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

Due to COVID-19, this meeting will be conducted via teleconference only (no physical location) pursuant to the <u>Governor's Executive Orders N-25-20 and N-29-20</u>. Directors, staff and the public may participate remotely via Zoom at <u>https://zoom.us/j/98417559271</u> for audio/visual capability or by calling 1-669-900-9128, Webinar ID: **#984 1755 9271** for audio only. The video live stream will be available during or after the meeting at <u>http://www.caltrain.com/about/bod/video.html</u>

Public Comments: Members of the public are encouraged to participate remotely. Public comments may be submitted to <u>publiccomment@caltrain.com</u> prior to the meeting's call to order so that they can be sent to the Board as soon as possible, while those received during or after an agenda item is heard will be included into the Board's weekly correspondence and posted online at <u>http://www.caltrain.com/about/bod/Board of Directors Meeting Calendar.html</u>. Oral public comments will also be accepted during the meeting through Zoom or the teleconference number listed above. Public comments on individual agenda items are limited to one per person PER AGENDA ITEM and each commenter will be automatically notified when they are unmuted to speak for two minutes or less. The Board Chair shall have the discretion to manage the Public Comment process in a manner that achieves the purpose of public communication and assures the orderly conduct of the meeting.

## <u>May 7, 2020 – Thursday</u>

- 1. Call to Order / Pledge of Allegiance
- 2. Roll Call
- 3. 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.

## 4. Consent Calendar

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

a. Approve Regular Meeting Minutes of April 2, 2020

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



## <u>9:00 am</u>

MOTION

	b. Receive Key Caltrain Performance Statistics	MOTION
	c. Receive State and Federal Legislative Update	INFORMATIONAL
Ap	proved by the Finance Committee	
	d. Accept Statement of Revenues and Expenditures for March 2020	MOTION
	e. Award of Contracts for On-Call Transportation Planning & Support Services	RESOLUTION
Ap	proved by the Work Program-Legislative-Planning Committee	
	f. Caltrain Business Plan - Update Covering April 2020	INFORMATIONAL
5.	Report of the Chair	
	a. Report of the Governance Ad-Hoc Committee	INFORMATIONAL
6.	Report of the Executive Director	
	a. COVID – 19 Update	INFORMATIONAL
	b. Authorize the Executive Director to Apply for Emergency Funds and Exercise Certain Emergency Powers in Response to the Covid-19 Pandemic	RESOLUTIONS
	c. Peninsula Corridor Electrification Project (PCEP) Monthly Progress Report	INFORMATIONAL
	d. Monthly Report on Positive Train Control (PTC) Project	INFORMATIONAL
7.	Report of the Citizens Advisory Committee	
8.	Report of the Work Program-Legislative–Planning (WPLP) Committee	INFORMATIONAL
	a. Update on Downtown Extension and Related San Francisco Planning Efforts	INFORMATIONAL
9.	Correspondence	

- 10. Board Member Requests
- 11. General Counsel Report
- Closed Session (via confidential teleconference number) Government Closed Session: Conference with Legal Counsel—Existing Litigation Code Section 54956.9(d)(1) Parsons Transportation Group v. Peninsula Corridor Joint Powers Board et al; San Mateo County Superior Court Case No. Case No. 17CIV00786 (lead)
- Date/Time of Next Regular Meeting: Thursday, June 4, 2020 at 9:00 am, via Zoom teleconference or at the San Mateo County Transit District Administrative Building, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA
- 14. 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 <u>www.caltrain.com</u>. Communications to the Board of Directors can be e-mailed 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

## Date and Time of Board and Committee Meetings

JPB Board: First Thursday of the month, 9:00 am; JPB Finance Committee: Fourth Monday of the month, 2:30 pm. Date, time and location of meetings may be changed as necessary. Meeting schedules for the Board and committees are available on the website.

#### Location of Meeting

#### Due to COVID-19, the meeting will only be via teleconference as per the information provided at the top of the agenda. The Public may not attend this meeting in person.

#### Public Comment\*

Members of the public are encouraged to participate remotely. Public comments may be submitted to publiccomment@caltrain.com prior to the meeting's call to order so that they can be sent to the Board as soon as possible, while those received during or after an agenda item is heard will be included into the Board's weekly correspondence and posted online at http://www.caltrain.com/about/bod/Board of Directors Meeting Calendar.html. Oral public comments will also be accepted during the meeting through Zoom or the teleconference number listed above. Public comments on individual agenda items are limited to one per person PER AGENDA ITEM and each commenter will be automatically notified when they are unmuted to speak for two minutes or less. The Board Chair shall have the discretion to manage the Public Comment process in a manner that achieves the purpose of public communication and assures the orderly conduct of the meeting.

#### Accessible Public Meetings/Translation

Upon request, the JPB will provide for written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in and provide comments at/related to public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, auxiliary aid, service or alternative format requested at least 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 Meeting 1250 San Carlos Avenue, San Carlos CA

## MINUTES OF APRIL 2, 2020

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

MEMBERS ABSENT: C. Chavez

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

## 1. CALL TO ORDER / PLEDGE OF ALLEGIANCE

Chair Dave Pine called the meeting to order at 9:07 am.

## 2. ROLL CALL

District Secretary Seamans called the roll and confirmed a quorum.

#### 3. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA

Roland Lebrun, Ryan Snow, Sacramento, remarked on masks for operating crews.

Roland Lebrun, San Jose, commented on Government Code Section 54954.3, SB 797, and AB 1847.

Adina Levin, Friends of Caltrain, commented on SB797 and equity in expenditures and policies.

Joan Cassman, Legal Counsel, assured the Board that this meeting was in compliance with the Brown Act as the Governor has recognized both telephonic and electronic comments can be received by public agencies as they navigate virtual meetings and there are two ways to submit written comments.

## 4. CONSENT CALENDAR

Public Comment

Roland Lebrun, San Jose, commented on Caltrain Business Plan and Revenues and Expenses.

Motion/Second: Davis/Bruins approved the Consent Calendar, as follows: Ayes: Bruins, Collins, Heminger, Stone, Walton, Zmuda, Davis, Pine Noes: None Absent: Chavez

- a. Approve Meeting Minutes of March 5, 2020
- b. Receive Key Caltrain Performance Statistics
- c. Receive State and Federal Legislative Update

- d. Caltrain Business Plan Update Covering March 2020
- e. Accept Statement of Revenues and Expenditures for February 2020
- f. Agree with Sprint for the Relocation of Communication Facilities for the South San Francisco Station Improvement Project
- g. Authorize Application for San Mateo County Shuttle Program Funds
- h. Award Contract for MP36PH-3C Locomotives Mid-Life Overhaul Services

## 5. REPORT OF THE CHAIR

Chair Pine thanked Caltrain and Samtrans staff for rising to the occasion in these extraordinary times to address COVID-19 while keeping other projects going. He announced new appointments which include Director Monique Zmuda joining the Work Program – Legislative – Planning (WPLP) Committee and Director Steve Heminger joining the Peninsula Corridor Electrification Project (PCEP) and Caltrain Dedicated Funding Ad Hoc Committees. Chair Pine announced the continuance of 1/8<sup>th</sup> sales tax measure and that it was approved by the Samtrans Board recently. He said Mr. Hartnett's review was completed, Samtrans and Caltrain Boards were please with Mr. Hartnett's performance and feel fortunate to have him heading Board efforts, particularly in times of crises. Mr. Hartnett was awarded performance pay and 3% pay increase, but deferred until after COVID-19 circumstances have passed.

## 6. REPORT OF THE EXECUTIVE DIRECTOR

Jim Hartnett, Executive Director, acknowledged extenuating times and Caltrain's move to provide essential mobility services for those permitted to travel. He noted the dramatic decrease in a revenue dependent agency, and said that they were working on obtaining federal funds from the package recently passed. Mr. Hartnett said the Metropolitan Transportation Commission's (MTC) next meeting was April 22<sup>nd</sup>, with requests to meet earlier to recommend stimulus distribution in a timely manner. He expressed particular gratitude for Speaker Pelosi and MTC for addressing stimulus needs in the Bay Area.

## a. COVID-19 Status Update

Michelle Bouchard, Chief Operating Officer, Rail, provided an update on ridership and service level impacts. She stated that trains were reduced from 90 to 42 trains to match the substantial decrease in demand and said there were still weekend trains providing essential services while meeting physical distancing requirements. Ms. Bouchard noted that these reductions have implications for the workforce, but they have been working with TASI to retain workers, including Capital work, until these circumstances have lifted.

Derek Hansel, Chief Financial Officer, provided an update, he indicated a revenue drop of \$8M a month, with the loss of ridership causing substantial impact. Mr. Hansel said there was some financial liquidity due to GoPass sales earlier in the year which would cover March and April, but May would be challenging without federal funding. He said they have pulled \$10M from the \$30M line of credit with JP Morgan with plans for a \$15M draw. Mr. Hansel remarked that this reads like a global natural disaster in terms of its economic impact, with unemployment unprecedently tripled in a three week period.

Mr. Hartnett stated that there a currently no cases of Corona virus in the agency, that they are following protocols from the CDC, and performing construction under the

'essential governmental functions' exemption. He said active projects (including PCEP, 25<sup>th</sup> Ave grade separation, SSF rehabilitation project), required such designation to continue work under current orders. He mentioned that some other works are qualified under this exemption as well.

Chair Pine requested the PCEP ad hoc committee convene a meeting to review the list of projects with Mr. Hartnett and provide the Board guidance regarding code Section 13(f) designating public works projects as essential government functions.

Board members had a robust discussion and staff provided further clarification in response to the Board comments and questions.

## b. Peninsula Corridor Electrification Project Monthly Progress Report

Mr. Funghi provided an update on current and ongoing projects; highlights include Balford Beatty taking full advantage of an increased work window, appreciation of the essential project designation, identifying a targeted work scope, installing duct bank at congested control points and starting off-track foundations. His update included traction powered station work, advancing the Redwood City switching station, paused & resumed PG&E work due to COVID-19, and overhead catenary tunnel modification work. Mr. Funghi thanked Samtrans for the weekend bus bridge service and mentioned not one complaint. He mentioned the first operational test scheduled for this month, has been placed on hold until flight restriction from Switzerland are lifted. Mr. Funghi reported that the train assemblies both here and in Europe remain on schedule. He said currently they have \$209M in contingency with \$171M required by the FTA at this stage of project development.

Chair Pine requested the PCEP ad hoc committee convene next week to review which projects fit the essential government functions category, review safety procedures on construction projects, and discuss opportunities to advance electrification project/train schedule.

Board members had a robust discussion and staff provided further clarification in response to the Board comments and questions.

## c. Monthly Report on Positive Train Control Project

Michelle Bouchard, Chief Operating Officer, Rail, informed the Board that the team has been in RSD (Revenue Service Demonstration) and completely operable on their own as well as on the UP Corridor for several months now. She said the next milestone is submittal of the Safety Plan which includes all of the data from revenue service demonstration trips taken to date, which will be assessed by the U.S. Department of Transportation -Federal Railroad Administration (FRA) for safety certification required legally by December 2020. Working with the in-house safety team and Wabtec, Ms. Bouchard is confident the plan will be submitted by June this year, which would allow the FRA six months to review the plan. This agreement would come back to the Board late summer/fall.

Director Heminger inquired about the project coming in at or under budget as indicated by the packet and whether the dispute with the contractor as to who owes a big sum of money was included in the data or whether this was discussed in closed session.

Mr. Hartnett clarified that what was in the packet indicated doing the project with Wabtec and it is a separate issue with the Parson's Transportation Group dispute and who owes what to whom. Mr. Hartnett said this would be reported out separately in closed session. Director Heminger asked if it would be appropriate to have such a closed session sometime soon. Mr. Hartnett said we could have this at the next Board meeting.

#### Public Comment

Andy Chow, Redwood City, commented on formal planning procedures and supplying face masks.

Roland Lebrun, San Jose, commented on TASI headcount, train schedules, and PCEP line of credit.

Aleta Dupree, Oakland, commented on foundations.

Boris commented on COVID-19 responses.

Ryan commented on precautions to protect the crews and public.

Jeff Carter, Millbrae, commented on ridership data availability.

## 7. REPORT OF THE WORK PROGRAM-LEGISLATIVE-PLANNING (WPLP) COMMITTEE a. Update on 25<sup>th</sup> Ave Grade Separation/Hillsdale Station Closure

Ms. Bouchard introduced the item, stating that it reached major milestones. She said key features of the construction program is the need to demobilize the Hillsdale Station while serving connection to Belmont.

Rafael Bolon, Project Manager, Engineering & Construction, provided a brief update on the project; highlights included building two new vehicular crossings to improve East-West connectivity, as well as pedestrian and bicycle paths. Mr. Bolon said it is ultimately a safety improvement project and station closure would start May 16<sup>th</sup> for 6 months with Belmont station 'acting' as Hillsdale station for the interim. He mentioned the parking track was part of the original project built, with a separate contract, at the same time as the grade separation.

Chair Pine thanked Casey Fromson and team for their outreach efforts.

Mr. Hartnett added that the Mayor of San Mateo played a positive and constructive role in this circumstance, holding Samtrans accountable and acting for the common interest.

## Public Comment

Anonymous commented on lack of social distancing on buses

Roland Lebrun commented on passing tracks at Hillsdale and Hayward Park.

Board members had a discussion and staff provided further clarification in response to the Board comments and questions.

## 8. REPLACE FUEL HEDGING POLICY WITH NEW DIESEL FUEL HEDGING PROGRAM AND STATEMENT OF POLICY

Derek Hansel, Chief Financial Officer, provided a presentation on the fuel stabilization program. He explained fuel hedging as a limit to the volatility of fuel pricing by purchasing diesel future contracts in the open market. Mr. Hansel compared this to previous actions of purchasing custom caps and explained that hedging would narrow the range of expected costs and reduce risk. He clarified that they are purchasing now due to lowered diesel prices for the past decade.

Board members had a robust discussion and staff provided further clarification in response to the Board comments and questions.

## Public comment

Roland Lebrun, San Jose, commented on Caltrain and Samtrans participation in fuel hedging.

Director Walton left at 11:16 a.m.

#### Approved by Resolution 2020-16, Adopt a new diesel fuel hedging program

Motion/Second: Davis/Stone moved for staff recommendation Ayes: Bruins, Collins, Heminger, Stone, Zmuda, Davis, Pine Noes: None Absent: Chavez, Walton

## 9. CORRESPONDENCE

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

## **10. BOARD MEMBER REQUESTS**

None.

## 11. GENERAL COUNSEL REPORT

Joan Cassman, General Counsel, introduced the closed session, including private phone line and access code for Board members and instructions to close Zoom to preserve confidentiality.

The Board convened in closed session at 11:17 a.m.

 a. Closed Session: Conference with Real Property Negotiators Property: 2121 South El Camino Real, San Mateo California Pursuant to Government Code Section 54956.8. Agency Negotiators: Joan Cassman, General Counsel, Brian Fitzpatrick, Director of Real Estate Program, and Gary Cardona, Manager, Capital Project Support & Property Management

Negotiating parties: LPC West, Inc. and RREF III-P Tower Plaza, LLC Under Negotiation: Lease price and terms of payment

The Board reconvened in open session at 11:40 a.m. Ms. Cassman reported that the Board has considered the resolution any was ready for a vote.

#### Public Comment

Roland Lebrun, San Jose, commented on PCEP contingency funding used for the lease extension.

Director Davis clarified that closed session revealed the money for PCEP lease renewal will be coming from regular funds, not contingency funds.

# Approved by Resolution 2020-15, Authorizing the Execution of a One-Year Extension to, and Amendment of, the Lease for the PCEP Office Rental Property at 2121 S. El Camino Real in San Mateo etc

Motion/Second: Collins/Stone Ayes: Davis, Bruins, Collins, Heminger, Stone, Zmuda, Pine Noes: None Absent: Chavez, Walton

**12. DATE/TIME OF NEXT REGULAR MEETING:** Thursday, May 7, 2020 at 9:00 am, San Mateo County Transit District Administrative Building, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA

## 13. ADJOURN

The meeting adjourned at 11:44 am.

An audio/video recording of this meeting is available online at <u>www.caltrain.com</u>. Questions may be referred to the Board Secretary's office by phone at 650.508.6242 or by email to <u>board@caltrain.com</u>.

## AGENDA ITEM #4b MAY 7, 2020

## 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 – MARCH 2020

As reported previously to the Board, the coronavirus pandemic has had drastic impacts to Caltrain ridership and revenue. The March report would be the first month showing these impacts. The typical revenue-based methodology for estimating ridership is inadequate to describe these impacts. As a result, performance reporting for this month will take place under the Executive Director's report.

## AGENDA ITEM #4c MAY 7, 2020

## 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

## <u>ACTION</u>

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 650-508-6493 Community Affairs Director





April 10, 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 – April 2020

As the COVID-19 crisis deepens, it appears that California's proactive approach may be working. Experts have expressed cautious optimism that California's shelter in place order is "bending the curve" as the Governor had hoped. In discussing this earlier in the week, Governor Newsom warned that continuing to adhere to the state's orders would be essential and that more work was needed to ensure an adequate number of hospital beds are available in the coming weeks.

## Schedule and Return of the Legislature

The Legislature's unprecedented initial choice to recess its regular session until at least April 13 in response to COVID-19 has put the Legislature's schedule for the remainder of the year into question.

On April 3, the Pro Tem and Speaker announced that the Legislature will now plan to return on May 4. Given that California cases are modeled to peak in Mid-May, it is possible that they will not return until June.

Meanwhile, the Senate President Pro Tem and Assembly Speaker announced yesterday that they would begin conducting oversight hearings of the Governor's activities. While the leaders were careful to express confidence in the Governor's approach, they noted that they promised to provide oversight prior to recessing on March 16. In making the announcement, the Pro Tem and Speaker stated that the hearings would occur in advance of the Legislature returning to session and that no decision had been made on the format of the meeting given COVID-19. With tens of thousands of Californians tuning in to watch the Governor's press conference live every day and many more seeing it on their own time on local news, we expect legislators to be cautious in their approach to oversight since the Governor has been making the case for his investments directly to their constituents.

The bigger question is how the Legislature's recess will affect its workload for the remainder of the year. As we are in the second year of a two-year session, the Constitution requires that the Legislature finish its business and adjourn its regular

session "sine die" by August 31. Consequently, we believe it is likely that legislators will curtail their bill packages and choose to limit themselves to "essential business" once they return. Other than COVID-19, subject areas frequently cited as "essential" include housing, wildfires, and power shutoffs. Some, but not all, Assembly policy committees have already asked legislators to curtail their bill load and warned that only bills addressing immediate needs related to COVID-19 or other "essential" issues would be heard. In fact, to lead by example, several Chairs have already "pulled" their bills so they will not be heard.

Another important factor is the state's financial situation. The state will be facing a massive fiscal challenge in the years ahead. We believe that regardless of how much legislators voluntarily "give up" bills, the state's financial situation will make it harder to pass bills with any significant costs to the state.

All of that said, Assembly and Senate Leadership have made no formal decisions on how to manage their workload. Any decision they do make will likely be heavily influenced by when the Legislature is able to return.

## **Budget Update**

While on paper the state is on sturdy ground financially, the economic impact of COVID-19 represents an unprecedented challenge. Observers have often compared California's tax revenues, which rely heavily on high income earners and capital gains, to a roller coaster. It is easy to project, therefore, that the rapid economic downturn will result in an equally rapid drop in tax revenue.

Grappling with this will be even more challenging because it could be months before the Legislature and the Governor have accurate revenue estimates to work with due to tax filing deadlines being extended to July 15. The Governor's Department of Finance (DOF) warned the Legislature that it would not be able to provide its customary April 1 updated revenue estimate. At the same time, the DOF sent a letter to state agencies warning that proposals for additional funding would be off the table and that the Administration would be developing a workload budget.

This week, Assemblymember Phil Ting, the Chair of the Assembly Budget Committee, confirmed what we and many others predicted; that the state will adopt a "workload budget" to meet the June 15 constitutional deadline to adopt a budget. Normally, budget subcommittees would already be meeting to consider proposals for new spending from the Administration. In a letter to his colleagues earlier this week Assemblymember Ting confirmed that the June budget would include no new spending that was not related to the state's response to COVID-19, wildfire prevention, and homelessness.

Mr. Ting went on to explain that once the extended July 15 filing deadline for personal income taxes passes, the Governor and Legislature will have a reliable understanding of the state's revenue shortfall and will then revisit the budget in an "August Revision." As of now, rough estimates predict that the state could lose anywhere from \$8 to \$20 billion of revenue due to economic turmoil caused by COVID-19. Reflecting this, Mr.

Ting warned that the state would likely need to consider sizeable ongoing reductions to major programs in August.

## **COVID-19 Impacts on Bay Area Transit**

The COVID-19 outbreak and subsequent social distancing/shelter in place protocols have wreaked havoc on Bay Area transit systems. Most systems are seeing ridership drops of 60-90 percent (Caltrain is around 85 percent and SamTrans close to 80 percent) and operations have been scaled back substantially. However, because transit is a lifeline service, systems are expected to keep running. The California Transit Association's (Association) initial estimates revealed that transit agencies required at least \$1 billion in new emergency state funding to offset an actual and anticipated four to six months of direct costs and passenger fare revenue losses associated with COVID-19, starting from the time the first county-level shelter at home orders were issued. The funding need is pronounced at every transit agency in the state; however, it is especially acute for several of the state's largest transit agencies, specifically those which rely on farebox and user revenues disproportionately to support their operating budgets - e.g. BART, Caltrain, and the transit services operated by the Golden Gate Bridge, Highway and Transportation District. After significant work by the Bay Area transit systems, MTC, and the Association, California was able to secure approximately \$3.7 billion for transit relief as part of the federal CARES Act. Of that amount, roughly \$1.3 billion will flow to the MTC region. Transit systems are now working with the Legislature and the Administration to look at what other measures can be moved forward that would provide funding flexibility and/or statutory or regulatory relief.

## 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 – CaISTA 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 <u>state funding</u> <u>program</u> 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 highspeed 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 4/9/2020

Bill Number	Summary	Location	Position
(Author)			
	Existing law creates the High-Speed Rail Authority with specified powers and duties relative to	Senate Rules	Watch
	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.		
	Introduced: 12/13/2018		
<u>AB 1350</u>	Existing law declares that the fostering, continuance, and development of public transportation	Senate Rules	Watch
( <u>Gonzalez</u> D)	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		
Free youth transit passes:	bill would require transit agencies to offer free youth transit passes to persons 18 years of age and		
eligibility for state funding.	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.		
	Amended: 1/15/2020		
AB 1991		Assembly Transportation	Watch
( <u>Friedman</u> D)	continuously appropriated allocation of 10% of the annual proceeds of the Greenhouse Gas		
Transit and Intercity Rail	Reduction Fund, to fund transformative capital improvements that will modernize California's		
Capital Program:	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		
pussenger tranivays.	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.		
	continuousiy appropriated moneys may be used, the bill would make an appropriation.		
	Introduced: 1/27/2020		
AB 1992	Existing law vests the Department of Transportation with full possession and control of the state	Assembly Transportation	Watch
( <u>Friedman</u> D)	highway system. Existing law requires the department, in consultation with the California		
	Transportation Commission, to prepare a robust asset management plan that assesses the health		
Transportation:	and condition of the state highway system and with which the department is able to determine the		
transportation	most effective way to apply the state's limited resources. This bill would state the intent of the		
infrastructure: climate	Legislature to enact legislation that would establish a new program to fund climate change		
change.	adaptation planning for transportation impacts, data collection, modeling, and training. The bill		
	would require the department, in consultation with the commission, to update the asset		
	management plan on or before December 31, 2022, and every 4 years thereafter, and for the		
		•	Daga 1

	updates to take into account the forecasted impacts of climate change on transportation infrastructure. The bill would require the updates to the California Transportation Plan and the Strategic Growth Council's report to include a forecast of the impacts of climate change on transportation infrastructure and measures to address those impacts. The bill would require the commission's revisions to the guidelines for the preparation of regional transportation plans to include a requirement that designated transportation planning agencies take into account the forecasted transportation infrastructure impacts of climate change. By requiring regional transportation plans to take into account this additional factor, the bill would impose a state- mandated local program. This bill contains other existing laws.		
AB 2012 (Chu D) Free senior transit passes: eligibility for state funding.	Amended: 3/11/2020 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.		Watch
AB 2057 (Chiu D) San Francisco Bay area: public transportation.	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.	Assembly Print	Watch
Free student transit	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 student transit passes to persons attending the California Community Colleges, the California State University, or the University of California in order to be eligible for state funding under the Mills-Alquist-Deddeh Act, the State Transit Assistance Program, or the Low Carbon Transit Operations Program. The bill would also require a free student transit pass to count as a full price fare for purposes of calculating the ratio of fare revenues to operating costs. This bill contains other related provisions and other existing laws.	Assembly Transportation	Watch
Bay area county transportation authorities:	The Bay Area County Traffic and Transportation Funding Act authorizes each of the 9 counties in the bay area to impose a 1/2 of 1% or 1% sales tax for transportation purposes, subject to voter approval. Existing law provides for the establishment of a county transportation authority in each county imposing a sales tax under these provisions, requires the development of a county transportation expenditure plan, and specifies the powers and duties of a county board of	Assembly Transportation	Watch

	supervisors and the county transportation authority in this regard. Existing law requires each county transportation authority to award contracts for the purchase of supplies, equipment, and materials in excess of \$75,000 to the lowest responsible bidder after competitive bidding, except in an emergency declared by the vote of 2/3 of the voting membership of the county transportation authority. This bill would require each county transportation authority to award contracts for the purchase of supplies, equipment, and materials in excess of \$150,000, rather than \$75,000, either to the lowest responsible bidder or to the responsible bidder whose proposal provides the best value, as defined, on the basis of the factors identified in the solicitation, except in a declared emergency, as specified.		
High-speed rail: legislative oversight.			Watch
<b>AB 2943 (<u>Ting</u> D)</b> Surplus property: disposal.	Existing law prescribes requirements for the disposal of surplus land, as defined, by a local agency, as defined. Existing law requires land to be declared surplus land or exempt surplus land, as supported by written findings, before a local agency takes any action to dispose of it consistent with the agency's policies or procedures. This bill would provide that the provisions regulating the disposal of surplus land shall not be construed to require a local agency to dispose of land that is determined to be surplus.	Government	Watch
AB 2987 (Flora R) Local agency public contracts: bidding procedures.		Assembly Local Government	Watch

	provisions and other existing laws.		
	Introduced: 2/21/2020		
AB 3128 (Burke D) Electricity: deenergization events: fuel cells.			Watch
high-speed rail service:	Existing law establishes the High-Speed Rail Authority within the state government with various powers and duties related to developing and implementing high-speed passenger rail service. Existing law requires the authority to direct the development and implementation of intercity high-speed rail service that is fully integrated with specified forms of transit. This bill would require the authority, in directing the development and implementation of intercity high-speed rail service, to prioritize projects based on specified criteria.	Assembly Transportation	Watch
Local government financing: affordable nousing and public nfrastructure: voter approval.	(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.		Supported June 2019
<b>SB 43</b> (Allen D) Carbon intensity and pricing: retail products.	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.	Assembly 2 year	Watch
	with such retain products can be quantified. This bill contains other existing laws.	I	Pag

1			
	Amended: 7/1/2019		
<u>5B 50</u> ( <u>Wiener</u> D)	(1)Existing law authorizes a development proponent to submit an application for a multifamily	Senate Dead	Watch
	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		
treamlined approval:	located on an eligible parcel to submit an application for a streamlined, ministerial approval process		
ncentives.	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		
	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		
B 146 (Beall D)	Existing law, operative under certain conditions, redesignates the Peninsula Corridor Study Joint	Assembly 2 year	Watch
	Powers Board as the Peninsula Rail Transit District, comprised of 9 members appointed from		
eninsula Rail Transit	various governing bodies situated in the City and County of San Francisco and the Counties of San		
District.	Mateo and Santa Clara, with specified powers. This bill would repeal the provisions relating to the		
	Peninsula Rail Transit District.		
	Introduced: 1/18/2019		
SB 147 (Beall D)	The California High-Speed Rail Act creates the High-Speed Rail Authority to develop and	Assembly 2 year	Watch
	implement a high-speed train system in the state, with specified powers and duties. Existing law		
ligh-Speed Rail Authority.	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		
B 278 (Beall D)	The Metropolitan Transportation Commission Act creates the Metropolitan Transportation	Assembly Desk	Watch
	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		
commission.	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.		

Total Measures: 19 Total Tracking Forms: 19

## Holland & Knight

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## SamTrans As of April 14, 2020 Federal Transportation Report

## President Trump Signs \$2 Trillion Coronavirus Rescue Package Into Law

President Donald Trump signed the "Coronavirus Aid, Relief and Economic Security (CARES) Act into law on March 27, providing the largest ever injection of federal cash into the economy to stave off the total economic collapse in the wake of the coronavirus (COVID-19) pandemic crisis. The rescue package provides more than \$2 trillion in loans and grants to major industries and small businesses, taxpayers, state and local governments, and public services. The package included funding for transit: \$25 billion for transit infrastructure to remain available until expended, to prevent, prepare for, and respond to coronavirus. Funds were allocated through the Federal Transit Administration (FTA) formula programs.

- \$13.9 billion for Section 5307 Urbanized Area Formula Program Grants
- \$1.8 billion Section 5311 Formula Grants for Rural Areas
- \$7.6 billion for <u>Section 5337 State of Good Repair</u>
- \$1.7 billion for Section 5340 Fast Growth-High Density Grants

Funding is "available for the operating expenses of transit agencies related to the response to a coronavirus public health emergency... beginning on January 20, 2020, reimbursement for operating costs to maintain service and lost revenue due to the coronavirus public health emergency, including the purchase of personal protective equipment, and paying the administrative leave of operations personnel due to reductions in service."

The operating expenses are not required to be included in a transportation improvement program (TIP), long-range transportation and statewide transportation plans, or a statewide transportation improvement program (STIP). The federal share can be 100 percent.

## Congress COVID-19 Response: Rounds 1 & 2

President Trump signed the first COVID-19 response legislation, the "Coronavirus Preparedness and Response Supplemental Appropriations Act" (<u>H.R. 6074</u>) into law on March 6. The bill provided \$8.3 billion in emergency funding for federal agencies and their efforts to address the crisis. Funding was allocated for issues such as:

- Developing, manufacturing, and procuring vaccines and other medical supplies;
- Grants for state, local, and tribal public health agencies and organizations;
- Loans for affected small businesses;
- Evacuations and emergency preparedness activities at U.S. embassies and other State Department facilities; and
- Humanitarian assistance and support for health systems in the affected countries.

President Trump signed the second round of emergency response legislation, the "Families First Coronavirus Response Act" (<u>H.R. 6201</u>), into law on March 18. The bill expands benefits for paid sick and family leave, provides tax credits and free COVID-19 testing, expands food assistance, and provides Medicare expansions.

## House Democrats Consider Fourth Legislative Response to Pandemic

On Wednesday, April 8, House Speaker Nancy Pelosi (D-CA) and Senate Minority Leader Chuck Schumer (D-NY) shared congressional Democrats' priorities for the next bill that they are calling the interim Emergency Coronavirus Relief legislation:

- \$250 billion in assistance to small businesses;
- \$100 billion for hospitals, community health centers and health systems, including production and distribution of national rapid testing and Personal Protective Equipment (PPE);
- \$150 billion for state and local governments to manage this crisis and mitigate lost revenue; and
- 15 percent increase to the maximum SNAP benefit.

On Thursday, April 9, Senate Majority Leader Mitch McConnell (R-KY) tried to fast-track a vote on legislation that would only provide the \$250 billion for the small business assistance, and the Senate Democrats objected.

Majority Leader McConnell has not ruled out cutting a deal with Democrats. Minority Leader Schumer said that he had a constructive call with Treasury Secretary Mnuchin who said that he will begin discussions with House and Senate Democrats and Republicans leadership on this interim Emergency Coronavirus Relief legislation. Minority Leader Schumer said, "There's no reason why we can't come to a bipartisan agreement by early next week [week of April 13]".

If Congress is able to pass this interim emergency relief bill, Pelosi said that she then would like to work on CARE 2 which would expand and extend funding in the CARES Act. Hopefully, following this bill, Congress will be able to then work on an infrastructure stimulus bill.

Speaker Pelosi has previously said that infrastructure stimulus bill should include at least \$760 billion over five years for transportation, water, broadband – plus \$10 billion for community health centers and more for housing and education – as a way to strengthen U.S. infrastructure and the economy. House Democrats will use their infrastructure framework, that was released on January 29, as a base for the bill, the "Moving Forward Framework".

## House Transportation and Infrastructure Subcommittee Discusses Funding a Robust Freight and Passenger Rail Network

On March 4, the House Committee on Transportation and Infrastructure Subcommittee on Railroads, Pipelines, and Hazardous Materials conducted a <u>hearing</u> entitled "Funding a Robust Freight and Passenger Rail Network." Subcommittee members discussed a need to modernize fleet and services for long-term vitality of the nation's rail infrastructure and facilitating interoperability of passenger and freight rail systems. There was a general bipartisan consensus regarding the federal government's essential role in investing in rail infrastructure.

Democrats on the subcommittee highlighted how moving freight by rail instead of trucks lowers greenhouse gas emissions to demonstrate that investing in rail aligns with climate priorities. Rep. Lloyd Smucker (R-PA) touted his bill, the "American Railroads Act" (<u>H.R. 5947</u>), that makes <u>Rail Rehabilitation Improvement Financing</u> (RRIF) more accessible. The industry panelists stressed the need for the federal government to invest in rail infrastructure, like funding grants such as BUILD and INFRA. Some panelists urged Congress to increase Section 130 Railway-Highway Crossings program incentive payments from the current \$7,500 cap to \$100,000; and make the Section 45G short-line tax credit extension permanent.

Witnesses included:

- **Mr. Stephen Gardner**, Senior Executive Vice President and Chief Operating and Commercial Office, Amtrak [Testimony]
- **Dr. Sandra Bury**, Mayor, Village of Oak Lawn, Illinois [<u>Testimony</u>]
- Mr. Kevin Corbett, President and Chief Operating Office, NJ TRANSIT Corporation [Testimony]
- **Mr. Rob Shanahan**, Assistant to the President, Brotherhood of Maintenance of Way Employees Division International Brotherhood of Teamsters [Testimony]
- Mr. Kevin Artl, President and Chief Operating Officer, American Council of Engineering Companies of Illinois [Testimony]
- Mr. Ian Jeffries, President, Association of American Railroads [Testimony]

## Senate Banking Committee Reviews Threats Posed by State-Owned and State-Supported Enterprises to Public Transportation

The Senate Committee on Banking, Housing, and Urban Affairs held a <u>hearing</u> March 5 to discuss the national security threats posed to U.S. transportation networks by state-owned enterprises in China. The hearing focused on two companies, state-owned CRRC rail manufacturer and the state-subsidized BYD electric bus manufacturer. Namely, the panel discussed the potential for surveillance of Americans by the Chinese government and remote control of autonomous vehicles (AVs) produced by these companies.

Senator John Cornyn (R-TX), one of the hearing witnesses, mentioned the potential for spyware, "The potential for an adversarial state actor to monitor the movements of American citizens,

hack personal or government-issued devices, and collect intelligence on our military is a major security concern. Allowing American trains and buses to become Trojan horses for these technologies on American soil is unacceptable."

Congress enacted a provision, as part of the FY 2020 National Defense Authorization, bans transit agencies from using Federal Transit Administration (FTA) funds to purchase buses or rail cars from manufacturers owned or subsidized by the Chinese government. The ban will take effect on December 20, 2021.

Senate Banking Committee Chairman Mike Crapo (R-ID), Senate Banking Committee Ranking Member Sherrod Brown (D-OH), House Transportation & Infrastructure Committee Chairman Peter DeFazio (D-OR), and House Transportation & Infrastructure Committee Ranking Member Sam Graves (R-MO) wrote a letter to Department of Transportation Secretary Elaine on January 31 stating "Some of the key restrictions will not become fully effective until late 2021, but all public transportation agencies should be made aware of the new law so they can best plan rolling stock procurements. We urge you to publish information online or issue a 'Dear Colleague' letter to FTA grant recipients explaining the recent statutory changes to procurement policy."

Witnesses included:

- Senator John Cornyn, (R-TX) [Testimony]
- Senator Tammy Baldwin, (D-WI) [Testimony]
- Mr. Michael O'Malley, President, Railway Supply Institute [Testimony] [Testimony]
- Mr. Scott Paul, President, Alliance for American Manufacturing [Testimony]
- Ms. Emily de la Bruyere, Principal, Horizon Advisor [Testimony]
- **Mr. Frank J. Cilluffo**, Director, McCrary Institute for Cyber and Critical Infrastructure Security and, Center for Cyber and Homeland Security, Auburn University [Testimony]

## **Grant Opportunities**

- **BUILD:** \$1 billion available. Applications due May 18, 2020.
- DHS Transit Security Grant Program: \$88 million available. Applications due April 15.
- America's Marine Highway Grant Program: \$10 million available. Applications due April 10.
- Accelerating Innovative Mobility (AIM) Challenge Grants: \$11 million available. Applications due May 18.

## AGENDA ITEM #4d MAY 7, 2020

## 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 MARCH 31, 2020

## <u>ACTION</u>

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

This staff report provides a brief discussion of significant items and trends on the attached Statement of Revenues and Expenses through March 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.

## SIGNIFICANCE

**Year to Date Revenues:** As of March year-to-date actual, the Total Revenue (page 1, line 17) is \$4.7 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, line 12).

**Year to Date Expenses:** As of March year-to-date actual, the Grand Total Expense (page 1, line 49) is \$5.1 million higher than the prior year-to-date actual. This is primarily due to increases in Rail Operator Service (page 1, line 23), Security Services (page 1, line 25), Wages and Benefits (page 1, line 38), Professional Services (page 1, line 41), and Long Term Debt Expense (page 1, line 47). The increases are partially offset by decreases in Claims, Payments, and Reserves (page 1, line 30), Managing Agency Admin OH Cost (page 1, line 39), and Other Office Expenses and Services (page 1, line 43).

**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.

Due to the impact of Covid-19 pandemic in the farebox revenues and other major line items in the financial statements, the forecast column was eliminated from the

reports until more information are available for accurate revenue and expense forecast.

## **BUDGET IMPACT**

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

## STRATEGIC INITIATIVE

This item does not achieve a strategic initiative.

Prepared By : Danny Susantin, Accountant III		650-622-8073	
	Jennifer Ye, Manager, General Ledger	650-622-7890	

PENINSULA CORRIDOR JOINT POWERS BOARD STATEMENT OF REVENUE AND EXPENSE Fiscal Year 2020 March 2020							
				% OF YEAR	ELAPSED	75.0%	
-	DDIOD	CURRENT	EAR TO DAT	E%	CUDDENT	ANNUAL APPROVED	
	PRIOR	CURRENT	\$	70	CURRENT AS A % OF	AFFROVED	
	ACTUAL	ACTUAL	VARIANCE	VARIANCE	BUDGET	BUDGET	
REVENUE							
OPERATIONS:							
Farebox Revenue	74,400,004	76,658,628	2,258,624	3.0%	72.3%	106,000,000	
Parking Revenue	3,831,796	3,613,331	(218,465)	(5.7%)	67.7%	5,335,000	
Shuttles	1,442,525	1,426,910	(15,615)	(1.1%)	57.0%	2,503,200	
Rental Income	1,418,873	1,473,634	54,761	3.9%	71.5%	2,060,540	
Other Income	1,867,405	2,589,865	722,460	38.7%	147.7%	1,753,450	
	1,007,405	2,509,005	722,400	50.770	147.770	1,755,450	
TOTAL OPERATING REVENUE	82,960,602	85,762,367	2,801,765	3.4%	72.9%	117,652,190	
CONTRIBUTIONS:							
AB434 Peninsula & TA Shuttle Funding	1,296,368	1,487,583	191,215	14.8%	85.6%	1,737,950	
Operating Grants	4,927,955	3,897,194	(1,030,762)	(20.9%)	73.2%	5,327,497	
JPB Member Agencies	20,523,500	23,296,918	2,773,418	13.5%	77.9%	29,921,971	
Use of Reserves				0.0%	0.0%	1,064,614	
TOTAL CONTRIBUTED REVENUE	26,747,823	28,681,694	1,933,871	7.2%	75.4%	38,052,032	
IOTAL CONTRIBUTED REVENUE	20,747,825		1,935,671	1.270	73.4%		
GRAND TOTAL REVENUE	109,708,425	114,444,062	4,735,636	4.3%	73.5%	155,704,222	
OPERATING EXPENSE: Rail Operator Service Positive Train Control Security Services Shuttles Services Fuel and Lubricants Timetables and Tickets Insurance Claims, Payments, and Reserves	63,459,048 20,481 4,018,753 2,945,062 7,893,520 54,175 3,150,288 333,088	66,721,859 213,740 4,362,804 3,017,105 7,991,869 57,539 3,244,061 (90,702)	3,262,811 193,259 344,050 72,044 98,349 3,363 93,772 (423,790)	5.1% 943.6% 8.6% 2.4% 1.2% 6.2% 3.0% (127.2%)	73.5% 8.9% 66.7% 57.0% 72.6% 40.1% 72.0% (9.5%)	90,817,696 2,400,000 6,544,183 5,290,100 11,003,417 143,500 4,506,064 951,794	
Facilities and Equipment Maint	1,419,345	1,683,690	264,344	18.6%	50.4%	3,339,391	
Utilities Maint & Services-Bldg & Other	1,359,644 730,496	1,430,640 996,912	70,996 266,416	5.2% 36.5%	68.0% 63.6%	2,105,422 1,567,930	
TOTAL OPERATING EXPENSE	85,383,901	89,629,515	4,245,614	5.0%	69.7%	128,669,496	
ADMINISTRATIVE EXPENSE	7 7 40 100	0.050.155	1 100 055	15 001	74.004	10.000 000	
Wages and Benefits	7,769,122	8,959,177	1,190,055	15.3%	74.3%	12,061,633	
Managing Agency Admin OH Cost	5,192,071	3,189,361	(2,002,710)	(38.6%)	62.6%	5,098,065	
Board of Directors	15,634	9,966	(5,669)	(36.3%)	68.3%	14,600	
Professional Services	1,527,730	2,680,962	1,153,232	75.5%	62.7%	4,275,583	
Communications and Marketing	193,514	224,670	31,156	16.1%	74.5%	301,500	
Other Office Expenses and Services	2,381,970	1,783,169	(598,801)	(25.1%)	67.5%	2,643,572	
TOTAL ADMINISTRATIVE EXPENSE	17,080,041	16,847,304	(232,737)	(1.4%)	69.1%	24,394,953	
Long Term Debt Expense	886,412	2,018,290	1,131,877	127.7%	76.5%	2,639,773	
GRAND TOTAL EXPENSE	103,350,355	108,495,109	5,144,754	5.0%	69.7%	155,704,222	
-	•	· ·					
NET SURPLUS / (DEFICIT)	6,358,071	5,948,953	(409,118)	(6.4%)		((	



BOARD OF DIRECTORS 2020

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

#### PENINSULA CORRIDOR JOINT POWERS BOARD

#### INVESTMENT PORTFOLIO

#### AS OF MARCH 31, 2020

JIM HARTNETT EXECUTIVE DIRECTOR

TYPE OF SECURITY		MATURITY DATE	INTEREST RATE	 PURCHASE PRICE	 MARKET RATE
Local Agency Investment Fund (Unrestricted)	*	Liquid Cash	1.787%	40	40
County Pool (Restricted)		Liquid Cash	1.776%	624,073	624,073
Other (Unrestricted)		Liquid Cash	0.700%	68,820,359	68,820,359
Other (Restricted)	**	Liquid Cash	0.200%	14,626,183	14,626,183
				\$ 84,070,655	\$ 84,070,655

Interest Earnings for March 20	\$ 32,777.41
Cumulative Earnings FY2020	\$ 301,815.88

\* The market value of Local Agency Investment Fund (LAIF) is calculated annually and is derived from the fair value factor as reported by LAIF for quarter ending June 30th each year.

\*\* Prepaid Grant funds for Homeland Security, PTMISEA and LCTOP projects, and funds reserved for debt repayment. The Portfolio and this Investment Report comply with the Investment Policy and the provisions of SB 564 (1995). The Joint Powers Board has the ability to meet its expenditure requirements for the next six months.

## PENINSULA CORRIDOR JOINT POWER BOARD STAFF REPORT

- TO: Board of Directors
- THROUGH: Jim Hartnett Executive Director
- FROM:Derek HanselMichelle BouchardChief Financial OfficerChief Operations Officer, Rail

## SUBJECT: AWARD OF CONTRACTS FOR ON-CALL TRANSPORTATION PLANNING AND CONSULTANT SUPPORT SERVICES

## <u>ACTION</u>

Staff Coordinating Council recommends the Board:

- 1. Award contracts to the firms listed below for provision of on-call transportation planning and consultant support services (Services) for an aggregate, not-to-exceed amount of \$25 million for a five-year term to be shared as a pool for authorized tasks:
  - Arup North America, Ltd, San Francisco, California;
  - Fehr & Peers, Oakland, California;
  - HNTB Corporation, Oakland, California;
  - Kimley-Horn & Associates, Inc., Oakland, California;
  - Mott MacDonald Group, Inc., San Ramon, California; and
  - WSP USA, Inc., San Francisco, California
- 2. Authorize the Executive Director, or his designee, to execute a contract with each of the above firms in full conformity with the terms and conditions of the solicitation documents and negotiated agreements, and in a form approved by legal counsel.
- 3. Authorize the Executive Director, or his designee, to exercise up to two additional one-year option terms with the above firms for up to \$5 million for each option term, to be shared in the aggregate among the six firms, if deemed in the best interest of the Peninsula Corridor Joint Powers Board(JPB).

## **SIGNIFICANCE**

Award of these contracts will provide the JPB with a pool of qualified firms to support the required and anticipated volume of services for planning and capital projects. The JPB will engage the firms through Work Directives on a project-by-project and asneeded basis. Award of these contracts will not obligate the JPB to purchase any specific level of service from any of the firms.

## BUDGET IMPACT

Work Directives will be funded with a mix of federal, state, regional, and/or local revenues and grants from current and future approved JPB operating and capital budgets.

## BACKGROUND

The JPB has a business need for qualified consulting firms to provide the Services during the transition to electrification of the railroad and beyond. Staff held an information gathering and sharing outreach event prior to release of the Request for Proposals (RFP) to enable dialog with representatives of the transportation planning and consulting industry in an open and transparent setting. Caltrain Planning Industry Day, a day-long event held in August 2019, was attended by representatives from 65 firms from as far away as Japan and Europe. The agenda was designed to provide potential proposers with a clear and comprehensive overview of the type of services to be provided and the skillsets necessary to complete the work. The event also included an opportunity for Small Business Enterprises and/or Disadvantaged Business Enterprises (SBE/DBEs) to network with prime consultants for potential partnering opportunities.

The RFP was advertised extensively on the JPB's procurement website, in international and national transit publications, and on social media. Staff held a pre-proposal conference and 82 firms attended in-person, via Webex and on YouTube Live. Nine firms submitted proposals, and each proposal included SBEs/DBEs as part of the proposed teams. While no specific DBE goal was established for this RFP, the JPB will assign goals to individual Work Directives that support federally-funded projects.

A Selection Committee (Committee) composed of qualified staff from the Caltrain Planning Department, and the City of San Jose and the City of San Francisco's transportation divisions, evaluated and scored the proposals in accordance with the following weighted criteria:

٠	Team Composition & Qualifications	0-35 Points
٠	Key Qualifications and Availability	0-55 Points
•	Cost Proposal (Labor Rates)	0-10 Points

After initial scoring of proposals, six firms were found to be in the competitive range and were interviewed. After interviews, the Committee reached a consensus ranking based on each firm's proposal, experience and qualifications, and found all six firms remained in the competitive range. Staff successfully negotiated favorable fees with these six firms and determined the fees to be fair, reasonable and comparable with prices currently paid by the JPB for similar services. These firms possess the necessary qualifications and requisite depth of experience to perform the Services successfully.

Fehr & Peers and HNTB Corporation (as prime consultants), and Arup North America and WSP USA, Inc. (as subconsultants), currently provide Services to the JPB under contracts awarded in 2013 with an aggregate, not-to-exceed amount of \$8,250,000 that includes exercised option terms, contract term extensions, use of contingency and Board-authorized increases in contract authority. The firms' performance to-date has been acceptable and in conformance with contractual requirements, terms and conditions. The contracts expire August 30, 2020.

Procurement Administrator II: Deborah Cordova650.508.7908Project Manager: Melissa Reggiardo, Manager, Caltrain Planning650.508.6283

#### **RESOLUTION NO. 2020-**

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

\* \* \*

## AWARDING CONTRACTS TO ARUP NORTH AMERICA, LTD, FEHR & PEERS, HNTB CORPORATION, KIMLEY-HORN & ASSOCIATES, INC., MOTT MACDONALD GROUP INC., AND WSP USA, INC. FOR PROVISION OF ON-CALL TRANSPORTATION PLANNING AND CONSULTANT SUPPORT SERVICES FOR AN AGGREGATE NOT-TO-EXCEED AMOUNT OF \$25 MILLION FOR A FIVE-YEAR TERM

WHEREAS, the Peninsula Corridor Joint Powers Board (JPB) issued a Request for Proposals (RFP) for on-call transportation planning and consultant support services; and

WHEREAS, in response to the RFP, the JPB received nine proposals; and

WHEREAS, a Selection Committee (Committee) evaluated and ranked the

proposals according to the evaluation criteria set forth in the RFP and determined that six proposals were in the competitive range for interviews, and after interviews the Committee determined all six firms remained in the competitive range; and

WHEREAS, the Committee completed its evaluation process and determined that Arup North America, Ltd of San Francisco, California (Arup), Fehr & Peers of Oakland, California (Fehr & Peers), HNTB Corporation of Oakland, California (HNTB), Kimley-Horn and Associates, Inc. of Oakland, California (Kimley-Horn), Mott MacDonald Group, Inc. of San Ramon, California (Mott MacDonald), and WSP USA Inc., of San Francisco, California (WSP) possess the necessary qualifications and requisite experience to successfully perform the scope of services defined in the solicitation documents, and have agreed to perform the specified services at fair and reasonable prices; and

WHEREAS, staff and legal counsel have reviewed the proposals and determined that the proposals comply with the requirements of the solicitation documents; and

WHEREAS, Staff Coordinating Council recommends, and the Executive Director concurs, that the Board of Directors (Board) award contracts to Arup, Fehr & Peers, HNTB,

Kimley-Horn, Mott MacDonald and WSP for an aggregate not-to-exceed amount of \$25 million for a five-year term.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Peninsula Corridor Joint Powers Board hereby awards contracts for on-call transportation planning and consultant support services to Arup North America, Ltd, Fehr & Peers, HNTB Corporation, Kimley-Horn and Associates, Inc., Mott MacDonald Group, Inc. and WSP USA Inc. for a five-year term for an aggregate not-to-exceed amount of \$25 million; and

**BE IT FURTHER RESOLVED** that the Executive Director, or his designee, is authorized to execute contracts on behalf of the JPB with Arup, Fehr & Peers, HNTB, Kimley-Horn, Mott MacDonald and WSP in full conformity with the terms and conditions of the solicitation documents and negotiated agreements, and in a form approved by legal counsel; and

**BE IT FURTHER RESOLVED** that the Executive Director, or his designee, is authorized to exercise up to two additional, one-year option terms with Arup, Fehr & Peers, HNTB, Kimley-Horn, Mott MacDonald and WSP in an aggregate not-to-exceed amount of \$5 million for each option year provided that the exercise of such options is in the best interest of the JPB; and

**BE IT FURTHER RESOLVED** that the Executive Director, or his designee, will submit a report to the Board twice per year providing the scope and value of work directives awarded to the firms under these agreements.

Regularly passed and adopted this 7<sup>th</sup> day of May, 2020 by the following vote: AYES: NOES: ABSENT: ATTEST:

JPB Secretary

## 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 APRIL 2020

## <u>ACTION</u>

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

Prepared by: Sebastian Petty, Deputy Chief, Caltrain Planning 650.622.7831

**AGENDA ITEM #6** 

#### 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

Date: April 27, 2020

To: Board of Directors

From: Jim Hartnett, Executive Director

**Subject:** May 7, 2020 JPB Board Meeting Executive Director's Report

- On-time Performance
  - **Through April 26:** The preliminary April 2020 OTP was 94.1 percent compared to 93.6 percent for April 2019.
    - Trespasser Strike There were two trespasser strikes on April 17, one resulting in a fatality.

Memorandum

- **March:** The March 2020 OTP was 96.7 percent compared to 94 percent for March 2019.
  - Trespasser Strike There was one trespasser strike on March 1, resulting in a fatality.
- Caltrain Reduced Weekday Service In order to mitigate severe fare revenue losses while still providing essential transit services to all stations, Caltrain reduced weekday service (from 92 trains to 70 trains) on Tuesday, March 17, 2020 suspending bullet service and reduced weekday service further (from 70 trains to 42 trains) on Monday, March 30, 2020 providing local train service between San Francisco to San Jose and providing two round trip Gilroy trains. With reduced weekday service, Caltrain is providing 24-hour single tracking for major capital projects including the 25th Avenue Grade Separation Project and the South San Francisco Caltrain Station Improvement Project in order to advance construction progress.

Caltrain is monitoring ridership during this time and may implement additional service changes as needed while ensuring that riders can maintain social distancing in accordance with the Centers for Disease



Control and Prevention (CDC) recommendations. Caltrain continues to maintain daily onboard cleaning and sanitation protocols in compliance with Environmental Protection Agency (EPA) guidelines.

Caltrain is assessing the impact that reduced ridership is having on the agency's ability to maintain operations in the coming months.

 COVID-19 Public Health Emergency Orders – On April 17, 2020 San Mateo County and San Francisco County Health Officers, in coordination with other Bay Area health officials, issued new public health emergency orders in connection with COVID-19 protections. The order requires residents to cover their nose and mouth with a face covering, such as a bandana, scarf, towel, or other piece of cloth or fabric, when leaving home in many situations. These include doctor appointments, grocery shopping, pharmacy visits, and riding on public transit, among others.

This rule took effect at 11:59 p.m. on April 17, 2020. Enforcement did not take place until 8 a.m. on April 22, 2020 to allow time to for obtaining face coverings.

Starting Wednesday April 22, 2020 Caltrain passengers were required to wear a face covering on Caltrain. Also when possible, passengers are requested to maintain social distancing.

- Hillsdale Station Temporary Closure Starting Saturday May, 16, 2020 the Hillsdale Station will be closed for up to six months as part of the 25<sup>th</sup> Avenue Grade Separation Project.
  - The closure is required to:
    - Transition ground-level tracks to elevated tracks
    - Create east-west connection at 28th Avenue
    - Build new Hillsdale Station (closer to 28<sup>th</sup>)
  - Rider Closure Plan (All plans are subject to change based on COVID-19 service changes and funding):
    - All Hillsdale Caltrain service switches to Belmont (Timetable TBD)
    - Free parking at Belmont Station
    - Free SamTrans ECR bus service between Belmont and San Mateo Stations
    - Free SamTrans Route 292 bus service between Hillsdale Shopping Center and San Mateo Station
    - Free SamTrans bus service on all routes (except FCX) for riders with the Caltrain Clipper monthly pass 2+ zones
    - Free peak period Belmont/Hillsdale Shuttle service (if available)
    - Caltrain will coordinate with existing public and private shuttles serving the two stations

- Rider Communication
  - Signage: Visual Messaging, A-frames, Info boards, Banner
  - Take-ones, Parking lot Windshield Drops
  - Ambassadors at stations, conductor announcements, customer support
  - Advertising
- Community Communication
  - Newsletters, mailers to community, email distribution list
  - Regular communication to electeds and organizations
  - Social Media, dedicated webpage
  - Virtual Town Hall: April 9, 2020

For more information, visit: <u>www.caltrain.com/HillsdaleTempClosure</u>

- CAC Meeting The Citizens Advisory Committee met on Wednesday, April 15 via teleconference. Sebastian Petty, Deputy Chief Planning, provided a presentation on the Business Plan update. Joe Navarro, Deputy Chief Rail Operations, provided the Staff Report. The next CAC meeting is scheduled for Wednesday, May 20, via teleconference or in San Carlos.
- **BAC Meeting –** The next Bicycle Advisory Committee meeting is scheduled for Thursday, May 21, via teleconference or in San Carlos.
- Special Event Train Service

# Services Provided:

 Warriors Regular Season – The Golden State Warriors hosted four games in March. Five games were postponed due to COVID-19 impacts in March. One post-event special train operated for the March 1 and March 7 games. Total post-game additional riders, boarding at San Francisco station was 217. Year-to-date post-game additional riders, boarding at San Francisco station was 14,969.

Note: For the March 1 and March 7 Warriors games, a bus bridge operated between Bayshore and San Francisco stations, in place of regular weekend service. Additional SamTrans buses were also provided post game.

 San Jose Sharks Regular Season – The Sharks hosted four games in March. Three games were postponed due to COVID-19 impacts in March. Total post-game additional riders, boarding at San Jose Diridon station was 846. Total year-to-date post-game additional riders, boarding at San Jose Diridon station, was 8,608, about the same as ridership for the 2018/2019 season.

# Services Scheduled:

Caltrain is closely monitoring continued efforts by local, state and federal health organizations and governments to prevent the spread of the coronavirus (COVID-19) along with impacted cancelled or postponed major events at venues in San Francisco, San Mateo and Santa Clara counties as it relates to Caltrain Special Event service.

- San Jose Sharks Regular Season –
   Due to the COVID-19 pandemic and efforts to prevent the spread of COVID-19, the NHL has put the 2019-2020 season on pause.
- Warriors Regular Season Due to the COVID-19 pandemic and efforts to prevent the spread of COVID-19, the NBA has suspended the season until further notice.
- Giants Baseball Due to shelter in place orders to reduce the spread of COVID-19 as well as recommendations from the Center for Disease Control and Prevention restricting events of more than 50 people for eight weeks as of mid-March, the 2020 regular season is being pushed back in accordance with that guidance.

Due to Caltrain ridership impacts from COVID-19 and need to monitor and adjust Caltrain service, Caltrain baseball service will be updated on the Caltrain Special Event Service Webpage. There will be no printed Caltrain Giants Service Brochure for the 2020 season.

- Bay to Breakers Following further discussions with the City and County of San Francisco surrounding the escalating COVID-19 outbreak, Bay to Breakers has been postponed from Sunday May 31, 2020 to Sunday September 20, 2020. In the weeks leading up to the event, Caltrain will determine if special event service will be provided.
- Memorial Day Service On Monday, May 25, Caltrain will operate a Sunday schedule in observance of the Memorial Day holiday. The weekend Tamien-San Jose Diridon shuttle will also operate that day.
- Capital Projects –

The Capital Projects information is current as of April 17, 2020 and is subject to change between April 17 and May 7, 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.

During April, the platform for the relocated Hillsdale station near 28th Avenue was completed. The retrofit of the existing bridge over Hillsdale Boulevard to accommodate a new track alignment was completed.

Due to temporary reduced Caltrain service levels, the project was able to single track continuously on the northbound track. This allowed construction of trackwork at both the north and south tie in, and demolition of the south bound platform to occur ahead of schedule.

The temporary closure of the Hillsdale Station, to allow completion of the project, is forecast to begin on May 16, 2020 and continue until Fall of 2020 to allow construction of the new grade separations. During the temporary closure trains that normally stopped at Hillsdale will stop at Belmont, and bus and shuttle service between Belmont and Hillsdale Station will be provided to minimize the temporary passenger inconvenience. A virtual online town hall was conducted on April 9 to inform the public of the details and locations of the planned services.

The original San Mateo Parking Track (i.e., Bay Meadows Set-Out track) was removed to support the construction of the grade separation. On February 18, 2020, the San Mateo City Council selected the location for the replacement parking track to be from 10th to 14th Avenues. An online survey was issued on March 5 to gather community preferences for various types of enhancements and treatments in lieu of chain link fencing on the east side of Railroad Avenue. Due to COVID-19 restrictions, community open houses that were originally scheduled for April 7 and April 28 to show survey results, display visual renderings and obtain feedback on proposed enhancements for selection to proceed to final design were instead available online. Submission of survey feedback was extended to April 15. Upon determination of community preferences for treatments and enhancements, the project will proceed to developing final designs for the new parking track and appurtenances for eventual construction.

Adjunct to this project is a new contract to relocate and improve the storm drain system along Delaware Street adjacent to the new station and new parking lots on the east side of the project. This work was to be undertaken by the City of San Mateo. This work is now being performed by Caltrain at the request of the City. The design for this work is currently being finalized and advertisement for bids is imminent with the work to take place beginning this Fall and completing in early-2021.  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 April, shoring that is required to structurally support the existing trackway and station continued. Also, excavation continued for the west plaza at the intersection of Airport Boulevard and Grand Avenue, and, the connecting west ramps and stairway. Relocation of a third-party fiber optic line in conflict with ramps is also in progress.

Due to the contractor caused delays, the project completion date is expected to extend from November 2020 until March 2021.

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.

The contract was advertised for bids on March 13, 2020. Due to COVID-19 constraints a virtual pre-bid conference was conducted followed by controlled physical site visits were conducted with bidders on March 27, 2020. Bids are due on April 28, 2020 and the award of contract is currently planned for June 2020. Construction is planned to occur from summer of 2020 to summer of 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 upgrading to new credit card readers has been completed at stations except for 8 remaining TVMs that are currently suspended due to COVID-19 restrictions. This first phase of the project is expected to complete in the summer when the shelter in place order is lifted. Full funding for the option for retrofitting 12 additional TVM's has now been secured and the option will be executed. 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% crossing design by the Electrification project is still not yet available for design coordination and a timeframe for its receipt is to be determined. The project is now proceeding to complete its own design without this information from the Electrification project. Completion of design is now planned by Spring 2020 and the construction to take place from summer 2020 until end of 2020.

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 no review comments were received from the City of San Mateo. Public outreach with neighboring businesses and residents at the various crossings was conducted in March to obtain comments and feedback for the proposed improvements and treatments. Advertisement of the construction contract is planned for the late 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. The 35% design received in March is under review including the review by the City of Palo Alto. Design is currently scheduled to continue to 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 fall of 2020.

F-40 Locomotive Mid-Life Overhaul Project: Perform mid-life overhaul of three F40PH2C locomotives. The mid-life overhaul of the locomotives includes the compete 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 returned to service. Locomotive #922 completed final quality checks at the vendor's facility and is now in transit for return to San Jose in April 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 overhaul contract was awarded to Alstom Transportation, Inc. (Alstom) in April 2020. The contract is now in the process of being executed with the vendor. 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.

# AGENDA ITEM #6b MAY 7, 2020

# PENINSULA CORRIDOR JOINT POWERS BOARD STAFF REPORT

- TO: Joint Powers Board
- THROUGH: Jim Hartnett Executive Director
- FROM: Joan Cassman Legal Counsel

Derek Hansel Chief Financial Officer

Michelle Bouchard April Chan Chief Officer, Rail Chief Officer, Planning, Grants and Transportation Authority

# SUBJECT: AUTHORIZE THE EXECUTIVE DIRECTOR TO APPLY FOR EMERGENCY FUNDS AND EXECUTE RELATED AGREEMENTS, AND EXERCISE CERTAIN EMERGENCY POWERS IN RESPONSE TO THE COVID-19 PANDEMIC

# <u>ACTION</u>

Staff recommends the Board of Directors:

- 1. Adopt a resolution authorizing the Executive Director, or his designee, to apply for and execute agreements and other documentation required to receive federal, state, or local emergency relief financial assistance, including but not limited to assistance from the Federal Emergency Management Agency.
- 2. Adopt a resolution authorizing and directing the Executive Director:
  - To waive requirements of the Peninsula Corridor Joint Powers Board (JPB) Procurement Manual when necessary and appropriate;
  - To take all actions necessary and proper in response to the COVID-19 pandemic, including promulgating written orders and rules necessary to provide for the protection of life and property pursuant to Government Code Section 8634;
  - To provide mutual aid when appropriate to an area affected by an emergency; and
  - To report the impacts of such authorized actions to the Board.

# **SIGNIFICANCE**

The COVID-19 pandemic is an unexpected, unprecedented, and extraordinary event. Staff has identified a variety of actions and measures that would better position the JPB to act quickly, yet thoughtfully, to address these changing circumstances, and take advantage of available federal, state, and local assistance. Staff recommends the Board adopt two resolutions to provide resources and flexibility to assist the JPB in its efforts to provide service and administer its affairs during the COVID-19 pandemic.

# Resolution to Receive Federal, State, and Local Financial Assistance

The efforts of the JPB to respond to and mitigate the spread of COVID-19 have resulted in additional operating expenses, including but not limited to costs for personal protective equipment, sanitizing supplies, staff time, technology enhancements and legal costs.

While the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), passed by Congress in March, provides much needed emergency relief for the JPB through funds distributed by the Metropolitan Transportation Commission, there are additional funds available from the Federal Emergency Management Agency (FEMA) specifically for the additional costs for certain "emergency protective measures" incurred as a result of the COVID-19 pandemic. While the funds are made available by FEMA, the California Governor's Office of Emergency Services (Cal OES) is coordinating reimbursement requests for all public agencies in California.

As CARES Act funding is available to the JPB under Federal Transit Administration grant programs in which the JPB already participates, no further Board action is required for the JPB to access this source of financial assistance. However, the JPB is required to apply for FEMA funds through a separate Cal OES process. The JPB has already taken the first step in applying for FEMA funding by submitting a request for public assistance. As part of this process, the JPB's Board of Directors must designate an agent for the purpose of filing the application, executing related agreements and authorizing the receipt of funds.

The proposed resolution will satisfy FEMA requirements and allow staff to seek reimbursement for the costs relating to the COVID-19 pandemic and also authorize the Executive Director to submit similar applications for available federal, state, or local assistance relating to the COVID-19 pandemic and for other future emergencies.

# Resolution Concerning Mutual Aid, Local Regulation and Procurements

The COVID-19 pandemic and the accompanying shelter-in-place orders have dramatically reduced transit ridership, as well as the various revenue streams upon which the JPB depends to fund its services. However, many of the JPB's riders, including workers providing essential services to the community, rely on the JPB's services to access work, and to obtain food and supplies. The situation is also fluid due to the issuance of federal, state, and local emergency orders and legislation. Various alterations to the JPB's schedules are necessary for the JPB to address these dramatically changed circumstances while still meeting the needs of transit-dependent riders. In addition, changes to JPB operations are required for operator and passenger safety. The Executive Director already has the authority to:

# a. Make certain service changes

The Executive Director is authorized to change train schedules that do not "add or delete service to or from a station" as provided in Section 5.c of the Joint Powers Agreement and that do not constitute "major services changes," as defined by the JPB's Title VI Major Service Change Policy, including significant service reductions and alterations lasting up to one year. Since the onset of this pandemic, staff already has used this authority to operate on reduced schedules to protect the health and safety of the JPB's riders, employees, contract workers and agents, while also accounting for the JPB's reduced revenue and demand for transit services.

# b. Make certain fare changes

The Executive Director also is authorized under the Caltrain Fare Structure, adopted in its current form by the Board of Directors in December 2019, to implement promotional fare reductions, including delays of previously-approved fare increases, for a period of up to six months. Staff already has utilized this authority to postpone a reduction in the Clipper fare discount on Caltrain that was scheduled to go into effect on April 1st after balancing the JPB's reduced revenue and demand for transit services, the economic impacts of the COVID-19 pandemic on transit users, and the relative availability of federal and state financial assistance.

At this time, staff recommends the Board adopt a resolution to enhance the JPB's ability to both serve its ridership and respond to the changing pandemic conditions by:

1. Suspending Provisions of the Procurement Manual when Necessary and Appropriate

Responding to the COVID-19 pandemic has required, and continues to require, the JPB to make purchases of various goods and services, such as personal protective equipment and cleaning supplies, to protect its riders, employees, and agents. In some cases, best practices and legal requirements have changed quickly in response to new information about the disease. The JPB's procurement practices are subject to a variety of federal, state, and local rules. In some cases, full compliance with these rules may inhibit the JPB from procuring necessary goods and services in a timely manner.

The JPB's Procurement Manual establishes rules and guidelines to ensure that there is adequate competition and fair access to JPB contracts. Authorizing the Executive Director to waive appropriate provisions of the Procurement Manual would allow the JPB to more quickly procure goods and services where necessary. Notably, this waiver authority will only affect rules set forth in the Procurement Manual that are self-imposed by the JPB. JPB procurements must still comply with applicable federal and state laws.

2. Authorizing the Executive Director to Take Necessary and Proper Actions to Protect Life and Property

The JPB has authority to make rules governing the operation of the JPB's services as well as public conduct on JPB vehicles and property. Knowledge and recommendations concerning health risks and impacts of the COVID-19 pandemic are changing rapidly and the JPB must be prepared to act quickly, yet thoughtfully, to address these changing circumstances. Delegating authority to the Executive Director to take necessary and proper actions to respond to the COVID-19 pandemic will allow the JPB to react in a timely manner when immediate action is necessary between Board meetings.

In particular, the Emergency Services Act (at California Government Code section 8634) authorizes the JPB to designate an official to promulgate rules necessary for the protection of life and property during an emergency (e.g., concerning the use of masks by passengers). The JPB does not have the authority to declare an emergency, so this power provided by the Emergency Services Act applies only when and where another federal, state, or local agency has declared an emergency within the JPB's jurisdiction. The United States, the State of California, and the Counties of San Francisco, San Mateo, and Santa Clara among others, have declared emergencies as a result of the COVID-19 pandemic. These actions allow the JPB to utilize the authority created by the Emergency Services Act to regulate public protection on JPB vehicles and property.

3. Authorizing the JPB to Provide Mutual Aid

The COVID-19 pandemic, or another emergency such as a natural disaster that occurs during the COVID-19 pandemic, may necessitate additional capacity to transport persons and property. The Emergency Services Act (at Government Code section 8631) authorizes the JPB to provide mutual aid during such emergencies in accordance with local resolutions. While Staff does not foresee any particular need for emergency rail transportation services at this time, the proposed resolution will reconfirm the JPB's authority to respond quickly to requests for mutual aid should the need arise.

# **BUDGET IMPACT**

There is no budget impact associated with this action. However, applications submitted and agreements executed, procurements conducted, and other actions taken pursuant to the proposed resolution may result in budgetary impacts.

# BACKGROUND

The present COVID-19 pandemic has affected many aspects of the JPB's operations and created a situation in which the JPB's needs may change unexpectedly. Many local agencies have declared emergencies as a result of the COVID-19 pandemic and invoked the emergency authority available in this unprecedented time.

Prepared By:	Peter Skinner, Director, Grants and Fund Management	650.622.7818
	Shayna van Hoften, Legal Counsel	415.995.5880

# **RESOLUTION NO. 2020 –**

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

#### \* \* \*

# AUTHORIZING THE EXECUTIVE DIRECTOR TO SUBMIT APPLICATIONS AND EXECUTE AGREEMENTS FOR FINANCIAL ASSISTANCE RELATING TO FEDERAL, STATE, AND LOCAL DECLARED STATES OF EMERGENCY

WHEREAS, a novel coronavirus (COVID-19) was first detected in Wuhan, China, in late 2019 and has spread throughout the world and the United States at alarming rates; and

WHEREAS, on January 30, 2020, the World Health Organization declared the COVID-19 outbreak a public health emergency of international concern; and

WHEREAS, the U.S. Department of Health and Human Services then declared a Public Health Emergency for the United States on January 31, 2020, followed by the President of the United States declaring a National Emergency due to the COVID-19 pandemic on March 13, 2020 as well as a Major Disaster in California due to the COVID-19 pandemic on March 22, 2020; and

WHEREAS, the Governor of the State of California declared a State of Emergency as a result of the COVID-19 pandemic on March 4, 2020 and issued Executive Order No. N-33-20 (State Order) requiring all individuals to stay in their places of residence, except as needed to maintain continuity of operations of essential critical infrastructure sectors, on March 19, 2020; and

WHEREAS, City and County of San Francisco, San Mateo County and Santa Clara County each have proclaimed the existence of a Local Emergency throughout their respective counties as a result of the COVID-19 pandemic; and WHEREAS, the County Health Officers of the City and County of San Francisco, San Mateo County and Santa Clara County then declared a Local Health Emergency due to the introduction of COVID-19 in their respective counties, and issued orders (collectively "County Order") on March 16, March 31 and April 29, 2020, directing, among other things, all individuals living in the county to shelter at their place of residence except to provide or receive essential services or engage in certain essential activities and work for essential businesses and governmental services, and effective May 3 select outdoor activities, with the latest County Order in effect through May 31, 2020; and

WHEREAS, as a result of the COVID-19 pandemic; the federal, state, and local emergency declarations; the County Orders, and the State Order, numerous additional emergency measures, such as enhanced cleaning and sanitizing, and purchase and use of additional personal protective equipment for employees, have become necessary to ensure the Peninsula Corridor Joint Powers Board (JPB) can continue to provide transit services in a manner that adequately protects the safety and health of its employees and the public; and

WHEREAS, the COVID-19 pandemic has dramatically reduced public transit ridership on Caltrain and beyond, has dramatically diminished revenue sources upon which the JPB relies to support its services, and has caused economic hardship for countless individuals and employers, including many Caltrain customers; and

WHEREAS, various federal, state, and local funds, including but not limited to Federal Emergency Management Agency (FEMA) funds distributed through the California Governor's Office of Emergency Services, may be available to assist the JPB for expenses incurred as a result of the COVID-19 pandemic and other emergencies; and

WHEREAS, the Board of Directors desires to authorize the Executive Director to submit applications, execute agreements and take such other actions as necessary and appropriate to secure funding from FEMA, the Governor's Office of Emergency Services and any other federal, state and local funding sources that may be available to reimburse and assist the JPB in defraying the additional costs incurred in responding to the COVID-19 Pandemic.

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

- In light of the recitals set forth above, the Board recognizes that there is a state of emergency within the JPB's service area and jurisdiction resulting from the COVID-19 pandemic;
- 2. The Executive Director is authorized to execute and provide all requisite applications, certifications, assurances and agreements to the appropriate federal, state, and local agencies for all matters pertaining to federal, state, and/or local assistance relating to the COVID-19 pandemic and other future emergencies; and
- The Executive Director, or his designee, is authorized to execute any other documents and take any other actions necessary for the JPB to apply for and accept disaster assistance related to the COVID-19 pandemic and other future emergencies.

Regularly passed and adopted this 7th day of May, 2020 by the following vote:

AYES:

NOES:

ABSENT:

Chair, Peninsula Corridor Joint Powers Board

ATTEST:

JPB Secretary

# RESOLUTION NO. 2020 -

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

#### \* \* \*

# AUTHORIZING AND DIRECTING THE EXECUTIVE DIRECTOR TO EXERCISE CERTAIN EMERGENCY POWERS IN RESPONSE TO THE COVID-19 PANDEMIC

WHEREAS, a novel coronavirus (COVID-19) was first detected in Wuhan, China, in late 2019 and has spread throughout the world and the United States at alarming rates; and

WHEREAS, on January 30, 2020, the World Health Organization declared the COVID-19 outbreak a public health emergency of international concern; and

WHEREAS, the U.S. Department of Health and Human Services then declared a Public Health Emergency for the United States on January 31, 2020, followed by the President of the United States declaring a National Emergency due to the COVID-19 pandemic on March 13, 2020 as well as a Major Disaster in California due to the COVID-19 pandemic on March 22, 2020; and

WHEREAS, the Governor of the State of California declared a State of Emergency as a result of the COVID-19 pandemic on March 4, 2020 and issued Executive Order No. N-33-20 (State Order) requiring all individuals to stay in their places of residence, except as needed to maintain continuity of operations of essential critical infrastructure sectors, on March 19, 2020; and

WHEREAS, City and County of San Francisco, San Mateo County and Santa Clara County each have proclaimed the existence of a Local Emergency throughout their respective counties as a result of the COVID-19 pandemic; and WHEREAS, the County Health Officers of the City and County of San Francisco, San Mateo County and Santa Clara County then declared a Local Health Emergency due to the introduction of COVID-19 in their respective counties, and issued orders (collectively "County Order") on March 16, March 31 and April 29, 2020, directing, among other things, all individuals living in the county to shelter at their place of residence except to provide or receive essential services or engage in certain essential activities and work for essential businesses and governmental services, and effective May 3 select outdoor activities, with the latest County Order in effect through May 31, 2020; and

WHEREAS, as a result of the COVID-19 pandemic; the federal, state, and local emergency declarations; the County Orders, and the State Order, numerous additional emergency measures, such as enhanced cleaning and sanitizing, and purchase and use of additional personal protective equipment for employees, have become necessary to ensure the Peninsula Corridor Joint Powers Board (JPB) can continue to provide transit services in a manner that adequately protects the safety and health of its employees and the public; and

WHEREAS, the COVID-19 pandemic has dramatically reduced public transit ridership on Caltrain and beyond, has dramatically diminished revenue sources upon which the JPB relies to support its services, and has caused economic hardship for countless individuals and employers, including many Caltrain customers; and

WHEREAS, the Executive Director has authority to make service changes that do not add or delete service at any stations under the Joint Powers Agreement governing the JPB, that have a duration of up to 12 months, and that are not "major service changes" as defined in the JPB's Major Service Change Policy adopted pursuant to Resolution 2013-21; and

WHEREAS, under the JPB's Fare Structure adopted pursuant to Resolution 2019-32 and Federal Transit Administration Circular 4702.1B, the Executive Director has authority to implement special and promotional fare discounts lasting up to six months, including delays of previously-approved fare increases; and

WHEREAS, the California Emergency Services Act (Gov. Code §§ 8550 et seq.) authorizes local public agencies to delegate additional powers to their officials to provide for the protection of life and property and provide mutual aid to other agencies during local emergencies; and

WHEREAS, the Board of Directors desires to delegate additional authority and provide further direction to the Executive Director to take appropriate actions, subject to review by the Board of Directors and in compliance with applicable laws, to allow the JPB to respond more effectively to the rapidly changing knowledge and recommendations concerning the health risks and impacts of the COVID-19 pandemic, and the JPB's financial situation.

**NOW, THEREFORE BE IT RESOLVED** that the Board of Directors of the Peninsula Corridor Joint Powers Board that, for the duration of any of the above-referenced federal, state, or local COVID-19 pandemic-related emergencies or emergency orders, as may be amended from time to time, within the JPB's service area, the Executive Director is hereby authorized and directed to:

1. Suspend any provision of the Peninsula Corridor Joint Powers Board Procurement Manual for any purchase relating to the COVID-19 pandemic where compliance with the provision would materially impede the JPB's ability to procure necessary materials, goods, or services;

- 2. Take all actions necessary and proper in response to the COVID-19 pandemic, including promulgating written orders and regulations necessary to provide for the protection of life and property pursuant to Government Code Section 8634 with the understanding that such actions include the Executive Director's existing authority as recited above to alter schedules in a manner that protects health and safety, while also accounting for the JPB's reduced revenue and demand for transit services; and to implement promotional fare reductions, including delays of previously-approved fare increases, to account for the reduced demand for transit services, the economic impacts of the COVID-19 pandemic on transit users, and the relative availability of federal and state financial assistance; and
- Provide mutual aid to any affected area in accordance with local ordinances, resolutions, emergency plans, or agreements therefor pursuant to Section 8631 of the Government Code; and

**BE IT FURTHER RESOLVED THAT** the Executive Director is directed to comply with all federal, state, and local laws when taking actions authorized by this resolution, and to report the impacts of such actions to the Board.

Regularly passed and adopted this 7th day of May, 2020 by the following vote:

AYES:

NOES:

ABSENT:

Chair, Peninsula Corridor Joint Powers Board

ATTEST:

JPB Secretary

# AGENDA ITEM # 6c MAY 7, 2020

# 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 Libr ary.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)



# March 2020 Monthly Progress Report

May 7, 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**

1.0	Backgi	round 1-1	
2.0	Executive Summary		
	2.1.	Monthly Dashboards 2-2	
	2.2.	Funding Partners Participation in PCEP2-5	
	2.3.	Schedule	
	2.4.	Budget	
	2.5.	Board Actions	
	2.6.	Government and Community Affairs	
3.0	Electrif	fication – Infrastructure	
	3.1.	Electrification	
	3.2.	Supervisory Control and Data Acquisition	
	3.3.	Tunnel Modification	
4.0	Electric	c Multiple Units	
	4.1.	Electric Multiple Units	
	4.2.	Centralized Equipment Maintenance and Operations Facility Modifications 4-1	
5.0	Safety		
6.0	Quality	/ Assurance	
7.0	Sched	ule	
8.0	Budge	t and Expenditures	
9.0	Chang	e Management	
10.0	Fundin	ıg 10-1	
11.0	Risk M	lanagement 11-1	
12.0	Enviro	nmental	
	12.1.	Permits 12-1	
	12.2.	Mitigation Monitoring and Reporting Program (MMRP) 12-1	
13.0	Utility F	Relocation	
14.0	Real E	state	
15.0	Third F	Party Agreements	
16.0	Goverr	nment and Community Affairs	
17.0	Disadv	vantaged Business Enterprise (DBE) Participation and Labor Statistics	
18.0		ement	
19.0	Timelir	ne of Major Project Accomplishments 19-1	

# List of Tables

# Page

Table 2.1 Schodule Statue	20
Table 2-1 Schedule Status	
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

A-1
B-1
C-1
D-1
E-1
F-1
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.

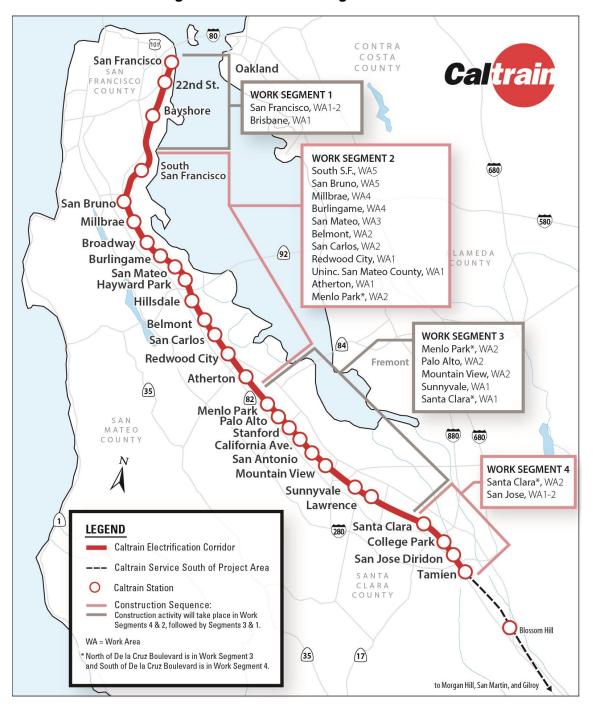
An electrified Caltrain will better address Peninsula commuters' vision of environmentally friendly, fast and reliable service. Electrification will modernize Caltrain and make it possible to increase service while offering several advantages in comparison with existing diesel power use, including:

- Improved Train Performance, Increased Ridership Capacity and Increased Service: Electrified trains can accelerate and decelerate more quickly than dieselpowered 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** 

Due to the designation of "essential project," PCEP construction has not slowed as a result of the Coronavirus Disease 2019 (COVID-19) pandemic, which has forced shutdowns around the world. While following suggested precautions for personal safety, construction crews remain in the field taking advantage of reduced train traffic to perform construction activities on the right of way. Progress marched on in March with the installation of 25 foundations and 72 poles. Speed of foundation installations is expected to accelerate in the coming months to meet the schedule goal of completion by the end of the year.

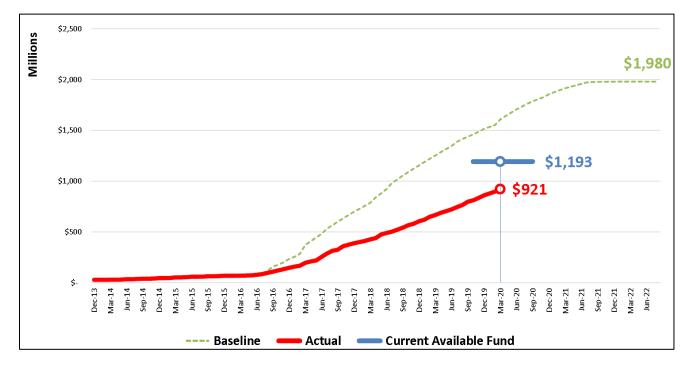
Having received approval from the Board, PG&E will now be constructing the interconnections between Caltrain and PG&E substations at South San Francisco and San Jose. PCEP and PG&E have established a meeting schedule to monitor the design, schedule, and progress of the traction power facilities construction.

EMU production is also operating near normal with on-schedule deliveries of car bodies, shells, and truck frames. COVID-19 has diminished some EMU activities, though, specifically related to those requiring travel. Testing of Trainset 1 has been postponed until travel restrictions are lifted. There is also a disruption in the supply chain for materials to construct additional trains, but the degree to which the disruption will affect progress is unknown at this time. Quality Assurance continues, however, as quality representatives are onsite in Salt Lake City and Altenrhein.

The Tunnel Modification Project is also progressing as planned. This month, conductor rail installation was completed and some fencing was installed. Preparations are underway for next month's construction activities.

# 2.1. Monthly Dashboards

Dashboard progress charts are included below to summarize construction progress.



# Figure 2-2 Expenditure – Planned vs. Actual

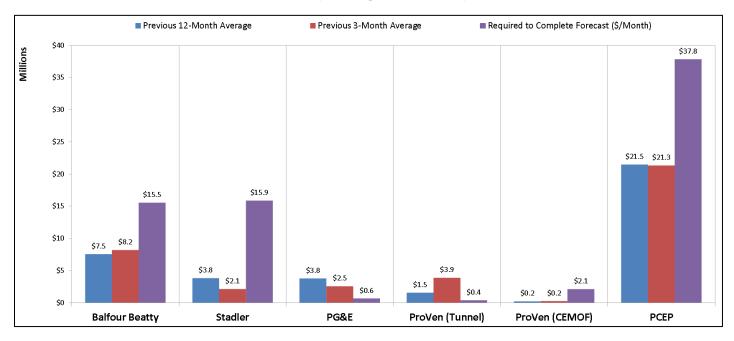
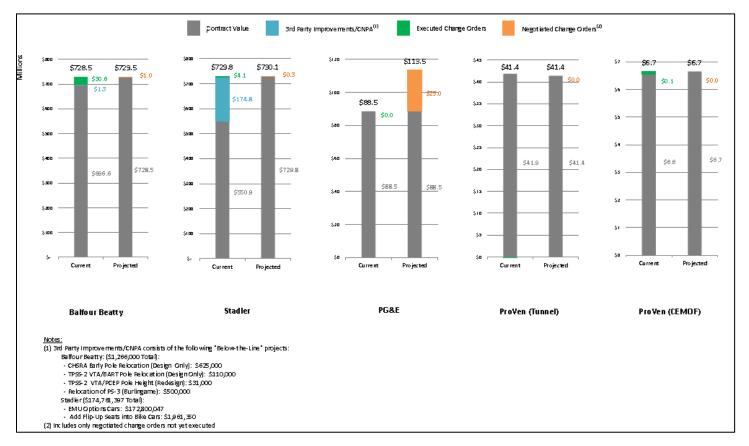
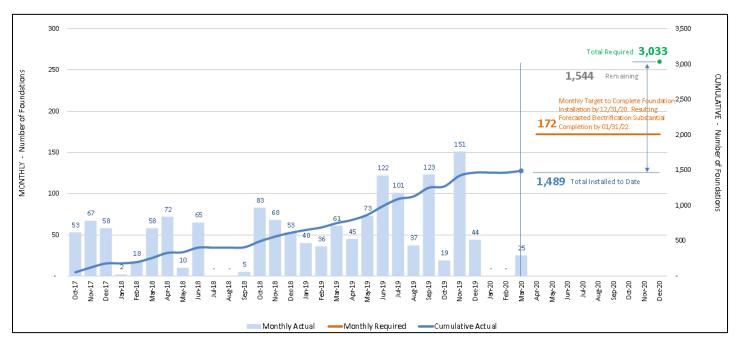


Figure 2-3 Spending Rate vs. Required

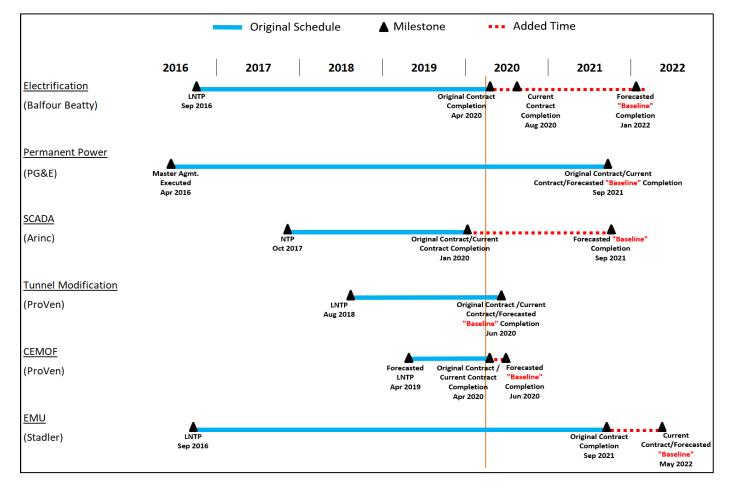
# Figure 2-4 Construction Contract Budgets







# 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 – Weekly Discipline-Specific Meetings

Purpose: To replace the previous weekly Engineering Meeting with three disciplinespecific meetings for the three major categories of work under the Electrification Design Build (DB) contract: Overhead Contact System (OCS) Foundation, Traction Power Facilities (TPF), and Signals. Each meeting will focus on the status, resolution and tracking of Balfour Beatty Infrastructure, Inc. (BBII) and Electrification design- and construction-related issues.

#### Activity this Month

## **OCS Foundation Meeting**

Funding Partners: None

- Review of upcoming foundation design and installation schedule
- Discussion of open issues impacting foundations design and installation
- Discussion of outstanding Requests for Information (RFI)
- Review of foundation designs that potentially impact Right of Way (ROW)
- Review of Field Order and Change Notice procedures related to OCS foundation work

## **TPF Meeting**

Funding Partners: None

- Review of outstanding items as they relate to the design and construction of the PG&E Interconnection
- Review of status of long-lead material procurement
- Review of PG&E Interconnection schedule
- Discuss progress and next steps for the Single Phase Study
- Discuss outstanding comments on the interconnection agreement
- Review and resolve open issues on the construction and design of the TPFs (paralleling stations, traction power substations, switching station)

# Signal Meeting

Funding Partners: None

- Discussion of design, installation and testing of the signal and communication modifications to the Caltrain system
- Discussion of outstanding comments and responses to comments on signal and communication design packages
- Review of schedule for signal and communication cutover plans
- Discuss and resolve RFIs

## PCEP Delivery Coordination Meeting – Bi-Weekly

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

#### Activity this Month

#### Funding Partners: None

The Project Management Oversight Consultant (PMOC) met with staff March 9 – 11. The annual Quality Management Plan Review has been completed and issued. Seven EMU sub-supplier quality audits were held in March. Joint Powers Board (JPB) and BBII safety staff and engineers attended the VTA Safety training. BBII held an All Hands Safety meeting in Santa Clara and San Francisco with a total of 280 people in attendance. The 25th Avenue Grade Separation Project is expected to install all foundations by July 27 with a substantial completion by May 2021. In EMU design and manufacturing, Final Design Reviews (FDRs) and First Article Inspections (FAIs) are continuing to progress toward closure, with a projected completion before the commencement of Type Testing in late March 2020. The Propulsion Gearbox retest is scheduled for March 9 – 13 with disassembly and inspection on March 26. The next design review with the Federal Railroad Administration (FRA) is being rescheduled with possible new dates in May 2020 due to incomplete Bike Car flip-up seats and barriers. A revised electrification OCS foundation schedule is expected with a target completion of all foundations by the end of 2020, and the Factory Acceptance Test (FAT) for Supervisory Control and Data Acquisition (SCADA) is expected to begin June 15 and completed by July 7.

## 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: None

Bi-weekly PCEP interface meetings are held to monitor and determine appropriate resolution for systems integration issues. All information from the systems integration database was recovered, is now in an Excel spreadsheet and individual items are being updated. The Action Items spreadsheet is the primary tracking method while review and System Integration matrix updates are in progress. 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 25<sup>th</sup> 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 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: Metropolitan Transportation Commission (MTC): Trish Stoops; 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

No Risk Assessment Committee Meeting was held in the month of March.

## Change Management Board (CMB) – Monthly

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

## Activity this Month

The March CMB meeting was rescheduled for April 7 to coincide with the Funding Partners Quarterly and FTA Quarterly meetings.

## 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.

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

Milestones	Program Plan	Progress Schedule (March 2020) <sup>1</sup>
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 <sup>2</sup>
<ul> <li>Interconnection from PG&amp;E Substation to Traction Power Substation (TPS)</li> </ul>	N/A	09/30/2020 <sup>2</sup>
PG&E Provides Permanent Power	09/09/2021	09/09/2021
Electrification Substantial Completion	08/10/2020	01/31/2022 <sup>2</sup>
Start Phased Revenue Service	N/A	02/01/2022 <sup>2</sup>
RSD (w/o Risk Contingency)	12/09/2021	05/06/2022
FFGA RSD (w/ Risk Contingency)	08/22/2022	08/22/2022

## Table 2-1 Schedule Status

Note:

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

<sup>2.</sup> 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.

Description of Work	Budget	Current Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion
	(A)	(B) <sup>1</sup>	(C) <sup>2</sup>	(D) <sup>3</sup>	(E)	(F) = (D) + (E)
Electrification Subtotal	\$1,316,125,208	\$1,316,125,208	\$17,595,809	\$714,040,864	\$602,084,344	\$1,316,125,208
EMU Subtotal	\$664,127,325	\$664,127,325	\$7,339,990	\$206,829,237	\$457,298,087	\$664,127,325
PCEP TOTAL	\$1,980,252,533	\$1,980,252,533	\$24,935,798	\$920,870,102	\$1,059,382,431	\$1,980,252,533

## Table 2-2 Budget and Expenditure Status

Notes regarding tables above:

<sup>1.</sup> Column B "Current Budget" includes executed change orders and awarded contracts.

<sup>2.</sup> Column C "Cost This Month" represents the cost of work performed this month.

<sup>3.</sup> Column D "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.

## 2.5. Board Actions

- Application for and Receipt of Annual Cap and Trade Funding for PCEP
- Amendment No. 2 to Supplemental Agreement No. 2 with PG&E for construction of 115 kilovolt Interconnections

#### Future anticipated board actions include:

- Shunt wire construction
- EMU Pantograph Inspection & Monitoring System contract
- On-call program management and electrification support services contract amendments

#### 2.6. Government and Community Affairs

There was one outreach event this month.

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# 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

- Installed off-track foundations in Segment 3.
- Continued to install OCS poles, long-reach cantilevers, 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.
- Held meetings with BBII to update schedule of foundation installations, including design and potholing with a goal to complete all foundations by the end of the year.
- 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 and removed asbestos pipes.
- Continued clearing and grubbing at PS-4.
- Installed signal ductbank and conduits in Segment 2.
- Continued to install signal ductbank, conduits, and cables in Segment 4.
- Performed case installation at Control Point (CP) Alameda and signal equipment kit installation at CP De la Cruz.
- 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 (IJs) in Segment 3.
- 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 TPS-1 90% design, and redundant fiber design at TPS-2 will be submitted in early April.
- 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.
- 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.

	Foundations				Poles		
Segment	Work Area	<b>Required</b> <sup>abc</sup>	Completed this Month	Completed to Date	Required <sup>ab</sup>	Completed this Month	Completed to Date <sup>d</sup>
	Tunnels	32	0	32	32	0	32
1	А	309	0	0	259	0	0
	В	237	0	0	177	0	0
	5	244	0	184	209	0	160
	4	314	0	240	254	0	186
2	3	174	0	63	141	0	36
	2	248	0	78	205	0	60
	1	208	0	79	154	0	33
3	2	512	25	217	443	53	93
3	1	391	0	353	310	19	191
	А	240	0	156	177	0	107
4	В	133	0	87	123	0	70
	CEMOF	110	0	0	81	0	0
Total		3,152	25	1,489	2,565	72	968

 Table 3-1 Work Progress by Segment

Note:

<sup>a</sup> Foundations required do not match poles required as guy foundations are needed in some locations for extra support.

<sup>b.</sup> The number of required poles and foundations fluctuate due to design changes.

<sup>6</sup> 55 foundations in S2WA5 will be installed by South San Francisco and 64 foundations in S2WA3 will be installed by 25<sup>th</sup> Avenue.

<sup>d.</sup> 2 poles in S3WA1 were installed during January 2020.

## Activity Next Month

- Continue foundation installation in Segment 3, both on-track and off-track.
- 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 all Segments where available.
- Continue wire installation in Segments 3 and 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.
- 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 and Segment 2.
- 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.
- Continue planning process for signal cutovers.
- Review BBII work plans for upcoming construction activities.
- Progress TPS-2 and TPS-1 Interconnection Design to Issued for Construction.
- 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).
- ARINC completed work on 2 additional test procedures and receiving comments.

## Activity Next Month

- Prepare and deliver the Monthly Report and the Monthly Schedule Update.
- Attend project status meetings.
- Support ongoing discussions concerning RFIs.
- Complete all test procedures.
- Merge Railroad Operations Control System into SCADA code base in preparation for Pre-FAT.

## 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 PCEP.

## Activity This Month

- Continued review of and prepared responses for submittals and RFIs.
- Completed Installation fencing for Tunnel 1 North, Tunnel 4 North, and Tunnel 4 South.
- Completed Conductor Rail installation.

- Review and respond to submittals, RFIs, and SSWPs as needed.
- Terminate feeder wire, contact wire, and conductor rail.
- Install ROW fence signage.
- Install Post insulator.
- Install OCS signage for every fifth drop tube.
- Install fencing at Tunnel 1 South and Tunnel 3 North.
- Prepare OCS testing plan.
- Prepare Spare Parts transmittal.

## 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

- Corona Virus Disease 2019 (COVID-19) has caused mixed disruptions of Stadler Activities:
  - Switzerland-based management, administrative and engineering personnel are working from home.
  - Switzerland-based production personnel are onsite and operating near normal. Carbodies shells and truck frame deliveries are on schedule.
  - Salt Lake City-based management, administrative and engineering personnel are working from home on alternate days. Measures have been taken to provide social distancing in office and production areas.
  - Salt Lake City-based testing of Trainset No. 1 has been halted since key Stadler and sub-supplier personnel cannot travel. The current delay is estimated at a day for each day of COVID-19 restrictions.
  - Stadler and some sub-suppliers have submitted excusable delay notices.
  - Stadler has material for about 3 trainsets, but the disrupted supply chain will likely create shortages and delays.
  - Stadler and project oversight and administration unaffected.
  - QA representatives are onsite in Altenrhein and Salt Lake City facilities.
- 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.
- FAIs continue to have their paperwork formalized and closed out.
- 28 car shells have been shipped from Stadler Switzerland and are onsite in Stadler's Salt Lake City facility.
- 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. No change from last month.

- Quality Assurance audits of USA-based sub-suppliers were halted in mid-March due to COVID-19 travel restriction. Audits will commence when travel permitted.
- PCEP and Caltrain Management meeting in Salt Lake City is postponed to June.

## **Activity Next Month**

- Continue to close out system level FDRs and FAIs.
- Work with the FRA on closing out remaining waiver requests and open items.
- Re-baseline Stadler trainset delivery and testing schedule on Caltrain property.

## 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.
- Installed conduit at the maintenance building near Track 5.
- Conducted soil testing at Parts Storage Warehouse (PSW).

- Compact subgrade at PSW.
- Install baserock at PSW.
- Install sand and 10 millimeter membrane at PSW.
- Install rebar at PSW.
- Continue to install conduit and pull wire at the maintenance building at Track 5.
- Off-haul soil from the area of the PSW.

# 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.
- Continued to review 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 a review and provided comments to the updated project Preliminary Hazard Analysis (PHA), Threat & Vulnerability Assessment (TVA), Safety & Security Certification Plan (SSCP), and System Safety Plan (SSP).
- Participated with internal stakeholders in Rail Activation Committee meetings.
- Investigated project incident occurrences and worked with the contractor representatives to identify incident root causes and develop and implement 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 safety and security updates to Project Management Oversight Contractor.

- Monthly safety communication meetings (via Webex) 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.
- Coordinate with JPB Safety and the project contractors with the application of mitigation measures in response to the evolving COVID-19 virus.

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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 report issued.
- Conducted three design package audits of PGH Wong with no Findings.
- Submitted review and report of the adequacy of the Quality Management Plan implementation.

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

Quality Assurance Activity	This Reporting Period	Total to Date				
Audits Conducted	3	112				
Audit Findings						
Audit Findings Issued	0	68				
Audit Findings Open	0	0				
Audit Findings Closed	3	68				
No	Non-Conformances					
Non-Conformances Issued	0	10				
Non-Conformances Open	0	1				
Non-Conformances Closed	0	9				

 Table 6-1 Quality Assurance Audit Summary

- Conduct audits of three PGH Wong design packages.
- Conduct field surveillances at PS-4, PS-5, and PS-7.

## 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.

Milestones	Program Plan	Progress Schedule (March 2020) <sup>1</sup>
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 <sup>2</sup>
<ul> <li>Interconnection from PG&amp;E Substation to Traction Power Substation (TPS)</li> </ul>	N/A	09/30/2020 <sup>2</sup>
PG&E Provides Permanent Power	09/09/2021	09/09/2021
Electrification Substantial Completion	08/10/2020	01/31/2022 <sup>2</sup>
Start Phased Revenue Service	N/A	02/01/2022 <sup>2</sup>
RSD (w/o Risk Contingency)	12/09/2021	05/06/2022
FFGA RSD (w/ Risk Contingency)	08/22/2022	08/22/2022

## **Table 7-1 Schedule Status**

Note:

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

<sup>2.</sup> 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 March, the variances relative to the BBII schedule are due to signal design progressing slower than baseline, slow progress on Traction Power Facilities design and construction, and slow progress on OCS foundations design resolution and installations.

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

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

# Table 7-2 Critical Path Summary

# 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 <sup>st</sup> Trainset in Salt Lake City	02/04/2019 (A)
Arrival of 1 <sup>st</sup> Trainset in Pueblo, CO	09/01/2020
Arrival of 1 <sup>st</sup> Trainset at JPB	02/26/2021
Segment 4 Completion	02/14/2021
Conditional Acceptance of 1 <sup>st</sup> 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

## 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.

Description of Work	Budget	Current Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion
	(A)	(B) <sup>1</sup>	(C) <sup>2</sup>	(D) <sup>3</sup>	(E)	(F) = (D) + (E)
ELECTRIFICATION						
Electrification (4)	\$696,610,558	\$727,220,541	\$7,632,170	\$385,326,618	\$341,893,923	\$727,220,541
SCADA	\$0	\$3,446,917	\$0	\$1,934,371	\$1,512,546	\$3,446,917
Tunnel Modifications	\$11,029,649	\$41,408,610	\$3,982,064	\$40,646,335	\$762,276	\$41,408,610
Real Estate	\$28,503,369	\$28,503,369	\$179,640	\$21,111,535	\$7,391,834	\$28,503,369
Private Utilities	\$63,515,298	\$92,451,380	\$2,128,585	\$81,462,056	\$10,989,325	\$92,451,380
Management Oversight (5)	\$141,506,257	\$145,557,684	\$2,001,520	\$135,587,766	\$9,969,918	\$145,557,684
Executive Management	\$7,452,866	\$9,214,226	\$114,717	\$8,094,690	\$1,119,536	\$9,214,226
Planning	\$7,281,997	\$6,281,997	\$815	\$5,794,526	\$487,471	\$6,281,997
Community Relations	\$2,789,663	\$1,789,663	\$5,914	\$1,564,802	\$224,861	\$1,789,663
Safety & Security	\$2,421,783	\$3,691,387	\$94,754	\$3,242,274	\$449,113	\$3,691,387
Project Management Services	\$19,807,994	\$16,807,994	\$134,304	\$12,623,670	\$4,184,324	\$16,807,994
Engineering & Construction	\$11,805,793	\$11,805,793	\$231,712	\$10,234,834	\$1,570,960	\$11,805,793
Electrification Eng & Mgmt	\$50,461,707	\$50,461,707	\$651,875	\$47,473,932	\$2,987,776	\$50,461,707
Construction Management	\$0	\$2,790,608	\$461,570	\$3,263,069	(\$472,460)	\$2,790,608
IT Support	\$312,080	\$407,170	\$0	\$407,170	\$0	\$407,170
Operations Support	\$1,445,867	\$2,380,632	\$164,242	\$2,605,077	(\$224,445)	\$2,380,632
General Support	\$4,166,577	\$5,566,577	\$69,971	\$5,476,847	\$89,730	\$5,566,577
Budget / Grants / Finance	\$1,229,345	\$1,429,345	(\$360)	\$1,351,390	\$77,955	\$1,429,345
Legal	\$2,445,646	\$2,445,646	\$8,363	\$4,505,818	(\$2,060,171)	\$2,445,646
Other Direct Costs	\$5,177,060	\$5,777,060	\$63,642	\$4,241,790	\$1,535,270	\$5,777,060
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	\$1,469,044	\$37,934,217	\$19,540,867	\$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	\$65,000	\$756,777	\$14,215,868	\$14,972,644
Required Projects	\$17,337,378	\$14,253,335	\$44,786	\$878,058	\$13,375,277	\$14,253,335
Maintenance Training	\$1,021,808	\$1,021,808	\$0	\$0	\$1,021,808	\$1,021,808
Finance Charges	\$5,056,838	\$6,137,156	\$93,000	\$3,859,544	\$2,277,612	\$6,137,156
Contingency	\$276,970,649	\$179,133,091	N/A	N/A	\$89,134,100	\$89,134,100
Forecasted Costs and Changes	\$0	\$0	N/A	N/A	\$89,998,991	\$89,998,991
ELECTRIFICATION SUBTOTAL	\$1,316,125,208	\$1,316,125,208	\$17,595,809	\$714,040,864	\$602,084,344	\$1,316,125,208

## Table 8-1 Electrification Budget & Expenditure Status

Notes regarding tables above:

<sup>1.</sup> Column B "Current Budget" includes executed change orders and awarded contracts.

<sup>2.</sup> Column C "Cost This Month" represents the cost of work performed this month.

<sup>3.</sup> Column D "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.

<sup>4.</sup> Cost To Date for "Electrification" includes 5% for Contractor's retention until authorization of retention release.

<sup>5.</sup> The agency labor is actual through February 2020 and accrued for March 2020.

Description of Work	Budget (A)	Current Budget (B) <sup>1</sup>	Cost This Month (C) <sup>2</sup>	Cost To Date (D) <sup>3</sup>	Estimate To Complete (E)	Estimate At Completion (F) = (D) + (E)	
EMU							
EMU \$550,899,459 \$555,034,909 \$6,337,920 \$158,557,322 \$396,477,587 \$555,034,909							
CEMOF Modifications	\$1,344,000	\$6,654,353	\$194,806	\$2,462,963	\$4,191,390	\$6,654,353	
Management Oversight (4)	\$64,139,103	\$62,513,984	\$731,930	\$42,738,142	\$19,775,842	\$62,513,984	
Executive Management	\$5,022,302	\$6,263,136	\$59,821	\$5,012,569	\$1,250,567	\$6,263,136	
Community Relations	\$1,685,614	\$985,614	\$7,298	\$650,109	\$335,505	\$985,614	
Safety & Security	\$556,067	\$765,296	\$7,498	\$533,269	\$232,027	\$765,296	
Project Mgmt Services	\$13,275,280	\$11,275,280	\$102,341	\$8,192,442	\$3,082,838	\$11,275,280	
Eng & Construction	\$89,113	\$89,113	\$0	\$23,817	\$65,296	\$89,113	
EMU Eng & Mgmt	\$32,082,556	\$29,981,014	\$386,169	\$19,719,036	\$10,261,977	\$29,981,014	
Construction Management	\$0	\$1,501,543	\$75,215	\$565,161	\$936,381	\$1,501,543	
ITSupport	\$1,027,272	\$952,089	\$12,090	\$602,656	\$349,433	\$952,089	
Operations Support	\$1,878,589	\$1,878,589	\$9,316	\$373,740	\$1,504,849	\$1,878,589	
General Support	\$2,599,547	\$2,599,547	\$26,028	\$2,363,365	\$236,182	\$2,599,547	
Budget / Grants / Finance	\$712,123	\$1,012,123	\$317	\$898,016	\$114,107	\$1,012,123	
Legal	\$1,207,500	\$1,207,500	\$7,473	\$1,232,867	(\$25,367)	\$1,207,500	
Other Direct Costs	\$4,003,139	\$4,003,139	\$38,366	\$2,571,095	\$1,432,045	\$4,003,139	
TASI Support	\$2,740,000	\$2,789,493	\$18,334	\$128,741	\$2,660,752	\$2,789,493	
Insurance	\$0	\$38,263	\$0	\$38,263	\$0	\$38,263	
Required Projects	\$4,500,000	\$3,927,821	\$0	\$538,280	\$3,389,541	\$3,927,821	
Finance Charges	\$1,941,800	\$3,761,482	\$57,000	\$2,365,527	\$1,395,955	\$3,761,482	
Contingency	\$38,562,962	\$29,407,020	N/A	N/A	\$29,775,537	\$29,775,537	
Forecasted Costs and Changes	\$0	\$0	N/A	N/A	(\$368,517)	(\$368,517)	
EMU SUBTOTAL	\$664,127,325	\$664,127,325	\$7,339,990	\$206,829,237	\$457,298,087	\$664,127,325	

Table 8-2 EMU Budget & Expenditure Status

Notes regarding tables above:

<sup>1.</sup> Column B "Current Budget" includes executed change orders and awarded contracts.

<sup>2.</sup> Column C "Cost This Month" represents the cost of work performed this month.

<sup>3.</sup> Column D "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.

<sup>4.</sup> The agency labor is actual through February 2020 and accrued for March 2020.

# Table 8-3 PCEP Budget & Expenditure Status

Description of Work	Budget	Current Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion
	(A)	(B) <sup>1</sup>	(C) <sup>2</sup>	(D) <sup>3</sup>	(E)	(F) = (D) + (E)
Electrification Subtotal	\$1,316,125,208	\$1,316,125,208	\$17,595,809	\$714,040,864	\$602,084,344	\$1,316,125,208
EMU Subtotal	\$664,127,325	\$664,127,325	\$7,339,990	\$206,829,237	\$457,298,087	\$664,127,325
PCEP TOTAL	\$1,980,252,533	\$1,980,252,533	\$24,935,798	\$920,870,102	\$1,059,382,431	\$1,980,252,533

Notes regarding tables above:

<sup>4.</sup> Column B "Current Budget" includes executed change orders and awarded contracts.

<sup>5.</sup> Column C "Cost This Month" represents the cost of work performed this month.

<sup>1.</sup> Column D "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.

Description of Work	Budget	Current Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion
	(A)	(B) <sup>1</sup>	(C) <sup>2</sup>	(D) <sup>3</sup>	(E)	(F) = (D) + (E)
CHSRA Early Pole Relocation	\$1,000,000	\$1,000,000	\$175,042	\$915,373	\$84,627	\$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	\$0	\$53,292,490	\$119,507,557	\$172,800,047
Add Flip-Up Seats into Bike Cars	\$1,961,350	\$1,961,350	\$0	\$980,675	\$980,675	\$1,961,350
CNPA TOTAL	\$176,402,397	\$176,402,397	\$175,042	\$55,432,039	\$120,970,358	\$176,402,397

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

Notes regarding tables above:

<sup>1.</sup> Column B "Current Budget" includes executed change orders and awarded contracts.

<sup>2.</sup> Column C "Cost This Month" represents the cost of work paid this month.

<sup>3.</sup> 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.

Transfer	Description	Contingency <sup>1</sup>
ELECTRIFICATION		
BBI-CCO-072A	SVP Requirements for Joint SIS & SPS (Task 1)	\$80,000
BBI-CCO-023C	Portec Insulated Rail Joints	\$375,000
BBI-CCO-076	Asbestos Pipe Abatement at CP Shark	\$145,872
BBI-CCO-075	Norcal Utility Potholing (FO#39)	\$98,105
BT-026	Rent and ODC Budget Reallocation	\$600,000
	ELECTRIFICATION SUBTOTAL	\$1,298,976
EMU		
PRO-CCO-020	Ground Wire Relocation	\$14,117
PRO-CCO-021	Zurn Drain Assembly in Lieu of Fibrelyte	\$1,104
BT-026	Rent and ODC Budget Reallocation	(\$600,000)
	EMU SUBTOTAL	(\$584,779)
	PCEP TOTAL	\$714,197

Table 8-5 B	udget Transfers	of Contingency
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Notes regarding tables above:

<sup>1.</sup> 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.

## 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
3/18/2020	BBI-053-CCO-072A	SVP Requirements for Joint SIS & SPS (Task 1)		\$80,000
3/19/2020	BBI-053-CCO-023C	Portec Insulated Rail Joints		\$375,000
3/26/2020	BBI-053-CCO-076	Asbestos Pipe Abatement at CP Shark		\$145,872
3/31/2020	BBI-053-CCO-075	Norcal Utility Potholing (FO#39)		\$98,105
			Total	\$698,977

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

## EMU Contract

Change C	Order Authority (5% of Sta	ller Contract)		5% x \$550,899,459 = \$27,544,973
Date	Change Number None	Description		CCO Amount \$0
			Total	\$0

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

#### SCADA Contract

Change Ord	er Authority (15% of Al	INC Contract)	15% x \$3,446	,917 = \$517,038
Date	Change Number	Description		CCO Amount
	None		Total	\$0 <b>\$0</b>

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

# **Tunnel Modification Contract**

Change O	rder Authority (10% of Pi	oVen Contract) <sup>2</sup>		10% x \$38,477,777 = \$3,847,778
Date	<b>Change Number</b> None	Description		CCO Amount \$0
			Total	\$0

<sup>1</sup> (When indicated) Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.
 <sup>2</sup> Tunnel modification contract (\$38,477,777) includes: Notching (\$25,281,170) and Drainage (\$13,196,607).
 <sup>3</sup> Third Party Improvements/CNPA Projects that are funded with non-PCEP funds.

#### CEMOF Contract

Change Order Authority (10% of ProVen Contract)		10% x \$	10% x \$6,550,777 = \$655,078	
Date	Change Number	Description		CCO Amount
3/5/2020	PROV-071-CCO-020	Ground Wire Relocation		\$14,117
3/13/2020	PROV-071-CCO-021	Zurn Drain Assembly in Lieu of Fibrelyte		\$1,104
			Total	\$15,221

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

## Amtrak AEM-7 Contract

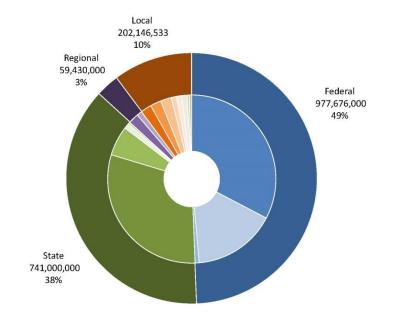
Change Or	der Authority (Lump Su	n)	Up to \$150,000
Date	Change Number	Description	CCO Amount
	None		\$0
		Total	\$0

#### Notes:

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

## 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. In the last month, staff was working with MTC and FTA to award \$97 million in Section 5307 funding as well as the next \$100 million in Core Capacity funding for the project.



## Figure 10-1 Funding Plan

Fund Source	Amount	%
FTA Core Capacity	\$647,000,000	32.67%
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	t) \$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

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## 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):

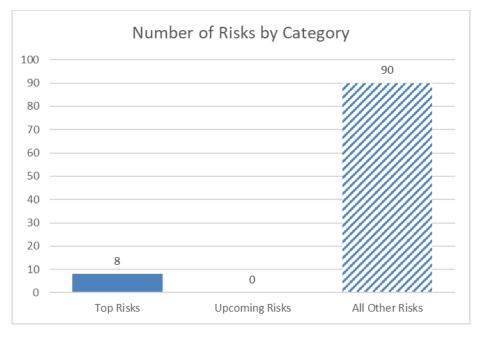
- 1. The contractor may not complete and install signal design including two-speed check modifications within budget and schedule.
- 2. Extent of differing site conditions and associated redesign efforts results in delays to the completion of the electrification contract and increases program costs.
- 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.
- 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. TASI may not have sufficient number of signal maintainers for testing.

## 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 = 98

Note: Updating of risk retirement dates resulted in no risks falling with the criteria for "Upcoming Risks," which is that the retirement date is within 60 days of the date that the update is conducted.

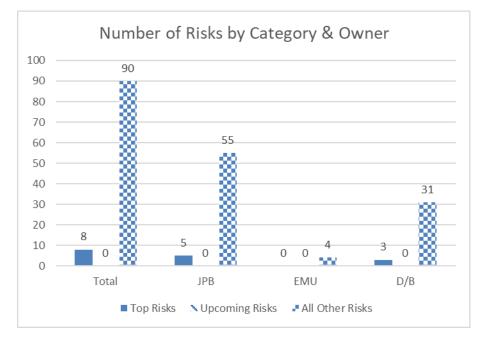


Figure 11-2 Risk Classification

#### Total Number of Active Risks = 98

Note: Updating of risk retirement dates resulted in no risks falling with the criteria for "Upcoming Risks," which is that the retirement date is within 60 days of the date that the update is conducted.

- 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.
- Prepare for risk refresh workshop.

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## 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, grading, clear and grub, duct bank and manhole installation, tree trimming/removal, conduit installation, traction power station form and drainage work) 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 nonhazardous soil was removed from the right of way (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. Pre-construction nesting bird surveys during the nesting bird season continued (nesting bird season is defined as February 1 through September 15), and protocol-level surveys for a sensitive avian species continued at previously identified potential habitat locations. 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.

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.

- 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, utility removal, abandoned signal cable removal, traction power form work, 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 nonhazardous 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 continue (nesting bird season is defined as February 1 through September 15), and protocol-level surveys for sensitive avian species will continue for the 2020 breeding season at previously identified potential habitat locations. BMPs.
- 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 and maintained prior to upcoming construction activities adjacent to potentially suitable habitat for sensitive wildlife species.
- In accordance with the specifications provided by a certified Asbestos Consultant during the previous reporting periods, the removal and disposal of subsurface piping by a certified Asbestos Contractor, as well as the associated monitoring by the certified Asbestos Consultant, is anticipated to occur next reporting period.

## 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.

- 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 facilitates. 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.

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

- Reached settlement agreement with Willow Bend Apartment's legal counsel. Staff is reviewing purchase agreement comments.
- Staff continues to review potential new pole locations and providing feedback to the design team.
- Staff engaged the Project's internal signal team and BBII signal team to determine potential Real Estate interests.
- Staff completed review of all potential ESZs in Segments 3 and 4 has identified a handful of potential ESZ acquisitions to discuss with the contractor.
- Reviewed ESZ requirements for KB Homes to confirm acquisition area and made First Written Offer to KB Homes and Google.
- Discussed pre-acquisition possession terms with Google
- Through the Real Estate weekly meetings and the BBII bi-weekly meetings, the need for additional acquisition from the Sonora Gray parcel were eliminated.
- Reviewing parcel acquisition options for Marchese parcel with Santa Clara Valley Water District.
- Finalized design for Diridon Hospitality, achieving the reduction of the acquisition area.
- Completed appraisal of PG&E property.

• Continued to finalize appraisal map for Britannia Gateway, and achieved PG&E approval.

- Continue to negotiate for all open parcels.
- Continue review of ESZ needs and work with BBII to finalize.
- Continue to meet with internal signal team and BBII signal team to determine potential Real Estate needs.
- Make offer to PG&E and negotiate for early possession.
- Meet with Diridon Hospitality to discuss acquisition.
- Work with Britain Gateway for potholing access.
- 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 and thereafter newly identified parcels.

#### 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.

Туре	Agreement	Third-Party	Status
		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
	Construction & Maintenance <sup>1</sup>	City of Redwood City	Executed
Governmental	Maintenance	City of Atherton	In Process
Jurisdictions		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
		San Francisco	In Process
	Condemnation Authority	San Mateo	Executed
		Santa Clara	Executed
Litilition	Infrastructure	PG&E	Executed
Utilities	Operating Rules	CPUC	Executed
	Construction & Maintenance	Bay Area Rapid Transit	Executed <sup>2</sup>
Transportation	Construction & Maintenance	California Dept. of Transportation (Caltrans)	Not needed <sup>3</sup>
& Railroad	Trackage Rights	UPRR	Executed <sup>2</sup>

### Table 15-1 Third-Party Agreement Status

Notes regarding table above:

<sup>1.</sup> 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.

<sup>2.</sup> Utilizing existing agreements.

<sup>3.</sup> 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**

Ballpark Mission Bay Transportation Coordinating Committee Meeting

#### Third Party/Stakeholder Actions

None

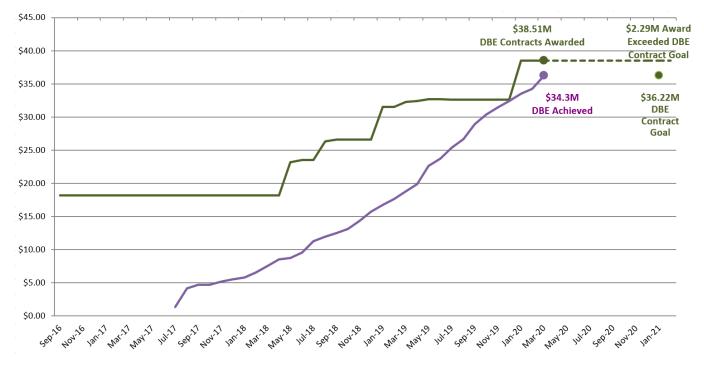
## 17.0 DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION AND LABOR STATISTICS

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:

- **\$35,011,323** has been paid to DBE subcontractors.
- BBII reports that \$38.51 million of DBE contracts have been awarded (to be verified).
- 4.9% 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 April, 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."

#### 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:

None

## **Upcoming Contract Awards/Contract Amendments:**

- Contract Amendment On-Call Program Management Services for CalMod
- Contract Amendment On-Call Electrification Support Services for CalMod

## Upcoming IFB/RFQ/RFP to be Issued:

• RFQ – Scissor Lift Work Platform

**Existing Contracts Amendments Issued:** 

None

## 19.0 TIMELINE OF MAJOR PROJECT ACCOMPLISHMENTS

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

<b>Date</b> 2001	Milestone 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)

Milestone
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)
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)
JPB approves agreement amendment to PG&E for interconnection construction

APPENDICES

Appendix A – Acronyms

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	EMU	Electric Multiple Unit
	System Operator	ESA	Endangered Species Act
CalMod	Caltrain Modernization Program	ESA	Environmental Site Assessments
Caltrans	California Department of	FAI	First Article Inspection
CDFW	Transportation California Department of	FEIR	Final Environmental Impact Report
	Fish and Wildlife	FNTP	Full Notice to Proceed
CEMOF	Centralized Equipment Maintenance and Operations Facility	FFGA	Full Funding Grant Agreement
CEQA	California Environmental Quality Act (State)	FONSI	Finding of No Significant Impact
CHSRA	California High-Speed Rail Authority	FRA	Federal Railroad Administration
CIP	Capital Improvement Plan	FTA	Federal Transit Administration
CNPA	Concurrent Non-Project Activity	GO	General Order
CPUC	California Public Utilities	HSR	High Speed Rail
стс	Commission Centralized Traffic Control	ICD	Interface Control Document
DB	Design-Build	IFC	Issued for Construction
DBB	Design-Bid-Build	ITS	Intelligent Transportation System
DBE	Disadvantaged Business Enterprise	JPB	Peninsula Corridor Joint Powers Board
DEMP	Design, Engineering, and Management Planning	LNTP	Limited Notice to Proceed

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

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

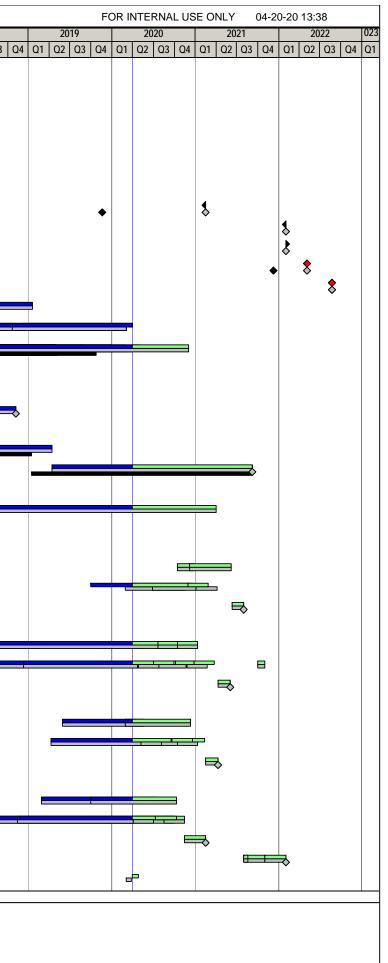
Appendix B – Funding Partner Meetings

Agency	CHSRA		SFCTA/SFMTA/CCSF	SMCTA	VTA
FTA Quarterly Meeting	Boris Lipkin     Simon Whitehorn     Wai Siu (info only)	Anne Richman	Luis Zurinaga	April Chan     Peter Skinner	Jim Lawson
Funding Partners Quarterly Meeting	<ul> <li>Boris Lipkin</li> <li>Simon Whitehorn</li> <li>John Popoff</li> </ul>	Trish Stoops	Luis Zurinaga	<ul> <li>April Chan</li> <li>Peter Skinner</li> </ul>	<ul><li>Krishna Davey</li><li>Edwin Castillo</li><li>Franklin Wong</li></ul>
Funding Oversight (monthly)	Kelly Doyle	<ul> <li>Anne Richman</li> <li>Kenneth Folan</li> </ul>	<ul> <li>Anna LaForte</li> <li>Maria Lombardo</li> <li>Luis Zurinaga</li> <li>Monique Webster</li> <li>Ariel Espiritu Santo</li> </ul>	<ul> <li>April Chan</li> <li>Peter Skinner</li> </ul>	<ul> <li>Jim Lawson</li> <li>Marcella Rensi</li> <li>Michael Smith</li> </ul>
Change Management Board (monthly)	<ul> <li>Bruce Armistead</li> <li>Boris Lipkin</li> <li>Simon Whitehorn</li> </ul>	<ul> <li>Trish Stoops</li> <li>Kenneth Folan</li> </ul>	<ul> <li>Luis Zurinaga</li> <li>Tilly Chang (info only)</li> </ul>	Joe Hurley	<ul> <li>Krishna Davey</li> <li>Edwin Castillo</li> <li>Franklin Wong</li> <li>Jim Lawson</li> <li>Nuria Fernandez (info only)</li> </ul>
Master Program Schedule Update (monthly)	● Wai Siu	Trish Stoops	Luis Zurinaga	Joe Hurley	Jim Lawson
Risk Assessment Committee (monthly)	● Wai Siu	Trish Stoops	• Luis Zurinaga	Joe Hurley	<ul><li>Krishna Davey</li><li>Edwin Castillo</li><li>Franklin Wong</li></ul>
PCEP Delivery Coordination Meeting (bi-weekly	• Wai Siu	Trish Stoops	• Luis Zurinaga	Joe Hurley	<ul><li>Krishna Davey</li><li>Edwin Castillo</li><li>Franklin Wong</li></ul>
Systems Integration Meeting (bi-weekly	● Wai Siu	Trish Stoops	• Luis Zurinaga	Joe Hurley	<ul><li> Krishna Davey</li><li> Edwin Castillo</li><li> Franklin Wong</li></ul>

# Funding Partner Meeting Representatives Updated April 21, 2020

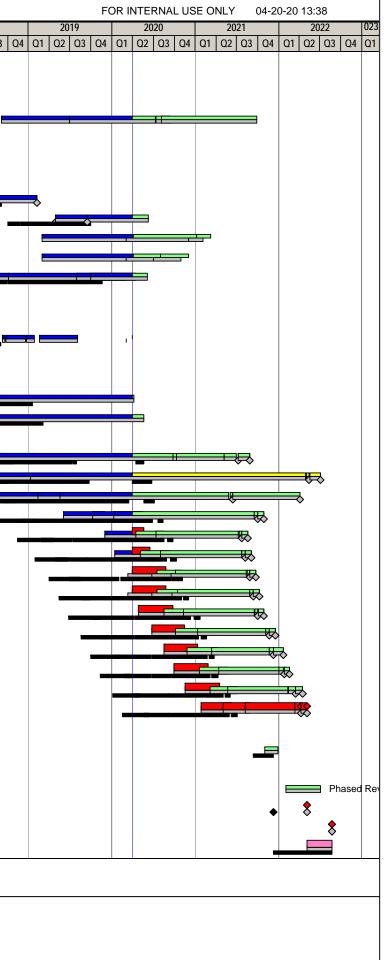
Appendix C – Schedule

y Name	Duration	Start	Finish	2014	2015		016	2017	2018
	2168d	05-01-14 A	08-22-22	Q2 Q3 Q4 Q1	Q2 Q3 Q4	Q1 Q2	Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 (
MASTER PROGRAM SCHEDULE C18.14		05-01-14 A	08-22-22						
MILESTONES	2168d		00-22-22						
Start	0d	05-01-14 A	00.44.40.4	\$					
NEPA Reevaluation Complete	0d	00.00.40.4	02-11-16 A	_		8	•		
LNTP to Electrification Contractor	b0	09-06-16 A		_			- A		
LNTP to Vehicle Manufacturer FTA Issues FFGA	b0	09-06-16 A	05 00 47 4	_			\$		
	b0		05-23-17 A	_				ð	
Segment 4 (incl. Test Track) Complete	b0		02-14-21	_					
Electrification Substantial Completion	Od	00.04.00	01-31-22	_					
Start Phased Revenue Service	Od	02-01-22		_					
Revenue Service Date (RSD) w/out Risk Contingency	Od		05-06-22	_					
Revenue Service Date (RSD) w/ Risk Contingency (FFGA RSD)	Od		08-22-22						
PLANNING / APPROVALS	1230d	05-01-14 A	01-16-19 A						
REAL ESTATE ACQUISITION	1118d	11-05-15 A	04-01-20						
OVERHEAD UTILITY RELOCATION (Various)	949d	03-10-17 A	12-04-20						
PG&E INFRASTRUCTURE	1151d	03-01-17 A	09-09-21						
INTERCONNECT (Feasibility Study)	171d	03-01-17 A	10-31-17 A						
INTERIM POWER	322d	08-01-17 A	11-05-18 A						
PERMANENT POWER	1044d	08-01-17 A	09-09-21						
DESIGN & PERMITTING	431d	08-01-17 A	04-12-19 A						
CONSTRUCTION	612d	04-15-19 A	09-09-21						
ELECTRIFICATION (BBII)	1410d	09-06-16 A	01-31-22						
DESIGN	1192d	09-06-16 A	03-31-21				Ę		<u> </u>
CONSTRUCTION	1484d	10-09-17 A	10-31-21				v	, ·	
Segment 1	670d	10-02-19 A	08-01-21						
OCS	239d	10-13-20	06-08-21						
Traction Power	516d	10-02-19 A	02-28-21						
Segment Testing	54d	06-09-21	08-01-21						
Segment 2	1484d	10-09-17 A	10-31-21						
ocs	1189d	10-09-17 A	01-09-21						
Traction Power	1382d	01-19-18 A	10-31-21						
Segment Testing	54d	04-09-21	06-02-21						
Segment 3	732d	04-09-19 A	04-09-21						
ocs	562d	05-28-19 A	12-09-20						
Traction Power	676d	04-09-19 A	02-12-21						
Segment Testing	54d	02-15-21	04-09-21						
Segment 4	1172d	12-01-17 A	02-14-21						
OCS	595d	02-25-19 A	10-11-20						
Traction Power	1080d	12-01-17 A	11-14-20						
Segment Testing	92d	11-15-20	02-14-21						
TESTING	183d	08-01-21	01-31-22						
DRILL TRACK (TASI)	20d	04-01-20	04-28-20						
	200								
Prog Plan (C16.00)	t Months Update			Pa	ige 1 of 2				
	ical Milestone				-				
Progress Critical ♦ ♦ Prog Plan (C16.00)							1		



	ER PROGRAM SCHEDULE C18.14	PCEP C18.14 Summary							
Acti	vity Name	Duration         Start         Finish         2014           Q2         Q3         Q4         Q1					2016 4 01 02 03 0	2017 04 01 02 03 04	2018
	SCADA (Arinc)	1652d	03-30-15 A	09-28-21	2 25 24				
	PREPARE SOLE SOURCE & AWARD	649d	03-30-15 A	10-16-17 A					
	DESIGN	157d	10-16-17 A	05-31-18 A					
	IMPLEMENTATION, TEST, INSTALL & CUTOVER	780d	09-04-18 A	09-28-21				, v	=
	CEMOF (Various)	863d	11-16-17 A	03-08-21					
	CEMOF MODIFICATIONS (ProVen)	669d	11-16-17 A	06-09-20					
	DESIGN	178d	11-16-17 A	07-31-18 A					
	BID & AWARD	132d	08-01-18 A	02-07-19 A				-	<b>_</b>
	CONSTRUCTION	292d	04-29-19 A	06-09-20					
	PANTORGRAPH INSPECTION & MONITORING SYSTEM (Ctr TBD)	513d	03-01-19 A	03-08-21					
	SCISSOR LIFT WORK PLATFORM (Ctr TBD)	446d	03-01-19 A	12-01-20					
	TUNNEL MODIFICATION (ProVen)	1460d	10-31-14 A	06-04-20					
	ELECTRIC LOCOMOTIVE (Amtrak / Mitsui)	805d	03-01-17 A	04-01-20	_				
	BID & AWARD	348d	03-01-17 A	06-29-18 A					
	REHAB / TEST/ TRAIN / SHIP	407d	09-10-18 A	04-01-20					
	EMU (Stadler)	2132d	05-01-14 A	07-01-22					
	DEVELOP RFP, BID & AWARD	612d	05-01-14 A	09-02-16 A					
	DESIGN	936d	09-06-16 A	04-07-20					
	PROCUREMENT (Material)	872d	01-16-17 A	05-19-20					
	MANUFACTURING & TESTING	1195d	12-04-17 A	07-01-22					
		975d	12-04-17 A	08-27-21	-				
	TRAINSET 2	1137d	02-22-18 A	07-01-22					
	TRAINSET 3	957d	08-06-18 A	04-05-22					
	TRAINSET 4	628d	06-03-19 A	10-27-21					
	TRAINSET 5	450d	12-02-19 A	08-20-21					
	TRAINSET 6	430d	01-13-20 A	09-03-21					
	TRAINSET 7	388d	04-01-20	09-24-21					
	TRAINSET 8	398d	04-01-20	10-08-21					
	TRAINSET 9	395d	04-27-20	10-29-21					
	TRAINSET 10	390d	06-22-20	12-17-21					
	TRAINSET 11	375d	08-17-20	01-21-22					
	TRAINSET 12	365d	09-28-20	02-18-22					
	TRAINSET 13	370d	11-16-20	04-15-22					
	TRAINSET 14	335d	01-25-21	05-06-22					
	TESTING & STARTUP (JPB)	211d	10-31-21	08-22-22					
	PRE-REVENUE TESTING	61d	10-31-21	12-30-21					
	REVENUE OPERATIONS	144d	02-01-22	08-22-22					
	Phased Revenue Service	109d	02-01-22	07-01-22					
	Revenue Service Date (RSD) w/out Risk Contingency	Od		05-06-22					
	Revenue Service Date (RSD) w/ Risk Contingency (FFGA RSD)	Od		08-22-22					
	RISK CONTINGENCY	108d	05-07-22	08-22-22					

Prog Plan (C16.00) Remaining	Start Milestone	Last Months Update	Page 2 of 2	
Last Months Update Near Critical 4	Finish Milestone	<ul> <li>Critical Milestone</li> </ul>		
Progress Critical	Prog Plan (C16.00)	Risk Contingency	Filename: _C18.14 04XX20	



Appendix D – Standard Cost Codes

## Peninsula Corridor Electrification Project Monthly Progress Report

	FFGA Baseline	Approved Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At
Description of Work	Budget	(B)	(C)	(D)	(E)	Completion
	(A)					(F) = (D) + (E)
10 - GUIDEWAY & TRACK ELEMENTS	\$14,256,739	\$27,308,610	(\$74,025)	\$24,919,485	\$2,862,620	\$27,782,105
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	\$2,500,000	\$2,500,000	\$44,786	\$111,593	\$2,388,407	\$2,500,000
10.07 Guideway: Underground tunnel	\$8,110,649	\$24,808,610	(\$118,811)	\$24,807,892	\$474,213	\$25,282,105
10.07 Allocated Contingency	\$3,646,090	\$0	\$0	\$0	\$0	\$0
30 - SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	\$2,265,200	\$6,654,353	\$194,806	\$2,462,963	\$4,756,817	\$7,219,780
30.03 Heavy Maintenance Facility	\$1,344,000	\$6,654,353	\$194,806	\$2,462,963	\$4,756,817	\$7,219,780
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	\$268,725,431	\$3,726,210	\$167,251,436	\$107,581,441	\$274,832,877
40.01 Demolition, Clearing, Earthwork	\$3,077,685	\$3,077,685	\$0 \$2,427,286	\$4,076,000	(\$998,315)	\$3,077,685
40.02 Site Utilities, Utility Relocation 40.02 Allocated Contingency	\$62,192,517 \$25,862,000	\$93,328,599	\$2,427,286 \$0	\$81,111,201	\$13,217,398	\$94,328,599
40.02 Allocated Contingency 40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water	\$25,862,000	(\$0)	ŞU	\$0	(\$0)	(\$0)
treatments	\$2,200,000	\$3,295,872	\$0	\$4,750,000	\$410,044	\$5,160,044
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic,	\$2,200,000	<i>\$3,233,012</i>	Ψ	Ş4,730,000	Ş410,044	\$3,100,044
parks	\$32,579,208	\$32,579,208	\$53,625	\$1,905,120	\$31,049,088	\$32,954,208
40.05 Site structures including retaining walls, sound walls	\$568,188	\$568,188	\$0 \$0	\$0	\$568,188	\$568,188
40.06 Pedestrian / bike access and accommodation, landscaping	\$804,933	\$764,933	(\$40,000)	\$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	\$1,285,300	\$75,409,115	\$42,847,058	\$118,256,173
40.08 Allocated Contingency	\$20,160,000	\$20,610,000	\$0	\$0	\$19,438,953	\$19,438,953
50 - SYSTEMS	\$504,445,419	\$522,742,159	\$11,809,022	\$160,405,720	\$377,737,976	\$538,143,696
50.01 Train control and signals	\$97,589,149	\$100,749,268	\$302,133	\$27,956,273	\$74,000,709	\$101,956,982
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	\$680,356	\$32,801,978	\$65,169,746	\$97,971,724
50.03 Allocated Contingency	\$31,755,013	\$27,990,895	\$0	\$0	\$2,763,958	\$2,763,958
50.04 Traction power distribution: catenary and third rail	\$253,683,045	\$275,765,995 \$12,908,011	\$10,826,533	\$99,589,480	\$203,259,600	\$302,849,080
50.04 Allocated Contingency 50.05 Communications	\$18,064,000 \$5,455,000	\$12,908,011 \$5,455,000	\$0 \$0	\$0 \$57,989	\$18,749 \$5,397,011	\$18,749 \$5,455,000
50.07 Central Control	\$2,090,298	\$2,090,298	\$0 \$0	\$37,989	\$2,090,298	\$2,090,298
50.07 Allocated Contingency	\$2,090,298	\$18,000	\$0 \$0	\$0	\$2,090,298	\$2,090,298
60 - ROW, LAND, EXISTING IMPROVEMENTS	\$35,675,084	\$35,675,084	\$179,640	\$18,952,200	\$16,722,884	\$35,675,084
60.01 Purchase or lease of real estate	\$25,927,074	\$25,927,074	\$179,640	\$18,823,626	\$7,103,448	\$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	\$625,057,938	\$7,006,719	\$194,954,144	\$428,272,147	\$623,226,291
70.03 Commuter Rail	\$589,167,291	\$591,727,115	\$7,006,719	\$194,415,864	\$396,377,307	\$590,793,171
70.03 Allocated Contingency	\$9,472,924	\$6,499,071	\$0	\$0	\$5,601,368	\$5,601,368
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	\$330,959,313	\$1,943,426	\$296,117,485	\$57,202,603	\$353,320,088
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	\$187,462,198	\$22	\$195,443,314	(\$3,417,060)	\$192,026,255
80.02 Allocated Contingency	\$1,866,000	(\$74,955)	\$0	\$0	\$21,942	\$21,942
80.03 Project Management for Design and Construction	\$72,029,265	\$74,932,188	\$1,234,874	\$74,287,062	\$15,265,945	\$89,553,008
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	\$635,168	\$16,384,843	\$14,872,220	\$31,257,063
80.04 Allocated Contingency	\$19,537,000 \$3,500,000	\$17,867,277	\$0 \$0	\$0 \$4,581,851	\$11,957,886	\$11,957,886 \$4,581,851
80.05 Professional Liability and other Non-Construction Insurance 80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	\$3,500,000 \$7,167,275	\$4,581,851 \$6,341,599	\$0 \$73,363	\$4,581,851 \$5,100,375	\$0 \$4,876,224	\$4,581,851 \$9,976,599
80.06 Allocated Contingency	\$7,167,275 \$556,000	\$556,000	\$73,363 \$0	\$5,100,375	¢4,070,224 ذم	رې وودنو د د د د د
80.07 Surveys, Testing, Investigation, Inspection	\$3,287,824	\$3,388,781	\$0 \$0	\$39,858	\$3,348,923	\$3,388,781
80.08 Start up	\$1,797,957	\$1,797,957	\$0 \$0	\$0\$,858	\$1,797,957	\$1,797,957
80.08 Allocated Contingency	\$628,000	\$628,000	\$0 \$0	\$0	\$628,000	\$628,000
Subtotal (10 - 80)	\$1,761,052,001	\$1,817,122,889	\$24,785,798		\$995,136,488	\$1,860,199,920
90 - UNALLOCATED CONTINGENCY	\$162,620,295	\$103,649,407	\$0	\$0	\$60,572,376	\$60,572,376
Subtotal (10 - 90)	\$1,923,672,296	\$1,920,772,296	\$24,785,798		\$1,055,708,863	\$1,920,772,296
100 - FINANCE CHARGES	\$6,998,638	\$9,898,638	\$150,000	\$6,225,070	\$3,673,568	\$9,898,638
Total Project Cost (10 - 100)	\$1,930,670,934	\$1,930,670,934	\$24,935,798	\$871,288,503	\$1,059,382,431	\$1,930,670,934

Appendix E – Change Order Logs

## Change Order Logs

## Electrification Contract

Change Orde	er Authority (5% of BBII	Contract)		5% x \$696,610,558	
Date	Change Number	Description	CCO Amount	Change Order Authority Usage <sup>1</sup>	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% <sup>2</sup>	-
04/24/18	BBI-053-CCO-008	2016 Incentives (Safety, Quality, and Public Outreach)	\$750,000	0.00% <sup>2</sup>	-
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% <sup>2</sup>	-
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% <sup>2</sup>	-
9/28/2018	BBI-053-CCO-024A	PG&E Utility Feed Connection to TPS#1 and TPS#2 (Design Only)	\$727,000	0.00% <sup>2</sup>	-
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% <sup>2</sup>	-
1/17/2019	BBI-053-CCO-029	CHSRA Early Pole Relocation (Design Only)	\$625,000	0.00% <sup>2,3</sup>	-
2/5/2019	BBI-053-CCO-040A	Increase in Potholing Quantity (unit price contract bid	\$1,662,500	4.77 %	\$30,600,456

## Peninsula Corridor Electrification Project Monthly Progress Report

Date	hange Order Authority (5% of BBII Contract) te Change Number Description CCO Amount			Change Order	Remaining
Date	Change Number	TPSS-2 VTA/BART Pole Relocation (Design Only)		Authority Usage <sup>1</sup>	Authority
3/5/2019	BBI-053-CCO-042A	(CNPA funded by VTA)	\$110,000	0.32% <sup>3</sup>	\$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% <sup>2</sup>	-
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 % <sup>3</sup>	\$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% <sup>3</sup>	\$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
2/5/2020	BBI-053-CCO-023B	Insulated Rail Joints De-stressing	\$890,600	2.56 %	\$21,105,709
3/18/2020	BBI-053-CCO-072A	SVP Requirements for Joint SIS & SPS (Task 1)	\$80,000	0.23 %	\$21,025,709
3/19/2020	BBI-053-CCO-023C	Portec Insulated Rail Joints	\$375,000	1.08 %	\$20,650,709
3/26/2020	BBI-053-CCO-076	Asbestos Pipe Abatement at CP Shark	\$145,872	0.42 %	\$20,504,837
3/31/2020	BBI-053-CCO-075	Norcal Utility Potholing (FO#39)	\$98,105	0.28 %	\$20,406,733
		Total	\$31,875,981	41.41 %	\$20,406,733

#### Notes:

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

<sup>2</sup> Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

<sup>3.</sup> 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 = \$27,544,9		
Date Change Number		Description	CCO Amount	Change Order Authority Usage <sup>1</sup>	Remaining Authority	
09/22/2017	STA-056-CCO 001	Contract General Specification and Special Provision Clean-up		0.00%	-	
10/27/2017	STA-056-CCO 002	Prototype Seats and Special Colors	\$55,000	0.20%	\$27,489,973	
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% <sup>2</sup>	-	
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% <sup>2,3</sup>	-	
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% <sup>3</sup>	\$21,938,173	
		Total	\$178,896,847	20.36 %	\$21,938,173	

#### Notes:

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

<sup>2.</sup> Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

<sup>3.</sup> 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 <sup>1</sup>	Remaining Authority
	None to date					
			Total	\$0	0.00%	\$517,038

Notes:

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

<sup>2.</sup> Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

## **Tunnel Modifications Contract**

Change Order Authority (10% of ProVen Contract <sup>1</sup> )			10% x \$55,077,777 = \$5,507,777		
Date	Change Number	Description CCO Amo		Change Order Authority Usage <sup>2</sup>	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 % <sup>4</sup>	\$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 % <sup>4</sup>	\$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 % <sup>4</sup>	\$4,692,731
1/25/2020	PROV-070-CCO-027	Grout Quantity Underrun	(\$1,216,000)	(22.08)%	\$5,908,731
1/29/2020	PROV-070-CCO-026	HMAC Quantity Overrun (CNPA - Drainage \$160,000.00)	\$160,000	2.9 %	\$5,748,731
		Total	(\$240,953)	(4.37)%	\$5,748,731

Notes:

<sup>1.</sup> Tunnel modifications contract (\$55,077,777) includes: Notching (\$25,281,170), Drainage (\$13,196,607) and OCS Installation (\$16,600,000).

<sup>2.</sup> When the threshold of 75% is reached, staff may return to the Board to request additional authority.

<sup>3.</sup> Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

<sup>4.</sup> Third Party Improvements/CNPA Projects that are funded with non-PCEP funds.

#### **CEMOF Modifications Contract**

Change Order Authority (10% of ProVen Contract)				10% x \$6,550,7	77 = \$655,078
Date	Change Number	Description	CCO Amount	Change Order Authority Usage <sup>1</sup>	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
2/13/2020	PROV-071-CCO-010	Deletion of Plastic Bollards Around New Inspection Pit	(\$3,324)	(0.51)%	\$629,593
2/13/2020	PROV-071-CCO-011	Fixing Broken Conduit in Concrete Slab North of Maintenance Building	\$4,286	0.65 %	\$625,307
2/13/2020	PROV-071-CCO-012	Epoxy Dowels at New Stairwells	\$3,526	0.54 %	\$621,781
2/13/2020	PROV-071-CCO-013	Deletion of the Removal and Replacement of Pump Disconnect Switches	(\$7,007)	(1.07)%	\$628,788
2/13/2020	PROV-071-CCO-014	Recycled Base Rock for Backfill at Pressurized Water Line at Parts Storage Warehouse	\$1,411	0.22 %	\$627,377
2/20/2020	PROV-071-CCO-015	Cut and Cap Oil Line	\$1,002	0.15 %	\$626,375
2/25/2020	PROV-071-CCO-016	Installation of Homerun Conduit	\$27,404	4.18 %	\$598,971
2/25/2020	PROV-071-CCO-017	Potholing for Boosted Water Line	\$18,476	2.82 %	\$580,495
2/28/2020	PROV-071-CCO-018	Cap Compressed Air Line	\$9,519	1.45 %	\$570,976
2/28/2020	PROV-071-CCO-019	Acoustic Ceiling Removal at Component Test Room	\$4,253	0.65 %	\$566,723
3/5/2020	PROV-071-CCO-020	Ground Wire Relocation	\$14,117	2.16 %	\$552,606
3/13/2020	PROV-071-CCO-021	Zurn Drain Assembly in Lieu of Fibrelyte	\$1,104	0.17 %	\$551,502
		Total	\$103,576	15.81 %	\$551,502

#### Notes:

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

<sup>2.</sup> Change approved by the Board of Directors – not counted against the Executive Director's Change Order Authority.

#### AMTRAK AEM-7 Contract

Change Orde	Change Order Authority (Lump Sum)				U	lp to \$150,000
Date	Change Number	Description		CCO Amount	Change Order Authority Usage <sup>1</sup>	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:

<sup>1.</sup> 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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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 • 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.	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	<ol> <li>Changes in datafiles could affect what Balfour provides; could delay timing for testing; could change books that FRA had to review.</li> <li>Full integrated testing between EMU and wayside cannot be conducted without PTC in place.</li> <li>Delays to completion of signal system could result in conflicts with PTC testing and PCEP construction and integrated testing.</li> <li>Potential for track access impacts due to PTC testing.</li> </ol>
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.

#### Listing of PCEP Risks and Effects in Order of Severity

ID	RISK DESCRIPTION	EFFECT(S)
		Delays to construction/testing.
209	TASI may not have sufficient number of	• Delays to completion of infrastructure
	signal maintainers for testing.	may delay acceptance of vehicles
		Proposed changes resulting from
	Major program elements may not be	electrification may not be fully and
223	successfully integrated with existing	properly integrated into existing system.
223	operations and infrastructure in advance	
	of revenue service.	Rework resulting in cost increases and schedule delays
	Property not acquired in time for contractor to do work.	
240	Property Acquisition not complete per contractor availability date <>Fee <>Easement	• Potential delays in construction schedule
	<>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	
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> <li>Delay in obtaining parts / components.</li> <li>Cost increases. (See Owner for allocation of costs)</li> <li>Schedule increase - 3 months (See Owner for allocation of damages associated with this Risk)</li> </ul>
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)
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.

ID	<b>RISK DESCRIPTION</b>	EFFECT(S)
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 BBI 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	BBI'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
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.
319	Failure of BBI 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.

ID	RISK DESCRIPTION	EFFECT(S)
		Prolonged delay to resolve issues (up to 12 months)
013	Vehicle manufacturer could default.	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> <li>Increased cost due to mitigation</li> <li>Potential delay due to public protests or environmental challenge.</li> </ul>
056	Lack of operations personnel for testing.	<ul> <li>Testing delayed.</li> <li>Change order for extended vehicle acceptance.</li> </ul>
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	<u>Schedule</u> - Delay. May need to use condemnation authority to acquire easement. <u>Cost</u> - Additional cost for PG&E to make connections increasing project costs
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.
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
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

Unexpected restrictions could affect construction progress: <ul> <li>Segment 4, rups-call</li> <li>Segment 4 substantially complete</li> <li>Segment 4 substantially complete</li></ul>	ID	RISK DESCRIPTION	EFFECT(S)
082       <> night work       • Reduced production rates.         <> local ordinances       • Delay         241       Segment 4 substantially complete (segment 4, TPS-2, Interconnect) may not be installed prior to scheduled exercising of EMUs       Inability to exercise EMUs         241       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       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.         253       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.       Cost increase.         011       Risks in achieving acceptable vehicle operations performance: <> software problems <> exected JPB authorized amount.       Cost increase.         011       Contractor's proposal on stakeholder requested changes to the vehicles (e.g., High Level Doors in lieu of windows as emergency exits) may significantly exceed JPB authorized amount.       Schedule delay.         031       New cars possibly not reliable enough to be put into service as scheduled       Operating plan negatively impacted		Unexpected restrictions could affect	
002       <> noise       • Delay         241       Segment 4 substantially complete (Segment 4, TPS-2, Interconnect) may not be installed prior to scheduled exercising of EMUs       Inability to exercise EMUs         241       not be installed prior to scheduled exercising of EMUs       Inability to exercise EMUs         241       Not be installed prior to scheduled exercising of EMUs       Inability to exercise EMUs         241       Design will need to support bridge barriers. The existing conditions and structural systems are unknown and may not support mounting new work       Delays to issuance of permit for construction while negotiating and executing an operation while negotiating and executing an operation and maintenance agreement for equipment installed on bridges; existing bridge will require some upgrades due to the introduction of new attachments.         011       Risks in achieving acceptable vehicle operations performance: <> electrical system problems       Cost increase.         011       Contractor's proposal on stakeholder requested changes to the vehicles (e.g., High Level Doors in lieu of windows as emergency exits) may significantly exceed PB authorized amount.       Schedule delay.         031       New cars possibly not reliable enough to be put into service as scheduled       Operating plan negatively impacted		construction progress:	
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<> local ordinances         Segment 4 substantially complete (Segment 4, TPS-2, Interconnect) may not be installed prior to scheduled exercising of EMUs       Inability to exercise EMUs         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       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.         253       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 vehicle acceptance         0111        > software problems <> electrical system problems       Cost increase.         0111       Contractor's proposal on stakeholder requested changes to the vehicles (e.g., High Level Doors in lieu of windows as emergency exits) may significantly exceed JPB authorized amount.       Schedule delay.         031       New cars possibly not reliable enough to be put into service as scheduled avef for unanticipated, additional ROW       Delay while procuring ROW and	002		• Delay
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ID	RISK DESCRIPTION	EFFECT(S)
190	Track roughness and cant could present problems for European vehicles which are accustomed to a higher class of track bed maintenance.	Vehicle cost increase. Vehicle delivery delay.
	Becomes problematic with concept of specifying "off-the-shelf" design.	
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.
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.
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.
320	Balfour may not complete O&M Manuals and testing and commissioning plan and schedule in time for start-up of Segment 4.	Delay to energization of Segment 4 and therefore testing of EMUs
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.

ID	RISK DESCRIPTION	EFFECT(S)
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.
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	<ul> <li>Failure of BBI to submit quality design and technical submittals in accordance with contract requirements</li> <li>\$3-\$5M/month burn rate for Owner's team during peak</li> </ul>	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.

ID	RISK DESCRIPTION	EFFECT(S)
	Potential that vehicles cannot meet	
025	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
053	Failure to meet Buy America requirements. (Contractor definition of component	Potential need for negotiations that might lead to delay of project award.
	v. sub-component may not be accepted by Caltrain / FTA.)	(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

ID	<b>RISK DESCRIPTION</b>	EFFECT(S)
	Compliance with Buy America requirements for 3rd party utility relocations.	
182	<>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 <>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% <>Risk is substation not relocations <>Substation equipment is available domestically, has 6 month longer lead time and increased cost of 20%	<ul> <li>Increased cost</li> <li>Delay</li> </ul>
192	Environmental compliance during construction. - 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	• Delay • Cost increase
195	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: • Fire, police, and first responders • Local communities • Schools	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.

ID	RISK DESCRIPTION	EFFECT(S)
237	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.	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.
248	3rd party coordination <>Jurisdictions, Utilities, UP, Contractors <>D/B needs to provide timely information to facilitate 3rd party coordination <>Risk is for construction	Delays in approvals resulting in project schedule delays and associated costs.
250	Potential for municipalities to request betterments as part of the electrification project.	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.
254	Potential that bridge clearance data are inaccurate and that clearances are not sufficient for installation of catenary.	Results in additional design and construction to create sufficient clearance.
259	Work on 25th Avenue Grade Separation Project could delay Balfour construction schedule.	<ul> <li>Increased cost for BBI as catenary construction in this section was anticipated to be constructed under the 25th Avenue Grade Separation Project.</li> <li>Potential delays in construction schedule</li> <li>Risk is delay to BBI</li> </ul>
266	Verizon poles in conflict with OCS may not be removed in advance of OCS installation.	Delay in progress of catenary installation resulting in claims and schedule delay
274	JPB as-built drawings and existing infrastructure to be used as basis of final design and construction is not correct	Additional cleanup of as-builts after PCEP construction
275	DB fails to verify as-built drawings and existing infrastructure	Additional cleanup of as-builts after PCEP construction
278	Failure of D/B contractor and subcontractors and suppliers to meet Buy America requirements	Delays while acceptable materials are procured and additional costs for delays and purchase of duplicative equipment.
282	Failure to maintain dynamic envelope and existing track clearances consistent with requirements.	Redesign entailing cost and schedule impacts.
284	Compliance with project labor agreement could result in inefficiencies in staffing of construction.	Increase in labor costs and less efficient construction resulting in schedule delays.

ID	RISK DESCRIPTION	EFFECT(S)				
290	Delays in agreement and acceptance of initial VVSC requirements database.	Delay to design acceptance				
293	Readiness of 115kV interconnect for temporary power to support testing	Delay in testing				
297	Cost and schedule of Stadler contract could increase as a result of this change in PTC system	1) Full integrated testing between EMU and wayside cannot be conducted without PTC in place.				
	Delay of PTC may delay acceptance of EMUs.	2) Delay in EMU final design for PTC and potential PTC interfaces. Need to finalize braking system sequence priority.				

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Appendix G – MMRP Status Log

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Reporting	Miti	gatio	n Timi	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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. AES-4b: Minimize light	X	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.	•				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.

Reporting						1
Mitigation Measure	Pre- Construction <u>ii</u>		Post- Construction	_	Status	Status Notes
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.

	Miti	gatio	n Tim	-		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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 2017-2019 surveys. Survey reports for the 2017, 2018, and 2019 surveys have been submitted to the JPB for the project

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
						record. In addition, pre-construction surveys of the potential BUOW habitat areas in Segment 4 are ongoing, as needed, and if required, they occur no more than 7 days prior to the onset of new ground-disturbing of construction activities. Surveys for the 2020 breeding season will commenced in March 2020. On March 24, 2020, two burrowing owls were observed adjacent to the Caltrain ROW, near MP 44.6. The owls were located approximately 150 feet away from the Caltrain ROW. Additional site visits are currently ongoing in order to determine if an active nest is present within the survey area. In the meantime, a 200- meter buffer has been implemented. Any future work scheduled to occur within the 200-meter buffer will be coordinated with the Qualified Biologist, in consultation with the JPB and the CDFW, as needed.
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. Nesting Bird Surveys recommenced on February 1, 2020 for the 2020 nesting season (February 1, 2020). During this reporting period, one active nest was observed (Killdeer nest at Tamien Station between MPs 48.4–48.5), and a no disturbance buffer has been established.

Reporting	Mitigation Timing					
Mitigation Measure	Pre- Construction Construction		Post- Construction	Operation	Status	Status Notes
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.
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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.
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.

	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.
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	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

Reporting	Miti	gatio	on Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
unique archaeological resources under PRC 21083.2 are present.						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.
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

	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
						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.
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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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 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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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. In addition, assessments of existing subsurface pipes by a certified Asbestos Consultant are occurring as needed throughout the project as they are observed. Following the assessments, a specification describing the methods for removal and disposal are provided to the certified asbestos contractor. The removal and disposal work performed by the certified asbestos contractor is monitored by the certified asbestos consultant
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.

Reporting Mitigation		n Tim	ing			
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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. 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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.
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	x	x			Upcoming	This measure has not started

Reporting	Miti	aatio	n Tim	ina		
Mitigation Measure	Pre- Construction	<u> </u>	Post- Construction	-	Status	Status Notes
impacted intersections for the 2020 Project Condition.						
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 following guidance in Caltrain's Bicycle Access and Parking Plan.				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 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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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 <sup>th</sup> Street without OCS conflicts in cooperation with SFMTA.	x				Complete	Not applicable. SFMTA has elected to not electrify the 16 <sup>th</sup> Street crossing. This measure no longer applies.
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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.
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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.

Reporting	Miti	gatio	n Timi	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.

	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction Construction		Post- Construction	Operation	Status	Status Notes
						were monitored by agency-approved 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.

Reporting	· · · · ·		n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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 <i>Santa Clara</i> <i>Valley Habitat Plan</i> 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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction		Post- Construction	•	Status	Status Notes
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.

Reporting	Miti	gatio	on Timi	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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.

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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

	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
						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.

Reporting	Miti	gatio	n Timir	ng		
Mitigation Measure	Pre- Construction	<u> </u>	Post- Construction	Operation	Status	Status Notes
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.

	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
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 following guidance in				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 wayside bike parking facilities along

Reporting	Miti	gatio	n Tim	ing		
Mitigation Measure	Pre- Construction	Construction	Post- Construction	Operation	Status	Status Notes
Caltrain's Bicycle Access and Parking Plan.						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 <sup>th</sup> Street without OCS conflicts in cooperation with SFMTA.	x				Complete	Not applicable. SFMTA has elected to not electrify the 16 <sup>th</sup> Street crossing. This measure no longer applies.
Mitigation Measure TRA- CUMUL-3: As warranted, Caltrain and freight operators will partner to provide Plate H clearance				x	Upcoming	This measure will be implemented during project operation.

	Mitigatio	on Timing					
Mitigation Measure	Pre- Construction Construction	Post- Construction Operation	Status	Status Notes			
as feasible between San Jose and Bayshore.							

#### AGENDA ITEM #6d May 7, 2020

#### 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 – April 2020

#### ACTION

Staff Coordinating Council recommends that the Board receive the Positive Train Control (PTC) report for April 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:

Key Project Activity	Expected Completion	Progress as of 04/15/20	Progress On Track?	Mitigation Required or Approvals Needed
Approval of Designated Revenue Service Demonstration (RSD) Test Request	May 31 <sup>st</sup>	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 <sup>st</sup>	Completed	Completed	Formal approval received on May 16, 2019 for PTCIP and RFA Rev. 10.
Pilot Installations (4) Completed	June 20 <sup>th</sup>	Completed	Completed	All pilots completed
Submit Designated RSD Application	Oct 15 <sup>th</sup>	Completed	Completed	RSD Application submitted and in review by FRA.
Submit Full Track RSD Application	June 7th	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 <sup>th</sup>	Completed	Completed	
Complete Designated RSD Training	Nov 14 <sup>th</sup>	Completed	Completed	Training for designated RSD personnel completed
Complete Required Vehicle Installations	Dec 3 <sup>rd</sup>	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 <sup>th</sup> 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 04/15/20	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 <sup>th</sup> , 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	Completed	Completed	Accomplished Interoperable with ACE on December 9, 2019. Interoperable Operation with Amtrak was achieved on Feb 26, 2020.		
Submit Caltrain PTC Safety Plan to the FRA	June 30, 2020	Plan	Yes	Project is targeting to submit PTCSP in mid-June 2020.		
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 April 2020:

- Caltrain commenced Revenue Service Demonstration (RSD) since September 7, 2019. As of Feb 26, 2020 Caltrain has achieved interoperability requirements and is interoperable with all tenants (UPRR, ACE, Amtrak/Capitol Corridor).
- Continued to provide technical support for RSD trouble shooting and addressed defect items with support from WABTEC PTC help-desk.
- Continued Federation 8-Tunnel configuration effort with remaining railroads including third party railroads as part of interoperable Operation with UPPR. As of April 15, 2020, we have federated with all railroads except for CSX.
- Continued BCCF/CCF Cutover planning effort and finalization of cutover plan and procedure.
- Completed Lab Regression Testing for on-board software 6.3.17.4.3.LD1
- Completed Field Regression Testing for on-board software 6.3.17.4.3.LD1 successfully.
- Continued to provide field on-site Warranty support for on-board subsystem
- Continued to finalize PTC Track data changes design document in support of Caltrain 25<sup>th</sup> Ave Grade Separation and South SF Capital Improvement Project.
- Planned deployment of PTC subdiv file version 9025 for non-comm area and UP MT1 speed changes.
- Continued to support Caltrain on Network Virtualization effort.
- Finalized lab and field test procedures for UPRR third party railroads interoperable tests.
- Continued planning and coordination effort for LIEE-I and field testing with UPRR third party railroads (6 total).
- Continued development of PTC Safety Plan (PTCSP) and associated risk assessment effort in support of Caltrain PTC safety certification. Submitted 13 PTCSP main body sections for Caltrain final review.
- Submitted draft maintenance agreement scope of work for Caltrain review and comments

# 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) except one F40, which is scheduled to be available for installation in late April of 2020 and one damaged cab car. Project is planning for last F40 installation in May 2020. Table below provides the overall status of 67-vehicle installation as of April 15, 2020.

I-ETMS On-Board Installation Progress (As of 4/15/20)									
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 April 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.
- Caltrain commenced Interoperable Operations with UPRR and ACE on December 9, 2019.
- Caltrain commenced Interoperable Operations with Amtrak/Capitol Corridor since February 26, 2020. Caltrain is interoperable with all tenants.
- 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 bi-weekly defect-tracking meetings are held to continue monitoring reliability of the PTC system and address any critical anomalies and defects by system engineering (Tier 2) and WABTEC/ARINC (Tier 3) as needed. TASI continues to provide 24/7 helpdesk coverage.
- Caltrain is meeting with Union Pacific Railroad (UPRR) and other tenants on the weekly basis to address any technical and operational issues related to PTC interoperable operations.
- Weekly Aeronautical Radio, Incorporated (ARINC) coordination meeting is held to address Operational Systems maintenance and modification work, the live Operational systems are Rail Operations Control System (ROCS), Passenger Predictive Train Arrival/Departure System (PADS) and Voice Radio Dispatching System (RDS), which are residing in the CCF and BCCF to support Rail Operations.
- Continued Work Directive Proposals effort with ARINC on BCCF/CCF Cutover and Rail Operations Control System (ROCS) Software modification. ROCs new software 2.3.5 is in production.

- 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 indepth 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.
- 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. Currently, CCB is evaluating systems impact due to 25<sup>th</sup> Ave Grade Separation and its detail cutover plan.
- Caltrain Systems team actively involved in PTC Interoperable Change Management process through Interoperable Change Approval Board (ICAB).
- Caltrain team is working with Wabtec, District Procurement and Legal to establish long term maintenance agreement for I-ETMS PTC system.

## 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 was executed. Project is performing evaluation and negotiation of two new change order proposals received in March 2020 for the work related to 1) UPRR third party railroad interoperable testing (6 railroads total); 2) the diverse redundant network path between CCF & BCCF datacenters.

## 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	Туре	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, Amtrak, and ACE were achieved.					

Risk Item	Туре	Mitigation Action
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 Long-term communication MPLS solution has been finalized and installation is scheduled once travel restriction is lifted due to COVID 19.
Maintenance of existing Assets Data Communications, Wayside Infrastructure and on- board equipment	Internal	Coordinated with Operations and TASI to ensure all assets transfered 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:

- Continued weekly calls with FRA review team
- Continued RSD Weekly and Monthly Reports to the Test Monitor
- Received approval of on-board software regression test plan
- Submit on-board regression test results once test is completed successfully

# 7. Caltrain Roadmap to Full RSD and Interoperability:

- Caltrain is currently in Extended Revenue Service Demonstration and is fully interoperable with all tenants.
- Completing and submitting the PTC Safety Plan to the FRA 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 1<sup>st</sup> 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.
  - Caltrain has completed Interoperability Testing with ACE and started PTC Operations on December 9, 2019. Caltrain commenced Interoperability Operations with Amtrak on February 26, 2020. Caltrain achieved interoperability requirements with all tenants.

12. Caltrain will complete submission of the final PTC Safety Plan (PTCSP) by June 2020 and receive full system certification by December 2020.

8.	Cost – Spend vs Budget with Actuals and Accruals through March 2020
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	(A)		(B)		(C)		(D)		(E)	(F) = (C - E)	(G) = ( D / E)
							Expended and		stimated at		
			Approved Changes		Project Current		Accruals To-		Completion	Variance at	
	Original I	Budget	(Contractor)		Budget		Date		(EAC)	Completion	% Expended
Project Cost Analysis	(US\$N	1M)	(US\$MM)		(US\$MM)		(US\$MM)		(US\$MM)	(US\$MM)	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	\$	35.05	\$	44.44	\$-	78.89%
Other Contractors	\$	6.00	\$-	•••	\$ 6.00	\$	1.81	\$	6.00	\$-	30.21%
Potential Changes	\$	2.00	\$ (1.42	) :	\$ 0.58			\$	0.79	\$ (0.21)	
Potential Incentive - WABTEC	\$	2.00	\$-		\$ 2.00	\$	2.00	\$	2.00	\$-	100.00%
Other Program Costs	\$	30.34	\$-	1	\$ 30.34	\$	17.37	\$	27.34	\$ 3.00	63.53%
Project Contingency	\$	6.06	\$-	1	\$ 6.06			\$	6.06	\$-	
Total PTC Project	\$	89.41	\$ -	1	\$ 89.41	\$	56.23	\$	86.62	\$ 2.79	64.92%
Note:											
1). Expended and Accruals To-Date is throug	gh March 31	, 2020;									
2). Integrator Wabtec Contract Value include	es Shared Ri	sk with No	t to Exceed Total of	\$1	91MM;						
<ul> <li>3). Other Contractors amount includes ROCS Modification and potential fiber fixes;</li> <li>4). Potential Changes amount is set for future project change orders as result of WABTEC assessment and survey for the communications and office subsystems;</li> </ul>									ems;		
Currently we are evaluating two change ord	er proposals	received	from WABTEC in Ma	arc	h 2020.						
5). Potential incentive amount reflects what	is in the WA	BTEC cont	formed agreement;								
6). Other Program Costs includes JPB projec	t oversight c	osts, TASI	support and Other [	Dire	ect Cost for PTC pr	rojeo	ct delivery;				
7). Project contingency includes a) continger	ncies for WA	BTEC cont	ract per Board Staff	Re	eport; b) JPB proje	ct te	am cost conti	nger	псу;		
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											
or 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 May 2020:

- Continue ITCM 8 tunnel production Federation effort with CSX which is one of UPRR foreign railroads.
- Continue to support PTC RSD with Operations and TASI.
- Continue BCCF/CCF cutover technical coordination with all parties.
- Continue Data Collection and PTC log analysis for PTC RSD weekly report to the FRA following RSD conditional approval requirements.
- Continue to provide Tier 2 PTC System Engineering support for tracking anomalies and addressing defect resolutions with Tier 3.
- Continue Interoperability Operational coordination with all tenants via weekly calls.
- Continue coordination and planning effort for LIEE-I and field testing with UPRR third party railroads (6 total). Lab and Field initialization Testing are scheduled from April through June of 2020.
- Continue PTC Virtualization and ATCS work.
- Submit field regression test results for on-board software 6.3.17.4.3.LD1.
- Complete KES long term MPLS/Cell Installation effort for sprint circuit installation once travel restriction is lifted.
- Continue development PTCSP including performing railroad specific hazard analyses required for PTC system certification.
- Continue I-ETMS long-term maintenance service scope and agreement effort.

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



#### CITIZENS ADVISORY COMMITTEE (CAC) PENINSULA CORRIDOR JOINT POWERS BOARD (JPB) SAN MATEO COUNTY TRANSIT DISTRICT ADMINISTRATIVE BUILDING

Bacciocco Auditorium, 2<sup>nd</sup> Floor 1250 San Carlos Avenue, San Carlos CA 94070

#### MINUTES OF APRIL 15, 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:** R. McCauley, J. Navarrete, J. Navarro, S. Petty

Due to COVID-19, this meeting was conducted as a teleconference pursuant to the provisions of the Governor's Executive Orders N-25-20 and N-29-20, which suspends certain requirements of the Ralph M. Brown Act.

Chair Brian Shaw called the meeting to order at 5:40 p.m. and led the Pledge of Allegiance.

#### APPROVAL OF MINUTES OF FEBRUARY 19, 2020

Motion/Second: Klein / Romo Ayes: Brandt, Flautt, Leung, Valenciana, Shaw Absent: Dagum, Kutler

A. Dagum and R. Kutler joined the meeting at 5:48 pm

#### **PUBLIC COMMENT**

Public Comment received via email at <a href="mailto:case-cretary@caltrain.com">case-cretary@caltrain.com</a>

Roland Lebrun, San Jose

Dear Chair Shaw and Committee members,

Further to the attached letter to the Caltrain Board,

I am hereby informing you that today's CAC meeting is being held in contempt of Governor Newsom's Order N-35-20 as well as Government Code Section 54954.3 and will result in a letter to cease and desist followed by a court injunction barring any further Caltrain meetings until Caltrain's managing agency complies.

In closing, I am respectfully requesting that you consider agendizing a future action item recommending that the Board terminate the San Mateo County Transit District's responsibilities as Caltrain's managing agency effective July 1st 2021 pursuant to section 6.B of the October 1996 JPB Agreement.



Jeff Carter, Millbrae, shared that he would like to publicly thank Caltrain and Julian Jest for posting the raw data from the 2019 Customer Satisfaction Survey, (discussed at the last CAC meeting. It's very helpful and beneficial for people to better understand Caltrain customers. He stated that it would also be extremely beneficial to post the raw data staff uses to create the COVID-19 ridership charts presented to the Finance and WPLP committees last month. Additionally, this should apply to the charts presented in the monthly key performance statistics charts. It is difficult to get this information through the PRA process and since February 2019, the new "recalibrated' data is not available. If staff can provide a quick answer, please?

Doug DeLong, Mountain View, stated that the novel corona virus pandemic appears to present a potential existential threat to Caltrain (and many other public entities). The CFO provided some information to a JPB Finance Committee meeting and it would seem appropriate to urgently agendize such a presentation for a future CAC meeting.

#### CHAIRPERSON'S REPORT

Brian Shaw stated that this is a challenging time for transit in general, across the country. It is unprecedented, the scope, the magnitude and the impact. He stated that, with the help of federal funds, Caltrain will be in a better position to maintain operations as they now are until such time that the situation can get back to normal.

#### COMMITTEE COMMENTS

Member Patrick Flautt stated that he commends and thanks Caltrain staff for enabling the meeting to continue via Zoom video and that it is a great path forward and is glad that the members can participate as a committee.

Vice Chair Adrian Brandt stated that he has been watching the news regarding Bay Area Transit operators and until there is a vaccine, there will likely be further outbreaks and social distancing will continue. He stated that the implications for Caltrain are very great and grave and it seems that it will be a very long time before Caltrain can get back to where it was in terms of ridership, revenue and so forth. Caltrain relies on Caltrain Fares and its Operating Budget and with ridership down not a lot of prospects that people would be willing to come back onto transit with social distancing recommendations. He stated that it will be critical for staff to think about ways to move forward. He mentioned that he had shared an idea, pre-covid, in that Caltrain has a lot of operating costs tied up in on onboard employees and when looking at the labor contract, staff should be thinking about moving forward with TASI, as BART is doing with their unions and so forth, on how to how to get costs more in line with Caltrain's new lower revenue and stated that staff should look at ways to lower the number of required employees as per the labor contracts. With TASI's contract coming up, it will be critical for staff to reduce the number of required employees, because the Caltrain 1/8 percent sales tax, while the board is trying to move ahead with that or keep their options open, it is highly speculative or unlikely that there would be a great appetite for two-thirds approval at the ballot box. Mr. Brandt stated that this should be Caltrain's number one subject to be thinking about.



Member Rosalind Kutler thanked Caltrain for making the CAC meeting online. She also hopes that staff is getting all the support that they need right now because it is a difficult time for anyone doing public service. She also stated that it is a good time for staff to do right by Caltrain employees so that there is a balance, in terms of appropriate service levels. She said that if staff needs to make cuts, staff should take advantage and offer employees anything that is available because there is federal aid that may become available.

Member Ricardo Valenciana asked what testing is being offered to the conductors. Joe Navarro, Deputy Chief, Rail Operations, responded that right now, if the conductors feel sick or ill, they are directed to go home and to check with their medical advisor and to get tested, if need be. Staff has no positive cases with Caltrain or TASI. There was a Balfour Beatty contractor, equipment operator, that tested positive and is the only known case. The conductors are provided wipes, small bottles of hand sanitizer and face coverings are available if they want to use them. Mr. Valenciana then asked whether the conductors PTO is affected if they want to take time off because of Covid-19. Mr. Navarro stated that if anyone needs to be tested, they will be paid during the time that they are getting tested. He stated that as of now, there are no cases where anyone has had to be quarantined for 14 days, however if it does happens, the employee will receive a one-time payment of fourteen days if there is found to be a need to be quarantined.

#### **BUSINESS PLAN UPDATE**

Sebastian Petty, Deputy Chief, Planning, presented the Peninsula Corridor Electrification Project Update.

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

#### Committee Comments:

Vice Chair Adrian Brandt thanked Sebastian for the added angle of starting to look at equity along different income groups. He stated that there is an equity issue that did not appear on the slides. He stated that he feels it needs to be part of the presentation. Mr. Brandt also stated that because Caltrain has a fixed zone structure where the zones are about thirteen and a half miles each and if a rider has the misfortune of living in the wrong place, and working in the wrong place, such as needing to commute to Stanford Research Institute in Menlo Park from Redwood City, a rider pays a greater fair to ride a very short distance than someone riding a much greater distance in the other direction. Mr. Brandt asked whether it would be appropriate to also include a move to a distance-based fare matrix that would underlie a very equitable fare structure such as BART has. It would station pair, origin and destination and the fare is calculated for riders. It discourages a lot of short distance trips. He stated that he would like it featured in future plans for what is needed on equity. Mr. Petty acknowledged Mr. Brandt's point and stated that he would make sure that when report is put together, it is reflected. He also stated that he would like to be cautious around jumping to the solution of a point to point structure. Mr. Petty stated that there is a regional fare integration study that is sponsored by MTC and that Jim Harnett is chairing that study. Mr. Petty also stated that although there has been



disruption by the COVID situation, there will be a progress report soon, and he will work on someone from his staff to present it to the CAC.

Member Larry Klein thanked Mr. Petty for the presentation and hoped that the final version of the presentation will be placed on the website to further review. Mr. Klein stated that he was happy to see the station access by household income as it is very useful when looking at more transit focus versus car focus depending upon the income level. He also stated that it shows people that were walking to the stations was higher than any percentage and equal amongst the different income classes. Mr. Klein then stated that although conceivably there is an expense to adding parking at the stations, conceivably offsetting that by putting that cost to the people that are at the highest income and basically having more of a strata on parking so that so that the vast majority of the people that are actually needing parking at the stations, if parking is expanded, is paid for by those people in the higher income. He also stated that from a station standpoint, adding housing and making sure that parking is not reduced and looking at other possibilities so that the space is better utilized, like car stacking and equipment to do appropriate, increase of the amount of cars that can be there with very simple operations is very important. And then, of course, just trying to pull in as many of those people as possible. He stated that it is all very useful. Mr. Klein stated that he will be sending an email to the CAC after the final presentation is posted. Mr. Petty apologized for the incorrect presentation posted and said that he would have the final version posted. He also responded to Mr. Klein and reiterated the importance of walking to the Caltrain system as it is Caltrain's primary mode of access and that the final version of the presentation will show how mode of access has changed over the last 15 years in absolute numbers. Ridership growth in the last decade has been almost entirely by foot. Mr. Klein asked whether there are numbers then about how much housing has been built on a near each station, from a city by city basis and whether there is a correlation there. Mr. Petty stated that he would follow-up with his team whether that data is available.

Member Rosalind Kutler thanked Mr. Petty for the equity piece in the presentation. She then asked Mr. Petty whether there have been surveys conducted of the pedestrian's experience and if it has not, whether there is a way they can be surveyed. She stated that it would be great to capture, not only data about the housing, but also the customer experience so that Caltrain has a baseline. She also stated that she would like to see a fare matrix as BART has, for simplicity purposes for those that worry about money. She stated that if Caltrain would like to make it more equitable, it should be simpler. Mr. Petty stated that the information from customers in that presentation came from the Triennial Survey which is a comprehensive survey that is done every three years of Caltrain ridership that is statistically representative. He stated that it includes information and how they paid for train fare. He stated that it is very helpful for these kinds of exercises and to Member Rosalind's point, it gives staff a baseline of who Caltrain customers are.



Public Comments:

Roland Lebrun, San Jose, stated that slide 7 shows that 20 years and \$30B later an express train will take 5 minutes longer than a diesel baby bullet train did 10 years ago or more than twice as long as the 30-minute Prop1A mandate codified in Streets & Highways code section 2704.09(b)(3)

https://leginfo.legislature.ca.gov/faces/codes\_displaySection.xhtml?lawCode=SHC&se ctionNum=2704.09. It is also unclear how Caltrain could possibly run 8 trains/hour until 16th Street is grade-separated in San Francisco.

- Slide 16 Parking at Tamien is at 150% over capacity. Blossom Hill and Capitol are at less than 10%
- The issue with clock-based timetables is caused by the lack of passing tracks
- Slide 43 Parking. Have you considered autonomous vehicles, TNCs and kiss & ride instead of park & ride?
- Slide 49 when will you provide hourly Baby Bullet service?
- Slide 52 There is plenty of affordable housing in Gilroy, Hollister, Salinas and Watsonville
- Slide 59 The distance between home and the Gilroy station is more like 10 miles, not 2 miles

Jeff Carter, Millbrae, stated that Caltrain needs to maximize the amount of passing tracks to allow for a good mix of local, limited and express service. Regarding fares and equity, the zone system needs to go ASAP and adopt point to point fare pricing. The zones really lead to many fare equity issues for Caltrain. Increasing parking charges can also affect equity issues. Many Caltrain lots are at or near capacity and will need to be expanded, however, building new parking spaces is very costly, so this option is quite limited, as pointed out in the presentation. Expanding non driving/parking alternatives needs to be taken to its maximum potential. Expanding local transit in the less populated sections of the corridor would require significant expansion of transit routes and frequencies and operating costs, how is this sustainable given the poor state of funding of bay area transit? I have much more but I will need to submit in writing at a later date.

CAC Secretary, Jennifer Navarrete, stated that only one public comment can be made per public member and that subsequent comments will be made part of the final packet as correspondence.

## STAFF REPORT UPDATE

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

# On-time Performance (OTP) -

- March: The March 2020 OTP was 96.7% compared to 94% for March 2019.
  - Vehicle Strikes There was one vehicle strike on March 11.



- Vehicle on Tracks There were three days, March 3, 15 and 29, with a vehicle on the tracks that caused train delays.
- **Mechanical Delays –** In March 2020 there were 363 minutes of delay due to mechanical issues compared to 961 minutes in March 2019.
- **Trespasser Strike –** There was one trespasser strike on March 1, resulting in a fatality.
- **February:** The February 2020 OTP was 93.5% compared to 92.2% for February 2019.
- Caltrain Reduced Weekday Service In response to a significant decline in ridership stemming from efforts to contain the spread of the coronavirus (COVID-19), Caltrain adjusted its weekday service, effective Tuesday, March 17, 2020.

Morning and afternoon peak hour service no longer features Baby Bullet Service. Local and limited service continues to operate as scheduled, including midday, evening and weekend service. Caltrain will be constantly monitoring ridership during this time and may implement additional service changes, as needed.

Caltrain is assessing the overall impact that reduced ridership will have on its ability to maintain operations in the coming months. As of March 13, 2020, one-way and day pass ticket sales have declined by approximately 75% from their levels two weeks prior. With no other dedicated source of funding, Caltrain relies primarily on fares to cover the system's operating costs.

Caltrain continues to maintain daily onboard cleaning and sanitation protocols in compliance with Environmental Protection Agency (EPA) guidelines.

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

#### Committee Comments:

Vice Chair Adrian Brandt asked Joe to talk more in detail about what sorts of additional progress on the Capital Project work, including PCEP, has been enabled by the COVID service reductions. He stated that the JPB, BART Board and MUNI have been trying to capitalize to maximum effect on catching up and accelerating projects. Mr. Navarro responded that PECP workers report in on mornings at seven o'clock and conduct a job briefing and train advance warning work they are doing. He also mentioned that pot holing and utility potholing work is being done. (inaudible) Mr. Navarro stated that Caltrain has been doing other Capital Projects with TASI like replacing rail at 22nd Street. (inaudible)

Member Rosalind Kutler asked whether Caltrain has plans to continue social distancing with the reopening, as the Governor explained. She asked there will be more distance between people within public transit and acknowledged it may be difficult when trains



are crowded. Vice Chair Adrian Brandt commented that BART is running longer trains to promote distancing. Mr. Navarro responded that staff is working on a plan and one of the options depending on ridership is to run at full service again and make all trains locals, but that is just one option and that staff is still working on a plan.

Public comments: Roland Lebrun: This item is in the packet but missing from the agenda

Through the Chair:

Why is the San Mateo County Transit District spending \$200M on new crossings at 28th and 31st Avenues in San Mateo while CLOSING existing crossings at Napoleon and Quint Street in District 10 in San Francisco?

Jeff Carter:

Kudos to Caltrain / Staff for accelerating the ongoing capital upgrades during this crisis. -Jeff Carter

## JPB CAC Work Plan

<u>May 20, 2020</u>

- > FY 2021 JPB Operating & Capital Budgets
- ➢ EMU Update
- Grade Crossing Solutions

## <u>June 17, 2020</u>

- > Mobile Parking App
- Distance Based Fares
- Transit Oriented Development

#### <u>July 15, 2020</u>

- Industry Safe Functionality
- Brown Act Training

## <u>August 19, 2020</u>

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## 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:

May 20, 2020 at 5:40 p.m., San Mateo County Transit District Administrative Building, 2<sup>nd</sup> Floor Bacciocco Auditorium, 1250 San Carlos Avenue, San Carlos, CA.

Adjourned at 7:15 pm

### AGENDA ITEM #8a MAY 7, 2020

## PENINSULA CORRIDOR JOINT POWERS BOARD STAFF REPORT

- TO: Joint Powers Board
- THROUGH: Jim Hartnett Executive Director
- FROM: Michelle Bouchard Chief Operating Officer, Caltrain

### SUBJECT: UPDATE ON THE DOWNTOWN EXTENSION AND RELATED SAN FRANCISCO PLANNING EFFORTS

## ACTION

Staff Coordinating Council recommends the Board of Directors (Board) receive a presentation providing an update on the status of the Downtown Extension and other related San Francisco planning efforts.

## **SIGNIFICANCE**

Peninsula Corridor Joint Powers Board (JPB) staff has prepared the attached presentation describing ongoing work related to the DTX and other rail-related planning efforts in San Francisco. This report is also accompanied by an informational copy of a six-party, staff-level MOU that has been developed to guide the ongoing advancement of the DTX. Legal counsel has determined that it is within the purview of the Executive Director to sign the attached MOU, however staff is providing it to the Board at this time for their awareness and information.

## **BUDGET IMPACT**

There is no budget impact associated with receiving this report.

## BACKGROUND

The Downtown Extension to San Francisco (the DTX) The Downtown Rail Extension (DTX) is a planned 1.3-mile rail extension that will connect Caltrain commuter rail underground from its current northern terminus at Fourth and King Streets to the recently opened Salesforce Transit Center in San Francisco. The DTX will also deliver the California High-Speed Rail Authority's future high-speed rail service to the Transit Center. In addition to the tunnel, the DTX project includes an underground station at 4<sup>th</sup> & Townsend and will also involve the build out and opening of the two subterranean levels of the Salesforce Transit Center. The DTX is included as part of Caltrain's Long Range Service Vision and is expected to generate upwards of 25,000 daily riders for Caltrain once it is in service.

The Transbay Joint Powers Authority (TJPA) is the governing entity with primary jurisdiction over all matters concerning the financing, design, development, construction, and operation of both the DTX and the SalesForce Transit Center. The TJPA includes membership from the City and County of San Francisco, the Alameda-Contra Costa Transit District, the Peninsula Corridor Joint Powers Board, the California High Speed Rail Authority, and Caltrans (ex officio). Jeff Gee represents Caltrain on the TJPA Board. The DTX project has been environmentally cleared as part of the overall Transbay program and most recently received an amended record of decision from Federal Transit Administration for the program's Supplemental Final Environmental Impact Statement/Environmental Impact Report on July 22, 2019.

The attached MOU describes a new, 6-party staffing structure that includes participation from TJPA, Caltrain, the California High Speed Rail Authority, the San Francisco County Transportation Authority, the City and County of San Francisco and the Metropolitan Transportation Commission. The structure proposes an integrated project team and executive steering committee that will support the efforts of the TJPA in the development of the DTX to a ready-for-procurement status and would make recommendations to the TJPA Board based on a set of work program activities outlined in the document. The MOU has been developed over the past year with participation from Caltrain staff.

The environmentally approved DTX is also part of a larger program of planned and contemplated rail projects in the City of San Francisco. These projects are not part of the formal Transbay Program and are not governed by the TJPA. They are generally in earlier phases of planning. Broadly, these efforts include:

- The Pennsylvania Avenue Extension this project contemplates an extension of the DTX tunnel southward past the existing railyards, generally following the alignment of Pennsylvania Avenue. The project would effectuate an underground grade separation of 16th Street and Mission Bay Drive. Preliminary engineering and pre-environmental work on this effort is being undertaken by SFCTA in coordination with Caltrain
- 22nd Street Station studies undertaken by Caltrain and San Francisco Planning will consider the options for rebuilding or relocating the current 22nd Street Station in coordination with the implementation of the Pennsylvania Avenue Extension.
- 4th and King Railyard –a series of planning and technical studies are being undertaken by Caltrain, Prologis Inc (the underlying owner of the railyard), and the City and County of San Francisco to determine Caltrain's long term storage, service, station, and maintenance requirements at 4th & King as well as the potential for future development at the rail yards.

All of the work described above is advancing in close coordination and involves significant participation by Caltrain staff. The Board will receive future updates on each of these efforts as they develop further.