightness Test	\$0	0.00%	-
12/05/2017	STA-056-CCO-004	Onboard Wheelchair Lift 800 Pound Capacity Provisions	\$848,000	3.08%	\$26,641,973
11/03/2017	STA-056-CCO 005	Design Progression (multiple)	\$0	0.00%	-
12/12/2017	STA-056-CCO 006	Prototype Seats and Special Colors	(\$27,500)	(0.10)%	\$26,669,473
01/17/2018	STA-056-CCO 007	Multi-Color Destination Signs	\$130,760	0.47%	\$26,538,713
02/09/2018	STA-056-CCO-008	Adjustment to Delivery and LDs due to delayed FNTP	\$490,000	0.00% ²	-
02/12/2018	STA-056-CCO-009	Ship Cab Mock-up to Caltrain	\$53,400	0.19%	\$26,485,313
04/17/2018	STA-056-CCO-010	Onboard Wheelchair Lift Locations	(\$1,885,050)	(6.84)%	\$28,370,363
04/17/2018	STA-056-CCO-011	Multiple Change Group 3 and Scale Models	\$0	0.00%	-
10/29/2018	STA-056-CCO-012	Multiple Change Group 4	\$0	0.00%	-
10/29/2018	STA-056-CCO-013	Wheelchair Lift Installation Redesign	\$228,400	0.83%	\$28,141,963
12/14/2018	STA-056-CCO-014	PTC System Change	\$0	0.00%	-
12/22/2018	STA-056-CCO-015	EMU Option Cars	\$172,800,047	0.00% ^{2,3}	-
6/26/2019	STA-056-CCO-016	Testing at TTCI (Pueblo Facility) - First Trainset	\$3,106,428	11.28 %	\$25,035,535
8/27/2019	STA-056-CCO-017	Virtual Reality Experience	\$400,000	1.45 %	\$24,635,535
8/21/2019	STA-056-CCO-018	EMI Conducted Emissions Limits	\$0	0.00%	\$24,635,535
8/8/2019	STA-056-CCO-019	Option Car Payment Milestones	\$0	0.00%	\$24,635,535
8/21/2019	STA-056-CCO-020	Multiple No Cost No Schedule Impact Changes Group 5	\$0	0.00%	\$24,635,535
10/28/2019	STA-056-CCO-021	Plugging of High-Level Doorways	\$736,013	2.67%	\$23,899,523
11/13/2019	STA-056-CCO-022	Add Flip-Up Seats into Bike Cars (CNPA: \$1.96M funded by Non-PCEP)	\$1,961,350	7.12% ³	\$21,938,173
Total			\$178,896,847	20.36 %	\$21,938,173

Notes:

- When the threshold of 75% is reached, staff may return to the Board to request additional authority.
- Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.
- Third party improvements/CNPA projects that are funded with non-PCEP funds.

SCADA Contract

Change Order Authority (15% of ARINC Contract)				15% x \$3,446,917 = \$517,038	
Date	Change Number	Description	CCO Amount	Change Order Authority Usage ¹	Remaining Authority
None to date					
Total			\$0	0.00%	\$517,038

Notes:

- When the threshold of 75% is reached, staff may return to the Board to request additional authority.
- Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Tunnel Modifications Contract

Change Order Authority (10% of ProVen Contract ¹)				10% x \$55,077,777 = \$5,507,778	
Date	Change Number	Description	CCO Amount	Change Order Authority Usage ²	Remaining Authority
3/27/2019	PROV-070-CCO-003	Track Access Delay	\$25,350	0.46 %	\$5,482,428
3/27/2019	PROV-070-CCO-004	Additional OCS Potholing Due to Conflict with Existing Utilities	\$70,935	1.29 %	\$5,411,493
3/27/2019	PROV-070-CCO-005	Install Tie Backs and Piles in Boulders at Tunnel 4	\$29,478	0.54 %	\$5,382,015
3/28/2019	PROV-070-CCO-001	Partnering Meetings (50% PCEP)	\$14,443	0.26 % ⁴	\$5,367,572
4/25/2019	PROV-070-CCO-002	Furnish Galvanized E-clips	\$37,239	0.68 %	\$5,330,333
4/30/2019	PROV-070-CCO-006	Additional Rock Bolts and Testing	\$22,549	0.41 %	\$5,307,784
5/23/2019	PROV-070-CCO-013	Late Removal of Leaky Feeder Tunnel 4 (T-4)	\$21,225	0.39 %	\$5,286,559
5/28/2019	PROV-070-CCO-014	OCS Piles Utility Conflict at Tunnel-1 South (T-1S)	\$16,275	0.30 %	\$5,270,284
5/29/2019	PROV-070-CCO-012	OCS Piles Utility Conflict at T-4S	\$6,871	0.12 %	\$5,263,413
5/31/2019	PROV-070-CCO-016A	Portal Structure Detailing Changes	\$84,331	1.53 %	\$5,179,082
6/18/2019	PROV-070-CCO-009	Creosote Ties Covering (CNPA - Drainage \$3,116.00)	\$3,116	0.06 % ⁴	\$5,175,966
6/28/2019	PROV-070-CCO-008	Micropiles at South Tunnel-2 South (T-2S)	\$41,322	0.75 %	\$5,134,644
6/28/2019	PROV-070-CCO-010	Salvage Transition Panels (CNPA - Drainage \$6,144.00)	\$6,144	0.11 % ⁴	\$5,128,500
6/28/2019	PROV-070-CCO-011	Demo PVC and Plug Tunnel-1 South (T-1S) (CNPA - Drainage \$4,035.00)	\$4,035	0.07 % ⁴	\$5,124,465
6/28/2019	PROV-070-CCO-020	Unidentified SD Conflict with Junction Inlet (CNPA - Drainage \$1,976.00)	\$1,976	0.04 % ⁴	\$5,122,489
9/26/2019	PROV-070-CCO-007	Canopy Tube Drilling	\$89,787	1.63%	\$5,032,702
9/26/2019	PROV-070-CCO-023	Over-excavate Trapezoidal Ditch at T-1N (CNPA - Drainage \$46,914.00)	\$46,914	0.85% ⁴	\$4,985,788
10/4/2019	PROV-070-CCO-029	Additional DryFix Pins	\$105,000	1.91%	\$4,880,788
10/4/2019	PROV-070-CCO-021	Out of Sequence Piles	\$185,857	3.37 %	\$4,694,931
10/30/2019	PROV-070-CCO-017	Hard Piping in T-4 (CNPA - Drainage \$2,200.00)	\$2,200	0.04 % ⁴	\$4,692,731
1/25/2020	PROV-070-CCO-027	Grout Quantity Underrun	(\$1,216,000)	(22.08)%	\$5,908,731
Total			(\$400,953)	(7.28)%	\$5,908,731

Notes:

- Tunnel modifications contract (\$55,077,777) includes: Notching (\$25,281,170), Drainage (\$13,196,607) and OCS Installation (\$16,600,000).
- When the threshold of 75% is reached, staff may return to the Board to request additional authority.
- Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.
- Third Party Improvements/CNPA Projects that are funded with non-PCEP funds.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

CEMOF Modifications Contract

Change Order Authority (10% of ProVen Contract)			10% x \$6,550,777 = \$655,078		
Date	Change Number	Description	CCO Amount	Change Order Authority Usage ¹	Remaining Authority
1/16/2020	PROV-071-CCO-001	Change Casing Size of Siphon Line to Schedule 80 PVC Pipe	\$3,849	0.59 %	\$651,229
1/13/2020	PROV-071-CCO-002	Leakage test for IW line	\$1,339	0.20 %	\$649,890
1/15/2020	PROV-071-CCO-003	Roughen surface of existing concrete	\$3,159	0.48 %	\$646,731
1/9/2020	PROV-071-CCO-004	Change Catch Basin Size from 24"X24" to 36" Round	\$14,415	2.20 %	\$632,316
1/15/2020	PROV-071-CCO-005	Hand Dig around Communication Lines	\$906	0.14 %	\$631,410
1/17/2020	PROV-071-CCO-008	Change Storm Drain Line A Material from 12-inch RCP Pipe to 12-inch PVC Pipe	\$3,583	0.55 %	\$627,827
1/16/2020	PROV-071-CCO-009	Demolition of Existing Exterior Light	\$1,558	0.24 %	\$626,269
Total			\$28,809	4.40 %	\$626,269

Notes:

- ¹ When the threshold of 75% is reached, staff may return to the Board to request additional authority.
- ² Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

AMTRAK AEM-7 Contract

Change Order Authority (Lump Sum)			Up to \$150,000		
Date	Change Number	Description	CCO Amount	Change Order Authority Usage ¹	Remaining Authority
10/25/2019	AMTK-066-CCO-001	Change to Amtrak Contract for Test Locomotives	(72,179)	(48.12%)	222,179
Total			(72,179)	(48.12%)	\$222,179

Notes:

- ¹ When the threshold of 75% is reached, staff may return to the Board to request additional authority.

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Appendix F – Risk Table

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**Peninsula Corridor Electrification Project
Monthly Progress Report**

Listing of PCEP Risks and Effects in Order of Severity

ID	RISK DESCRIPTION	EFFECT(S)
314	The contractor may not complete and install signal design including Two-speed check (2SC) modifications within budget and schedule.	Delay and additional cost for rework.
303	Extent of differing site conditions and associated redesign efforts results in delays to the completion of the electrification contract and increases program costs.	Extends construction of design-build contract with associated increase in project costs <ul style="list-style-type: none"> • DSC design cost • Inefficiencies • Construction costs related to DSCs (i.e., larger foundations) • Additional potholing
257	Potential that modifications to the PTC database and signal software are not completed in time for cutover and testing.	Failure to follow the Configuration Management process will result in delays to completing PCEP signal cutovers. This could delay milestone completion as well as project substantial completion.
267	Additional property acquisition is necessitated by change in design.	New project costs and delays to schedule.
273	Contractor generates hazardous materials, that necessitates proper removal and disposal in excess of contract allowances and expectations.	Delay to construction while removing and disposing of hazardous materials resulting in schedule delay, increased construction costs, and schedule delay costs.
308	Rejection of DVR for ATF and static wires results in cost and schedule impacts to PCEP.	Delay and delay claims
313	Sub-optimal contractor sequencing, when progressing design and clearing foundation locations may result in construction inefficiencies	Contractor claims for increase in construction and design costs, and reduced production rates extending construction duration
298	Changes to PTC implementation schedule could delay completion of the electrification work. Cost and schedule of BBII contract could increase as a result of change in PTC system	1. Changes in datafiles could affect what Balfour provides; could delay timing for testing; could change books that FRA had to review. 2. Full integrated testing between EMU and wayside cannot be conducted without PTC in place. 3. Delays to completion of signal system could result in conflicts with PTC testing and PCEP construction and integrated testing. 4. Potential for track access impacts due to PTC testing.
242	Track access does not comply with contract-stipulated work windows.	Contractor claims for delays, schedule delays and associated costs to owner's representative staff.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
309	Potential that vehicles will not receive timely notification from FRA of compliance with acceptable alternate crash management standards	Delays to completion of construction and additional cost to changes in design.
209	TASI may not have sufficient number of signal maintainers for testing.	<ul style="list-style-type: none"> • Delays to construction/testing. • Delays to completion of infrastructure may delay acceptance of vehicles
223	Major program elements may not be successfully integrated with existing operations and infrastructure in advance of revenue service.	Proposed changes resulting from electrification may not be fully and properly integrated into existing system. Rework resulting in cost increases and schedule delays
240	Property not acquired in time for contractor to do work. Property Acquisition not complete per contractor availability date <>Fee <>Easement <>Contract stipulates that if parcels are not available by contract date, there is only a delay if parcels are not available by the time contractor completes the Segment	<ul style="list-style-type: none"> • Potential delays in construction schedule
263	Collaboration across multiple disciplines to develop a customized rail activation program may fail to comprehensively address the full scope of issues required to operate and maintain an electrified railroad and decommission the current diesel fleet.	Delay in testing of EMUs. Delay in Revenue Service Date. Additional costs for Stadler and BBII due to overall schedule delays.
010	Potential for Stadler's sub-suppliers to fall behind schedule or delays in parts supply chain result in late completion of vehicles.	<ul style="list-style-type: none"> • Delay in obtaining parts / components. • Cost increases. (See Owner for allocation of costs) • Schedule increase - 3 months (See Owner for allocation of damages associated with this Risk)
244	Delays to completion of Segment 4 and then the entire alignment would create storage issues and impede the ability to exercise (power up and move) EMUs and delay testing of the delivered EMUs.	Delay claims from the EMU contractor (Stadler) and expiration of the EMU 2 year warranty before putting significant mileage on the EMUs.
312	Project executed the OCS Option; increase in procurement durations for necessary OCS Parts (Conductor Rail) has led to an associated increase in costs and schedule duration for the overall project	Additional cost to project, primarily from additional bus bridges.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
315	Increased oversight and schedule risk associated with Stadler plan to move car shell manufacturing to a new Switzerland facility. And to implement second shift of sub-assembly production in Altenrhein, AC106	Increased PCEP oversight costs possible trainset delivery schedule slippage
067	Relocation of overhead utilities must precede installation of catenary wire and connections to TPSS. Relocation work will be performed by others and may not be completed to meet BBII's construction schedule.	Delay in progress of catenary installation resulting in claims and schedule delay
115	Other capital improvement program projects compete with PCEP for track access allocation and requires design coordination (design, coordination, integration).	Schedule delay as resources are allocated elsewhere, won't get track time, sequencing requirements may delay PCEP construction, track access requirements must be coordinated.
136	UP reviews of BBII design may extend project duration.	Delays to completion of design and claims for delay.
261	EMU electromechanical emissions and track circuit susceptibility are incompatible.	Changes on the EMU and/or signal system require additional design and installation time and expense.
277	Inadequate D-B labor to support multiple work segments	Additional cost and time
281	BBII's ability to complete base scope for signal/pole adjustments may be required to remedy sight distance impediments arising from modifications to original design.	Add repeater signals, design duct bank would result in increased design and construction costs.
285	Potential for inflation, (except with respect to Maintenance Option) to increase contractor costs.	Higher cost
286	Potential for wage escalation, (except for Maintenance Option) to increase contractor costs.	Higher cost
287	Design changes may necessitate additional implementation of environmental mitigations not previously budgeted.	Increased cost for environmental measures and delays to construct and overall delay in construction schedule
296	BBII needs to complete interconnection and traction power substations be sufficiently complete to accept interim power	Delay in testing and increased costs
304	Solution to FRA concerns over bike storage impeding path to emergency exit windows path results in increased costs and potential rework.	Protracted negotiations with FRA to achieve original design
319	Failure of BBII to order cages in advance results in delays to foundation installation	Delays in installation of catenary system and additional cost for track protection and oversight.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
013	Vehicle manufacturer could default.	Prolonged delay to resolve issues (up to 12 months) Increase in legal expenses Potential price increase to resolve contract issue
012	Potential for electromagnetic interference (EMI) to private facilities with sensitive electronic equipment caused by vehicles.	<ul style="list-style-type: none"> Increased cost due to mitigation Potential delay due to public protests or environmental challenge.
056	Lack of operations personnel for testing.	<ul style="list-style-type: none"> Testing delayed. Change order for extended vehicle acceptance.
088	Construction safety program fails to sufficiently maintain safe performance.	Work stoppages due to safety incidents resulting in schedule delay and additional labor costs.
161	Unanticipated costs to provide alternate service (bus bridges, etc.) during rail service disruptions.	Cost increase.
183	Installation and design of new duct bank takes longer because of UP coordination	<p><u>Schedule</u> - Delay. May need to use condemnation authority to acquire easement.</p> <p><u>Cost</u> - Additional cost for PG&E to make connections increasing project costs</p>
247	Timely resolution of 3rd party design review comments to achieve timely approvals	Delay to completion of design and associated additional labor costs.
270	OCS poles or structures as designed by Contractor fall outside of JPB row	Additional ROW Take, additional cost and time
294	UP does not accept catenary pole offsets from centerline of track necessitating further negotiation or relocation of poles	Delay to construction and additional costs for redesign and ROW acquisition.
302	May not have a 110-mph electrified section of track that will be ready for testing for final acceptance of vehicle.	Contract with Stadler implies readiness of Electrification Project and track upgrades for EMU testing Delays in testing may increase Caltrain costs.
318	Change of vehicle suppliers results in additional first article inspections at cost to JPB	PCEP incurs additional cost to validate supplier and product, including repeat FAIs as needed
082	Unexpected restrictions could affect construction progress: <> night work <> noise <> local roads <> local ordinances	<ul style="list-style-type: none"> Reduced production rates. Delay

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
241	Segment 4 substantially complete (Segment 4, TPS-2, Interconnect) may not be installed prior to scheduled exercising of EMUs	Inability to exercise EMUs
253	Risk that existing conditions of Caltrans-owned bridges will not support bridge barriers. The existing bridge conditions and structural systems are unknown and may not support mounting new work Design will need to prove new barriers will not impact existing capacity of the bridges prior to Caltrans's approval for construction. Without approval of design and issuance of permit, there is risk to the schedule for the work and also budget if during design existing bridge will require some upgrades due to the introduction of new attachments.	Delays to issuance of permit for construction while negotiating and executing an operation and maintenance agreement for equipment installed on bridges; existing bridge deficiencies could result in additional costs to PCEP.
011	Risks in achieving acceptable vehicle operations performance: <> software problems <> electrical system problems <> mechanical problems <> systems integration problems Increased issues lately with vehicles regarding system integration and compatibility.	Cost increase. Delays vehicle acceptance Potential spill-over to other program elements
031	New cars possibly not reliable enough to be put into service as scheduled	Operating plan negatively impacted
078	Need for unanticipated, additional ROW for new signal enclosures.	Delay while procuring ROW and additional ROW costs.
171	Electrification facilities could be damaged during testing.	Delay in commencing electrified operations.
190	Track roughness and cant could present problems for European vehicles which are accustomed to a higher class of track bed maintenance. Becomes problematic with concept of specifying "off-the-shelf" design.	Vehicle cost increase. Vehicle delivery delay.
251	Subcontractor and supplier performance to meet aggressive schedule <>Potential issue meeting Buy America requirements	Delay to production schedule resulting in increased soft costs and overall project schedule delay.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
271	Need for additional construction easements beyond that which has been provided for Contractor proposed access and staging	Additional cost and time
272	Final design based upon actual Geotech conditions	Could require changes
289	Coordination and delivery of permanent power for power drops for everything except traction power substations along alignment	Can't test resulting in delays to schedule and associated additional project costs.
291	Order/manufacture of long lead items prior to 100% IFC design document that proves to be incorrect	Design change and/or delays
292	Potential that UPS will not fit in the spaces allotted to communications work within the buildings.	Requisite backup capacity units under design criteria could result in the need for larger unit than originally planned resulting in design and fabrication changes and associated schedule delays and costs.
311	Although project recordable injuries remain below the industry average, there have been numerous small impact incidents occurring that could potentially lead to a more serious event occurring.	The occurrence of a high impact safety event could result in project rework, construction delays, and increased project costs.
316	PTC system "freeze periods" during revenue service demonstration periods may delay Balfour activities including: cutovers at new locations, taking signals out of service, making software changes in a location, and spicing into fiber.	Delays and additional costs associated with interruption of efficient workflow.
317	JPB may not make timely acquisition of resources to staff rail activation plan with key personnel.	Delay in operating electrified railroad - delay of RSD.
019	Potential for vehicle delivery to be hampered by international conflict; market disruption; labor strikes at production facility.	Delay in production of vehicle with associated cost implications.
021	EMU production delay. Possible that there are quality issues, failed factory tests, poor integration / control of suppliers.	Schedule Increase - up to 6 months (6 months float already built into 36 month schedule)
027	Vehicle power consumption may not meet requirements. <>System impact study and load flow show no issues	Issue with PG&E. Can't run full acceleration.
042	Full complement of EMUs not available upon initiation of electrified revenue service	Late delivery impacts revenue service date.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
055	Failure to pass Qualification Testing.	Cost Increase - minimal Schedule delay
061	Latent defects in EMU vehicles.	Unbudgeted costs incurred from legal actions. Repairs take trains out-of-service.
101	PG&E may not be able to deliver permanent power for the project within the existing budget and in accordance with the project schedule	Additional project costs; potential delay to revenue service date
150	Number of OCS pole installation is significant. Any breakdown in sequencing of operations or coordination of multiple crews will have a substantial effect on the project.	Delay.
245	Failure of BBI to submit quality design and technical submittals in accordance with contract requirements • \$3-\$5M/month burn rate for Owner's team during peak	Delays to project schedule and additional costs for preparation and review of submittals.
252	Failure of BBI to order/manufacture long lead items prior to 100% IFC design document approval by JPB	Delays to project schedule and additional cost for contractor and JPB staff time.
306	Possible legal challenge and injunction to any changes in PCEP requiring subsequent CEQA or NEPA environmental clearance documentation/actions.	Worst case: a judge issues an injunction, which would prohibit any work ONLY on the project scope of the environmental document. Impact to the project from cost and schedule impact depends on if work is on the critical or becomes on the critical path.
008	Requests for change orders after vehicles are in production	Delays to manufacturing of vehicles and additional design and manufacturing costs.
016	Inter-operability issues with diesel equipment.	Cost increase.
023	Manufacturer cannot control vehicle weight to meet specifications.	Increased operating cost.
025	Potential that vehicles cannot meet requirements for "Mean Time to Repair" (MTTR).	Increased maintenance cost.
032	Failure to come up to speed on stakeholder safety requirements: <> FTA <> FRA <> CPUC	Takes longer than expected to gain FRA/FTA concurrence on waiver and/or level boarding requirements.
051	Damage during delivery of first six EMUs.	Schedule delay

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
053	Failure to meet Buy America requirements. (Contractor definition of component v. sub-component may not be accepted by Caltrain / FTA.)	Potential need for negotiations that might lead to delay of project award. (BA is not negotiable)
054	Infrastructure not ready for vehicles (OCS, TPS, Commissioning site / facility).	Increases cost if done off property
069	Potential need for additional construction easements. Especially for access and laydown areas. Contractor could claim project is not constructible and needs more easements after award.	Increased cost Delay
087	Unanticipated HazMat or contaminated hot spots encountered during foundation excavations for poles, TPSS, work at the yards.	Increased cost for clean-up and handling of materials and delay to schedule due to HazMat procedures.
106	Potential that DB contractor will have insufficient field resources (personnel or equipment) to maintain aggressive schedule. Multiple segments will need to be under design simultaneously. Labor pool issue. 32 qualified linemen will be needed. Potential there is not enough available. Big storm damage anywhere in US will draw from the pool to make line repairs. Possible shortages with other specialty crafts as well.	Delay.
151	Public could raise negative concerns regarding wheel/rail noise.	Increased cost to mitigate: <> grind rails <> reprofile wheels <> sound walls

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
182	<p>Compliance with Buy America requirements for 3rd party utility relocations.</p> <p><>Utility relocations covered under existing Caltrain agreements that require utilities to move that will not have effect on project cost - will not be Buy America</p> <p><>Installation of new equipment inside PG&E substations that will provide all PG&E customers, about 1/6 of that provides power to our system - is upgrade that benefits all customers subject to Buy America requirements, is it 1/6th, or 100%</p> <p><>Risk is substation not relocations</p> <p><>Substation equipment is available domestically, has 6 month longer lead time and increased cost of 20%</p>	<ul style="list-style-type: none"> • Increased cost • Delay
192	<p>Environmental compliance during construction.</p> <ul style="list-style-type: none"> - Potential impact to advancing construction within the vicinity of any cultural finds that are excavated. - Failure to meet the commitments contained within the PCEP EA, FEIR and permit conditions 	<ul style="list-style-type: none"> • Delay • Cost increase
195	<p>Introduction of electrified train service will require training of first responders in working in and around the rail corridor. The new vehicles will be considerably quieter than the existing fleet and the presence of high voltage power lines will require new procedures for emergency response. A new training program will need to be developed and disseminated for:</p> <ul style="list-style-type: none"> • Fire, police, and first responders • Local communities • Schools 	<p>Safety hazards resulting in incidents that delay construction and increase labor cost. Delays in RSD until training is completed as requirement of safety certification process.</p>
237	<p>JPB needs an agreement with each city in which catenary will be strung over an existing grade crossing (17 in all) under GO 88 (grade crossings). These agreements must be executed subsequent to installing overhead catenary. JPB is preparing a response to CPUC while working with the cities. Delays in reaching agreement could have impacts on schedule and budget.</p>	<p>Not completing the grade crossing diagnostics and getting agreement from the cities on the results can result in delays to necessary approvals for the project and revenue service.</p>

**Peninsula Corridor Electrification Project
Monthly Progress Report**

ID	RISK DESCRIPTION	EFFECT(S)
248	<p>3rd party coordination</p> <p><>Jurisdictions, Utilities, UP, Contractors</p> <p><>D/B needs to provide timely information to facilitate 3rd party coordination</p> <p><>Risk is for construction</p>	<p>Delays in approvals resulting in project schedule delays and associated costs.</p>
250	<p>Potential for municipalities to request betterments as part of the electrification project.</p>	<p>Delay to project schedule in negotiating betterments as part of the construction within municipalities and associated increased cost to the project as no betterments were included in the project budget.</p>
254	<p>Potential that bridge clearance data are inaccurate and that clearances are not sufficient for installation of catenary.</p>	<p>Results in additional design and construction to create sufficient clearance.</p>
259	<p>Work on 25th Avenue Grade Separation Project could delay Balfour construction schedule.</p>	<ul style="list-style-type: none"> • Increased cost for BBI as catenary construction in this section was anticipated to be constructed under the 25th Avenue Grade Separation Project. • Potential delays in construction schedule • Risk is delay to BBI
266	<p>Verizon poles in conflict with OCS may not be removed in advance of OCS installation.</p>	<p>Delay in progress of catenary installation resulting in claims and schedule delay</p>
274	<p>JPB as-built drawings and existing infrastructure to be used as basis of final design and construction is not correct</p>	<p>Additional cleanup of as-builts after PCEP construction</p>
275	<p>DB fails to verify as-built drawings and existing infrastructure</p>	<p>Additional cleanup of as-builts after PCEP construction</p>
278	<p>Failure of D/B contractor and subcontractors and suppliers to meet Buy America requirements</p>	<p>Delays while acceptable materials are procured and additional costs for delays and purchase of duplicative equipment.</p>
282	<p>Failure to maintain dynamic envelope and existing track clearances consistent with requirements.</p>	<p>Redesign entailing cost and schedule impacts.</p>
284	<p>Compliance with project labor agreement could result in inefficiencies in staffing of construction.</p>	<p>Increase in labor costs and less efficient construction resulting in schedule delays.</p>
290	<p>Delays in agreement and acceptance of initial VVSC requirements database.</p>	<p>Delay to design acceptance</p>
293	<p>Readiness of 115kV interconnect for temporary power to support testing</p>	<p>Delay in testing</p>
297	<p>Cost and schedule of Stadler contract could increase as a result of this change in PTC system</p> <p>Delay of PTC may delay acceptance of EMUs.</p>	<p>1) Full integrated testing between EMU and wayside cannot be conducted without PTC in place.</p> <p>2) Delay in EMU final design for PTC and potential PTC interfaces. Need to finalize braking system sequence priority.</p>

Appendix G – MMRP Status Log

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**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
AES-2a: Minimize OCS construction activity on residential and park areas outside the Caltrain ROW.	X	X			Ongoing	The OCS proposed construction schedule has been provided to the JPB. OCS construction began the week of October 2, 2017. The D-B has utilized the potholing process to assist in locating conflicts in the 35% design and attempting to relocate OCS pole locations within the ROW.
AES-2b: Aesthetic treatments for OCS poles, TPFs in sensitive visual locations, and Overbridge Protection Barriers.	X				Ongoing	The design requirements indicated in the measure have been implemented as described, and coordination with the specific jurisdictions regarding pole colors and design is ongoing. Coordination with the JPB & local jurisdiction regarding Overbridge Protection Barriers and TPFs is ongoing.
AES-4a: Minimize spillover light during nighttime construction.		X			Ongoing	OCS construction began the week of October 2, 2017; and the BBI community relations lead has notified nearby residents of upcoming construction. During construction, lighting is faced inward, towards the railroad tracks, and any complaints will be documented and addressed by the BBI community relations lead.
AES-4b: Minimize light spillover at TPFs.	X				Upcoming	The design requirements indicated in the measure are being utilized in the design and construction process.
AQ-2a: Implement BAAQMD basic and additional construction mitigation measures to reduce construction-related dust.	X	X			Ongoing	The Dust Mitigation Plan was submitted to the JPB and approved. The requirements in the Dust Mitigation Plan will be implemented throughout the construction period and documented in daily reports.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
AQ-2b: Implement BAAQMD basic and additional construction mitigation measures to control construction-related ROG and NOX emissions.	X	X			Ongoing	The Equipment Emissions Control Plan was submitted to the JPB and approved. The requirements in the Equipment Emissions Control Plan will be implemented throughout the construction period and documented in daily reports.
AQ-2c: Utilize clean diesel-powered equipment during construction to control construction-related ROG and NOX emissions.	X	X			Ongoing	The Equipment Emissions Control Plan was submitted to the JPB and approved. The requirements in the Equipment Emissions Control Plan will be implemented throughout the construction period and documented in daily reports.
BIO-1a: Implement general biological impact avoidance measures.	X	X			Ongoing	Worker Environmental Awareness Training is provided to all project-related personnel before they work on the project. All measures as described will be implemented throughout the construction period and documented in daily reports.
BIO-1b: Implement special-status plant species avoidance and revegetation measures.	X	X	X		Complete	Not applicable. Subsequent habitat assessment and avoidance of Communication Hill eliminated any potential to affect special-status plant species. The measure is not needed.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
BIO-1c: Implement California red-legged frog and San Francisco garter snake avoidance measures.	X	X			Ongoing	Pre-construction surveys are occurring no more than 7 days prior to the initiation of construction activities nearby/adjacent to potential habitat for CRLF and SFGS. The Wildlife Exclusion Fencing Plans for Segments 1 and 4 were submitted and approved by the wildlife agencies, and installation and monitoring of wildlife exclusion fencing is ongoing. No CRLF / SFGS or sign of each species has been observed to date on the Project.
BIO-1d: Implement western pond turtle avoidance measures.	X	X			Ongoing	Pre-construction surveys are occurring no more than 7 days prior to the initiation of construction activities nearby/adjacent to potential habitat for WPT. No WPT or WPT sign have been observed to date on the Project.
BIO-1e: Implement Townsend's big-eared bat, pallid bat, hoary bat, and fringed myotis avoidance measures.	X	X			Ongoing	Pre-construction surveys are occurring no more than 7 days prior to the initiation of construction activities with the potential to disturb bats or their habitat. No special-status bats or sign have been observed to date on the Project.
BIO-1f: Implement western burrowing owl avoidance measures.	X	X			Ongoing	Protocol surveys for Western Burrowing Owl have been conducted from April–July, in 2017, 2018, and 2019, at previously identified potentially suitable habitat locations. Note that all of these locations are in Construction Segment 4 (southern Santa Clara and San Jose). No Burrowing Owls have been observed during the surveys conducted to date. Survey reports for the 2017, 2018, and 2019 surveys have been

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
						submitted to the JPB for the project record. In addition, pre-construction surveys of the potential BUOW habitat areas in Segment 4 are ongoing, and if required, they occur no more than 7 days prior to the onset of construction activities. Surveys for the 2020 breeding season will commence in April 2020.
BIO-1g: Implement northern harrier, white-tailed kite, American peregrine falcon, saltmarsh common yellowthroat, purple martin, and other nesting bird avoidance measures.	X	X			Ongoing	Nesting Bird and raptor surveys were conducted from February 1 through September 15, in 2017, 2018 and 2019, prior to project-related activities with the potential to impact nesting birds. No Nesting Bird and raptor Surveys occurred during this reporting period. Nesting Bird Surveys will recommence at the beginning of the 2020 nesting season (February 1, 2020). As of the end of the reporting period, there are no active nests observed on the Project.
BIO-1h: Conduct biological resource survey of future contractor-determined staging areas.	X	X			Ongoing	The agency-approved Qualified Biologist has conducted surveys of the staging areas currently being used for construction activities. No special-status species or other potentially sensitive biological resources were observed. The agency-approved Qualified Biologist will continue to survey ahead of the initiation of activities at planned staging areas as the Project moves into new construction areas.
BIO-1i: Minimize impacts on Monarch butterfly overwintering sites.	X	X			Ongoing	The agency-approved Qualified Biologist has periodically monitored the project limits to evaluate the presence of Monarch butterfly overwintering sites. No Monarch

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
						butterfly overwintering sites have been observed on the Project to date.
BIO-1j: Avoid nesting birds and bats during vegetation maintenance.				X	Upcoming	To be completed during Project operation.
BIO-2: Implement serpentine bunchgrass avoidance and revegetation measures.	X	X	X		Complete	Not applicable. Subsequent habitat assessment and avoidance of Communication Hill eliminated any potential to affect serpentine bunchgrass. This measure is no longer needed.
BIO-3: Avoid or compensate for impacts on wetlands and waters.	X	X	X		Complete	The JPB has compensated for unavoidable wetland impacts by purchasing adequate credits from a wetlands mitigation bank approved by USACE and SFRWQCB.
BIO-5: Implement Tree Avoidance, Minimization, and Replacement Plan.	X	X	X		Ongoing	Tree removal and pruning activities were initiated in August 2017, and are ongoing, under the guidance of the BBI Arborist, and in accordance with the Tree Avoidance, Minimization, and Replacement Plan. Tree Removal and Pruning status is provided to the JPB on a regular basis.
BIO-6: Pay Santa Clara Valley Habitat Plan land cover fee (if necessary).	X				Complete	Not applicable. The SCVHP does not apply to the Project because TPS2, Option 1 was not selected and OCS does not extend to Communication Hill. This measure is not needed.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
CUL-1a: Evaluate and minimize impacts on structural integrity of historic tunnels.	X				Upcoming	To be implemented prior to construction in tunnels.
CUL-1b: Minimize impacts on historic decorative tunnel material.	X				Upcoming	To be implemented prior to construction in tunnels. Historic American Engineering Record (HAER) documentation was completed in October 2018, pursuant to this measure.
CUL-1c: Install project facilities in a way that minimizes impacts on historic tunnel interiors.	X				Upcoming	To be implemented prior to construction in tunnels.
CUL-1d: Implement design commitments at historic railroad stations	X				Complete	The Qualified Architectural Historian completed and submitted the HABS Level III documents to the JPB for all seven of the historic stations. Pole placement has been designed to minimize the visual impact to historic stations and all design changes are reviewed by the Environmental Compliance Lead to ensure the mitigation measure is being implemented as the design of the project progresses.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
CUL-1e: Implement specific tree mitigation considerations at two potentially historic properties and landscape recordation, as necessary.	X	X			Complete	It was determined that the project is not acquiring any ROW at either of the subject properties so all tree effects would be within the JPB ROW. Therefore, the APE does not include these two historic properties. This measure is no longer needed.
CUL-1f: Implement historic bridge and underpass design requirements.	X				Ongoing	This measure is being implemented as described during the design process and will be incorporated into the final design. The four bridges that are included in the MMRP are rail bridges crossing over another feature. Design of the OCS system is taking into account that there are requirements that restrict the design. Thus far, the designs for Construction Segments 2 & 4 are in process and designs are not yet complete. The D-B will forward to the Architectural Historian once complete.
CUL-2a: Conduct an archaeological resource survey and/or monitoring of the removal of pavement or other obstructions to determine if historical resources under CEQA or unique archaeological resources under PRC 21083.2 are present.	X				Ongoing	Periodic inspections of ground surface areas along the alignment, in conjunction with cultural monitoring as-needed of project activities in culturally sensitive areas are ongoing. The Archaeological Final Report will be provided at the conclusion of construction activities.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
CUL-2b: Conduct exploratory trenching or coring of areas where subsurface project disturbance is planned in those areas with “high” or “very high” potential for buried site.	X				Ongoing	Exploratory trenching and subsurface testing of all potentially culturally sensitive areas occurred prior to the initiation of construction activities in those areas. The results will be included in the Archaeological Final Report. No cultural resources requiring the development of a treatment plan were observed. A Native American monitor has been present for all exploratory trenching and subsurface testing work.
CUL-2c: Conduct limited subsurface testing before performing ground-disturbing work within 50 meters of a known archaeological site.	X				Ongoing	Exploratory trenching and subsurface testing of all potentially culturally sensitive areas occurred prior to the initiation of construction activities in those areas. The results will be included in the Archaeological Final Report. No cultural resources requiring the development of a treatment plan were observed. A Native American monitor has been present for all exploratory trenching and subsurface testing work.
CUL-2d: Conduct exploratory trenching or coring of areas within the three zones of special sensitivity where subsurface project disturbance is planned.	X				Ongoing	Exploratory trenching and subsurface testing of all potentially culturally sensitive areas occurred prior to the initiation of construction activities in those areas. The results will be included in the Archaeological Final Report. No cultural resources requiring the development of a treatment plan were observed. A Native American monitor has been present for all exploratory trenching and subsurface testing work.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
CUL-2e: Stop work if cultural resources are encountered during ground-disturbing activities.	X	X			Ongoing	No prehistoric or historic-period cultural materials have been observed during cultural monitoring.
CUL-2f: Conduct archaeological monitoring of ground-disturbing activities in areas as determined by JPB and SHPO.		X			Ongoing	Cultural monitoring as-needed of project activities in culturally sensitive areas is ongoing. The Archaeological Final Report will be provided at the conclusion of construction activities.
CUL-3: Comply with state and county procedures for the treatment of human remains discoveries.		X			Ongoing	No human remains have been observed to date on the Project.
EMF-2: Minimize EMI effects during final design, Monitor EMI effects during testing, commission and operations, and Remediate Substantial Disruption of Sensitive Electrical Equipment.	X	X	X		Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. Designs are submitted and reviewed/commented on by JPB. Monitoring EMI effects will occur post construction.
GEO-1: Perform a site-specific geotechnical study for traction power facilities.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. Geotechnical studies are being conducted by Parikh under subcontract with PGH Wong. Studies and results are submitted to

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
						JPB as completed.
GEO-4a: Identification of expansive soils.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design by the D-B as described. Geotechnical studies are being conducted by Parikh under subcontract with PGH Wong. Studies and results are submitted to JPB as completed.
GEO-4b: Mitigation of expansive soils.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design by the D-B as described. Geotechnical studies are being conducted by Parikh under subcontract with PGH Wong. Studies and results are submitted to JPB as completed.
HAZ-2a: Conduct a Phase II Environmental Site Assessment prior to construction.	X				Complete	A Phase II Environmental Assessment was completed prior to construction by the JPB consultant, and the results were provided to BBI, and the required mitigation is being implemented prior to the initiation of construction activities.
HAZ-2b: Implement engineering controls and best management practices during construction.	X	X			Ongoing	D-B field activities are being monitored daily for significant color changes or odors which may indicate contamination.

Peninsula Corridor Electrification Project
Monthly Progress Report

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
HYD-1: Implement construction dewatering treatment, if necessary.	X	X			Ongoing	Facilities & BMPs are in place to deal with this requirement should it arise in the OCS foundations.
HYD-4: Minimize floodplain impacts by minimizing new impervious areas for TPFs or relocating these facilities.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. The TPFs in Construction Segments 2 & 4 are currently in final design and design for TPFs in Construction Segments 1 & 3 has begun. The design minimizes hardscape only to required structure foundations; yard areas are to receive a pervious material.
HYD-5: Provide for electrical safety at TPFs subject to periodic or potential flooding.	X			X	Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. The TPFs in Construction Segments 2 & 4 are currently in final design and design for TPFs in Construction Segments 1 & 3 has begun. The design plan currently raises the TPFs above the floodplain.
HYD-7: Implement sea level rise vulnerability assessment and adaptation plan.				X	Ongoing	The JPB has initiated this measure and preparation of the sea level rise vulnerability assessment and adaptation plan is underway.
NOI-1a: Implement Construction Noise Control Plan.	X	X			Ongoing	The Noise and Vibration Control Plan has been submitted and is being implemented. Field activity is monitored per the Plan. If allowable noise levels are near or exceed allowable noise levels, mitigation such as blankets are used from that point forward.

Peninsula Corridor Electrification Project
Monthly Progress Report

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
NOI-1b: Conduct site-specific acoustical analysis of ancillary facilities based on the final mechanical equipment and site design and implement noise control treatments where required.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. PGH Wong has completed analysis and design and issued for JPB review.
NOI-2a: Implement Construction Vibration Control Plan.	X	X			Ongoing	The Noise and Vibration Control Plan has been submitted and is being implemented. Field activity is monitored per the Plan.
PSU-8a: Provide continuous coordination with all utility providers.	X	X			Ongoing	The design requirements indicated in the measure will be implemented through the final design as described. Coordination with utility providers is ongoing and there have not been any service interruptions thus far.
PSU-8b: Adjust OCS pole foundation locations.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described.
PSU-8c: Schedule and notify users about potential service interruptions.	X	X			Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. There have not been any service interruptions thus far.
PSU-9: Require application of relevant construction mitigation measures to utility relocation and transmission line construction by others.	X	X			Ongoing	JPB has initiated coordination with PG&E regarding transmission line construction. PG&E is currently raising overcrossing lines in Segment 2.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
TRA-1a: Implement Construction Road Traffic Control Plan.	X	X			Ongoing	The D-B has begun traffic control design and permit applications with the City of Millbrae, Burlingame and San Mateo. Other communities will follow. Designs have been completed for all cross-over bridges in Segments 2 & 4 and submitted.
TRA-1c: Implement signal optimization and roadway geometry improvements at impacted intersections for the 2020 Project Condition.	X	X			Upcoming	This measure has not started
TRA-2a: Implement construction railway disruption control plan.	X	X			Ongoing	Minimization of railway disruption is being coordinated by the Site Specific Work Plan. A Construction Railway Disruption Control Plan was prepared to document the measures that are being implemented.
TRA-3b: In cooperation with the City and County of San Francisco, implement surface pedestrian facility improvements to address the Proposed Project's additional pedestrian movements at and immediately adjacent to the San Francisco 4th and King Station.	X	X	X		Upcoming	This measure has not started.
TRA-4b: Continue to improve bicycle facilities at Caltrain stations and partner with bike share programs where available				X	Ongoing	The JPB adopted the Caltrain Bicycle Parking Management Plan in November 2017, and staff have been working to implement the Plan's recommendations to improve

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes	
	Pre-Construction	Construction	Post-Construction	Operation			
following guidance in Caltrain's Bicycle Access and Parking Plan.						wayside bike parking facilities along the corridor. Staff have also been coordinating with local jurisdictions that have launched bikeshare pilot programs to safely site bicycles near Caltrain stations.	
NOI-CUMUL-1: Implement a phased program to reduce cumulative train noise along the Caltrain corridor as necessary to address future cumulative noise increases over FTA thresholds				X	Upcoming	This measure will be implemented during project operation.	
NOI-CUMUL-2: Conduct project-level vibration analysis for Blended System operations and implement vibration reduction measures as necessary and appropriate for the Caltrain corridor					X	In Progress	CHSRA is conducting this analysis as part of the EIR/EIS for the San Francisco to San Jose section.
TRA-CUMUL-1: Implement a phased program to provide traffic improvements to reduce traffic delays near at-grade crossings and Caltrain stations					X	Upcoming	This measure will be implemented during project operation.
TRA-CUMUL-2: Implement technical solution to allow electric trolley bus transit across 16th Street without OCS conflicts in cooperation with SFMTA.	X					Complete	Not applicable. SFMTA has elected to not electrify the 16 th Street crossing. This measure no longer applies.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
Mitigation Measure TRA-CUMUL-3: As warranted, Caltrain and freight operators will partner to provide Plate H clearance as feasible between San Jose and Bayshore.				X	Upcoming	This measure will be implemented during project operation.
AES-2a: Minimize OCS construction activity on residential and park areas outside the Caltrain ROW.	X	X			Ongoing	The OCS proposed construction schedule has been provided to the JPB. OCS construction began the week of October 2, 2017. The D-B has used the potholing process to assist in locating conflicts in the 35% design and attempting to relocate OCS pole locations within the ROW, thereby avoiding parks and residential areas.
AES-2b: Aesthetic treatments for OCS poles, TPFs in sensitive visual locations, and Overbridge Protection Barriers.	X				Ongoing	The design requirements indicated in the measure have been implemented as described, and coordination with the specific jurisdictions regarding pole colors and design, TPFs, and Overbridge Protection Barriers, is ongoing.
AES-4a: Minimize spillover light during nighttime construction.		X			Ongoing	OCS construction began the week of October 2, 2017. The BBI community relations lead has notified nearby residents of upcoming construction. During construction, lighting is faced inward, towards the railroad tracks, and any complaints will be documented and addressed by the BBI community relations lead.
AES-4b: Minimize light spillover at TPFs.	X				Upcoming	The design requirements indicated in the measure are being used in the design process of the TPFs.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
AQ-2a: Implement BAAQMD basic and additional construction mitigation measures to reduce construction-related dust.	X	X			Ongoing	The Dust Mitigation Plan was submitted to the JPB. The requirements in the Dust Mitigation Plan will be implemented throughout the construction period and documented in daily reports.
AQ-2b: Implement BAAQMD basic and additional construction mitigation measures to control construction-related ROG and NOX emissions.	X	X			Ongoing	The Equipment Emissions Control Plan was submitted to the JPB. The requirements in the Equipment Emissions Control Plan will be implemented throughout the construction period and documented in daily reports.
AQ-2c: Utilize clean diesel-powered equipment during construction to control construction-related ROG and NOX emissions.	X	X			Ongoing	The Equipment Emissions Control Plan was submitted to the JPB. The requirements in the Equipment Emissions Control Plan will be implemented throughout the construction period and documented in daily reports.
BIO-1a: Implement general biological impact avoidance measures.	X	X			Ongoing	Worker Environmental Awareness Training is provided to all project-related personnel before they work on the project. All measures as described will be implemented throughout the construction period and documented in daily reports.
BIO-1b: Implement special-status plant species avoidance and revegetation measures.	X	X	X		Complete	Not applicable. Subsequent habitat assessment and avoidance of Communication Hill eliminated any potential to affect special-status plant species. The measure is not needed.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
BIO-1c: Implement California red-legged frog and San Francisco garter snake avoidance measures.	X	X			Ongoing	Pre-construction surveys are occurring no more than 7 days prior to the initiation of construction activities nearby/adjacent to potential habitat for CRLF and SFGS. The Wildlife Exclusion Fencing Plan for Segments 2 and 4 was submitted and approved by the wildlife agencies, and installation and monitoring of wildlife exclusion fencing is ongoing. No CRLF / SFGS or sign of each species has been observed to date on the Project. A separate Wildlife Exclusion Fencing Plan will be submitted for Segments 1 and 3, prior to initiation of construction activities in those segments.
BIO-1d: Implement western pond turtle avoidance measures.	X	X			Ongoing	Pre-construction surveys are occurring no more than 7 days prior to the initiation of construction activities nearby/adjacent to potential habitat for WPT. No WPT or WPT sign have been observed to date on the Project.
BIO-1e: Implement Townsend's big-eared bat, pallid bat, hoary bat, and fringed myotis avoidance measures.	X	X			Ongoing	Pre-construction surveys are occurring no more than 7 days prior to the initiation of construction activities with the potential to disturb bats or their habitat. No special-status bats or sign have been observed to date on the Project.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
BIO-1f: Implement western burrowing owl avoidance measures.	X	X			Ongoing	Protocol surveys for Western Burrowing Owl were conducted from April 2017 through July 2017 at previously identified potentially suitable habitat locations. Note that all of these locations are in Construction Segment 4 (southern Santa Clara and San Jose). No Burrowing Owls were observed during the surveys. Construction in Segment 4 is anticipated to occur in 2018. Prior to construction activities in Segment 4, pre-construction surveys of the potential habitat areas will occur no more than 7 days prior to the onset of construction activities. In addition, protocol surveys were initiated in March 2018, and were completed in June 2018, at the previously identified potentially suitable habitat locations, which will allow work to occur during the 2019 breeding season, if necessary. No Burrowing Owls were observed during the 2018 surveys.
BIO-1g: Implement northern harrier, white-tailed kite, American peregrine falcon, saltmarsh common yellowthroat, purple martin, and other nesting bird avoidance measures.	X	X			Ongoing	Nesting Bird surveys were conducted from February 1 through September 15, 2017 prior to project-related activities with the potential to impact nesting birds. No active nests were observed during this reporting period. Nesting Bird surveys were initiated on February 1, 2018 and continued throughout the reporting period. Active nests were observed during this reporting period, and no-disturbance buffers were implemented to avoid any impacts to active nests, and all project activities which occurred nearby active nests were monitored by agency-approved

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
						biological monitors.
BIO-1h: Conduct biological resource survey of future contractor-determined staging areas.	X	X			Ongoing	The agency-approved Qualified Biologist has conducted surveys of the staging areas currently being used for construction activities. No special-status species or other potentially sensitive biological resources were observed. The agency-approved Qualified Biologist will continue to survey ahead of the initiation of activities at planned staging areas as the Project moves into new construction areas.
BIO-1i: Minimize impacts on Monarch butterfly overwintering sites.	X	X			Ongoing	The agency-approved Qualified Biologist has periodically monitored the project limits to evaluate the presence of Monarch butterfly overwintering sites. No Monarch butterfly overwintering sites have been observed on the Project to date.
BIO-1j: Avoid nesting birds and bats during vegetation maintenance.				X	Upcoming	To be completed during Project operation.
BIO-2: Implement serpentine bunchgrass avoidance and revegetation measures.	X	X	X		Complete	Not applicable. Subsequent habitat assessment and avoidance of Communication Hill eliminated any potential to affect serpentine bunchgrass. This measure is no longer needed.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
BIO-3: Avoid or compensate for impacts on wetlands and waters.	X	X	X		Complete	The JPB has compensated for unavoidable wetland impacts by purchasing adequate credits from a wetlands mitigation bank approved by USACE and SFRWQCB.
BIO-5: Implement Tree Avoidance, Minimization, and Replacement Plan.	X	X	X		Ongoing	Tree removal and pruning activities were initiated in August 2017, and are ongoing, under the guidance of the BBI Arborist, and in accordance with the Tree Avoidance, Minimization, and Replacement Plan. Tree Removal and Pruning status is provided to the JPB on a weekly basis.
BIO-6: Pay Santa Clara Valley Habitat Plan land cover fee (if necessary).	X				Complete	Not applicable. The SCVHP does not apply to the Project because TPS2, Option 1 was not selected and OCS does not extend to Communication Hill. This measure is not needed.
CUL-1a: Evaluate and minimize impacts on structural integrity of historic tunnels.	X				Upcoming	To be implemented prior to construction in tunnels.
CUL-1b: Minimize impacts on historic decorative tunnel material.	X				Upcoming	To be implemented prior to construction in tunnels.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
CUL-1c: Install project facilities in a way that minimizes impacts on historic tunnel interiors.	X				Upcoming	To be implemented prior to construction in tunnels.
CUL-1d: Implement design commitments at historic railroad stations	X				Complete	The Qualified Architectural Historian completed and submitted the HABS Level III documents to the JPB for all seven of the historic stations. Pole placement has been designed to minimize the visual impact to historic stations and all design changes are reviewed by the Environmental Compliance Lead to ensure the mitigation measure is being implemented as the design of the project progresses.
CUL-1e: Implement specific tree mitigation considerations at two potentially historic properties and landscape recordation, as necessary.	X	X			Complete	It was determined that the project is not acquiring any ROW at either of the subject properties so all tree effects would be within the JPB ROW. Therefore, the APE does not include these two historic properties. This measure is no longer needed.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
CUL-1f: Implement historic bridge and underpass design requirements.	X				Ongoing	This measure is being implemented as described during the design process and will be incorporated into the final design. The four bridges that are included in the MMRP are rail bridges crossing over another feature. Design of the OCS system is taking into account that there are requirements that restrict the design. Thus far, the designs for Construction Segments 2 & 4 are in process and designs are not yet complete. The D-B will forward to the Architectural Historian once complete.
CUL-2a: Conduct an archaeological resource survey and/or monitoring of the removal of pavement or other obstructions to determine if historical resources under CEQA or unique archaeological resources under PRC 21083.2 are present.	X				Ongoing	Periodic inspections of ground surface areas along the alignment, in conjunction with cultural monitoring as-needed of project activities in culturally sensitive areas are ongoing. The Archaeological Final Report will be provided at the conclusion of construction activities.
CUL-2b: Conduct exploratory trenching or coring of areas where subsurface project disturbance is planned in those areas with “high” or “very high” potential for buried site.	X				Ongoing	Exploratory trenching and subsurface testing of all potentially culturally sensitive areas occurred prior to the initiation of construction activities in those areas. The results will be included in the Archaeological Final Report. No cultural resources requiring the development of a treatment plan were observed. A Native American monitor has been present for all exploratory trenching and subsurface testing work.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
CUL-2c: Conduct limited subsurface testing before performing ground-disturbing work within 50 meters of a known archaeological site.	X				Ongoing	Exploratory trenching and subsurface testing of all potentially culturally sensitive areas occurred prior to the initiation of construction activities in those areas. The results will be included in the Archaeological Final Report. No cultural resources requiring the development of a treatment plan were observed. A Native American monitor has been present for all exploratory trenching and subsurface testing work.
CUL-2d: Conduct exploratory trenching or coring of areas within the three zones of special sensitivity where subsurface project disturbance is planned.	X				Ongoing	Exploratory trenching and subsurface testing of all potentially culturally sensitive areas occurred prior to the initiation of construction activities in those areas. The results will be included in the Archaeological Final Report. No cultural resources requiring the development of a treatment plan were observed. A Native American monitor has been present for all exploratory trenching and subsurface testing work.
CUL-2e: Stop work if cultural resources are encountered during ground-disturbing activities.	X	X			Ongoing	No prehistoric or historic-period cultural materials have been observed during cultural monitoring.
CUL-2f: Conduct archaeological monitoring of ground-disturbing activities in areas as determined by JPB and SHPO.		X			Ongoing	Cultural monitoring as-needed of project activities in culturally sensitive areas is ongoing. The Archaeological Final Report will be provided at the conclusion of construction activities.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
CUL-3: Comply with state and county procedures for the treatment of human remains discoveries.		X			Ongoing	No human remains have been observed to date on the Project.
EMF-2: Minimize EMI effects during final design, Monitor EMI effects during testing, commission and operations, and Remediate Substantial Disruption of Sensitive Electrical Equipment.	X	X	X		Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. Designs are submitted and reviewed/commented on by JPB. Monitoring EMI effects will occur post construction.
GEO-1: Perform a site-specific geotechnical study for traction power facilities.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. Geotechnical studies and results are submitted to JPB as completed.
GEO-4a: Identification of expansive soils.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. Geotechnical studies and results are submitted to JPB as completed.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
GEO-4b: Mitigation of expansive soils.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. Geotechnical studies and results are submitted to JPB as completed.
HAZ-2a: Conduct a Phase II Environmental Site Assessment prior to construction.	X				Complete	A Phase II Environmental Assessment was completed prior to construction by the JPB consultant, and the results were provided to BBI, and the required mitigation is being implemented prior to the initiation of construction activities.
HAZ-2b: Implement engineering controls and best management practices during construction.	X	X			Ongoing	Field activities are being monitored daily for significant color changes or odors which may indicate contamination. In addition, an assessment of two existing subsurface pipes by a certified Asbestos Consultant occurred during this reporting period, and a specification describing the methods for removal and disposal is currently in progress.
HYD-1: Implement construction dewatering treatment, if necessary.	X	X			Ongoing	Facilities & BMPs are in place to deal with this requirement should it arise in the OCS foundations.
HYD-4: Minimize floodplain impacts by minimizing new impervious areas for TPFs or relocating these facilities.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. The TPFs in Construction Segments 2 & 4 are currently in final design and design for TPFs in Construction Segments 1 & 3 has begun. The design minimizes

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
						hardscape only to required structure foundations; yard areas are to receive a pervious material.
HYD-5: Provide for electrical safety at TPFs subject to periodic or potential flooding.	X			X	Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. The TPFs in Construction Segments 2 & 4 are currently in final design and design for TPFs in Construction Segments 1 & 3 has begun. The design plan currently raises the TPFs above the floodplain.
HYD-7: Implement sea level rise vulnerability assessment and adaptation plan.				X	Ongoing	The JPB has initiated this measure and preparation of the sea level rise vulnerability assessment and adaptation plan is underway.
NOI-1a: Implement Construction Noise Control Plan.	X	X			Ongoing	The Noise and Vibration Control Plan has been submitted and is being implemented. Field activity is monitored per the Plan. If allowable noise levels are near or exceed allowable noise levels, mitigation such as blankets are used from that point forward.
NOI-1b: Conduct site-specific acoustical analysis of ancillary facilities based on the final mechanical equipment and site design and implement noise control treatments where required.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. Design is still in process and a noise study is currently being performed.

Peninsula Corridor Electrification Project
Monthly Progress Report

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
NOI-2a: Implement Construction Vibration Control Plan.	X	X			Ongoing	The Noise and Vibration Control Plan has been submitted and is being implemented. Field activity is monitored per the Plan.
PSU-8a: Provide continuous coordination with all utility providers.	X	X			Ongoing	The design requirements indicated in the measure will be implemented through the final design as described. Coordination with utility providers is ongoing and there have not been any service interruptions thus far.
PSU-8b: Adjust OCS pole foundation locations.	X				Ongoing	The design requirements indicated in the measure are being implemented through the final design as described.
PSU-8c: Schedule and notify users about potential service interruptions.	X	X			Ongoing	The design requirements indicated in the measure are being implemented through the final design as described. There have not been any service interruptions thus far.
PSU-9: Require application of relevant construction mitigation measures to utility relocation and transmission line construction by others.	X	X			Ongoing	JPB has initiated coordination with PG&E regarding transmission line construction. PG&E is currently raising overcrossing lines in Segment 2.

Peninsula Corridor Electrification Project
Monthly Progress Report

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
TRA-1a: Implement Construction Road Traffic Control Plan.	X	X			Ongoing	The D-B has begun traffic control design and permit applications with cities in Segments 2 and 4. Designs have been completed and approved for all cross-over bridges in Segments 2 and 4.
TRA-1c: Implement signal optimization and roadway geometry improvements at impacted intersections for the 2020 Project Condition.	X	X			Upcoming	This measure has not started
TRA-2a: Implement construction railway disruption control plan.	X	X			Ongoing	Minimization of railway disruption is being coordinated by the Site Specific Work Plan. A Construction Railway Disruption Control Plan was prepared to document the measures that are being implemented.
TRA-3b: In cooperation with the City and County of San Francisco, implement surface pedestrian facility improvements to address the Proposed Project's additional pedestrian movements at and immediately adjacent to the San Francisco 4th and King Station.	X	X	X		Upcoming	This measure has not started.
TRA-4b: Continue to improve bicycle facilities at Caltrain stations and partner with bike share programs where available				X	Ongoing	The JPB adopted the Caltrain Bicycle Parking Management Plan in November 2017, and staff have been working to implement the Plan's recommendations to improve

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
following guidance in Caltrain's Bicycle Access and Parking Plan.						wayside bike parking facilities along the corridor. Staff have also been coordinating with local jurisdictions that have launched bikeshare pilot programs to safely site bicycles near Caltrain stations.
NOI-CUMUL-1: Implement a phased program to reduce cumulative train noise along the Caltrain corridor as necessary to address future cumulative noise increases over FTA thresholds				X	Upcoming	This measure will be implemented during project operation.
NOI-CUMUL-2: Conduct project-level vibration analysis for Blended System operations and implement vibration reduction measures as necessary and appropriate for the Caltrain corridor				X	In Progress	CHSRA is conducting this analysis as part of the EIR/EIS for the San Francisco to San Jose section.
TRA-CUMUL-1: Implement a phased program to provide traffic improvements to reduce traffic delays near at-grade crossings and Caltrain stations				X	Upcoming	This measure will be implemented during project operation.
TRA-CUMUL-2: Implement technical solution to allow electric trolley bus transit across 16 th Street without OCS conflicts in cooperation with SFMTA.	X				Complete	Not applicable. SFMTA has elected to not electrify the 16 th Street crossing. This measure no longer applies.

**Peninsula Corridor Electrification Project
Monthly Progress Report**

Mitigation Monitoring and Reporting

Mitigation Measure	Mitigation Timing				Status	Status Notes
	Pre-Construction	Construction	Post-Construction	Operation		
Mitigation Measure TRA-CUMUL-3: As warranted, Caltrain and freight operators will partner to provide Plate H clearance as feasible between San Jose and Bayshore.				X	Upcoming	This measure will be implemented during project operation.

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: **CALTRAIN POSITIVE TRAIN CONTROL PROJECT UPDATE – February 2020**

ACTION

Staff Coordinating Council recommends that the Board receive the Positive Train Control (PTC) report for February 2020.

SIGNIFICANCE

Staff will provide monthly updates covering PTC related activities during the previous month and provide a preview of activities anticipated to take place during the current month.

BUDGET IMPACT

There is no budget impact.

MONTHLY UPDATE

1. Project Schedule - Major Milestones for Caltrain PTC Implementation:

<u>Key Project Activity</u>	<u>Expected Completion</u>	<u>Progress as of 02/21/20</u>	<u>Progress On Track?</u>	<u>Mitigation Required or Approvals Needed</u>
Approval of Designated Revenue Service Demonstration (RSD) Test Request	May 31 st	Completed	Completed	Formal conditional approval received on September 10. Team incorporating FRA conditions in test plan to ensure compliance to approval.
Approval of revised project PTC Implementation Plan (PTCIP) and Request for Amendment (RFA)	May 31 st	Completed	Completed	Formal approval received on May 16, 2019 for PTCIP and RFA Rev. 10.
Pilot Installations (4) Completed	June 20 th	Completed	Completed	All pilots completed
Submit Designated RSD Application	Oct 15 th	Completed	Completed	RSD Application submitted and in review by FRA.
Submit Full Track RSD Application	June 7 th	Completed	Completed	Formal RSD request for full track was submitted to the FRA on June 14, 2019
Complete Critical Feature Verification & Validation (V&V) for Designated Track RSD	Oct 30 th	Completed	Completed	
Complete Designated RSD Training	Nov 14 th	Completed	Completed	Training for designated RSD personnel completed
Complete Required Vehicle Installations	Dec 3 rd	Completed	Completed	(44) Installs required for RSD completed, punch list items being addressed by Wabtec.
Meet FRA Statutory Requirements and Substitute Criteria	Dec 31	Completed	Completed	Met FRA December 31, 2018 deadline
Obtain Alternative Schedule approval from FRA	Mar 15 th 2019	Completed	Completed	Received FRA's approval on February 6, 2019.
Completion of Remaining Vehicle Installation (all 67 units)	April 30, 2019	Completed (65 Units)	Completed (65 Units)	Except one F40PH 3C Rehab vehicle that is going through overhaul and one wrecked vehicle.
Full RSD - Complete Remaining Critical Feature V&V	Jan 2019	Completed	Completed	
Full RSD – Complete Wayside Interface Unit (WIU) V&V	March 15, 2019	Completed	Completed	Completed on March 15, 2019

Key Project Activity	Expected Completion	Progress as of 02/21/20	Progress On Track?	Mitigation Required or Approvals Needed
Full RSD – Complete Lab Integrated End to End Testing (LIEE)	June 30, 2019	Completed	Completed	LIEE Cycle 3 was completed ahead of schedule on June 12, 2019
Full RSD – Complete Field Integrated Testing (FIT)	August 2019	Completed	Completed	Full track FIT has completed on June 30, 2019
Full RSD – Complete Field Qualification Testing (FQT)	September 2019	Completed	Completed	Full track FQT has completed on July 14, 2019
*Commence Full RSD – Caltrain ROW	October 2019	Completed	Completed	Caltrain has successfully entered RSD on September 07, 2019.
Complete Lab Integrated End to End Testing for Interoperability with UPRR (LIEE-I)	October 2019	Completed	Completed	LIEE-I with UPRR was completed on October 15.
*Complete Interoperability Testing with UPRR - Both ROW	December 2019	Completed	Completed	Interoperable Test with UPRR on both territories were completed on Nov 5 th , 2019
*Complete Interoperability Testing with Tenant Railroads - ACE	April 30 2020	Completed	Completed	Interoperable Test with ACE was completed on Nov 17, 2019.
*Complete Interoperability Testing with Tenant Railroads - AMTRAK	April 30 2020	Completed	Completed	Interoperable field testing was concluded on Feb 8, 2020
Achieve Interoperability with UPRR	Dec 31, 2019	Completed	Completed	Accomplished on December 9, 2019
Achieve Interoperability with other Tenants	April 30, 2020	Plan	Ahead of Schedule	Accomplished Interoperable with ACE on December 9, 2019. Plan to be Interoperable with Amtrak on Feb 26, 2020.
Submit Caltrain PTC Safety Plan to the FRA	June 01, 2020	Plan	Yes	
Complete Caltrain PTC Implementation	December 2020	Plan	Yes	

*Key project milestones for 2019/2020 have incentive payments as part of a contract negotiation concluded on May 7, 2020.

1. Major Wabtec activities for February 2020:

- Caltrain commenced Revenue Service Demonstration (RSD) on September 7, 2019. Caltrain commenced Interoperable Operations with UPRR and ACE on December 7, 2019.
- Continued to provide technical support for RSD trouble shooting and addressed defect items with support from WABTEC PTC help-desk.
- Completed Field Interoperability Testing with Amtrak successfully.
- Continued Federation 8-Tunnel configuration effort with remaining railroads including third party railroads. 8-Tunnel federation with Amtrak was accomplished before field interoperability testing.
- Continued BCCF/CCF Cutover planning effort and finalization of cutover plan and procedure.
- Completed Lab Regression Testing with ACE for ACE on-board software 17.4.3
- Developed test plan and SSWP for removing unnecessary WSMs as result of Relay Gap Analysis.
- Developed PTC Track data changes design document in support of Caltrain 25th Ave. Capital Improvement Project.
- Continued PTC Virtualization Design effort with Caltrain team.
- Submitted LIEE-I and field interoperable test results with Amtrak.
- Implemented subdiv 9024 into production.
- Continued PTCSP roadmap effort and associated risk assessment effort in support of Caltrain PTC safety certification.

2. Vehicle Installation:

Wabtec completed installation of (44) I-ETMS modules on the Caltrain locomotives and cab cars as required in Caltrain's Implementation Plan and statutory criteria requirements in early November of 2018. Wabtec has completed installations on the remaining Caltrain fleet (23 additional locomotives and cab cars) on April 8, 2019. This excludes three locomotives that are off property for overhaul, or have just recently completed overhaul, and one damaged cab car. Project resumed two of three previously off-property equipment in January 2020. Two F40s have PTC installed and accepted. Table below provides the overall status of 67-vehicle installation as of January 25, 2020.

I-ETMS On-Board Installation Progress (As of 2/21/20)			
Equipment	Completed	In Progress	Pending
F40	22	0	1
MP36	6	0	0
Bombardier Cab	9	0	0
NS Gallery Cab	26	0	1
MP1500	2	0	0
Total	65	0	2
%	97%	0%	3%

3. Other Key Activities for February of 2020:

This section reports on PTC project general progress and issues being performed and tracked in addition to the Wabtec contract during the current reporting month.

- Caltrain has received approval from the FRA to enter extended Revenue Service Demonstration (RSD) on January 7, 2020 after initial RSD commenced on September 7, 2019. Caltrain is currently running all revenue trains with PTC.
- Herzog Technology Incorporated (HTI) Data collection team and PTC project team are producing PTC weekly and monthly reporting to the FRA per the RSD conditional approval requirements for the extended RSD.
- PTC helpdesk continues to support PTC operation since commencement of RSD with support from Tier 1 and Tier 2 support staff for PTC Operations. Post RSD weekly meetings and defect-tracking meetings are held to continue monitoring PTC system roll out and address any critical anomalies and defects by system engineering (Tier 2) and WABTEC/ARINC as needed. TASI now provides 24/7 helpdesk coverage.
- Caltrain commenced Interoperable Operations with UPRR and ACE on December 9, 2019.
- Coordinated with Operations/TASI and Amtrak for Field Interoperable Testing; Caltrain and Amtrak is planning to commence Interoperable service on February 26, 2020.
- Caltrain is meeting with UPRR and other tenants on the weekly basis to address any technical and operational issues related to PTC interoperable operations.
- Continued managing ARINC under newly established long-term maintenance and support service agreement for Rail Operations Control System (ROCS), Passenger Predictive Train Arrival/Departure System (PADS) and Voice Radio Dispatching System (RDS), the three major systems residing in the CCF and BCCF that support Rail Operations.
- Continued Work Directive Proposals effort with ARINC on BCCF/CCF Cutover and ROCS Software modification.
- The PTC project continues its coordination efforts with the Electrification and EMU programs via regularly scheduled status meetings. Ad hoc meetings to discuss topics requiring in-depth or immediate decisions are held as needed. Data sharing of fiber audit results and

testing schedules (sharing of track and time) is ongoing to ensure both teams coordinate needs.

- o Caltrain Configuration Control Board (CCB) continued review and approval of configuration changes that impact Rail Operations systems and infrastructure by following Caltrain Configuration Management Plan and Process.
- o Caltrain Systems team actively involved in PTC Interoperable Change Management process through Interoperable Change Approval Board (ICAB) chaired by AAR.

4. Change Order Log:

The additional scope items negotiated with Wabtec totaling \$1.42 M are needed to support the new milestone schedule approved by FRA in December. They relate to interoperability and the communications system. The funds for this scope were taken from potential change budget as part of original board approved \$89.41 project budget. This is the only change order for this contract. This change order was reviewed and approved by the Change Management Board in May. The contract amendment one (1) that reflects this change order is executed. There are no new change orders in February of 2020.

5. Risk Management:

Caltrain and Wabtec have agreed to share the management of an identified list of risk items that were identified during the contract negotiations. The total cost allocated to these risks is \$1.9M to be shared amongst both parties. Unrealized risks will result in cost savings to Caltrain.

Caltrain and Wabtec jointly review the shared risk register as the project progresses. Caltrain will provide update for any realized risks that are identified and agreed upon by both parties.

There are also risks to be monitored outside the Wabtec specific contract that the project team monitors and mitigates as necessary. The following table captures the top risks both external (outside the Wabtec contract) and internal (specific to the Wabtec contract):

Risk Item	Type	Mitigation Action
FRA process changes	External	Maintain close and open relationship with key FRA contacts to ensure all submittals are done correctly and within required time frame to achieve approvals required to achieve full system certification.
Interoperability delays	External	Caltrain is working with UPRR and tenants to ensure agreed to interoperability schedule dates are maintained – Risks are mitigated, Interoperability with UPRR and ACE were achieved and Amtrak is scheduled in February 2020.
Track access delays	Internal	Ensure field test schedule is maintained by coordinating all fieldwork in combination with other capital project’s needs, particularly the PCEP project.
Back Office Server (BOS) documentation scope creep	Internal	Ensure standard documentation supplied by Wabtec meets requirements of Caltrain specification criteria
Key Exchange Server Solution	Internal	Implementation of Caltrain Key Exchange Server timely to support Interoperability Testing with UPRR. KES production test was completed in October 2019. The

Risk Item	Type	Mitigation Action
		Long-term communication MPLS solution will be implemented in early 2020.
Maintenance of existing Assets Data Communications, Wayside Infrastructure and on-board equipment	Internal	Coordinated with Operations and TASI to ensure all assets transfer including all documentation were done and handed off to Operations/TASI. PTC infrastructure are maintained by TASI and Project team continue to provide support as Tier 2/Tier 3 to ensure PTC is reliable for PTC Revenue Service Operations.

6. FRA Coordination Status:

- o Continued weekly calls with FRA review team
- o Continued RSD Weekly and Monthly Reports to the Test Monitor
- o Submitted Interoperable field testing results to the FRA
- o Submitted Interoperable RSD with Amtrak/Capitol Corridor request

7. Caltrain Roadmap to Full RSD and Interoperability:

- o Caltrain has achieved Full Track commencement of Revenue Service Demonstration (RSD). Completing interoperability is the next big milestone in order to achieve overall system certification.
 1. Alternative Schedule was approved on February 6, 2019.
 2. Caltrain completed all field validation by the 1st quarter of 2019.
 3. Caltrain completed Laboratory Integrated Testing for full track in April of 2019.
 4. Caltrain submitted the full track RSD application in June 2019 and received conditional approval of RSD in July 2019.
 5. Caltrain completed Field Integrated Testing (FIT) and Field Qualification Testing (FQT) for full track and has commenced RSD on September 7, 2019.
 6. Caltrain completed training TASI personnel to support full track RSD and PTC operations.
 7. Caltrain continues to roll out PTC trains; all 92 trains per weekday are under PTC as of the end of 2019.
 8. Caltrain completed Interoperability Laboratory Testing with UPRR on August 12, 2019 for cycle one and subsequently cycle two on October 15, 2019.
 9. Caltrain has received Interoperability Test Request Conditional Approval from the FRA.
 10. Caltrain completed Interoperability Field Testing with UPRR on November 5 2019 and has achieved Interoperability with UPRR on December 9, 2019.
 11. Caltrain has completed Interoperability Testing with ACE and started PTC Operations on December 9, 2019. Caltrain will commence Interoperability Testing with Amtrak in February 26, 2020. Caltrain will achieve interoperability requirements with all tenants by February 2020, two months ahead of schedule.
 12. Caltrain will complete submission of the final PTC Safety Plan by June 2020 and receive full system certification by December 2020.

8. Cost – Spend vs Budget with Actuals and Accruals through January 2020

	(A)	(B)	(C)	(D)	(E)	(F) = (C - E)	(G) = (D / E)
Project Cost Analysis	Original Budget (US\$MM)	Approved Changes (Contractor) (US\$MM)	Project Current Budget (US\$MM)	Expended and Accruals To- Date (US\$MM)	Estimated at Completion (EAC) (US\$MM)	Variance at Completion (US\$MM)	% Expended of EAC
CBOSS PTC Project (Jan 2008 - Feb 2018)	\$ 231.00		\$ 239.88	\$ 202.26	\$ 202.26		
Caltain PTC Project (March 1, 2018 - June 30,2020):							
Integrator WABTEC Contract	\$ 43.01	\$ 1.42	\$ 44.44	\$ 33.61	\$ 44.44	\$ -	75.63%
Other Contractors	\$ 6.00	\$ -	\$ 6.00	\$ 1.71	\$ 6.00	\$ -	28.42%
Potential Changes	\$ 2.00	\$ (1.42)	\$ 0.58		\$ 0.58	\$ -	
Potential Incentive - WABTEC	\$ 2.00	\$ -	\$ 2.00	\$ 1.50	\$ 2.00	\$ -	75.00%
Other Program Costs	\$ 30.34	\$ -	\$ 30.34	\$ 15.88	\$ 26.75	\$ 3.59	59.37%
Project Contingency	\$ 6.06	\$ -	\$ 6.06		\$ 6.06	\$ -	
Total PTC Project	\$ 89.41	\$ -	\$ 89.41	\$ 52.69	\$ 85.82	\$ 3.59	61.40%
Note:							
1). Expended and Accruals To-Date is through January 31, 2020;							
2). Integrator Wabtec Contract Value includes Shared Risk with Not to Exceed Total of \$1.91MM;							
3). Other Contractors amount includes ROCS Modification and potential fiber fixes;							
4). Potential Changes amount is set for future project change orders as result of WABTEC assessment and survey for the communications and office subsystems;							
5). Potential incentive amount reflects what is in the WABTEC conformed agreement;							
6). Other Program Costs includes JPB project oversight costs, TASI support and Other Direct Cost for PTC project delivery;							
7). Project contingency includes a) contingencies for WABTEC contract per Board Staff Report; b) JPB project team cost contingency;							
8). CBOSS PTC project budget and actual cost are highlighted to reflect prior March 1st, 2018 CBOSS project financial data.							
9). Negotiated additional scope items are included in WABTEC's contract amendment 1. There is no budget impact since project has budgeted adequate potential change for the amount of \$2MM (note no. 4 above) for added scope items. Current Project budget for WABTEC contract is updated to reflect added scope items.							

9. Upcoming Key Activities in March 2020:

- o Continue ITCM 8 tunnel Test and production Federation with remaining railroads including UPRR foreign railroads.
- o Continue to support PTC RSD Roll out with Operations and TASI.
- o Continue BCCF/CCF cutover planning effort.
- o Continue Data Collection and PTC log analysis for PTC RSD weekly report to the FRA following RSD conditional approval requirements.
- o Continue to provide Tier 2 PTC System Engineering support for tracking anomalies and addressing defect resolutions with Tier 3.
- o Continue Interoperability Operational coordination with all tenants via weekly calls.
- o Commence LIEE-I with UPRR third party railroads.
- o Continue MP1500 locomotive Brake Testing and perform FIT once brake testing is concluded.
- o Continue PTC Virtualization and ATCS work.
- o Perform lab regression testing for new on-board software once Caltrain confirms which version is suitable for Caltrain.
- o Continue KES long term MPLS/Cell implementation.
- o Perform removal of unnecessary WSMs and re-configure WSRS accordingly.
- o Commence I-ETMS long-term maintenance service scope and agreement effort.

Prepared By: Matt Scanlon, Deputy Director, Systems - 650.622.7819

Draft

**CITIZENS ADVISORY COMMITTEE (CAC)
PENINSULA CORRIDOR JOINT POWERS BOARD (JPB)
SAN MATEO COUNTY TRANSIT DISTRICT ADMINISTRATIVE BUILDING
Bacciocco Auditorium, 2nd Floor
1250 San Carlos Avenue, San Carlos CA 94070**

MINUTES OF FEBRUARY 19, 2020

MEMBERS PRESENT: A. Brandt, A. Dagum, L. Klein, M. Romo, P. Leung, P. Flautt, R. Kutler, R. Valenciana (Vice Chair), B. Shaw (Chair)

MEMBERS ABSENT: None

STAFF PRESENT: Z. Guan, J. Jest, J. Navarrete, J. Navarro

Chair Brian Shaw called the meeting to order at 5:46 p.m. and led the Pledge of Allegiance.

APPROVAL OF MINUTES OF JANUARY 15, 2020

Motion/Second: Klein / Flautt

Ayes: Brandt, Dagum, Leung, Kutler, Romo, Valenciana, Shaw

Absent: None

PUBLIC COMMENT

None

CHAIRPERSON'S REPORT

Brian Shaw attended the JPB meeting and reported that Chair B. Shaw was re-elected as Chair and that Member A. Brandt was elected Vice Chair. He also let the Board know about some of the items that Member Patrick had suggested. Chair Shaw then advised the committee that staff has feedback and will be responding to the suggestions as part of the Staff Report. Chair Shaw also stated that the report that is given to the JPB is essentially a condensed version of the minutes from the CAC meetings. Since the JPB meetings are captured through live stream there is the ability to take that part of the stream and make it into a short video to provide the public a summary of the CAC meetings online. Staff will be working on that following the February meeting.

COMMITTEE COMMENTS

Member Rosalind Kutler stated that she noticed tons of press coverage over the last period about David Chiu's Seamless Transit Act and asked whether JPB will address it as it may have implications for Caltrain if passed. Chair Shaw responded that if it is addressed, Casey Fromson would be the best person to address that issue as she is the

Government Affairs Lead for Caltrain and that staff could proactively ask her to address the concern.

Member Adrian Brandt shared with the committee that San Mateo had its final working study session on the Hayward Park set-out track. Ultimately what occurred was that staff was asked to evaluate alternatives that citizens felt were meritorious and would keep the set-out track away from their neighborhood. Staff did that and provided a pretty thorough technical rebuttal as to why the impracticality and the cost and so on. Member Brandt reported that City Council went with the staff recommendation; this is city staff recommendation, which was in concurrence with Caltrain's evaluation, the original location, the only feasible and viable, from a budgetary perspective, alternative.

Member Patrick Flautt read from a prepared statement addressed towards staff regarding the decisions on the agenda items that were suggested at the last CAC meeting, as the following:

At the January 2020 meeting for the Citizens Advisory Committee, I requested several items to be added to the pending agenda item list for consideration of this committee at future meetings. I was under the impression that all proposed agenda items would be added to this list and that over time, these items would propagate to future meetings for committee consideration, general feedback and discussion and a motion to improve, for consideration by the JPB, if so necessary. Ahead of the staff report following my oral commentary, I thought it prudent to make light of staff determinations affecting three of my agenda items. Number one: Business cards for CAC members. Number two: Email addresses for CAC members hosted on Samtrans servers and three Clipper Card incentives for Caltrain CAC members. All three items were requested to be added to the pending agenda item list for consideration of this very committee. These items were not open for staff determination at this time, as the committee has never reviewed, discussed or motion these items for approval. I request a meeting with staff within three weeks following my reading this oral report and that Chair Brian Shaw be present during this meeting, so that we can discuss the current process for vetting member proposed agenda items to be considered by this committee. I want to ensure that this process follows the standards of Robert's Rules and the Brown Act requirements, the JPB Board and the CAC has adopted, which allows the public the right to access direct information from the CAC and staff discussion over actions on proposed agenda items. That is my oral report.

Member Anna Dagum stated that she is very pleased that Caltrain has adopted the affordable housing policy. She expressed an interest in having some presentations for the Committee to be able to comment on future development plans with the land that Caltrain owns.

Member Ricardo Valenciana stated that he read an article regarding affected service into San Francisco through March on the weekends and requested further details. Staff provided Member Valenciana with the "Weekend SF Caltrain Closure" pamphlet.

Member Martin Romo stated that he is also pleased with the Board's adoption of the new affordable housing policy. He stated that they set thirty percent below market

rate requirement and added provisions requiring a minimum of twelve units per acre that really bolsters the policy and makes it so that any new apartment development does in fact provide a good amount of affordable housing on a new location. Member Romo then asked about his request regarding more information on Transit Oriented Development. Chair Shaw responded that the item is agendaized for March's CAC meeting.

Public Comment:

Jeff Carter, Millbrae, stated that when he was a member of the Samtrans Citizens Advisory Committee, they provided business cards to the members, provided a means of contacting the Citizens Advisory Committee and also provided the members with a bus pass. He stated that it may work differently through Caltrain because of the different setup, but might be worth looking into.

PENINSULA CORRIDOR ELECTRIFICATION PROJECT (PCEP)

Zhenlin Guan, Deputy Director, Project Delivery, presented the Peninsula Corridor Electrification Project Update.

The full Power Point presentation can be found on caltrain.com

Committee Comments:

Member Flautt stated that he read the consolidated financials for last year and is aware that there's the ability for the VTA to have five trains daily and also five for Caltrain as well, for a total of ten and asked whether there is a possibility to get a fourth train at some point. Mr. Guan stated that he is not very familiar with that topic. Mr. Joe Navarro, Deputy Chief, Rail Operations stated that he is looking into that for 2021. Mr. Flautt thanked Mr. Navarro.

Member Brandt stated that there was a reference to conductor rail regarding the tunnels and asked whether that means Caltrain is using solid busbar rail. Mr. Guan confirmed that essentially, yes, it will be solid and what it will have a conductor wire essentially clamped into the rail itself. Member Brandt then stated that he read something in the PMOC, the latest report. It said the Caltrain staff was asking the FRA to remove two on-board lifts. Mr. Navarro stated that the FRA/FTA rule is that the bathroom must be accessible if you board the bathroom car and that the wheelchair lifts were put on a train for the high-level doors. He stated that at this point since Caltrain will not be using a wheelchair lift until at least 2033 or 2035, it is not feasible to have them put in a train at this time and will be available to install when necessary with high-level doors. Chair Shaw stated that it doesn't become an issue until there is high level platforms, which right now for Caltrain, will likely only be at the downtown Salesforce Transit Center, San Jose and maybe Millbrae. Member Brandt then asked about Constant Time Warning and Mr. Navarro stated that there will be a presentation on that topic at next month's CAC meeting. Member Brandt then asked about the contingency and cost overruns. Mr. Guan responded that the increases of the budget are in PG&E, a \$30 million increase and with tunnel modifications due the gap in estimate versus the bid itself. Lastly, Member Brandt asked Mr. Guan to comment on

the monthly progress reports and why there are such wild variations from month to month and lagging very far behind on the potholing and the building the foundations. Mr. Guan responded that the primary reason is due to the amount of unexpected utilities that the contractors have been uncovering which may cause procedural issues with the contractors and the designers which is leading to a lot of redesign work. The spikes of production are due to areas with a lot of holes that have been cleared and ready be worked on. Although at some point, the team runs out of work that is ready, and there is a waiting period for the next redesign to be completed. Mr. Guan stated that staff is consistently battling with the utilities being uncovered and working to finding solutions, whether it is moving poles or moving utilities.

Member Klein asked regarding timeline, whether Caltrain is two years from completion and scheduled to finish the beginning of 2022. Mr. Guan stated that based on what is known today and known risks 2022 is an achievable date. Member Klein stated that Caltrain has broken the network into four sections and asked what sections would be completed first. Mr. Guan responded that segment four will be completed first and that it will be used as a test area once it is completed. He stated that there is a lot of focus on that segment in order to be ready to be energized and is working with PG&E. Mr. Guan then stated that after segment four is completed, the plan is to work south to north. Member Klein then asked assuming everything is going smoothly for the beginning of 2022, to finish construction, would all of 2022 schedule be the same as with electric trains or would staff consider adding additional capacity. Mr. Navarro stated that when blended service begins, the seven car EMU seats the same number of passengers as a six car train now, and would start pulling out the diesel train sets and begin running the EMU train sets on the diesel schedule until enough diesel train sets are pulled to run the electrified schedule.

Public Comments:

Jeff Carter, Millbrae, stated that High Speed Rail is coming with high platforms, two different levels of high platforms, one at 25 inches which is the current entrance level for the bombardier cars without the step and the other High Speed Rail has yet to determine the equipment. Mr. Carter said that instead of High Speed Rail dictating to Caltrain and presumably Metrolink in Los Angeles to go to 50 inch high level platforms, Caltrain and Metrolink should be telling the High Speed Rail what they should do and not the other way around because High Speed Rail has yet to determine what kind of equipment they will be using. He then stated that level boarding will be a big help with dwell time and getting people on and off, bicycles, wheelchairs, etc. Jeff then shared his concern with only one bathroom per train with new EMU. He stated that after ballgames people already line up at the bathroom. Jeff then stated that often the bathroom at Fourth and Townsend is closed in the evening. He requested staff to investigate further.

Andy Chow, Redwood City, stated, regarding the wheelchair access and high level platform issue, that he believes the new train sets are not supposed to have a wheelchair space for wheelchairs in the mid-level so they would all have to go down to the bottom level. So that means that even if the ride between two high platform stations, that passengers would need to be lifted down to the lower level and then lifted back up. That is not that's not level boarding and is basically what Caltrain has now

with the Gallery cars, but in reverse. He stated that all EMUs should have single levels so that there is no need to go up and down. He then stated that, regarding the Burlingame the Broadway stops, he thinks Samtrans should operate from Millbrae all the way to San Mateo on California drive so that bus would run all day every half hour. He stated that putting a lot of money to rebuild Broadway is very costly proposition when they could spend the funds on a bus, a BRT a straight route along the track.

2019 CUSTOMER SATISFACTION SURVEY KEY FINDINGS

Julian Jest, Market Research Analyst, presented the 2019 Customer Satisfaction Survey Key Findings presentation.

The full PowerPoint presentation can be found on caltrain.com

Committee Comments:

Member Flautt asked how the survey is being disseminated and what platforms is it being released to. Mr. Jest responded that the survey is conducted on board pre-selected trains and that the paper surveys are distributed and collected to keep a close check on how many responses are being received from the potential population that is being targeted. Mr. Flautt then asked whether there will ever be another option online for people that have had experiences, but maybe weren't on that train during that day. Mr. Jest responded that from time to time online surveys are conducted and is a great way to collect information quickly. As for the Customer Satisfaction Survey in particular, staff requires the survey to be statistically representative as possible and once the online route of collecting data is taken, it is hard to control who is taking the survey. This way the survey is representative for peak riders, for off peak riders and conducting this survey online, would not be able to do that. Member Flautt liked the results of the survey and the new buckets of data for 2019. He stated that it would be very interesting to provide an online survey in a separate bucket within itself in overall experience indicator for the ridership. He requested to see the updates for the new buckets, especially the location of the clipper machines and believes that it will be impactful. Mr. Joe Navarro stated that staff conducted an online survey for the upcoming Hillsdale station closure to identify passenger preference and potential station usage. Mr. Navarro stated that it worked very well because staff needed the information in a timely manner. He also stated that there is a budget for these types of surveys and may need to conduct another online survey when Hillsdale closes for construction and service is moved to Belmont. Member Flautt asked what the budgeted amount for surveys per year is. Mr. Jest responded that it varies on the needs there are in the system and what staff is working on. Lastly, Mr. Flautt asked where on the website can the raw data be found. Mr. Jest responded [caltrain.com\surveys](http://caltrain.com/surveys).

Member Valenciana asked what, if any, significant feedback was from weekday riders compared to weekend riders. Mr. Jest stated that weekend riders tend to give higher ratings compared to peak riders, in general. Mr. Valenciana asked about the riders that recommended more service, how much of that was weekend service. Mr. Jest responded that it was primarily peak riders who wanted more service.

Member Leung asked what action items are generated from the survey. Mr. Navarro responded that one of the top complaints were regarding the bathroom cars and the smell of the bathroom cars. Staff has been tearing down the bathroom cars in the Bombardier to locate the problems. He also stated that staff is considering bringing in the EMU bathroom manufacturer for an ultra-fit for new bathroom in these cars. The next step is, when overhauling the Bombardier cars, considering having the flooring and the seating the same as the EMUs therefore having one product to maintain since the Bombardier cars will remain with the blended service.

Public Comments:

Jeff Carter, Millbrae, shared his appreciation of the data that will be available online. He notified the committee that surveys from previous years are also available online. He requested the raw data from previous surveys be made available as well. He also stated that the triennial survey results will be available soon. Mr. Carter would like to see station boarding and station alighting information, an O&D chart.

STAFF REPORT UPDATE

Joe Navarro, Deputy Chief, Rail Operations, reported:
(The full report can be found on caltrain.com)

Follow-Up Items –

- **Transaction history on the mobile app:**
5 transactions will display on the main screen. At the bottom of the list you can tap to "view more transaction history" this will then display the 30 most recent transactions. At the bottom of this list is a link to RiderWeb where the user can access all transaction history.
- **Business cards for CAC members:** No business cards will be issued at this time for CAC members.
- **Official email addresses hosted on a separate server for CAC members:** At this time there will not be an official individual email address for CAC members. There is an official CAC email set up for comments that may be sent to cacsecretary@caltrain.com. The CAC secretary will forward emails as needed.

Chair Brian Shaw asked whether that email address can be given out if someone wanted to write the committee and that it would be added to the monthly correspondence packet. Mr. Joe Navarro confirmed.

- **Request for paid access to Caltrain for CAC members:** At this time the CAC members will not be assigned a clipper card due to the voluntary nature of the position and the monetary value tied to the Go Pass, \$1,500 in value.

Member Flautt stated that the CAC volunteer would have to participate in the CAC committee and bring something of value to the committee and disagreed with the possibility of a volunteer joining for solely the Go Pass.

Member Rosalind referred to the bylaws because the bylaws state that there shall be no personal or monetary gain by members of the CAC.

On-time Performance (OTP) –

- **January:** The January 2020 OTP was 95.4% compared to 94.4% for January 2019.
 - **Vehicle on Tracks** – There were four days, January 11, 16, 28 and 29, with a vehicle on the tracks that caused train delays.
 - **Mechanical Delays** – In January 2020 there were 913 minutes of delay due to mechanical issues compared to 411 minutes in January 2019.
- **December:** The December 2019 OTP was 92.5% compared to 92.2% for December 2018.
 - **Trespasser Strikes** – There were two trespasser strikes on December 2 and 11, one resulting in a fatality.

(The full report can be found on caltrain.com)

Committee Comments:

Chair Brian Shaw asked whether the MP36 Overhaul Locomotives will be overhauled at CEMOF. Mr. Navarro responded that the work will not occur at CEMOF and that they will be sent away.

Public comments:

None

JPB CAC Work Plan

March 18, 2020

- Transit Oriented Development
- Industry Safe Functionality
- Grade Crossing Solutions

April 15, 2020

- Mobile Parking App
- EMU Update

May 20, 2020

- FY 2021JPB Operating & Capital Budgets

- Distance Based Fares

June 17, 2020

-
-

Items to be scheduled

- Schedule Audit – requested by Member Lauren Fernandez on 3/6/18
- Go Pass cost per ride factors – requested by Chair, Brian Shaw on 6/19/19
- San Mateo County Climate Action Plan – requested by Member Rosalind Kutler on 10/16/19
- MTC Means-Based Discount Fare program update
- Caltrain connections with other agencies – requested by Member Rosalind Kutler on 12/18/19
- Update on grade crossing pilot six months after installation – requested by Member, Patrick Flautt on 12/18/19
- Summary video of the CAC meetings by the Social Media Officer – requested by Chair, Brian Shaw on 12/18/19
- Grade Crossing Improvements to be scheduled for a future meeting
- Operating Costs – requested by Member Adrian Brandt on 2/13/20

DATE, TIME AND LOCATION OF NEXT REGULAR MEETING:

March 18, 2020 at 5:40 p.m., San Mateo County Transit District Administrative Building, 2nd Floor Bacciocco Auditorium, 1250 San Carlos Avenue, San Carlos, CA.

Adjourned at 7:28 pm

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Caltrain

SUBJECT: **CALTRAIN BUSINESS PLAN – UPDATE COVERING JANUARY & FEBRUARY 2020**

ACTION

Staff Coordinating Council recommends the Board of Directors (Board) receive a presentation providing an update on Caltrain Business Plan activities and progress during January and February of 2020.

SIGNIFICANCE

Peninsula Corridor Joint Powers Board (JPB) staff has prepared the attached presentation describing analysis and project activities related to the Caltrain Business Plan that have been ongoing in January and February of 2020.

Staff will provide the JPB with written updates or presentation materials on a monthly basis throughout the duration of the Business Plan project. These written updates will periodically be supplemented by a full presentation to the Board.

BUDGET IMPACT

There is no budget impact associated with receiving this presentation.

BACKGROUND

In 2017, the JPB secured full funding for the Peninsula Corridor Electrification Project and issued notices to proceed to its contractors for corridor electrification and purchase of Electric Multiple Unit railcars. Now that construction on this long-awaited project is underway, the agency has the opportunity to articulate a long-term business strategy for the future of the system.

The initial concept for a Caltrain “Business Plan” was brought to the Board in April of 2017. The Board reviewed a draft scope of work for the Business Plan in December of 2017 and adopted a final Business Strategy and Scope of Work in February of 2018. Technical work on the Plan commenced in the summer of 2018. The Business Plan has been scoped to include long-range demand modeling, and service and infrastructure planning, as well as organizational analysis and an assessment of Caltrain’s interface with the communities it traverses. In October of 2019, the JPB marked a major milestone

in the Business Plan process with its adoption of a "2040 Service Vision" for the Caltrain system. This action sets long-range policy guidance for the future of the Caltrain service and allows staff to move forward with completion of the overall plan by early 2020

Prepared by: Sebastian Petty, Deputy Chief, Caltrain Planning

650.622.7831

Caltrain Business Plan

WPLP/Joint Powers Board

March 5, 2020



Agenda for Today



Process Overview



Making it Happen: Delivering Improved Caltrain Service Before 2040

- Understanding Demand
- Priorities for CalMod – Better Service in the 2020s
- Taking the Next Big Step
- Investing in Improvement – Costs and Funding



Work in Progress & Next Steps



Process Overview

3

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.



4

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



Timeline

July 2018 – July 2019

Development and Evaluation of Growth Scenarios

October 2019

Adoption of Long-Range Service Vision

Fall 2019

Rounding Out the Vision and Implementation Planning

Winter 2019-2020

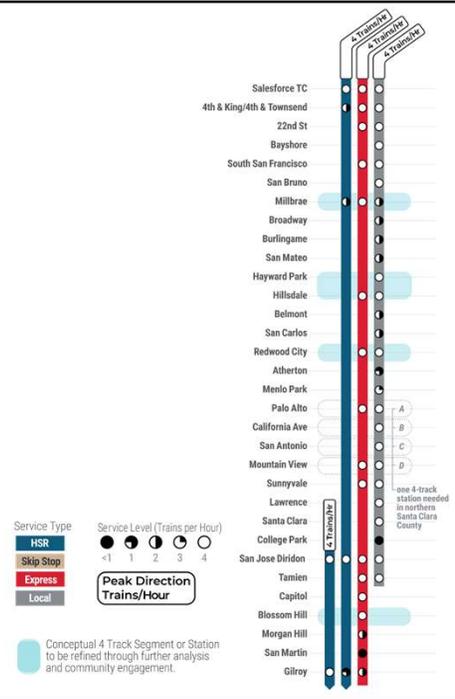
Spring 2020

Completion of Business Plan



Caltrain's 2040 Service Vision Illustrative Service Details

Trains per Hour, per Direction	Peak: 8 Caltrain + 4 HSR Off-Peak: Up to 6 Caltrain + 3 HSR
Stopping Pattern	Local / Express with timed transfer in Mid Peninsula
Travel Time, STC-Diridon	61 Min (Express) 85 Min (Local)
New Passing Tracks	Millbrae, Hayward Park-Hillsdale, Redwood City area, Northern Santa Clara County, Blossom Hill
Service Plan Description	<ul style="list-style-type: none"> Local and Express trains each operating at 15-minute frequencies with timed cross-platform transfer at Redwood City All trains serve Salesforce Transit Center Trains serve Capitol and Blossom Hill every 15 minutes and Morgan Hill and Gilroy every 30 minutes Skip stop pattern for some mid-Peninsula stations



Caltrain's 2040 Service Vision - Investments

CAPITAL COSTS

\$23 BILLION
TOTAL CAPITAL COSTS*

Capital costs include all projects from SF to Gilroy, knitting together a connected corridor with greatly improved service.



\$9.4B
GRADE SEPARATIONS



\$7.8B
TERMINAL IMPROVEMENTS



\$3.3B
RAIL INFRASTRUCTURE AND SYSTEMS



\$1.4B
STATION IMPROVEMENTS



\$1.1B
FLEET UPGRADES

OPERATING COSTS

\$370 MILLION
2040 ANNUAL OPERATING COSTS*

Caltrain is one of the leanest, most efficient transit services in the country. Today's annual operating and maintenance costs are \$135 million, and 73% is covered by fares. The vision would benefit from a similarly high farebox recovery ratio.

\$266M
OPERATING COSTS COVERED BY FAREBOX (72%)



\$104M
ANNUAL OPERATING INVESTMENT NEEDED (28%)

Remaining Technical Analysis Making it Happen

With a 2040 Service Vision adopted, what will the next 10 years look like for Caltrain? What are the key actions and steps we need to focus on next?

Additional technical and policy analysis is underway to focus on what Caltrain can achieve over the next decade and the key near term steps and work that will be needed to make it happen.



Building towards the Vision with service concepts for initial electrification and options for growth and investment through 2020s



Accompanying financial projections and funding plan



Identification of a program of key planning, policy and organizational next steps



Remaining Technical Analysis Rounding Out the Vision

With a 2040 Service Vision adopted, how can Caltrain “Round Out” its vision for the future?

Additional technical and policy analysis are underway with a focus on areas that were highlighted as important through stakeholder outreach and help complete the picture of the railroad Caltrain hopes to become.



Analysis of connections to other systems & station access options



Equity analysis & focus on making Caltrain accessible to all



Review of funding options and revenue generation opportunities to support the Vision



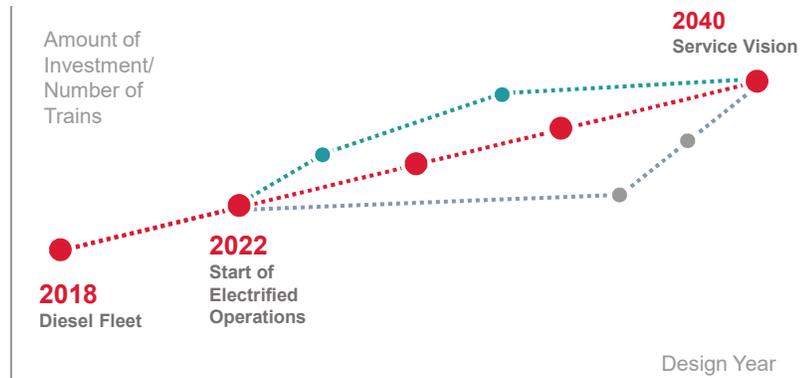
Making it Happen: Delivering Improved Caltrain Service Before 2040

11

Getting to the 2040 Service Vision

CalMod will provide tremendous near-term service benefits to the corridor. However, regional growth projections suggest that there is medium-term demand for even more service.

Working backwards from the 2040 Service Vision, Caltrain can explore how to deliver key service benefits to the corridor sooner.



12

Key Questions for the Next Decade

1. What is the potential market demand for Caltrain service over the next 10 years?
2. Which benefits of the 2040 Service Vision could Caltrain deliver before 2030?
 - How can we use the initial electrified system (CalMod) to deliver near-term service benefits and best meet market demand?
 - How could we improve service further through subsequent incremental investments?
3. What will it cost to provide the service the corridor needs over the next decade? What sources of revenue and funding should we plan for?



13



The Next Decade of Caltrain



14

Understanding Demand

Daily ridership demand for Caltrain service will likely exceed 90,000 passengers per weekday within the next decade. This growth is driven by several factors:



Latent Demand

Improving Caltrain service and increasing capacity will make Caltrain more appealing for a wider range of trips



Population and Employment Growth

Station areas will add over 100,000 new residents and employees within 1/2 mile of Caltrain stations, a ~30% increase over existing



Improved Connectivity

New connections like the Central Subway will extend Caltrain's reach



Existing Ridership by Station

5

Highest Ridership
>4,000
Daily Riders

4

Moderate Ridership
2,000 – 4,000
Daily Riders

20

Lower Ridership
<2,000
Daily Riders

- 4th & King
- Redwood City
- Palo Alto
- Mountain View
- San Jose Diridon

- Millbrae
- San Mateo
- Hillsdale
- Sunnyvale

- 22nd Street
- Bayshore
- South San Francisco
- San Bruno
- Broadway
- Burlingame
- Hayward Park
- Belmont
- San Carlos
- Atherton
- Menlo Park
- California Ave
- San Antonio
- Lawrence
- Santa Clara
- Tamien
- Capitol
- Blossom Hill
- Morgan Hill
- San Martin
- Gilroy





Priorities for CalMod



Priorities for CalMod

The ongoing electrification of the Caltrain service between San Francisco and San Jose provides a transformative, near-term opportunity to improve service.

With this investment, Caltrain can begin delivering many, but not all, of the service improvements described 2040 Service Vision while also attempting to keep pace with growing market demand.

Staff has developed two illustrative service options that are responsive to the opportunities and priorities identified to the right.

Opportunities and Recommended Priorities



Increasing service at stations



Standardizing schedules and enhancing connectivity



Expanding off-peak service



Balancing capacity

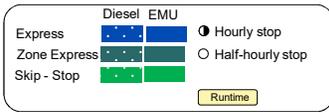


Two Illustrative Service Plans

Caltrain has prepared two sets of illustrative service plans to carry forward for further analysis.

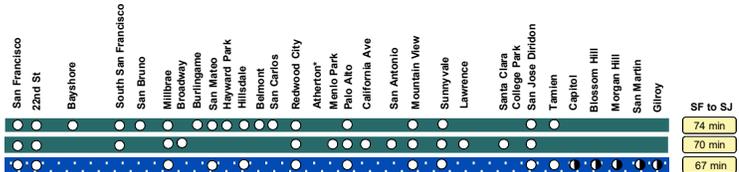
Two Zone with Express – two zone patterns (north and south of Redwood City) with a regional express pattern offering different travel times and wait times

Distributed Skip Stop – three skip stop patterns offering similar travel times and regular wait times at major stations



Two Zone with Express

PEAK PERIOD
 2 Trains / Hour
 2 Trains / Hour
 2 Trains / Hour



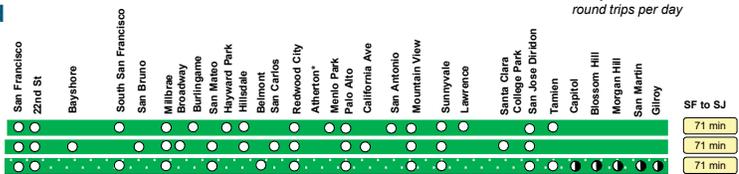
*Future Atherton service levels under discussion

Gilroy Service - 4 round trips per day

SF to SJ
 74 min
 70 min
 67 min

Distributed Skip Stop

PEAK PERIOD
 2 Trains / Hour
 2 Trains / Hour
 2 Trains / Hour



*Future Atherton service levels under discussion

Gilroy Service - 4 round trips per day

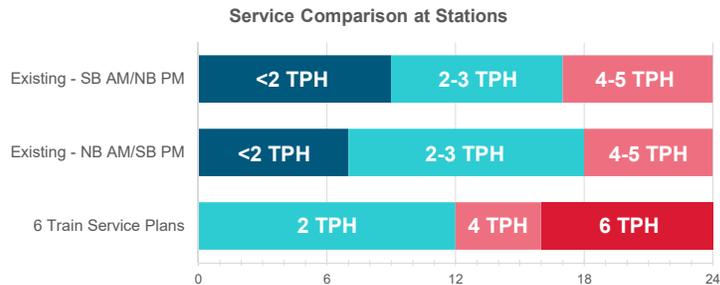
SF to SJ
 71 min
 71 min
 71 min

Service Frequency Improvements

Because of the growth in demand throughout the corridor, staff recommends prioritizing increased service levels at stations throughout the system (while maintaining competitive travel times).

While specific stopping patterns shown are illustrative, all service concepts considered *double* the number of stations that receive at least four trains per hour, per direction.

All service concepts provide *at least* two trains per hour, per direction to all mainline, regularly served stations.

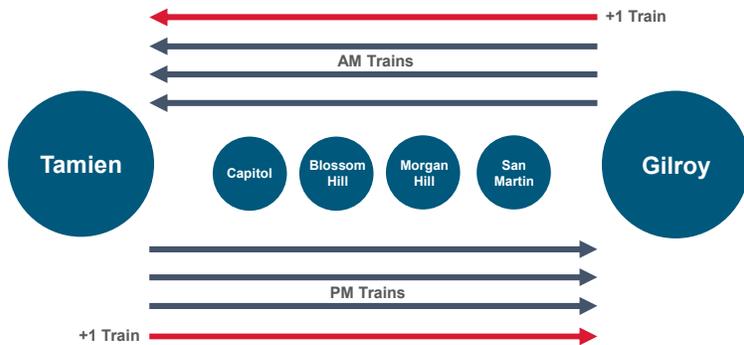


South of Tamien Service Improvements

Caltrain would increase service south of Tamien from three to four trains per day with CalMod.

Under the current agreement with Union Pacific, Caltrain can add up to two additional roundtrips to Gilroy to reach five trips per day. Caltrain has committed to adding one additional roundtrip in FY2021. There are some constraints as to when these trips can be added without affecting mainline service.

In the future, two of these roundtrips could be extended south to Salinas subject to further planning and agreement by both the Caltrain Board and Union Pacific.



Standardizing the Schedule and Enhancing Connectivity

Standardized Schedule

Staff recommends creating a more user-friendly, intuitive service by standardizing the Caltrain service to a repeating, clockface pattern including symmetrical services in both NB and SB directions.

Enhancing Connectivity

Increased frequency and standardized schedules allow for improved connections with the rest of the region's rail and transit network. This creates the opportunity to specifically "design" service around key high volume transfers (eg BART connection at Millbrae) and creates new opportunities for better bus and shuttle integration throughout the system.

Example- Each Line 2x per Hour



Photo credit SPUR

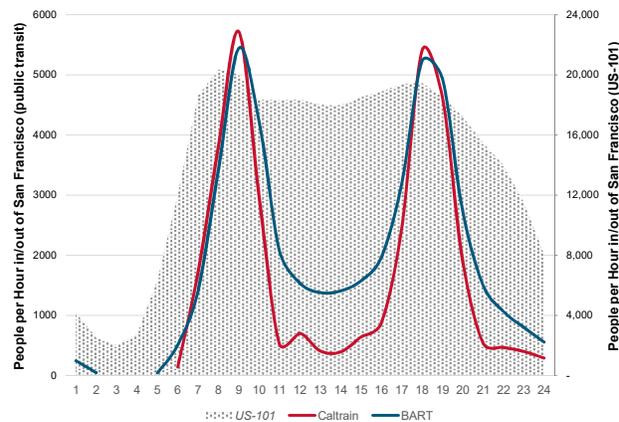
Improving Off-Peak and Weekend Service

With electrification, Caltrain has the opportunity to stretch the peaks and increase off-peak and weekend service levels to better meet corridor demand.

However, operational and financial constraints may affect Caltrain's ability to fully serve off-peak demand.

Goals

- Increase Caltrain's market share during off-peak and weekend periods
- Offer competitive travel times between major stations
- Maintain flexibility to accommodate construction and maintenance windows

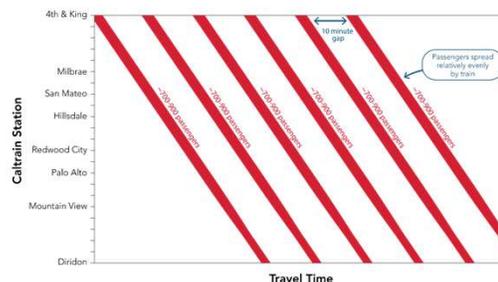
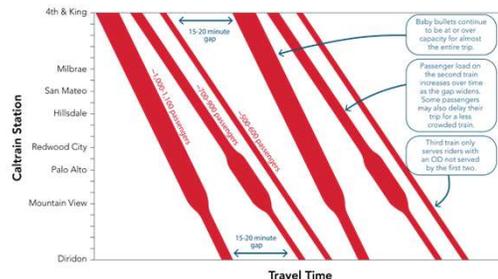


Balancing Capacity

An Ongoing Challenge

- Strong corridor demand means that peak-hour capacity is likely to be an ongoing challenge for Caltrain- even as service improvements and expansion are implemented
- Caltrain can design its service to better balance demand across all of its trains- but doing so could require eliminating popular peak-hour express service and instead making all trains run at roughly the same speed
- The two service options developed by Caltrain present both sides
- Looking forward, Caltrain's best option to prepare for increased demand will be to take the next incremental step beyond CalMod

How Service Patterns Affect Crowding





The Next Big Step



27

Taking the Next Step: Adding Capacity and Increasing Service to Grow Ridership

Toward the end of the 2020s, Caltrain is expected to reach capacity during peak hours.

Caltrain will not be able to accommodate additional ridership growth in the 2030s without adding capacity. This poses a challenge for accommodating ongoing land use growth as well as demand that will be induced by DTX, Dumbarton rail, and other potential changes on the corridor.

While smaller, interim improvements may ease capacity, the most significant improvement to service and capacity involves expanding service to eight trains per hour, per direction.



28

Getting to 8 Trains Per Hour

The following parallel and programmatic investments will be an ongoing focus for Caltrain throughout the 2020's- they are needed to support the overall success of the system and the full implementation of the 2040 Service Vision.



Grade Separations

Planning and construction of grade separations and grade crossing improvements



Station Improvements

Programmatic improvements to Caltrain stations and investments in station access and connectivity



Major Investments

Work on major terminal projects (including Diridon and DTX), major station investments, and partner projects including HSR

Getting to 8 Trains Per Hour

The following key investments would specifically be needed to implement an interim 8-tph service. These investments are consistent with the overall program assumed in the 2040 Service Vision.



Expanded EMU Fleet



More Train Storage



Holdout Rule Elimination

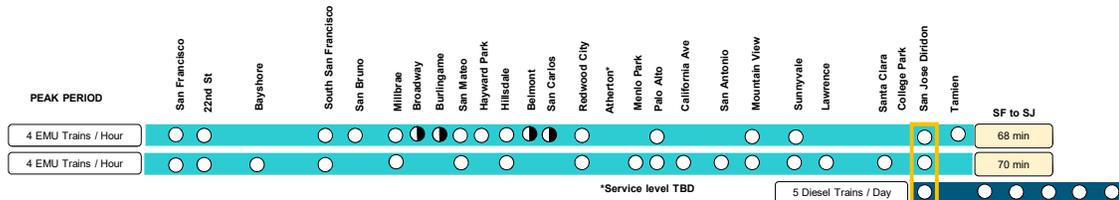


Level Boarding



Minor Track Work

8 Train Illustrative Service Plan



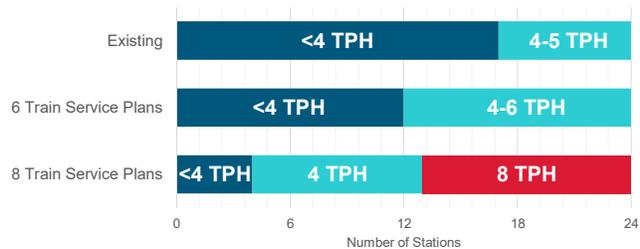
- An 8-train Caltrain service would likely look like a hybrid of the zone express and skip stop patterns with 8 trains per hour, per direction.
- There is limited flexibility in the service structure due to lack of new passing tracks and the constraints of Caltrain's existing signal system.
- An 8-train per hour service requires the mainline to be a fully electrified operation. Diesel service would remain for stations south of Tamien with a timed transfer at Diridon Station; however, service would increase to a minimum of 5 trains per day and the schedule could be fully customized to local travel needs.



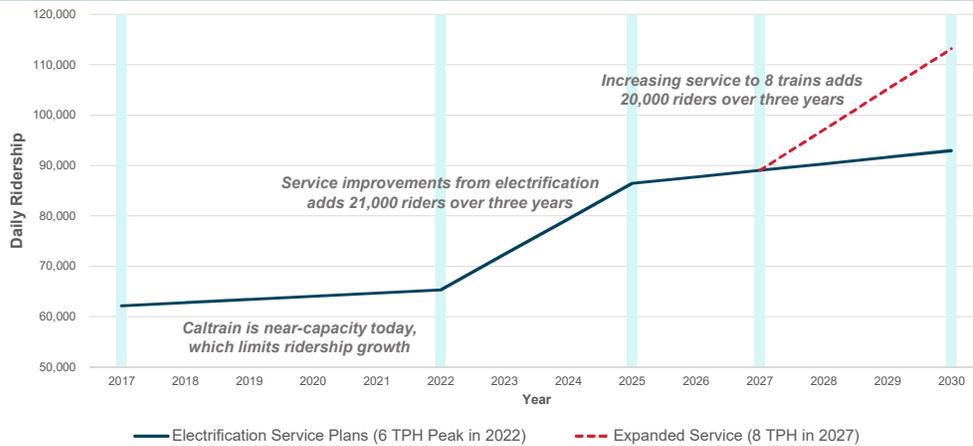
Increasing Service at Stations

Increasing service from six to eight trains per hour, per direction enables more frequent service to more stations.

With an interim 8 tph service, 20 of 24 mainline stations would receive at least four trains per hour, per direction, and nearly half of stations would receive eight trains per hour, per direction.



Change in Weekday Ridership Over Time



Investing In Improvement - Costs & Funding

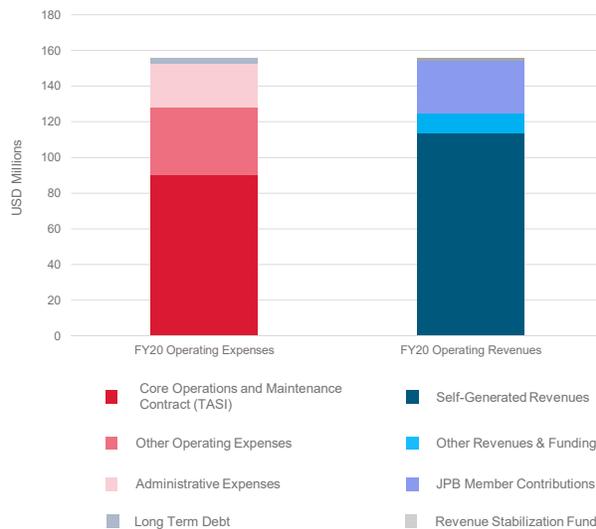


Caltrain Today Operating Costs & Revenues

Caltrain had a total budgeted Operating Expense of \$156 million in FY2020. Of this total, \$91 million (58%) were direct TASI O&M costs, \$38 million (24%) were for other (non-TASI) operating expenses, \$24 million (16%) were for Administrative Expenses, and \$3 million (2%) was for Long-term Debt.

On the revenue side, Caltrain budgeted for a total of \$156 million during FY2020, of which \$114 million (73%) was Self-Generated Revenue, \$11 million (7%) was in Other Revenues and Funding, and \$30 million (19%) was Local Member Contributions. The remaining \$1 million was budgeted to be paid out of the revenue stabilization fund.

Budgeted Operating Expenses and Revenue FY 2020



All costs shown in YOY \$

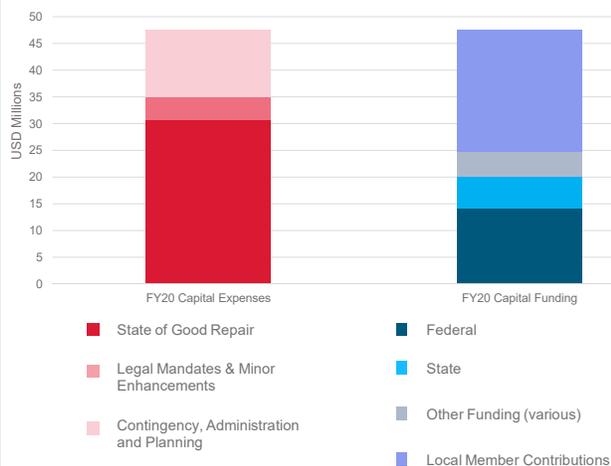


Caltrain Today Annual Capital Costs & Funding

During FY2020, Caltrain budgeted \$47 million for capital expenses related to State of Good Repair, minor system enhancements and legal requirements, and contingency, administration and planning. These expenditures reflect the categories of capital investment that Caltrain must consider and plan for on a recurring annual basis.

These capital expenses were funded through a combination of Federal and State formula funds, a collection of smaller individual sources, and annual JPB member agency capital contributions.

Budgeted Capital Expenses and Funding FY 2020



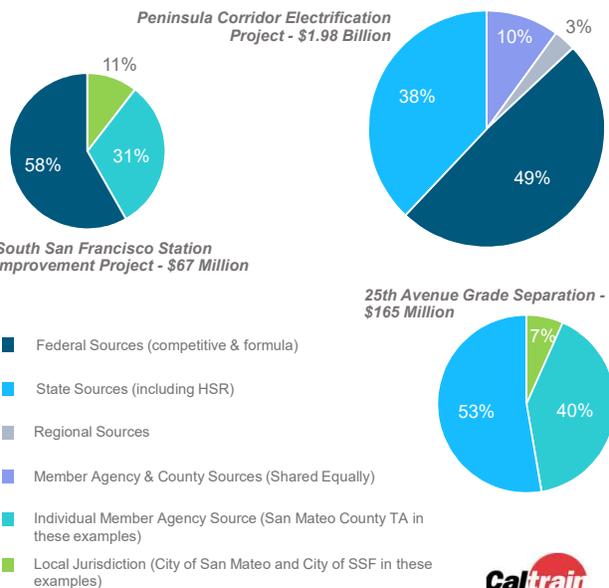
Caltrain Today Major Capital Projects

Major capital projects often span multiple budget years and rely on individualized funding plans. These are developed independently on a project-by-project basis.

Member agencies may contribute additional funds to support large projects - either directly or through county specific grant sources. These local funds are often used to match qualifying regional, state and federal sources.

Member agencies typically contribute equally to large system wide projects (like electrification). The development of funding plans for more localized projects - like grade separations or the improvement of a specific station - are typically undertaken directly by the specific county where the project resides.

Example Funding Plans For Recent Projects



Investing in Service

Over the next decade Caltrain has the opportunity to make substantial improvements to service.

Service enhancements require investment - both to sustain operations and to implement and maintain the capital infrastructure needed to grow the system.

The following slides provide a financial analysis that considers the costs and potential funding needs associated with two options for growth.



Baseline CalMod

This option includes provision of the "baseline" level of electrified service envisioned in PCEP grant applications and funding documents

Includes six peak hour trains throughout the decade with modest improvements to off-peak service levels (approx. 116 trains per day)



Enhanced Growth

This option considers enhanced service levels that maximize the use of available infrastructure and more fully serve expected demand

Includes six peak hour trains growing to eight by the end of the decade

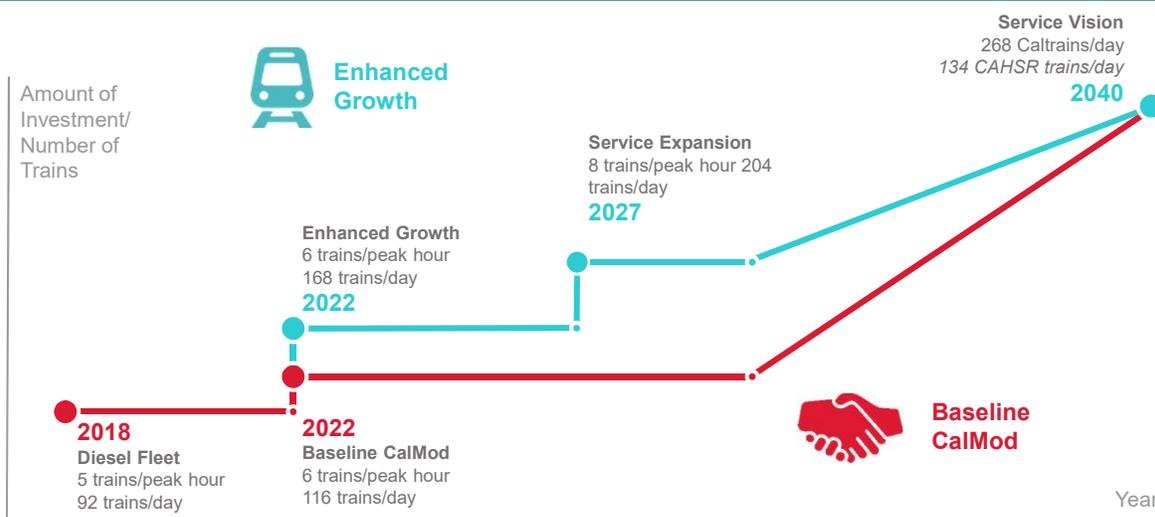
Peak periods are expanded, and off-peak service is significantly enhanced (approx. 168 trains per day growing to 204)



Scenario Details

Scenario	Service Description	Capital Investments	Major Operating Cost Drivers
Baseline CalMod	<ul style="list-style-type: none"> 6 tphpd during peak hours (4 hours per day) Modest off-peak service increases Approx 116 trains per day throughout the decade. Increase to 4 round trips per day to Gilroy. 	<ul style="list-style-type: none"> PCEP completed in early 2020s (already funded) Ongoing investment in State of Good Repair. 	<ul style="list-style-type: none"> TASI costs related to increased service hours Maintenance of new systems and expanded fleet Electricity for Traction Reduced fuel consumptions Reduced diesel fleet maintenance
Enhanced Growth	<ul style="list-style-type: none"> 6 tphpd during peak hours (7-8 hours per day) increasing to 8 tphpd by late 2020s. Expanded peak periods and off-peak service 168 trains per day increasing to 204 trains by the end of the decade. Increase to at least 5 round trips per day to Gilroy 	<ul style="list-style-type: none"> PCEP completed in early 2020s. Ongoing investment in State of Good Repair. Direct investments required to support 8 tphp service 	<p>Same as above, plus:</p> <ul style="list-style-type: none"> Additional TASI costs related to further expanded service Additional electricity for traction Additional maintenance related to expanded fleet

Two “Scenarios” for Growth

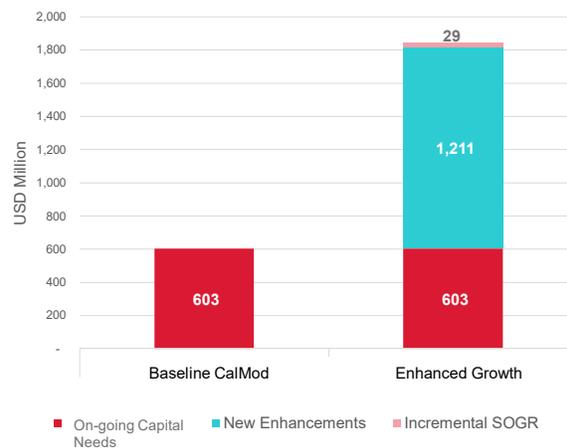


10-Year Total Capital Expenses by Scenario

Caltrain projects a cumulative \$600 million in ongoing general capital needs (including SOGR as well as minor enhancements, planning and administration) to deliver the Baseline CalMod service.

Delivering the Enhanced Growth level of service will require approximately \$1.2 billion of additional capital investments, of which \$570 million are to acquire additional fleet to achieve the intended service frequency. The total 10-year capital expenses for this scenario are around \$1.8 billion.

Total 10-year Capital Expenses by Scenario



All costs shown in US\$ 2018



10-Year Capital Funding Gap

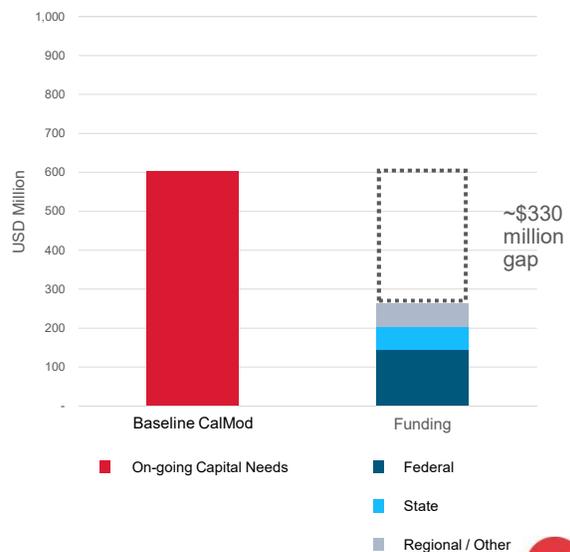
Baseline CalMod

While the Peninsula Corridor Electrification Project is fully funded, the ongoing general capital needs of the system require funding of \$600 million total over the next 10 years (approx. \$60 million a year in 2018 dollars).

This projected need will not be fully covered with existing and anticipated Regional, State and Federal funding sources.

Baseline CalMod

10-year Capital Gap – No JPB Contribution



All costs shown in US\$ 2018



10-Year Capital Funding Gap

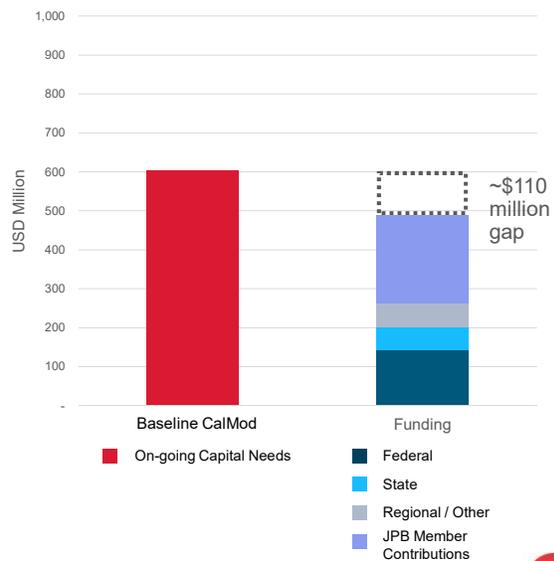
Baseline CalMod

While the Peninsula Corridor Electrification Project is fully funded the ongoing capital needs of the system require funding of \$600 million total over the next 10 years (approx. \$60 million a year in 2018 dollars).

This projected need will not be fully covered with existing and anticipated State and Federal funding sources.

If member agency capital contributions were to continue at their current rate (approximately \$22.5 million per year, divided evenly among counties) the gap would shrink to \$110 million.

Baseline CalMod 10-year Capital Gap – With JPB Contribution



All costs shown in US\$ 2018



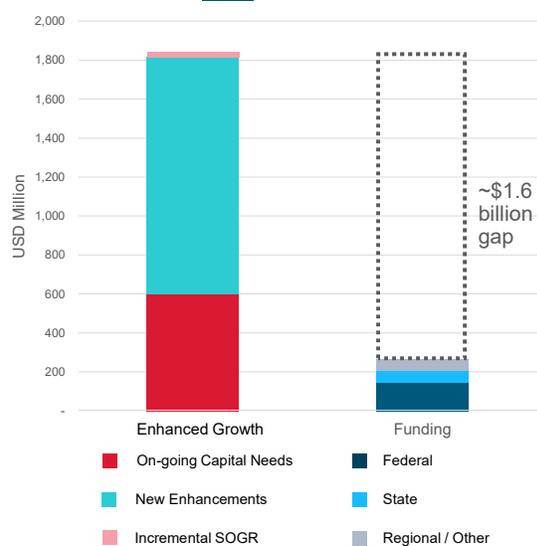
10-Year Capital Funding Gap

Enhanced Growth

Achieving the levels of service envisioned in the “Enhanced Growth” option will require investment in both the basic, ongoing capital needs of the system as well as new improvements to enable an 8 train per hour service. This scenario requires a total capital investment of \$1.8 billion, an additional \$1.2 billion over the Baseline CalMod scenario.

There will be a need of approximately \$1.6 billion of new funding above anticipated state, regional and federal formula sources to cover this capital need over the next decade.

Enhanced Growth 10-year Capital Gap – No JPB Contribution



All costs shown in US\$ 2018



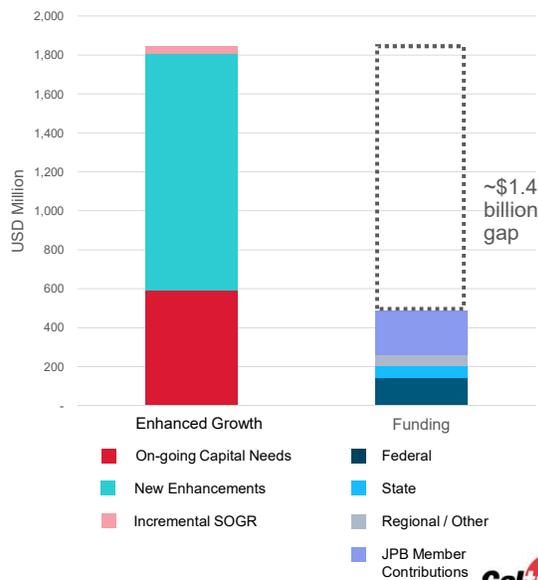
10-Year Capital Funding Gap

Enhanced Growth

Achieving the levels of service envisioned in the “Enhanced Growth” option will require investment in both the basic, ongoing capital needs of the system as well as new improvements to enable an 8 train per hour service. This scenario requires a total capital investment of \$1.8 billion, an additional \$1.2 billion over the Baseline CalMod scenario.

If member agency capital contributions were to continue at their current rate (approximately \$22.5 million per year, divided evenly among counties) the gap would shrink to \$1.4 billion.

Enhanced Growth 10-year Capital Gap – With JPB Contribution



All costs shown in US\$ 2018

10-Year O&M Expenses: Methodology & Assumptions

Staff has developed projections of anticipated operating expenses and revenues over the next decade for both the Baseline CalMod and Enhanced Growth Scenarios.

Projections are developed through a unit-based integrated business model and then further refined for typical escalation rates by cost category.

Assumptions and Caveats

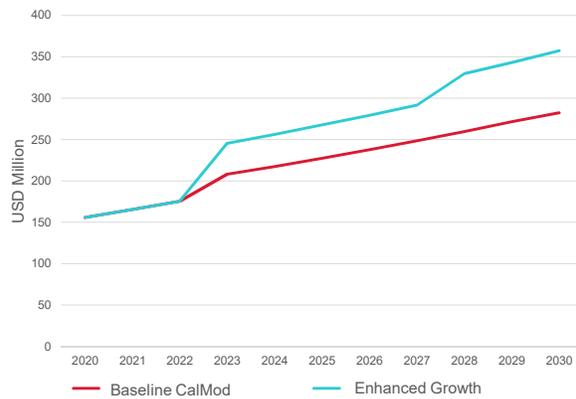
- 10 Year O&M projections are shown in year of expenditure dollars
- The projections represent Caltrain’s best available information on likely costs and revenues, but several areas of significant uncertainty remain:
 - TASI costs and operational parameters play a significant role in determining overall operating costs and may be influenced by ongoing contract negotiations
 - Costs of maintaining new systems and equipment (overhead catenary system, EMUs) have been estimated but are not yet fully known
 - Timing and speed of ridership growth in response to new service has been estimated but is not yet fully known
 - Many cost categories are inherently volatile and may vary (e.g. fuel, insurance)

O&M Expenses 2020-2030

Both scenarios assume the commencement of electrified service in 2022 (FY2023).

The Baseline CalMod path assumes the operation of 116 trains per day starting in FY2023 and through the end of the 10-year period.

The Enhanced Growth path will have 168 trains per day from FY2023 through FY2027, then increasing to 204 in FY2028 through the end of the 10-year period.



All costs shown in YOE \$



O&M Expenses and Revenues 2020-2030

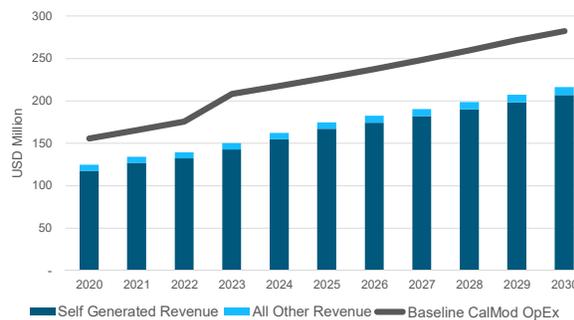
Baseline CalMod

Self Generated Revenues include fares, parking and projections of existing rental and advertising income.

All other revenue includes other minor funding and revenue sources that Caltrain receives on a predictable and recurring basis.

From FY2023 through 2030, the average annual gap is **\$59 million** if Member Contributions are excluded.

Baseline CalMod
O&M Revenues Versus Expenses
No JPB Contribution



All costs shown in YOE \$

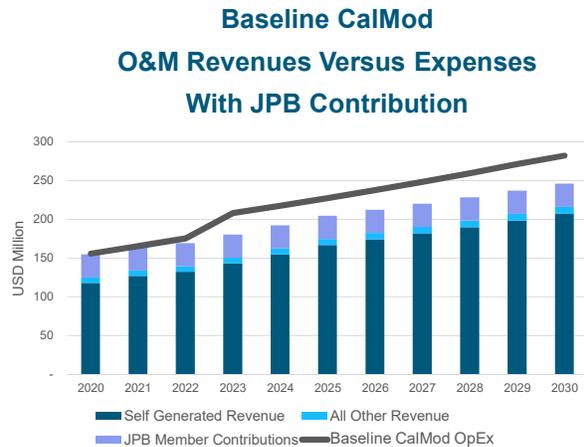


O&M Expenses and Revenues 2020 - 2030

Baseline CalMod

Caltrain's member agencies contributed a combined \$29.9 million to the system's annual operating budget in FY20.

If these contributions were to continue at the same level, the average annual gap between FY2023 and 2030 would fall to approximately **\$29 million**.



All costs shown in YOY \$

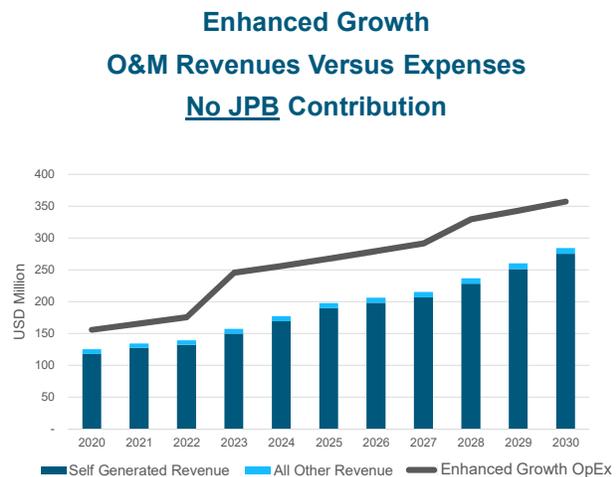


O&M Expenses and Revenues 2020-2030

Enhanced Growth

Self-generated revenues grow in the enhanced growth scenario but are not sufficient to offset increased operating costs.

The average annual gap between FY2023 and 2030 is **\$80 million** if no Member Contributions are considered.



All costs shown in YOY \$



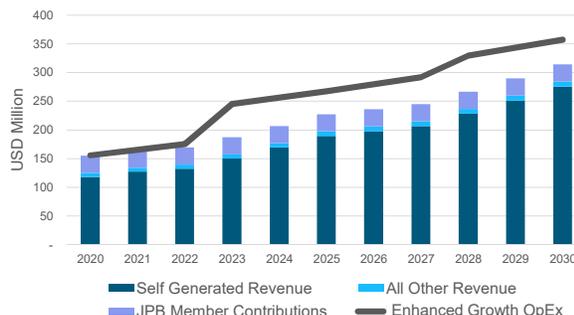
O&M Expenses and Revenues 2020-2030

Enhanced Growth

Caltrain's member agencies contributed a combined \$29.9 million to the system's annual operating budget in FY20.

If these contributions were to continue at the same level, the average annual gap between FY2023 and 2030 would fall to approximately **\$50 million**.

Enhanced Growth
O&M Revenues Versus Expenses
With JPB Contribution



All costs shown in YOY \$



Options to Fill the Funding Gap

The following categories define four overarching “strategies” that Caltrain and the region could use to fund both Caltrain’s near- and medium-term improvements as well as the long range Service Vision.



Cost Sharing

Establish a fair distribution of costs between Caltrain and other users of the corridor.



Self-Generated Revenue

Revenues from farebox, parking, advertising, and other self-generated sources.



Value Capture

Mechanisms to capture and remit new economic value generated by the railroad.



Public Investment

Direct public investment into the railroad including member contributions as well as new federal, state, regional, and local funding streams.



Options to Fill the Funding Gap

Examples of specific funding strategies within each category are shown below.



Cost Sharing

- Capital cost allocation for projects with multiple beneficiaries
- Track access fees



Self-Generated Revenue

- Farebox
- Parking
- Advertising
- Naming rights
- Low Carbon Fuel Credits
- Utilities and digital Services



Value Capture

- Special assessment and taxes
- Tax increment financing
- Joint development
- Other developer Contributions



Public Investment

- Member contributions
- Existing county funding sources
- Regional measures
- Local sales taxes
- Public grants

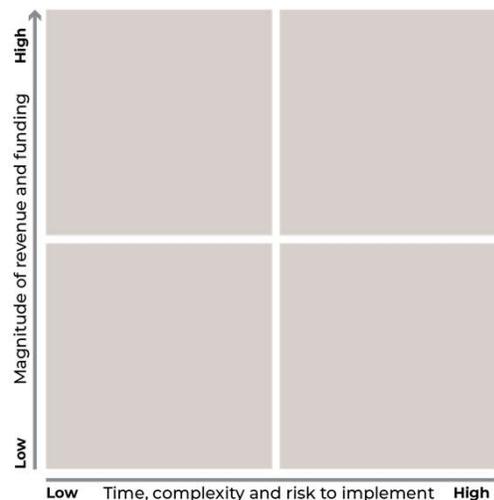


Filling the Gap

The various funding mechanisms shown vary widely – and many may not be ready for near-term implementation or may not have the potential to generate large-scale revenues.

In contemplating options to fill Caltrain's anticipated funding gap over the next 10 years, potential sources have been analyzed by two factors:

- Magnitude of potential dollar amount (Y axis)
- Time, complexity and risk associated with securing this funding (X axis)

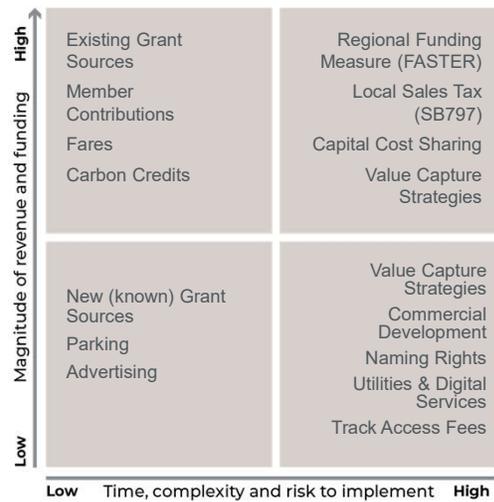


Filling the Gap

The upper quadrants are significant revenue sources, with increasing implementation complexity, time and/or risk to the right.

The lower quadrants are less significant revenue opportunities, with increasing implementation complexity, time and/or risk to the right.

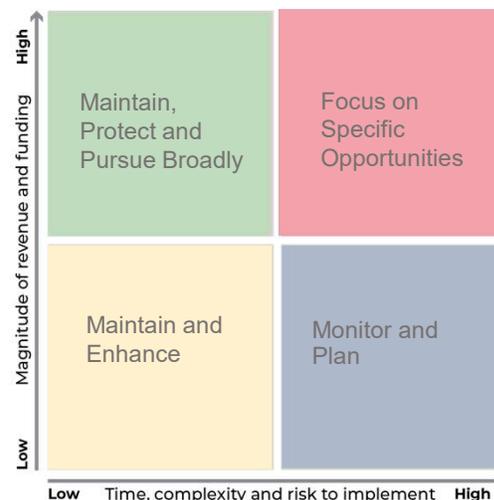
Examples of potential funding sources and revenues have been conceptually mapped to the four quadrants.



Developing a near- and mid-Term Strategy

Many different funding opportunities and strategies will need to be realized to achieve the 2040 Service Vision.

In the near- and medium term, however, the conceptual mapping of sources is helpful in developing plan of action as to where Caltrain should focus its immediate efforts and what sources can reasonably be assumed as part of a 10-year funding plan (where funding will need to be secured within a few years).



Near Term Options to Fill Funding Gap

Based on this analysis, the following strategies are recommended for consideration and inclusion as part of Caltrain's 10-year funding plan.



Cost Sharing

- Capital cost allocation
- Track access fees



Self-Generated Revenue

- Farebox
- Parking
- Advertising
- Naming rights
- Carbon credits
- Utilities and digital services



Value Capture

- Special assessment and taxes
- Tax increment financing
- Joint development
- Other developer Contributions



Public Investment

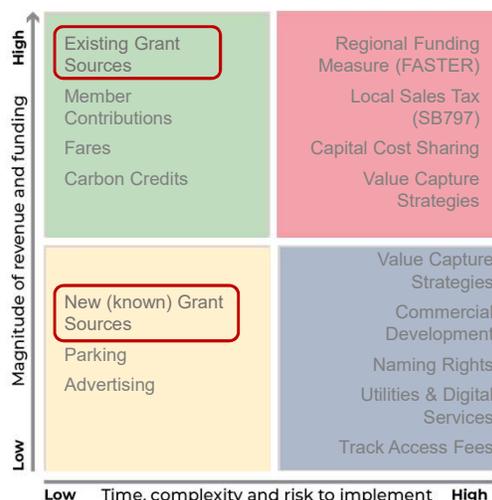
- Member contributions
- Regional measures
- Local sales taxes
- Public grants



Filling the Capital Gap -

To achieve the level of service contemplated in the "Enhanced Growth" path, up to \$1.6 billion in capex is needed from new funding sources over the next 10 years.

Existing grant sources are one potential source of funding for these enhancements



Filling the Capital Gap -

To achieve the level of service contemplated in the “Enhanced Growth” path, up to \$1.6 billion in capex is needed from new funding sources over the next 10 years.

Existing grant sources are one potential source of funding for these enhancements.

Known and Existing Sources	Considerations
Federal Programs (FTA and FRA)	Size of source and amount available
State Programs (Transit and Intercity Rail Capital Program, Solutions for Congested Corridors)	Individual grant eligibility and criteria
Regional Programs (Carl Moyer)	Competing with other, worthy projects
Local Measures (Measures K, A, W, B)	

For planning purposes Caltrain has conservatively assumed a 10-year total of \$200 million could be captured from existing grant sources. The remaining CapEx gap for the “Enhanced Growth” scenario would be:

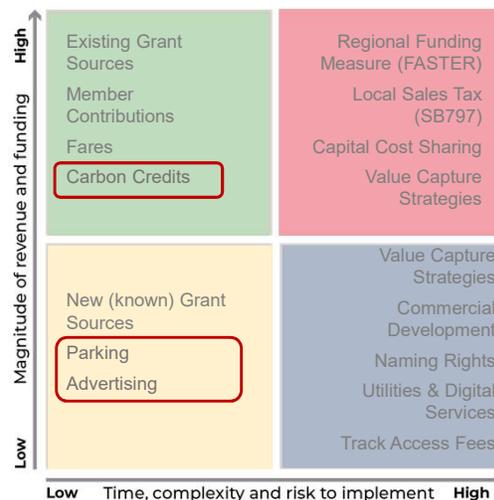
- \$1.4 billion (without Member Contributions)
- \$1.2 billion (with annual capital budget Member Contributions held constant at FY2020 levels)



Filling the O&M Gap -

To achieve the level of service contemplated in the “Enhanced Growth” path, an average of as much as \$80M a year in funding will be needed to support rail operations after 2023.

Over the next 10 years, Caltrain has several potential opportunities to increase operating revenues.



Filling the O&M Gap -

To achieve the level of service contemplated in the “Enhanced Growth” path, an average of as much as \$80M a year in funding will be needed to support rail operations after 2023.

Over the next 10 years, Caltrain has several potential opportunities to increase operating revenues.

Potential Near- and Mid-term Opportunities to increase annual operating revenue:

- Advertising \$1-\$2 million/year
- Parking \$3-6 million/year
- Carbon Credits \$10-\$30 million/year

For planning purposes Caltrain has assumed that an average of \$22 million a year can be generated by these sources. The remaining OpEx gap for the “Enhanced Growth” scenario would be:

- \$58 million gap a year (without Member Contributions)
- \$28 million gap a year (with Member Contributions held constant at FY2020 levels)



New Public Investment Required

Even after pursuing readily available sources of funding and revenue, Caltrain will need ongoing and new public investment to achieve the “enhanced growth” scenario and deliver its full potential over the next 10 years and beyond.

Projected Expense – Enhanced Growth	Funding Gap (No JPB Member Contributions Included)	Funding Gap (JPB Member Contributions Maintained at FY20 Levels)
Ongoing OpEX	\$58 million annually (average)	\$28 million annually (average)
Ongoing Annual Capital Needs	\$40 million annually (average)	\$20 million annually (average)
New Capital Investment	\$1 billion	\$1 billion



New Public Investment Required

If Caltrain were to only deliver the “Baseline CalMod” level of service the gap would be lower but a substantial unmet annual need for funding would still exist (even after pursuing readily available sources of funding and revenue)

Projected Expense – Baseline CalMod	Funding Gap (No JPB Member Contributions Included)	Funding Gap (JPB Member Contributions Maintained at FY20 Levels)
Ongoing OpEX	\$37 million annually (average)	\$7 million annually (average)
Ongoing Annual Capital Needs	\$40 million annually (average)	\$20 million annually (average)
New Capital Investment	N/A	N/A

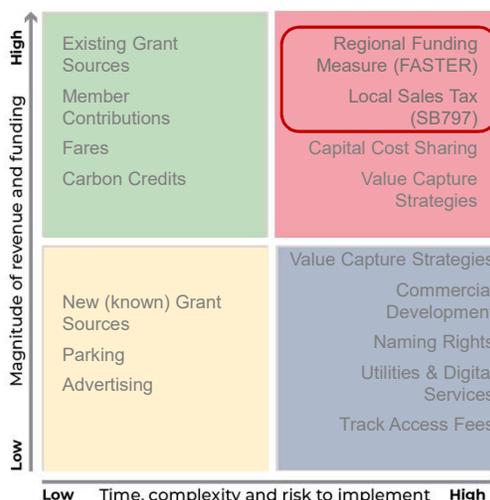


New Public Investment Required

Caltrain needs new public funding.

Realizing the full benefits of electrification and continue to grow the system to meet market demand will require investment from a source such as FASTER or SB 797.

Without this funding, Caltrain will not be able to provide the level of service the corridor needs and will face significant added demands on JPB member funding.



Connection to Plan Bay Area 2050

- The Metropolitan Transportation Commission (MTC) is in the process of preparing Plan Bay Area 2050, an update to the Bay Area's Regional Transportation Plan (RTP) and Sustainable Communities Strategy.
- During MTC's call for project submissions in fall 2019, the JPB submitted three projects, which corresponded to the three long-term "Growth Scenarios" developed through the Caltrain Business Plan.
- As MTC proceeds with the Plan Bay Area 2050 process, Caltrain staff plan to provide an updated project for the RTP that addresses performance concerns flagged by MTC and is better scaled to fit into the fiscally-constrained version of the plan MTC must ultimately adopt.
- Staff plans to develop an updated submittal that is consistent with the 'enhanced growth' scenario described while addressing other elements of the 2040 Long Range Service Vision in coordination with partner agencies and through programmatic categories in the RTP>



Work in Progress

Station Access Work Plan

The Business Plan presents an opportunity to evaluate Caltrain's current role in station access and how this role may need to change over time to support the service vision.

The Business Plan will provide a high-level assessment of potential paths forward at a system-level, but will not address investment needs at individual stations.



What role does Caltrain play in station access?

- Review existing programs and investments



What is Caltrain's station access vision?

- Consider several paths forward:
 - a. A hands-off approach
 - b. A proactive investment in parking
 - c. A proactive investment in multimodal access



How do we get there?

- Identify most pressing access needs and priorities



Equity Assessment Work Plan

The equity assessment is intended to help us understand how the Service Vision could improve equitable access to Caltrain and develop a series of policy interventions that would improve equitable access further.



Opportunities & Challenges

- Review of existing plans
- Stakeholder interviews
- Market assessment



Analysis of the Service Vision

- Qualitative & quantitative evaluation of the Service Vision



Recommendations

- Context-specific recommendations as outcomes from the analysis of the Service Vision and opportunities and challenges.



PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: JPB Board

THROUGH: Jim Hartnett
Executive Director

FROM: Seamus Murphy
Chief Communications Officer, Caltrain

SUBJECT: **SB797 Update**

ACTION

The Staff Coordinating Council (SCC) recommends that the Board receive an informational update on the progress related to Senate Bill (SB) 797.

SIGNIFICANCE

Since its inception, the JPB has had no dedicated source of funding other than passenger fares and, instead, relies on contributions from its Member Agencies to fill minimum financial requirements in its operating and capital budgets under two different funding formulas for capital costs. Each of the Member Agencies (a) contributes an equal amount of capital funding each year and (b) supplements operating funding based on the percentage of system ridership originating in each County. The levels of both capital and operating funding are determined by the funding capacity of the Member Agency with the least ability to provide its share of funding in any given year, and the amount that Member Agency can make available then becomes the standard against which the contributions of the other Member Agencies are calculated.

This approach fosters an uncertain financial and planning environment for the JPB, which is exacerbated by continually-escalating operating, maintenance and repair costs, thereby keeping the JPB from operating at service levels that meet the rising passenger demands for Caltrain service.

To provide a means to help address the JPB's financial challenges, Caltrain has been coordinating with the relevant seven-party agencies to place a sales tax measure on the November 2020 ballot. The presentation will provide a status update on these coordination efforts.

BUDGET IMPACT

There is no budget impact associated with receiving this update and presentation. Should a ballot measure pass in November 2020, significant resources would be available to the JPB.

BACKGROUND

In 2017 the Governor signed SB797, introduced by Senator Jerry Hill, authorizing the JPB to implement a new retail transactions and use tax of up to 0.125 percent in the three Counties served by Caltrain if (i) the Board of Directors of the JPB adopts a resolution submitting the measure to the voters, (ii) the measure is approved by the Boards of Supervisors in the Counties of Santa Clara, San Mateo and San Francisco, (iii) the measure is approved by a majority vote of the governing boards of the San Francisco Municipal Transportation Agency, the SMCTD, and VTA, and (iv) the tax is adopted by a two-thirds vote of the three Counties' voters.

Prepared by: Casey Fromson, Gov. and Community Affairs Director 650.508.6493



SB797 Update

JPB
March 2020

3-County 1/8-Cent Sales Tax

- 2/3 of total votes across all 3 counties
- Can exceed 2% local sales tax limit
- ~\$108 million/year for operating & capital needs
 - SFC ~\$26.5m; SMC ~\$25m; SCC ~\$56.5m

7 Agency Approval Process

Regional

1. Caltrain Board of Directors (2/3)

San Mateo County

2. Transit District Board of Directors
3. Board of Supervisors (2/3)

San Francisco

4. SFMTA Board of Directors
5. Board of Supervisors (2/3)

Santa Clara County

6. VTA Board of Directors
7. Board of Supervisors (2/3)

Projected Future Ridership

County	2017 Existing Service	2025 Initial Electrification	2040 Long Range Service Vision
San Francisco	17,010	23,130	59,280
	27%	27%	32%
San Mateo	18,740	27,230	50,090
	30%	31%	27%
Santa Clara County	26,330	36,080	75,330
	43%	42%	41%

Operating Contribution by County

County	FY20
San Francisco	\$8.1M
San Mateo	\$9.1M
Santa Clara	\$12.7M
TOTAL	\$29.9M

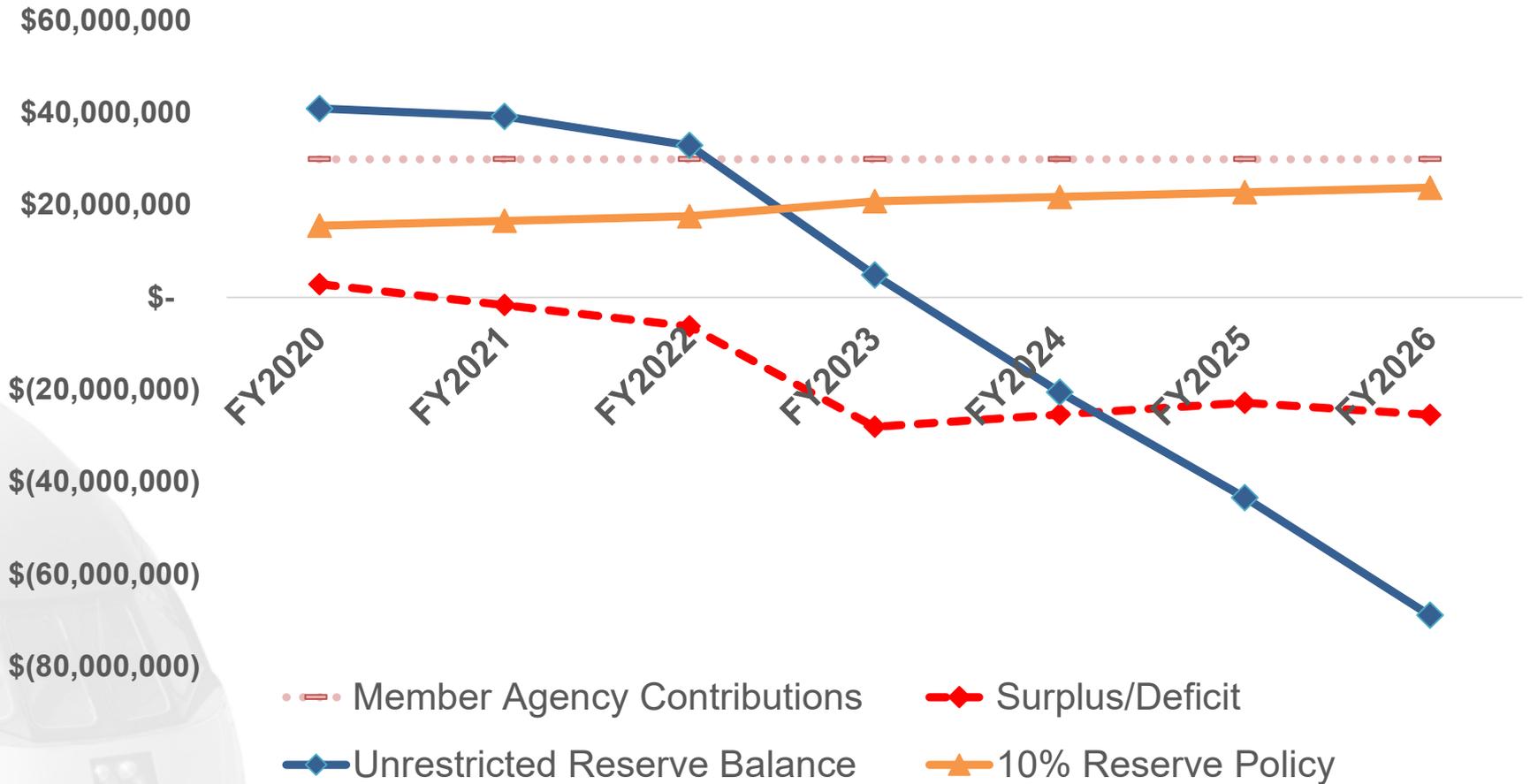
Capital Contribution by County

County	FY18	FY19	FY20
San Francisco	\$5.0M	\$7.5M	\$7.5M
San Mateo	\$5.0M	\$7.5M	\$7.5M
Santa Clara County	\$5.0M	\$7.5M	\$7.5M
TOTAL	\$15.0M	\$22.5M	\$22.5M

Combined Capital & Ops vs. Ridership

County	FY20	% of FY20	% of riders
San Francisco	\$15.6M	30%	27%
San Mateo	\$16.6M	32%	30%
Santa Clara County	\$20.2M	38%	43%
TOTAL	\$52.4M		

Projected Surplus/(Deficits)



Projections show the baseline scenario of 116 trains per day.

Baseline vs Enhanced Growth

Scenario	Service Description
Baseline Electrified CalMod	<ul style="list-style-type: none">• 6 tphpd during peak hours (4 hours per day)• Modest off-peak service increases• ~116 trains per day throughout the decade.• Increase to 4 round trips per day to Gilroy.
Enhanced Growth	<ul style="list-style-type: none">• 6 tphpd during peak hours (7-8 hours per day) increasing to 8 tphpd by late 2020s.• Expanded peak periods and off-peak service• ~168 trains per day increasing to 204 trains by the end of the decade.• Increase to at least 5 round trips per day to Gilroy

Info from the Caltrain Business Plan

Baseline Electrified Growth

Annual New Investment Required (No SB797)

Projected Expense – Baseline CalMod	Funding Gap (No JPB Member Contributions Included)	Funding Gap (JPB Member Contributions Maintained at FY20 Levels)
Ongoing OpEX	\$37 million annually (average)	\$7 million annually (average)
Ongoing Annual Capital (SOG) Needs	\$40 million annually (average)	\$20 million annually (average)
New Capital Investment	N/A	N/A

Member Agency Obligation

Annual New Investment by County (No SB797)

Member agency obligation (Op & Annual Capital SOGR)	Today	Electrified Baseline (Other revenues assumed)
San Francisco	\$15.6M	\$23.4M
San Mateo	\$16.6M	\$24.9M
Santa Clara County	\$20.2M	\$28.9M
Annually Total	\$52.4M	\$77M

Enhanced Growth

New Annual Investment Required (No SB797)

Projected Expense – Enhanced Growth	Funding Gap (No JPB Member Contributions Included)	Funding Gap (JPB Member Contributions Maintained at FY20 Levels)
Ongoing OpEX	\$58 million annually (average)	\$28 million annually (average)
Ongoing Annual Capital (SOGR) Needs	\$40 million annually (average)	\$20 million annually (average)
New Capital Investment	\$1 billion	\$1 billion

SB797 passed: capital funds available, after Op and Annual Cap (SOGR)	\$300 million	\$1.8 billion
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Expenditure Plan Summary

- Revenues prioritized:
 - Operations and annual capital (state of good repair) needs
 - Capital – infrastructure and rolling stock to advance the expansion of the Caltrain peak hour service to 8 trains per hour, per direction as well as the expansion of service on the Gilroy extension to a minimum of five roundtrip per day
 - Equity Benefits
- Revenues will also be eligible to help advance capital projects necessary to implement the Caltrain Business Plan's 2040 Service Vision

Timeline*

	January	February	March	April	May	June	July	August
JPB		Feb 26 - WPLP Subcommittee Info	March 5 - JPB Info	April 22 - WPLP Action	May 7 - JPB Action			8/7/2020 Place Measure on Ballot
SFMTA				April 21 - Action				
VTA				4/8/2020 to 4/17/2020 - Committees Info	5/13/2020 to 5/21/2020 - Committee Rec Board Action	6/4/2020 - Board Action		
SMCTD		Feb 5 – Info		April 1 – Action				

*Subject to Change

Timeline Continued*

	Jan	Feb	March	April	May	June	July	August
CCSF BOS (must act after SFMTA)						June 2 Introduced and assigned to committee	July 9 Committee Action July 21 BOS Action	
SCC BOS				April 21 Last Day to Direct County Administration to draft a report		June 2 Report presented to BOS and introduced June 16 BOS Action		
SMC BOS			March 24 - Info	April 14 - Action				

8/7/2020
Place
Measure
on Ballot

*Subject to Change

Questions/Comments

**PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT**

TO: Joint Powers Board

FROM: Jim Hartnett
Executive Director

SUBJECT: **RETENTION OF SPECIAL COUNSEL FOR GOVERNANCE MATTERS**

ACTION

The Special Counsel Ad Hoc Committee recommends that the Board:

1. Select Olsen Remcho, LLP to serve as special counsel to the Peninsula Corridor Joint Powers Board (JPB) (a) related to Caltrain governance matters identified in Section 7 of Chapter 4 of the Organizational Assessment prepared for the Caltrain Business Plan, and (b) for matters in which the JPB's General Counsel, Hanson Bridgett LLP, has a conflict of interest related to the San Mateo County Transit District (District) as defined under Rule 1.7 of the California Rules of Professional Conduct (Special Counsel Services);
2. Authorize the Executive Director to execute an agreement with Olsen Remcho, LLP to provide the Special Counsel Services in an amount not to exceed \$250,000; and
3. Direct staff to facilitate an agreement between the District, Santa Clara Valley Transportation Authority (VTA) and City and County of San Francisco (CCSF) under which each of the JPB's three member agencies would contribute \$83,333 to the JPB to fund the Special Counsel Services.

SIGNIFICANCE

Award of a contract for Special Counsel Services will provide the JPB with access to legal counsel, which is not also general counsel for any of the JPB's member agencies or major funding partners, for the next phase of governance-related work being conducted as part of the Organizational Assessment within the Caltrain Business Plan. The selected attorneys also will be available to assist with matters in which Hanson Bridgett has a conflict arising from its representation of the District.

Additional information on the Special Counsel Ad Hoc Committee's recommendation is provided in the attached memorandum from JPB Chair Dave Pine.

BUDGET IMPACT

The Board has established a budget in an amount not to exceed \$250,000 for the Special Legal Counsel services. The JPB's three member agencies have agreed to share equally in the cost of these services and each agency will contribute \$83,333 toward the budget above pursuant to agreements to be executed.

BACKGROUND

In 2017, the JPB secured full funding for the Peninsula Corridor Electrification Project and issued notices to proceed to its contractors for corridor electrification and purchase of Electric Multiple Unit railcars. Now that construction on this long-awaited project is underway, the agency has the opportunity to articulate a long-term business strategy for the future of the system. The initial concept for a Caltrain "Business Plan" was brought to the Board of Directors (Board) in April of 2017. The Board reviewed a draft scope of work for the Business Plan in December of 2017 and adopted a final Business Strategy and Scope of Work in February of 2018. Technical work on the Plan commenced in the summer of 2018. The Business Plan has been scoped to include long-range demand modeling, and service and infrastructure planning, as well as organizational analysis and an assessment of Caltrain's interface with the communities it traverses.

An Organizational Assessment work stream is a distinct component of the overall Caltrain Business Plan process and has been enabled through a partnership with Stanford University, entered into by the JPB in the spring of 2018. The report has been researched and written by Howard Permut of Permut Consulting LLC, under contract to Stanford University and with assistance from the Stanford Global Projects Center as well as other outside experts. The report presents research, analysis and recommendations across a spectrum of organizational areas including service delivery, internal organization and governance.

The draft report, which includes several alternative governance and administrative structures, was presented to the Board for the first time on August 1, 2019 with the understanding that further direction on the Organizational Assessment would be based on Board discussion and stakeholder outreach.

The Board held a special meeting on November 21, 2019 to respond to and discuss in more detail the Organizational Assessment and alternatives provided therein for changing JPB governance and/or administration. In light of Hanson Bridgett's concurrent general counsel representation of the JPB and the District, and the firm's work as special counsel for the other two member agencies of the JPB on unrelated matters, it is foreseeable that legal conflicts may interfere with Hanson Bridgett's ability to represent the JPB (or its member agencies) in the next steps of evaluating and possibly pursuing governance changes as contemplated in Section 7, Chapter 4 of the Organizational Assessment. Accordingly, staff and the Board agreed that the JPB should obtain special counsel for work on this matter and for other matters that give rise to a conflict of interest for Hanson Bridgett resulting from its relationship with the JPB and the District under the Rules of Professional Conduct applicable to all licensed attorneys practicing in California.

On December 5, 2019, the Board directed staff to issue a Letter Request for Proposals (Letter RFP) to a short list of attorneys for Special Counsel Services. Staff issued the Letter RFP on December 13, 2019 to 15 potential proposers following consultation with legal counsel to each of the member agencies (including the San Francisco City Attorney's office); the County Counsels of San Mateo and Santa Clara Counties; and

other resources. Six proposals were submitted by the deadline; a seventh proposal was submitted late and was not considered.

The Special Counsel Ad Hoc Committee, consisting of Directors Stone, Walton and Director Chavez, with Chair Pine as ex officio, evaluated the proposals based upon (a) the degree to which respondents understand the desired services; (b) respondents' applicable qualifications and capacity; (c) their experience dealing with joint powers agencies as well as issues that intersect law and politics; and (d) the cost of their services. The Special Counsel Ad Hoc Committee interviewed the top four proposers and the members unanimously selected Olsen Remcho, LLP as their recommendation for the award of contract for Special Counsel Services.

Prepared by: Jim Hartnett, Executive Director

650.508.6221

MEMO FROM SPECIAL COUNSEL AD HOC COMMITTEE

TO: JPB Board

FROM: Chair, Dave Pine, on behalf of Special Legal Counsel Ad Hoc Committee
(Directors Pine, Chavez, Walton and Stone)

DATE: February 24, 2020

RE: Recommendation of Firm for Retention as Special Legal Counsel

At the Board meeting on December 5, 2019, the Board authorized staff to issue a Request for Proposals for retention of Special Legal Counsel as described in more detail in the staff report accompanying this memo. Concurrently, a Special Legal Counsel Ad Hoc Committee consisting of Directors Pine, Chavez, Walton and Stone was established to work with staff, review the responses to the RFP and recommend a Special Counsel to the Board.

The Ad Hoc Committee is pleased to unanimously recommend that Olson Remcho, LLP be retained as Special Legal Counsel to the Board.

Background

Following the December Board meeting, Executive Director Hartnett solicited recommendations for names of attorneys or firms to provide Special Counsel services from, among others, the City Attorney office of the City and County of San Francisco, the General Counsel of the SFCTA, General Counsel of VTA, San Mateo County Counsel's office and JPB Board Members. An RFP was prepared and sent to 15 firms. Six firms responded within the established response time. The Ad Hoc Committee met to review and discuss the responses, and decided to interview four firms.

Interviews were conducted on Saturday, February 15 and Friday, February 21. One or more reference checks were made for each firm.

Recommendation

The Ad Hoc Committee unanimously recommends the retention of Olson Remcho, LLP of Oakland, California, as Special Legal Counsel to the JPB. The firm (21 attorneys) and assigned attorneys were found to have exceptional background and experience as well as reasonable hourly rates (\$325 to \$475). The lead attorney for the firm for these services is Robin Johansen, who will be assisted by Thomas Willis and James Harrison. Ms. Johansen has over 40 years of experience and Mr. Willis and Mr. Harrison each have over 25 years of experience advising public agencies.

The firm has extensive experience working with cities, counties, public agencies, the State of California and joint powers agencies on a host of governance, ethics, administrative code changes, legislative (drafting and litigation) and election law issues. Representative clients include the San Francisco Bay Restoration Authority, AC Transit, California Independent Systems Operator, EBMUD, CalPERS, CalSTRS and the Metropolitan Water District of Southern California.

We were impressed and pleased with the number, quality, background and diverse experience of the firms which responded to the RFP and the attorneys that were interviewed. We believe that Olson Remcho, LLP is best suited for the services required as Special Counsel, and that the firm has the capacity and time to provide the services.

RESOLUTION NO. 2020 – 10

**BOARD OF DIRECTORS, PENINSULA CORRIDOR JOINT POWERS BOARD
STATE OF CALIFORNIA**

* * *

**AWARDING A CONTRACT TO OLSON REMCHO, LLP FOR SPECIAL COUNSEL SERVICES AT
A COST NOT TO EXCEED \$250,000**

WHEREAS, the Peninsula Corridor Joint Powers Board (JPB) is a joint exercise of powers authority duly formed pursuant to Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code of the State of California and the joint powers agreement by and between the City and County of San Francisco, the San Mateo County Transit District, and the Santa Clara Valley Transportation Authority (together, the JPB's "Member Agencies"), which was restated and amended as of October 3, 1996; and

WHEREAS, the Caltrain rail service provides mobility to approximately 65,000 riders a day along the spine of the Bay Area Peninsula and helps to fuel the dynamic economy in the area known as the Silicon Valley; and

WHEREAS, to prepare for the further modernization and expansion of the Caltrain rail service once electrified, the JPB, working closely with stakeholders in both the public and private sectors, launched a significant undertaking in 2017 to develop a Caltrain Business Plan to articulate a long-term vision and business strategy for the system to the year 2040, including long-range demand modeling, and service and infrastructure planning, as well as organizational analysis and an assessment of Caltrain's interface with the communities it traverses; and

WHEREAS, at its meeting on August 1, 2019, the Caltrain Business Plan project team presented the JPB Board of Directors (Board) with three long range scenarios for

growth of the Caltrain rail service through 2040 and a draft Organizational Assessment report, including several alternative governance and administrative structures, with the understanding that further direction on the Organizational Assessment would be based on Board discussion and stakeholder outreach; and

WHEREAS, on October 3, 2019, pursuant to Resolution No. 2019-38 the JPB adopted the Caltrain 2040 Long Range Service Vision and acknowledged the ongoing work of the JPB and its Member Agencies to prepare for its implementation by evolving the organization in a manner to enable delivery of the Service Vision and by seeking the new and dedicated funding sources needed to sustain and support the Service Vision; and

WHEREAS, the Board held a special meeting on November 21, 2019 to respond to and discuss in more detail the Organizational Assessment and alternatives provided therein for changing JPB governance and/or administration; and

WHEREAS, in light of Hanson Bridgett, LLP's concurrent general counsel representation of the JPB and the San Mateo County Transit District (District), and the firm's work as special counsel for the other two Member Agencies on unrelated matters, it is foreseeable that legal conflicts may interfere with Hanson Bridgett's ability to represent the JPB (or its Member Agencies) in the next steps of evaluating and possibly pursuing governance changes as contemplated in Section 7, Chapter 4 of the Organizational Assessment; and

WHEREAS, accordingly, staff and the Board agreed that the JPB should obtain special counsel for work on the JPB governance matter and for other matters that give rise to a conflict of interest for Hanson Bridgett given its relationship between the JPB and the District under the Rules of Professional Conduct applicable to all licensed

attorneys practicing in California (Special Counsel Services); and

WHEREAS, consistent with direction provided by the Board on December 5, 2019, JPB staff issued a Letter Request for Proposals (Letter RFP) to a short list of attorneys for Special Counsel Services, resulting in the receipt of six timely proposals; and

WHEREAS, following review of the six proposals and interviews with the top four proposers, a Special Counsel Ad Hoc Committee of the Board unanimously selected Olsen Remcho, LLP as its recommendation for the award of contract for Special Counsel Services; and

WHEREAS, the Special Counsel Ad Hoc Committee now recommends that the Board:

1. Select Olsen Remcho, LLP to serve as special counsel to the Peninsula Corridor Joint Powers Board related to the Special Counsel Services;
2. Authorize the Executive Director to execute an agreement with Olsen Remcho, LLP to provide the Special Counsel Services in an amount not to exceed \$250,000; and
3. Direct staff to facilitate an agreement between the District, Santa Clara Valley Transportation Authority and City and County of San Francisco under which each of the Member Agencies will contribute \$83,333 to the JPB to fund the Special Counsel Services.

NOW, THEREFORE BE IT RESOLVED that the Board of Directors of the Peninsula Corridor Joint Powers Board hereby takes the three recommended actions enumerated above.

Regularly passed and adopted this 5th day of March, 2020 by the following vote:

AYES:

NOES:

ABSENT:

Chair, Peninsula Corridor Joint Powers Board

ATTEST:

JPB Secretary