AGENDA
PENINSULA CORRIDOR JOINT POWERS BOARD
Bacciocco Auditorium, 2nd Floor
1250 San Carlos Avenue, San Carlos CA 94070

June 7, 2018 - Thursday 10:00 a.m.

1. Call to Order / Pledge of Allegiance
2. Roll Call
3. Public Comment
   Public comment by each individual speaker shall be limited to two (2) minutes
4. Consent Calendar
   Members of the Board may request that an item under the Consent Calendar be considered separately
   a. Approval of Minutes of May 3, 2018
   b. Acceptance of Statement of Revenues and Expenditures for April 2018
   c. Receive Key Caltrain Performance Statistics - June 2018
   d. Receive State and Federal Legislative Update
   e. Receive Capital Projects Quarterly Report - 3rd Quarter Fiscal Year 2018
   f. Proclamation Declaring June 21, 2018 as National Dump the Pump Day
   g. Authorize Award of Contracts for On-Call Market Research and Survey Services
   h. Authorize Amendment to Funding Agreement with the California Department of Transportation to Receive Additional Funding For the Redwood City Grade Crossing Improvement Project
   i. Receive Update on Blended System Planning with California High Speed Rail
5. Chairperson’s Report
6. Report of the Citizens Advisory Committee

Note: All items appearing on the agenda are subject to action by the Board. Staff recommendations are subject to change by the Board.
7. **Report of the Executive Director**
   a. Peninsula Corridor Electrification Project Monthly Report for April 2018
   b. Update on Financial Dashboard

8. **Approve and Ratify the Fiscal Year 2019 Insurance Program**

9. **Adoption of Fiscal Year 2019 Operating Budget and Fiscal Year 2019 Capital Budget, and Establishment of a Revenue Stabilization Fund**

10. **Award of Contracts for the Purchase and Overhaul of Used AEM-7AC Electric Locomotives for the Peninsula Corridor Electrification Program**

11. **Award of Contract for Tunnel Modifications and Track Rehabilitation Project for the Peninsula Corridor Electrification Program**

12. **Authorize the Approval of Cooperative and Funding Agreements for Participation in the Preparation of the San Jose Diridon Integrated Station Concept Plan**

13. **Update on Caltrain Planning Studies and Development of Transit-Oriented Development Policy**

14. **Correspondence**

15. **Board Member Requests**

16. **General Counsel Report**

17. **Date/Time of Next Regular Meeting:** Thursday, July 5, 2018 at 10:00 a.m. San Mateo County Transit District Administrative Building, Bacciocco Auditorium, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA 94070

18. **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 650.508.6279. Agendas are available on the Caltrain website at www.caltrain.com. Communications to the Board of Directors can be e-mailed to board@caltrain.com.

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

The JPB meets regularly on the first Thursday of the month at 10 a.m. The JPB Citizens Advisory Committee meets regularly on the third Wednesday of the month at 5:40 p.m. at the same location. Date, time and place may change as necessary.

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

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

Accessibility for Individuals with Disabilities
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 public meetings. Please send a written request, including your name, mailing address, phone number and brief description of the requested materials and a preferred alternative format or auxiliary aid or service at least two days before the meeting. Requests should be mailed to the JPB Secretary at Peninsula Corridor Joint Powers Board, 1250 San Carlos Avenue, San Carlos, CA 94070-1306; or emailed to board@caltrain.com; or by phone at 650.508.6242, or TDD 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.

Note: All items appearing on the agenda are subject to action by the Board. Staff recommendations are subject to change by the Board.
MEMBERS PRESENT: J. Bruins (Chair), C. Brinkman, C. Chavez, D. Davis, G. Gillett, J. Gee, D. Pine, C. Stone, M. Zmuda

MEMBERS ABSENT: None


CALL TO ORDER / PLEDGE OF ALLEGIANCE
Chair Jeannie Bruins called the meeting to order at 10:00 a.m. Vaughn Wolffe led the Pledge of Allegiance.

ROLL CALL
Acting District Secretary Gumpal called the roll. A quorum was present.

PUBLIC COMMENT
Vaughn Wolffe, Sunnyvale, commented on Amtrak’s long-distance train service.

Leslie Little, representing City of Morgan Hill’s elected officials, expressed appreciation for train services in the region and for including electrification in the Caltrain Business Plan.

Vincent De Martell, Palo Alto, thanked the Board for investing in new electric train sets and capacity. He noted a concern with the layout of the proposed bike cars.

Roland Lebrun, San Jose, commented on the lack of Caltrain service south of the Tamien station.

CONSENT CALENDAR
a. Approval of Minutes of Special Meeting of April 5, 2018
b. Approval of Minutes of April 5, 2018
c. Acceptance of Statement of Revenues and Expenditures for March 2018
d. Receive Key Caltrain Performance Statistics – May 2018
e. Receive State and Federal Legislative Update
f. Authorizing Third Amendment of the Use and Maintenance Agreement for the Millbrae Intermodal Station
g. Receive San Jose Diridon Station Planning Update

Motion/Second: Davis/Gillet
Ayes: Bruins, Brinkman, Chavez, Davis, Gillett, Gee, Pine, Stone, Zmuda
Absent: None
Public Comment
Roland Lebrun, San Jose, addressed the Board regarding the brevity of the minutes.

Jeff Carter, Millbrae, addressed the Board regarding the brevity of the minutes.

Vaughn Wolfe, Sunnyvale, addressed the Board and recommended including Amtrak/long-distance trains in the planning of the new Diridon station.

CHAIRPERSON’S REPORT
Chair Bruins announced three openings on the Citizens Advisory Committee and encouraged the public to apply by June 1, 2018, with appointment at the July 7 Board meeting. Director Pine inquired about the process for amending the Board’s procedural rules. Chair Bruins responded that there would be an update at the next Board meeting.

REPORT OF THE CITIZENS ADVISORY COMMITTEE
Brian Shaw, Chair of the Caltrain Citizens Advisory Committee, provided highlights of the most recent advisory committee meeting. He also noted that the draft minutes were included in the Board Members’ reading folders and placed on the public table.

REPORT OF THE EXECUTIVE DIRECTOR
Jim Hartnett, Executive Director, announced a grant that had been pledged from the California State Transportation Agency for the Transit Intercity Rail Capital Program to support Caltrain service improvements, including replacement of the diesel fleet with electric trains, on-board Wi-Fi and enhanced bicycle facilities. In addition, plans include lengthening of some boarding platforms, completion of the Caltrain Business Plan and other efforts.

PRESENTATION ON DEDICATED LAW ENFORCEMENT SERVICES
Carter Mau, Deputy General Manager/CEO introduced Lieutenant Victoria O’Brien, San Mateo County Sheriff’s Office, who presented a brief video of the services the Sheriff’s Office provides. Board members provided commentary on the video and issues that the Sheriff’s Office handles on a daily basis. Lieutenant O’Brien answered numerous questions of Board members.

PENINSULA CORRIDOR ELECTRIFICATION PROJECT QUARTERLY REPORT AND MONTHLY REPORT FOR MARCH 2018
John Funghi, Chief Officer-CalMod, provided highlights of the electrification project for the first quarter of 2018, including design progress, construction progress (including pole and foundation installation) and electric multiple unit assembly. Mr. Funghi discussed concurrent electrification projects. Finally, budget expenditures and contingencies were discussed. He responded to questions raised throughout the discussion.

MONTHLY REPORT ON POSITIVE TRAIN CONTROL SYSTEM
Michelle Bouchard, Chief Operating Officer, Rail, referred to her written report on Wabtec, the contractor responsible for implementing Caltrain’s Positive Train Control System. She noted the rail CEOs met at the American Public Transit Association annual
meeting in conjunction with Federal Rail Administration representatives, and a majority indicated that they would be requesting extensions of the federal mandate to implement positive train control systems. Ms. Bouchard noted the Board’s Positive Train Control ad hoc advisory committee will be meeting to discuss funding/program budgeting for the project.

Public Comment
Andy Chow, San Francisco, addressed the Board regarding the progression of technology, namely the electrification project.

Roland Lebrun, San Jose, addressed the Board on several items: a transparent Caltrain Modernization update, management oversight fees, electric multiple units, electrification, and Caltrain operating six-car versus eight-car trainsets.

CALTRAIN FARE STUDY UPDATE
Elizabeth Scanlon, Planning Director, made a presentation on Caltrain’s fare study and price elasticity of demand. She provided an update on the status of the study including recommended next steps, the on-going regional effort to develop a means-based fare program and considerations for Caltrain’s potential participation in the program.

Public Comment:
Jeff Carter, Millbrae, addressed the Board regarding study of the fare elasticity of subsidized riders versus non-subsidized riders, the definition of elasticity, member agency contributions, and the need for a dedicated funding source.

Doug DeLong, Mt. View, addressed the Board regarding elimination of senior fare discounts.

Adina Levin, Friends of Caltrain addressed the Board regarding the Metropolitan Transportation Commission’s means-based fare study starting as a smaller study, incorporating deeper discounts and perhaps moving towards a regional pass system after evaluation.

Roland Lebrun, San Jose, addressed the Board regarding discontinuation of the Go Pass and focus on a means-based study. He recommended cutting of staffs’ salaries.

Drew, San Mateo, addressed the Board and recommended that the statements regarding fare inelasticity be qualified at certain percentages, not stated as indefinitely inelastic. He also requested that the fare study should also review the current zone structure.

Discussion ensued between Mr. Hartnett, Ms. Scanlon and Board members regarding fare equity and station parking lots.
PRESENTATION OF PRELIMINARY FISCAL YEAR 2018-19 OPERATING AND CAPITAL BUDGETS
Derek Hansel, Chief Financial Officer, provided a detailed presentation on the preliminary budgets and noted that the final budgets would be presented for adoption at the June 7th meeting.

Ms. Bouchard provided an update on the State of Good Repair program, and discussed the true cost of deferring capital improvement.

Public Comment
Roland Lebrun, San Jose, addressed the Board regarding the budget presentation.

Jeff Carter, Millbrae, addressed the Board regarding the cost of diesel fuel and dedicated funding, and expressed concern with raising fares.

Adina Levin, Friends of Caltrain, addressed the Board regarding the TIRCP grant and the acceleration of the electrification project, partner budget support and MTC’s means-based fare study.

UPDATE ON BLENDED SYSTEM PLANNING WITH CALIFORNIA HIGH SPEED RAIL
This agenda item was deferred to a future meeting.

CORRESPONDENCE
Correspondence was included in the Board members’ reading files.

BOARD MEMBER REQUESTS
Director Chavez requested to hold a future closed session on the topic of safety and security.

GENERAL COUNSEL REPORT
None.

Date/Time of Next Regular Meeting: Thursday, June 7, 2018 at 10:00 a.m.
San Mateo County Transit District Administrative Building, Bacciocco Auditorium, 2nd Floor, 1250 San Carlos Avenue, San Carlos, CA 94070

ADJOURN
The meeting adjoumed at approximately 12:48 p.m.

An audio/video recording of this meeting is available online at www.caltrain.com. Questions may be referred to the Board Secretary's office by phone at 650.508.6279 or by email to board@caltrain.com.
AGENDA ITEM #4 (b)  
JUNE 7, 2018

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  
APRIL 30, 2018

ACTION  
Staff proposes that the Board of Directors accept and enter into the record the  
Statement of Revenues and Expenses for the month of April 2018.

This staff report provides a brief discussion of significant items and trends on the  
attached Statement of Revenues and Expenses through April 30, 2018. The statement  
has been designed to follow the Agency wide line item rollup as included in the  
adopted budget. The columns have been designed to provide easy comparison of  
year to date prior to current actuals for the current fiscal year including dollar and  
percentage variances. In addition, the current forecast of Revenues and Expenses is  
compared to the Revised Budget for Fiscal Year 2018.

SIGNIFICANCE  
Annual Forecast: The forecast was updated in the February financial statement to  
improve accuracy of year-end results and increase visibility to current trends. Finance  
staff collaborated with division chiefs and cost center managers to estimate year-end  
expense and review variances between actual and budget. Since then, Parking  
Revenue (page 1, line 2) was reduced by $1.3 million due to an accounting change  
and lower parking demand.

Year to Date Revenues: As of April year-to-date actual, the Total revenues (page 1  
of the Statement of Revenues and Expenses, line 17) are $2.9 million higher than the prior  
year. This is primarily driven by Farebox Revenue (page 1, line 1), Shuttle (page 1, line  
3), and Rental Income (page 1, line 4). This is partially offset by Parking Revenue (page  
1, line 2), AB434 Peninsula & TA Funding (page 1, line10) and Other Income (page 1,  
line 5) due to Union Pacific shared track and maintenance revenue.
**Year to Date Expenses**: As of April year-to-date actual, the Total Expense (page 1, line 48) is $0.8 million higher than the prior year-to-date actual. This is primarily due to Security Services (page 1, line 25), Fuel and Lubricants (page 1, line 27), Wages & Benefits (Page 1 line 37) and Professional Services (page 1, line 40) offset by Insurance (page 1, line 29) due to decrease in claims expense and reversal of claims reserve.

**BUDGET IMPACT**
There are no budget amendments for the month of April 2018.

**STRATEGIC INITIATIVE**
This item does not achieve a strategic initiative.

Prepared By: Maria Pascual, Accountant 650-508-6288
Jeannie Chen, Manager, General Ledger 650-508-6259
## Statement of Revenue and Expense

### Peninsula Corridor Joint Powers Board

**Statement of Revenue and Expense**

**Fiscal Year 2018**

**April 2018**

<table>
<thead>
<tr>
<th>YEAR TO DATE</th>
<th>% OF YEAR ELAPSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIOR ACTUAL</td>
<td>CURRENT ACTUAL</td>
</tr>
<tr>
<td>83.3%</td>
<td></td>
</tr>
</tbody>
</table>

### REVENUE

#### OPERATIONS:

1. Farebox Revenue: 75,863,183 (3,917,141) 5.2% 98,427,507 (98,427,507) - 0.0%
2. Parking Revenue: 4,705,485 (299,978) 6.4% 6,871,603 (5,590,483) (1,281,120) (18.6%)
3. Shuttles: 1,486,697 (317,829) 21.4% 2,461,000 (2,461,000) - 0.0%
4. Rental Income: 1,559,724 (183,009) 11.7% 1,740,200 (1,740,200) - 0.0%
5. Other Income: 2,280,783 (1,017,197) (44.6%) 993,345 (1,397,920) 404,575 (40.7%)

#### TOTAL OPERATING REVENUE: 85,895,872 (3,100,804) (3.6%) 110,493,655 (109,617,110) (876,545) (0.8%)

### CONTRIBUTIONS:

1. AB34 Peninsula & TA Shuttle Funding: 1,608,163 (123,918) (7.7%) 1,796,300 (1,796,300) - 0.0%
2. Operating Grants: 3,644,904 (90,195) (2.5%) 4,265,650 (4,265,650) - 0.0%
3. JPB Member Agencies: 18,089,010 (30,975) (0.2%) 20,448,014 (20,448,014) - 0.0%
4. Use of Reserves: 8,490,979 4,136,388 (4,354,591) (51.3%)

#### TOTAL CONTRIBUTED REVENUE: 23,342,077 (245,089) (1.0%) 35,000,943 (30,646,352) (4,354,591) (12.4%)

### GRAND TOTAL REVENUE: 109,237,949 (112,093,664) (2,855,715) (2.6%) 145,494,598 (140,263,462) (5,231,136) (3.6%)

### EXPENSE

#### OPERATING EXPENSE:

1. Rail Operator Service: 65,682,269 (65,682,164) (105) 0.0% 84,418,672 (83,787,587) (6,631,085) (1.2%)
2. Positive Train Control: 193,401 (145,430) (47,971) (75.7%) 488,373 488,373 - 0.0%
3. Security Services: 4,454,454 (5,032,978) (578,524) (13.0%) 5,865,760 (5,865,760) - 0.0%
4. Shuttles Services: 3,645,352 (274,880) 7.5% 5,161,000 (4,760,700) (400,300) (7.8%)
5. Fuel and Lubricants: 7,137,065 (1,061,645) 14.9% 10,099,289 (9,111,789) (878,500) (6.5%)
6. Timetables and Tickets: 72,319 (19,266) (26.6%) 144,700 144,700 - 0.0%
7. Insurance: 3,729,174 (1,919,779) (51.5%) 6,108,156 5,500,000 (608,156) (10.0%)
8. Facilities and Equipment Maint: 1,702,483 (38,178) 2.2% 2,992,921 2,800,227 (192,694) (6.4%)
9. Utilities: 1,604,085 1,620,997 16,913 1.1% 1,964,783 1,985,456 20,673 1.1%
10. Maint & Services-Bldg & Other: 1,028,395 1,079,023 50,628 4.9% 1,509,598 1,490,658 (18,940) (1.2%)

#### TOTAL OPERATING EXPENSE: 89,248,997 (63,813) (0.1%) 119,253,256 (116,326,250) (2,927,006) (2.5%)

### ADMINISTRATIVE EXPENSE

1. Wages and Benefits: 6,413,360 6,822,214 408,854 6.4% 9,620,399 8,500,000 (1,120,399) (11.6%)
2. Managing Agency Admin OH Cost: 4,717,351 4,841,666 124,315 2.6% 6,051,231 5,899,231 (152,000) (2.5%)
3. Board of Directors: 8,896 12,254 3,357 37.7% 14,600 14,600 - 0.0%
4. Professional Services: 3,451,289 3,821,243 369,954 10.7% 6,016,928 5,212,184 (804,744) (13.4%)
5. Communications and Marketing: 109,737 162,913 53,176 48.5% 211,500 202,045 (9,455) (4.5%)
6. Other Office Expenses and Services: 1,893,645 1,588,627 (305,018) (16.1%) 3,028,012 2,810,476 (217,536) (7.2%)

#### TOTAL ADMINISTRATIVE EXPENSE: 16,594,278 17,248,917 654,639 3.9% 24,942,670 22,638,536 (2,304,134) (9.2%)

### GRAND TOTAL EXPENSE: 106,928,801 107,713,593 784,792 0.7% 145,494,598 140,263,462 (5,231,136) (3.6%)

### NET SURPLUS / (DEFICIT): 2,369,148 4,380,071 2,070,923 89.7% 0 0 0
## PENINSULA CORRIDOR JOINT POWERS BOARD
### INVESTMENT PORTFOLIO
#### AS OF APRIL 30, 2018

<table>
<thead>
<tr>
<th>TYPE OF SECURITY</th>
<th>MATUREITY DATE</th>
<th>INTEREST RATE</th>
<th>PURCHASE PRICE</th>
<th>MARKET PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Agency Investment Fund (Unrestricted)</td>
<td>* Liquid Cash</td>
<td>1.661%</td>
<td>73,400</td>
<td>73,400</td>
</tr>
<tr>
<td>County Pool (Restricted)</td>
<td>** Liquid Cash</td>
<td>1.604%</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>County Pool (Unrestricted)</td>
<td>** Liquid Cash</td>
<td>1.604%</td>
<td>988,680</td>
<td>988,680</td>
</tr>
<tr>
<td>Other (Unrestricted)</td>
<td>Liquid Cash</td>
<td>0.000%</td>
<td>56,140,920</td>
<td>56,140,920</td>
</tr>
<tr>
<td>Other (Restricted)</td>
<td>*** Liquid Cash</td>
<td>0.200%</td>
<td>25,117,358</td>
<td>25,117,358</td>
</tr>
</tbody>
</table>

$83,320,358 $83,320,358

Accrued Earnings for April 2018 $9,512.42
Cumulative Earnings FY2018 $77,376.03

* 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.

** As of April 2018, the total cost of the Total County Pool was $5,226,842,178 and the fair market value per San Mateo County Treasurer’s Office was $5,208,618,080.

*** Prepaid Grant funds for Homeland Security, PTMSEA 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.
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: KEY CALTRAIN PERFORMANCE STATISTICS - APRIL 2018

ACTION
Staff Coordinating Council recommends that the Board receive the Performance Report for April 2018.

SIGNIFICANCE
Staff will provide monthly updates to Key Caltrain Performance Statistics, Caltrain Shuttle Ridership, Caltrain Promotions, Special Event Updates and Social Media Analytics.

BUDGET IMPACT
There is no budget impact.

MONTHLY UPDATE
In April 2018, Caltrain’s average weekday ridership (AWR) increased 3.5 percent to 62,192 from April 2017 AWR of 60,099. The total number of passengers who rode Caltrain in April 2018 increased 3.3 percent to 1,593,726 from 1,542,995 in April 2017. This month ticket sales for One Way tickets (up 31.6 percent), ED One Way tickets (up 19.3 percent) and ED Monthly Passes (up 3.7 percent) increased from April 2017. Ticket sales for Day Passes (down 6.8 percent), ED Day Passes (down 6.5 percent) and Monthly Passes (down 2.0 percent) decreased from April 2017. The shift in fare product usage is due to elimination of the 8-ride ticket. The recent implementation of Caltrain Mobile Ticketing (which includes One Way, ED One Way, Day Pass, ED Day Pass, Zone Upgrades and Joint Caltrain +VTA Day Pass purchases) accounted for approximately 1.3 percent (20,250 rides) of April 2018 rides and 1.8 percent of April 2018 Monthly Ticket Sales Revenue. The number of Eligible Go Pass Employees decreased 2 percent to 75,561 from 77,090 from April 2017. The slight decrease in Go Pass Eligible Employees was likely due to the recent Go Pass price increase effective January 2018. The number of participating Go Pass Companies increased to 127 from 121 from April 2017. Farebox Revenue increased 6.1 percent to $8,274,247 from $7,798,587 in April 2017.
On-time performance (OTP) for April 2018 was 92.6 percent, compared to 95.8 percent OTP for April 2017. In April 2018 there were 1,007 minutes of delay due to mechanical issues compared to 637 minutes in April 2017.

Looking at customer service statistics, there were 5.1 complaints per 100,000 passengers in April 2018 which decreased from 8.4 in April 2017.

Shuttle ridership for April 2018 is down 4.1 percent from April 2017. For the station shuttles, the Millbrae-Broadway shuttle averaged 148 daily riders. The Belmont-Hillsdale shuttle averaged 35 daily riders. The weekend Tamien-San Jose shuttle averaged 27 daily riders. When the Marguerite shuttle was removed, the impact to ridership was a decrease of 4.6 percent. Due to ongoing service issues with the Shuttle Partner contractor due to a staffing shortage, additional Shuttle routes had DNOs (Did Not Operate trips) starting in April 2018. Staff management is working on resolving the worsening issue.

Caltrain Promotions - April 2018:

San Francisco Giants - The Giants season officially kicked off on April 3. Ridership on Caltrain during the season has always been friendly for fans but somewhat painful for commuters as trains are packed to the gills. Caltrain has provided extra service to weekday afternoon and weekend games, however many people were not utilizing the “extra” pre-game trains as they had relatively low ridership. Baseball service was not heavily promoted in the past because the trains were jammed packed resulting in bad user experience. This year, Caltrain wanted to create more awareness and shift riders to the extra trains. Improvements were made to the look and feel on the Giants web page and printed brochures which is helping to call out the extra service as well as displaying the extra trains on the Visual Messaging Boards at each station. The train service schedule is now being pushed to MTC so extra trains will be displayed on Google Trip Planning applications. Promotional advertising strategies included outdoor digital/static billboards along highway 101 and 280 (both directions) and San Francisco, hosting the first ever booth at the Giants Fan Fest, e-mail blast to over 150K baseball fans in San Mateo and Santa Clara Counties and sponsored a geo-targeted Facebook engagement campaign. Internal communications included news release/blog, organic social media posts throughout the season and staff at the station on opening day to help customers with questions.

Earth Day - In celebration of Earth Day and as a reminder to our communities of the District’s commitment to sustainability, Caltrain displayed “Every Day is Earth Day When You Ride Caltrain” on the Visual Messaging Boards at all stations on Earth Day. Internal communication included organic social media and Peninsula Moves blog to help spread the word the week leading up to Earth Day on April 22.

Partnerships - As a way to brand and promote ridership to fun events along the Peninsula, Caltrain partnered with the New Living Expo held at the San Mateo Event Center on Friday, April 27 - Sunday, April 29. As part of the agreement, Caltrain promoted the event on the go.caltrain.com main page, Peninsula Moves blog/news
release, social media and ad cards placed on the train. The Caltrain logo was placed on all collateral materials and distributed at the event as well as on Comcast Spotlight television spots.

Caltrain also partnered with the San Francisco Flower & Garden Show held at the historic Cow Palace on Wednesday, April 4 - Sunday, April 8. As a partner, the event was promoted through social media, highlighted on the go.caltrain.com site, ad cards placed on the train and Peninsula Moves blog/news release. The logo was also included on the SFgardenshow.com website and on the official printed event program.

On-going promotions:

**Caltrain Mobile Ticketing App Launch** - Caltrain’s Mobile Ticketing App launched in February. The campaign runs from Feb. 10 and extends through the end of July. Ad campaign strategies include geo-targeted sponsored Facebook ads and SEO/SEM search click to web campaign. The Mobile App solution is being heavily promoted during the 2018 Giants season and other special events.

**San Jose Sharks at SAP Center** - For the month of April, the Sharks played the three regular season games and three playoff games that swept the Anaheim Ducks in the first round. This closed out the regular season with 11,275 total additional riders. Caltrain carried an additional 935 riders to playoff games for the month of April.

**Caltrain Digital Metrics - April 2018**

**New Followers**

+**3219**

Apr, 18 - 183,892  
Mar, 18 - 180,673  
Apr, 17 - 138,830

**Caltrain.com Pageviews**

Apr, 18 - **784,716**  
Mar, 18 - 765,157  
Apr, 17 - 827,579

**Monthly Yelp & FB Rating**

🌟🌟🌟  
(8 reviews)

**Mobile App - Apr, 18**

11,098 - Downloads  
10,028 - Active Users  
2.1 - Overall Rating

**Top Tagged Issues**

1. Delays  
2. Giants/Belmont  
3. Bike Car  
4. Compliment  
5. Clipper

**Social Sentiment**

Neutral: 1,663  
Positive: 962  
Negative: 1,013
Social Media Impression Spikes
April, 2018

Your Tweets earned **1.6M impressions** over this **30 day** period

April 4
NB375 & 277 Mech Failures
384 Incident Delay Mins
593 Daily Delay Mins

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

Prepared by:  James Namba, Marketing Specialist 650.508.7924
Jeremy Lipps, Social Media Officer 650.622.7845
Patrice Givens, Data Specialist 650.508.6347
### Table A

#### April 2018

<table>
<thead>
<tr>
<th></th>
<th>FY2017</th>
<th>FY2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Ridership</td>
<td>1,542,995</td>
<td>1,593,726</td>
<td>3.3%</td>
</tr>
<tr>
<td>Average Weekday Ridership</td>
<td>60,099</td>
<td>62,192</td>
<td>3.5%</td>
</tr>
<tr>
<td>Total Farebox Revenue</td>
<td>$7,798,587</td>
<td>$8,274,247</td>
<td>6.1%</td>
</tr>
<tr>
<td>On-time Performance</td>
<td>95.8%</td>
<td>92.6%</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Average Caltrain Shuttle Ridership</td>
<td>9,501</td>
<td>9,113</td>
<td>-4.1%</td>
</tr>
</tbody>
</table>

#### Year to Date

<table>
<thead>
<tr>
<th></th>
<th>FY2017</th>
<th>FY2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Ridership</td>
<td>15,442,113</td>
<td>15,600,430</td>
<td>1.0%</td>
</tr>
<tr>
<td>Average Weekday Ridership</td>
<td>58,446</td>
<td>60,372</td>
<td>3.3%</td>
</tr>
<tr>
<td>Total Farebox Revenue</td>
<td>$75,863,183</td>
<td>$79,780,325</td>
<td>5.2%</td>
</tr>
<tr>
<td>On-time Performance</td>
<td>94.4%</td>
<td>94.6%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Average Caltrain Shuttle Ridership</td>
<td>9,306</td>
<td>8,849</td>
<td>-4.9%</td>
</tr>
</tbody>
</table>

### Graph A

#### Caltrain Average Weekday Ridership

- **April 2018**: 60,099
- **April 2018**: 62,192

- **AWR**
- **13-Month Average**
**Graph B**

**Caltrain Mobile Ticketing - Monthly Sales by Ticket Type**

<table>
<thead>
<tr>
<th></th>
<th>Feb-18</th>
<th>Mar-18</th>
<th>Apr-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone Upgrade</td>
<td>145</td>
<td>247</td>
<td>610</td>
</tr>
<tr>
<td>Day Pass</td>
<td>1003</td>
<td>2681</td>
<td>5108</td>
</tr>
<tr>
<td>One-Way</td>
<td>2136</td>
<td>6194</td>
<td>10034</td>
</tr>
</tbody>
</table>

**Graph C**

**MONTHLY MECHANICAL DELAYS**
Graph D

CALTRAIN MONTHLY COMPLAINTS

Complaints per 100,000 Passengers

Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun

FY2016
FY2017
FY2018
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Seamus Murphy
Chief Communications Officer

SUBJECT: STATE AND FEDERAL LEGISLATIVE UPDATE

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

SIGNIFICANCE
The 2018 Legislative Program establishes the principles that will guide the legislative and regulatory advocacy efforts. Based on those principles, staff coordinates closely with our Federal and State advocates on a wide variety of issues that are considered in Congress and the State legislature. The attached reports highlight the recent issues and actions that are relevant to the Board.

Prepared By: Casey Fromson, Government and Community Affairs Director 650-508-6493
CONGRESS

FY 2019 Appropriations Process Begins: The House and Senate Appropriations Committees have begun consideration of the FY 2019 appropriations bills. Both the House and Senate on Transportation, Housing and Urban Development (THUD) Appropriations Subcommittees have held hearings with the Department of Transportation (DOT) Secretary Chao, and the modal administrators. The House THUD Appropriations Subcommittee will mark-up the FY 2019 THUD bill on May 17 and the full House Appropriations Committee will probably markup the bill the following week. The Senate THUD Appropriations Subcommittee may markup the Senate FY 2019 THUD bill during the first week of June.

Senate Appropriations Committee Chairman Richard Shelby (R-AL) recently said that the Senate leadership has agreed to expedite the spending bills and bypass procedural battles, and plan to avoid controversial policy riders that present obstacles to passage. Democrats agreed that they may be willing to refrain from voting on motions to proceed to the bills, in order to expedite the measures.

House Passes FAA Reauthorization: On April 27, the House passed H.R. 4, a bill reauthorizing the Federal Aviation Administration (FAA) for five years, in a 393-13 vote. The bill provides funding for the FAA through FY 2023, following a six month extension of the agency in the FY 2018 omnibus spending bill passed in March. The reauthorization bill received bipartisan support, and included a disaster relief provision making changes to FEMA and the Stafford Disaster Relief Act. The FEMA language seeks to improve infrastructure and preparation to handle natural disasters. However, some provisions received criticism from Democrats. House Minority Leader Nancy Pelosi (D-CA) urged Democrats to vote against two trucking amendments, including a bipartisan amendment from Reps. Jeff Denham (R-CA), Henry Cuellar (D-TX), and Jim Costa (D-CA) that sought to refine regulations on meals and rest periods for truckers. The amendment passed with 222 votes. Additional amendments included one in the managers’ package that incorporated language requiring the FAA to conduct an engine safety review and present a report to the House Transportation and Infrastructure Committee. The managers’ amendment addressed several key issues, from certification of commercial space support flights to treatment of disabled passengers. The amendment was introduced by House Transportation and Infrastructure Committee Chairman Bill Shuster (R-PA) on April 24. Highlights of changes included in the amendment are:

- Modifies the bill’s funding authorizations to align with the Congressional Budget Office’s (CBO) updated baseline;
• Creates a new grant program for airports classified as non-primary; primary airports that are categorized as small, medium, or non-hub; or that are participating in a general aviation privatization pilot;
  o Authorizes $1.02 billion for Airport Improvement Program (AIP) grants in FY 2019, increasing to $1.1 billion in FY 2023.
• Establishes a Chief Technology Officer position to oversee operation, maintenance, and security of current air traffic control systems as part of the FAA;
• Requires the FAA to prepare a comprehensive report on the effort by the federal government to modernize the air traffic control system;
• Requires FAA to report to Congress on costs and benefits of the NextGen technology upgrade program;
• Requires the FAA to initiate a review of engine safety;
• Directs DOT to develop a bill of rights document for disabled passengers; and
• Eliminates the cap on the general aviation airport privatization pilot project (currently limited to 10 airports).

The passage of the legislation with strong bipartisan support could help move the bill through the Senate with greater ease. However, House Transportation and Infrastructure Committee Ranking Member Peter DeFazio (D-OR) said he voted for the bill despite reservations about broad language, and hopes that trucking and other issues will be addressed in Senate negotiations. Senate Commerce Committee Chairman John Thune (R-SD) said that he is working to get floor time for the bill before the July 4 recess, but did not specify when.

House Appropriations Subcommittee Questions FHWA, FTA Budget Requests: The acting heads of the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) defended the President’s FY 209 budget request before the House THUD Appropriations Subcommittee on April 26. Subcommittee members questioned FTA Acting Administrator Jane Williams about the Capital Investment Grant (CIG) program, with Chairman Mario Diaz-Balart (R-FL) urging the administration to grant executed construction agreements to projects that have gone through the FTA’s rating and evaluation process and met requirements. Williams noted that there are currently 55 projects in varying stages of the process that are seeking construction agreements. The subcommittee also questioned acting FHWA Administrator Brandye Hendrickson about various FHWA programs, including Buy America, federal lands/tribal projects, and the Administration’s proposal to increase the flexibility of states to toll existing interstate lanes. Rep. David Young (R-IA) also questioned Hendrickson on the status of the Highway Trust Fund (HTF); Hendrickson said the agency projects the HTF to remain solvent through the end of FY 2020, but added that – like Secretary Chao – she could not support any specific revenue increases.

ADMINISTRATION

DOT Rebrands TIGER Grants as BUILD Grants; Releases NOFO: The Department of Transportation (DOT) announced on April 20 that the previously existing TIGER grant program would be renamed the Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program. BUILD grants will be used for surface transportation infrastructure, awarded on a competitive basis for projects that have significant
local or regional impact. Grants can be used to support roads, bridges, transit, rail, ports, or intermodal transportation. Projects are evaluated on merit criteria, including safety, economic competitiveness, quality of life, environmental protection, state of good repair, innovation, partnership, and additional non-Federal revenue for future transportation infrastructure investments. DOT released the Notice of Funding Opportunity (NOFO), with an application deadline date of July 19, 2018. For FY 2018, the maximum grant award is $25 million, and no more than $150 million can be awarded to a single state, under provisions outlined in the FY 2018 omnibus appropriations act.

DOT staff have said that the agency’s priorities are rural, road, freight/intermodal, and innovation (AVs, ITS, etc.). In addition, the NOFO includes a section for applicants to explain new transportation revenue.

The FY 2018 appropriations bill was specific about not DOT not prioritizing cost share: “the Secretary shall not use the Federal share as a selection criteria in awarding projects.” However, the NOFO does does indicate that DOT is still focusing on this issue:

“The Administration believes that attracting significant new, non-Federal revenue streams dedicated to transportation infrastructure investment is desirable to maximize investment in transportation infrastructure. The Department will assess the extent that applications provide evidence that the applicant will secure and commit new, non-Federal revenue to transportation infrastructure investment. New revenue means revenue that is not included in current and projected funding levels and results from specific actions taken to increase transportation infrastructure investment. For example, an applicant may generate new revenue through asset recycling, tolling, tax-increment financing, or sales or gas tax increases.

New revenue does not include the proceeds of a new bond issuance unless an applicant raises or commits to raising new revenue to repay the bonds. The Department will consider actions to create new revenue only if those actions occurred after January 1, 2015 or will occur in the future; it will not consider actions that occurred before January 1, 2015. For applications that propose to generate revenue over multiple years, the maximum time period that should be used is 10 years, beginning on January 1, 2018. Among otherwise similar applications, applicants that generate more new non-Federal revenue for future transportation infrastructure investment will be more competitive. The Department recognizes that applicants have varying abilities and resources to generate non-Federal revenue. If an applicant describes broader legal or fiscal constraints that affect its ability to generate non-Federal revenue, the Department will consider those constraints. As mandated by the FY 2018 Appropriations Act, the Department will not use the Federal share as a selection criterion in awarding projects.”

Funds are only available for obligation through September 30, 2020. Obligation occurs when a selected applicant and DOT enter into a written grant agreement after the applicant has satisfied applicable administrative requirements, including transportation planning and environmental review requirements. All FY 2018 BUILD funds must be expended (the grant obligation must be liquidated or actually paid out to the grantee) by September 30, 2025.
THUD Appropriations Subcommittee Chair and Ranking Member Send Letter on TIGER to DOT: Senate THUD Appropriations Subcommittee Chairwoman Susan Collins (R-ME) and Ranking Member Jack Reed (D-RI) sent a letter to Transportation Secretary Elaine Chao to express their disapproval with aspects of the BUILD grant program, formerly known as TIGER. The senators wrote that the grant program is not suitable for testing new policies, and took issue with the focus on non-federal revenue and how far back the administration is willing to reward a state or region that’s already moved to generate more funding. Congress has set guidelines for how grants are awarded, but BUILD is an unauthorized program – this means the Department of Transportation (DOT) has the ability to adjust aspects of the program as they see fit. House Transportation Appropriations Chairman Mario Diaz-Balart (R-FL) said he will have to examine what DOT changed in the criteria, but hinted that appropriators may adjust the program as well.

DOT Announces ATCMTD Grants: The Federal Highway Administration (FHWA) announced the availability of funds for the Advanced Transportation and Congestion Management Technologies Deployment Initiative (ATCMTD) grants. Up to $60 million in federal funding is available to provide grants to eligible entities to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance and infrastructure return on investment. To be selected for an ATCMTD award, an applicant must be an eligible applicant. Eligible applicants are state or local governments, transit agencies, metropolitan planning organizations (MPO) representing a population of over 200,000, or other political subdivisions of a state or local government (such as publicly owned toll or port authorities), or a multijurisdictional group or consortia of research institutions or academic institutions. Partnership with the private sector or public agencies, including multimodal and multijurisdictional entities, research institutions, organizations representing transportation and technology leaders, or other transportation stakeholders, is encouraged. Applications are due by June 18, 2018.

Senator Sends CIG Letter: Sen. Dianne Feinstein (D-CA) sent a letter to Secretary Elaine Chao on April 30, asking that she put an end to administrative delays that have held up DOT from handing out money for Capital Investment Grants (CIG) projects. The White House proposed cutting funding for the program in its budget, but Congress committed to expanding the program in its FY 2018 omnibus appropriations bill – the bill provided $2.645 billion for the program, a 10 percent increase over the FY 2017 enacted level.

DOT Begins Soliciting Applications for FY 2018 Grant Funding: DOT has begun soliciting applications for many programs funded under the FY 2018 omnibus spending bill, signed into law in March. The following programs had been announced as of April 23 (amount in millions):
INFRA grant funding deadlines have passed, as funding for the program falls under the contract authority provided in the FAST Act, but the exact amount available was not known until the FY 2018 omnibus bill was passed. The Federal Highway Administration (FHWA) combined FY 2017 money with the anticipated FY 2018 amount in one grant announcement, and recipients are anticipated to be identified in early June.

DOE Announces Vehicle Technologies Grant: The Department of Energy (DOE) announced the availability of grant funds for its FY 2018 Advanced Vehicle Technologies Research program. The Office of Energy Efficiency and Renewable Energy is issuing, on behalf of the Vehicle Technologies Office, this Funding Opportunity Announcement (FOA), which seeks research project to address priorities in the following areas: batteries and electrification; materials; technology integration and energy efficient mobility systems; energy efficient commercial off-road vehicle technologies; and co-optimized advanced engine and fuel technologies to improve fuel economy. All applications are due by July 13, 2018.

Source: Eno Transportation Weekly
May 11, 2018

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 – MAY 2018

Overview
May is the house of origin deadline for the Legislature. This means that all Assembly bills must pass out of the Assembly and all Senate bills must pass out of the Senate by June 1. May also marks the release of the Governor’s May revision to his introduced budget from January and kicks off the final month of negotiations with the Legislature on the State Budget, which must pass by June 15.

State Budget
As noted above, the Governor issued his May Revise on May 11. The revised budget anticipates increase spending for transit due to increased revenues in the State Transit Assistance program (STA).

Legislation of Interest

AB 1912 (Rodriguez) – Retirement Liability for Members of Joint Powers Agencies
This bill would hold current and former member agencies of a Joint Powers Agency (JPA) jointly and severally liable for retirement obligations of employees of the JPA or a dissolved JPA. This bill is sponsored by the Service Employees International Union (SEIU) which represents many employees in local JPA’s. This bill is heavily opposed by the League of California Cities, Counties and Special Districts due to the joint and several liability provisions in the bill and the fact that its requirements are retroactive to participation in JPA’s that have long been dissolved. AB 1912 has passed both the Assembly Public Employees Retirement Committee and the Assembly Judiciary Committee on partisan votes with all Democrats voting for the bill and Republicans voting against or abstaining. It is currently awaiting action in the Assembly Appropriations Committee.

SB 2034 (Kalra) – Human Trafficking
This bill would require the operator of an intercity passenger rail, light rail, or bus station to train its employees to recognize signs of human trafficking and how to report to authorities. AB 2034 passed the Assembly Judiciary Committee on March 20 on a 10-0 vote. It is awaiting a decision of the Assembly Appropriations Committee as to whether it will pass off the Suspense file.
AB 2065 (Ting) – Surplus Land
AB 2065 would revise definitions and place new requirements on local government agencies with respect to the disposition and use of surplus land to prioritize housing. This is a highly controversial bill sponsored by the Non-Profit Housing Coalition of Northern California. It is opposed by a broad coalition of local government agencies objecting to provisions of the bill, mostly, that define leased land as surplus land. The author has committed to work with opponents of the bill and is in the process of considering various amendments to remove opposition. This bill passed the Assembly Local Government Committee on a 6-3 vote, though some Democrats voting for it in committee explained that they would not continue to support it further if the author does not satisfy local government concerns.

SB 1 Repeal
The entities behind the effort to repeal the gas tax and fee increases in SB 1 from 2017 have submitted signatures to qualify their initiative for the November ballot. Led in part by the two Republican candidates for Governor, approximately 950,000 signatures were submitted and 585,000 are needed to qualify this measure for the November ballot. Signatures must be verified by May 21 and all indications are that it is expected to qualify.

The campaign to oppose the initiative is being led by the Coalition to Protect Local Transportation Improvements made up of labor, local government, transportation service providers, contractors and others is busily organizing and raising money to fight this initiative. We will keep the Joint Powers Board apprised of ongoing efforts concerning this matter.
<table>
<thead>
<tr>
<th>Bill ID/Topic</th>
<th>Location</th>
<th>Summary</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AB 1912</strong> Rodriguez D</td>
<td><strong>Public employees' retirement: joint powers agreements: liability.</strong></td>
<td>The Joint Exercise of Powers Act generally authorizes 2 or more public agencies, by agreement, to jointly exercise any common power. Under the act, if an agency is not one or more of the parties to the agreement but is a public entity, commission, or board constituted pursuant to the agreement, the debts, liabilities, and obligations of the agency are the debts, liabilities, and obligations of the parties to the agreement, unless the agreement specifies otherwise. The act also authorizes a party to a joint powers agreement to separately contract for, or assume responsibilities for, specific debts, liabilities, or obligations of the agency. This bill would eliminate that authorization, and would specify that if an agency established by a joint powers agreement participates in, or contracts with, a public retirement system, member agencies, both current and former to the agreement, would be required to mutually agree as to the apportionment of the agency's retirement obligations among themselves, provided that the agreement equals the total retirement liability of the agency.</td>
<td>Watch</td>
</tr>
<tr>
<td><strong>AB 1969</strong> Salas D</td>
<td><strong>Transportation funds: transportation planning agencies: transit operators: fare revenue ratios: exemptions.</strong></td>
<td>Current law sets forth alternative ways an transit operator may qualify for funding, including a standard under which the allocated moneys do not exceed 50% of the operator's total operating costs, as specified, or the maintenance by the operator of a specified ratio of fare revenues to operating costs. Current law generally establishes the required fare revenues to operating cost ratio as 20% in urbanized areas and 10% in nonurbanized areas. This bill would authorize a transportation planning agency to grant an exemption, for up to 5 years, to an operator that fails to maintain the applicable fare-revenue-to-cost ratio if, based on that agency's determination, an exemption is appropriate, as specified. The bill would require the agency to consider specified factors in determining whether to grant the exemption.</td>
<td>Watch</td>
</tr>
<tr>
<td><strong>AB 2034</strong> Kalra D</td>
<td><strong>Human trafficking: notice.</strong></td>
<td>Would require a business or other establishment that operates an intercity passenger rail, light rail, or bus station, on or before January 1, 2020, to train its new and existing employees who are likely to interact with, or to come into contact with, a victim of human trafficking or who are likely to receive a report from another employee about suspected human trafficking, in recognizing the signs of human trafficking and how to report those signs to the appropriate law enforcement agency, as specified.</td>
<td>Watch</td>
</tr>
<tr>
<td><strong>AB 2065</strong> Ting D</td>
<td><strong>Local</strong></td>
<td>Current law prescribes requirements for the disposal of surplus land by a local agency. Current law defines “local agency” for these purposes as every city, county, city and county, and district, including school districts of any kind or class, empowered to acquire and hold real property. This bill would expand the definition of “local agency” to include</td>
<td>Watch</td>
</tr>
<tr>
<td>Agencies: surplus land.</td>
<td>Sewer, water, utility, and local and regional park districts, joint powers authorities, successor agencies to former redevelopment agencies, housing authorities, and other political subdivisions of this state and any instrumentality thereof that is empowered to acquire and hold real property, thereby requiring these entities to comply with these requirements for the disposal of surplus land.</td>
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<tr>
<td><strong>AB 2249 Cooley D</strong>&lt;br&gt;Public contracts: local agencies: alternative procedure.</td>
<td><strong>Last Amended on 4/16/2018</strong>&lt;br&gt;Would authorize public projects of $60,000 or less to be performed by the employees of a public agency, authorize public projects of $200,000 or less to be let to contract by informal procedures, and require public projects of more than $200,000 to be let to contract by formal bidding procedures. Supported May 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACA 4 Aguilar-Curry D</strong>&lt;br&gt;Local government financing: affordable housing and public infrastructure: voter approval.</td>
<td><strong>Local government financing: affordable housing and public infrastructure: voter approval.</strong> Watch</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACA 5 Frazier D</strong>&lt;br&gt;Motor vehicle fees and taxes: restriction on expenditures: appropriations limit.</td>
<td><strong>Last Amended on 4/4/2017</strong>&lt;br&gt;Would add Article XIXâ¢%D to the California Constitution to require revenues derived from vehicle fees imposed under a specified chapter of the Vehicle License Fee Law to be used solely for transportation purposes, as defined. The measure would prohibit these revenues from being used for the payment of principal and interest on state transportation general obligation bonds that were authorized by the voters on or before November 8, 2016. The measure would prohibit the revenues from being used for the payment of principal and interest on state transportation general obligation bonds issued after that date unless the bond act submitted to the voters expressly authorizes that use. Supported 2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SB 827 Wiener D</strong>&lt;br&gt;Planning and</td>
<td>Would require a local government to, if requested, grant a development proponent of a transit-rich housing project a transit-rich housing bonus if that development at the time of submittal meets specified planning standards, including complying with demolition permit requirements, complying with any local inclusionary housing ordinance or, if the local Watch</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Peninsula Corridor Joint Powers Board
### State Legislative Matrix as of 5/11/2018

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sponsor</th>
<th>Description</th>
<th>Last Amended</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. APPR. SUSPENSE FILE 5/25/2017-May 25 hearing: Held in committee and under submission.</td>
<td>Wiener D</td>
<td>Would require that the imposition, extension, or increase by a local government of a special tax as may otherwise be authorized by law, whether a sales or transactions and use tax, parcel tax, or other tax for the purpose of providing funding for transportation purposes be submitted to the electorate by ordinance and approved by 55% of the voters voting on the proposition. The measure would authorize an ordinance submitted to the voters for approval under these provisions to provide, as otherwise authorized by law, for the issuance of bonds payable from the revenues from the special tax.</td>
<td>5/1/2017</td>
<td>Supported Feb. 2018</td>
</tr>
<tr>
<td>SB 1119 Newman D</td>
<td></td>
<td>Current law requires, for recipient transit agencies whose service areas include disadvantaged communities, as specified, that those recipient transit agencies expend at least 50% of the total moneys they received as part of the Low Carbon Transit Operations Program on projects or services that meet specified requirements and benefit those disadvantaged communities. This bill would authorize a recipient transit agency to satisfy the above-stated requirement by expending at least 50% of program funds received on transit fare subsidies, specified transit connections, or technology improvements that reduce emissions of greenhouse gases.</td>
<td>4/9/2018</td>
<td>Supported April 2018</td>
</tr>
<tr>
<td>A. DESK 5/10/2018-Read third time. Passed. (Ayes 38. Noes 0.) Ordered to the Assembly. In Assembly. Read first time. Held at Desk.</td>
<td>Newman D</td>
<td>A. DESK 5/10/2018-Read third time. Passed. (Ayes 38. Noes 0.) Ordered to the Assembly. In Assembly. Read first time. Held at Desk.</td>
<td>SB 1119 Newman D</td>
<td>Low Carbon Transit Operations Program.</td>
</tr>
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</table>
AGENDA ITEM #4 (e)
JUNE 7, 2018

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: CAPITAL PROJECTS QUARTERLY STATUS REPORT –
3rd QUARTER FISCAL YEAR 2018

ACTION
Staff Coordinating Council recommends the Board receive the Quarterly Program
Status Report 3rd Quarter Fiscal Year 2018.

SIGNIFICANCE
The Capital Projects Quarterly Status Report is submitted to keep the Board advised as
to the scope, budget and progress of current ongoing capital projects.

BUDGET IMPACT
There is no impact on the budget.

BACKGROUND
Staff prepares the Capital Projects Quarterly Status Report for the Board on a quarterly
basis. The report is a summary of the scope, budget and progress of capital projects. It is
being presented to the Board for informational purposes and is intended to better
inform the Board of the capital project status.

Prepared by: Gordon Hail, Senior Project Controls Engineer 650.508.7795
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Seamus Murphy
Chief Communications Officer

SUBJECT: PROCLAMATION DECLARING JUNE 21, 2018 AS “NATIONAL DUMP THE PUMP DAY”

ACTION
Staff Coordinating Council recommends the Board adopt a proclamation designating June 21, 2018 as “National Dump the Pump Day.”

SIGNIFICANCE
By proclaiming June 21 as “National Dump the Pump Day” the Peninsula Corridor Joint Powers Board is joining transit agencies around the country participating in the effort to reaffirming a commitment to reducing congestion and improving air quality by providing high quality public transportation services to all. In partnership with the American Public Transportation Association (APTA), Dump the Pump Day is an annual opportunity to encourage people to give up driving and use public transportation, steps that reduce the carbon footprint, ease congestion and pollution and save money.

Nationwide, public transit systems provide more than 34 million rides every weekday, according to APTA. Since 1995, public transit ridership is up 30 percent, outpacing population growth, which is up 22 percent, and vehicle miles traveled (VMT) is up 32 percent. Public transportation is a $68 billion industry that employs more than 420,000 people. More than 6,800 organizations provide public transportation in the United States.

Public transportation use reduces our nation’s dependence on foreign oil by 4.2 billion gallons of gasoline a year and it also saves 37 million metric tons of carbon emissions annually. Public transportation also provides personal mobility and freedom for people from every walk of life. One person with a 20-mile round trip commute who switches from driving to public transit can reduce his or her daily carbon emissions by 20 pounds or more than 4,800 pounds in a year.

Caltrain participates in these efforts by providing a transit alternative for more than 62,000 daily riders, with 19 million annual total trips since Caltrain instituted Baby Bullet
express service in 2004, AWR has increased by 160 percent. Many trains are at more than 100 percent capacity, and to increase capacity and frequency, Caltrain is electrifying the 154-year-old service, modernizing the system for the 21st Century.

**BUDGET IMPACT**
There is no impact on the budget.

**BACKGROUND**
“National Dump the Pump Day” began in June 2006 when national gas prices averaged $3 per gallon. Although gas prices have stabilized, traffic in the Bay Area is pushing our freeways and roads to their limits. Using transit options such as Caltrain is one of the most effective ways to beat gas prices and reduce congestion.

To encourage drivers to try transit on June 21, Caltrain will promote National Dump the Pump Day with a community event at the Millbrae Transit Center to launch new transit connections between Caltrain and San Francisco International Airport that will make transit a more attractive alternative for travelers going to and from the airport during the summer travel season. Caltrain will also encourage passengers to participate in National Dump the Pump Day on social media using the hashtag #dumpthepump.

Prepared by: Tasha Bartholomew, Communications Manager 650.508.7927
Proclamation

ESTABLISHING 13th ANNUAL NATIONAL DUMP THE PUMP DAY
ON JUNE 21, 2018

WHEREAS, June 15, 2017 marks the American Public Transportation Association’s (APTA) 12th annual National Dump the Pump Day; and

WHEREAS, Caltrain supports National Dump the Pump Day as a day to encourage people to ride public transportation to save money, revitalize communities, protect the environment, reduce our dependence on foreign oil, and improve the quality of life for all Americans; and

WHEREAS, Caltrain recognizes that public transportation is a vital resource for residents across the nation, in communities of all sizes and types; and

WHEREAS, to highlight the importance of getting commuters out of their cars and onto transit, Caltrain will promote National Dump the Pump Day with a community event at the Millbrae Transit Center to launch Route SFO, a new transit connection between the Millbrae Caltrain Station and San Francisco International Airport; and

WHEREAS, Caltrain will also encourage passengers to participate in the national social media campaign using the hashtag #dumpthepump; and

WHEREAS, Caltrain operates 92 weekday trains between San Francisco and San Jose, serving the Peninsula Rail Corridor and the communities of San Francisco, San Mateo and Santa Clara counties; and Caltrain carried more than 19 million passengers in Fiscal Year 2017; and

WHEREAS, in 2017, Americans took 10.1 billion trips on public transportation, and since 1995, trips on public transit have increased by 30 percent; and

WHEREAS, according to APTA’s most recent Transit Savings Report, a two-person household can save, on the average, more than $10,063 a year by downsizing to one car; and

WHEREAS, public transportation is a $68 billion industry that employs more than 420,000 people; and

NOW, THEREFORE BE IT RESOLVED on this 7th day of June, 2018 the Board of Directors of the Peninsula Corridor Joint Powers, in support of APTA’s efforts, encourages citizens to dump the pump and get onto public transportation, and does hereby proclaim Thursday, June 21, 2018 as NATIONAL DUMP THE PUMP DAY.

Chair, Peninsula Corridor Joint Powers Board
TO: Joint Powers Board 

THROUGH: Jim Hartnett 
Executive Director 

FROM: Derek Hansel Seamus Murphy 
Chief Financial Officer Chief Communications Officer 

SUBJECT: AWARD OF CONTRACTS FOR ON-CALL MARKET RESEARCH AND SURVEY SERVICES 

ACTION 
Staff Coordinating Council recommends the Board: 

1. Award on-call, no guarantee contracts to Corey, Canapary & Galanis of San Francisco, California and EMC Research, Inc. of Oakland, California for an aggregate not-to-exceed amount of $1,357,000 to provide market research and survey services for a five-year term at the hourly rates specified in each proposal. 
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 in a form approved by legal counsel. 

SIGNIFICANCE 
Award of these contracts will provide the Peninsula Corridor Joint Powers Board (JPB) with qualified on-call market research firms to conduct rider and non-rider research, ridership counts, and passenger satisfaction surveys on a project-by-project basis. Potential projects may include market segmentation, trip origin and destination studies, fare planning, funding studies, and vision and branding research. 

BUDGET IMPACT 
Funds to support the award of these contracts are included in the adopted Fiscal Year 2018 Operating Budget and will be included in future operating budgets. 

BACKGROUND 
The JPB issued a Request for Proposals (RFP), to provide Market Research and Survey Services as a joint solicitation with the San Mateo County Transit District. The solicitation was advertised in a newspaper, and on the JPB’s procurement website and notices also were sent to interested proposers, small business enterprises (SBEs) and disadvantaged business enterprises (DBEs). The JPB received proposals from Corey, Canapary & Galanis and EMC Research, Inc.
An Evaluation Committee composed of qualified staff (Market Research Specialist, Strategic Planner, and Caltrain Principal Planner) reviewed and scored the proposals in accordance with the following weighted criteria:

- Approach to Scope of Services 0-20 points
- Qualifications and Experience of Firm 0-25 points
- Qualifications and Experience of Key Personnel 0-30 points
- Cost Proposal 0-25 points
- Small Business Enterprise Preference 0-05 points
  
  Total 105 points

After review, evaluation, and scoring of the proposals, both firms were determined to be responsive, responsible and within the competitive range. Both firms are certified Small Businesses and both received the full five SBE preference points. No exceptions were taken to the agreement for services, financial reviews were satisfactory, and analyses of proposed costs indicated they were competitive. As a result, it was determined that Corey, Canapary & Galanis and EMC Research, Inc. are qualified to be selected for contract award.

The firms possess the requisite experience and the qualifications to successfully perform the scope of services defined in the solicitation documents, and are fully capable of providing the specified services at a fair and reasonable price. Therefore, the recommendation is to award a contract to each of these firms.

During preparation of the RFP, internal stakeholders, Market Research & Development and Rail Planning identified a need for additional market research services to support an array of service planning needs. The research and surveys planned for the next five years include: the Triennial System-wide Survey, the Annual Customer Satisfaction Survey, the Shuttle Survey, the fare and service related surveys, the NTD Counts, Focus Groups, Market Segmentation and other surveys based on required project needs. To accommodate this work, the aggregate contract value was increased from the current contract amount of $1,140,000 for a five-year term. Based upon the projected volume of projects, staff determined it is in the JPB’s best interest to award contracts to more than one firm. Work Directives will be issued on a project-by-project basis to one or both of the firms.

Three firms currently have contracts to provide these services: Corey, Canapary & Galanis, Dikita Enterprise, Inc., and EMC Research, Inc. These contracts expire on July 31, 2018.

Contract Officer: Ann Stroud 650.622.7893
Project Manager: Julian Jest, Market Research Specialist 650.508.6245
RESOLUTION NO. 2018- ____

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

* * *

AWARDING CONTRACTS TO COREY, CANAPARY & GALANIS AND EMC RESEARCH, INC.
FOR PROVISION OF ON-CALL MARKET RESEARCH AND SURVEY SERVICES FOR A FIVE-YEAR
TERM FOR AN AGGREGATE NOT-TO-EXCEED AMOUNT OF $1,357,000

WHEREAS, the Peninsula Corridor Joint Powers Board (JPB) issued a Request for Proposals (RFP) for market research and survey services; and

WHEREAS, in response to the RFP, the JPB received a total of two proposals; and

WHEREAS, the RFP included a preference for proposals with small business utilization, consistent with the JPB’s Small Business Enterprise Program, for which both firms applied; and

WHEREAS, an Evaluation Committee (Committee) reviewed and evaluated the firms’ proposals, scored and ranked the proposals according to the evaluation criteria set forth in the RFP, and determined that both firms were in the competitive range; and

WHEREAS, the Committee completed its evaluation process and determined that Corey, Canapary & Galanis of San Francisco, California and EMC Research, Inc. of Oakland, California possess the necessary qualifications and requisite experience to successfully perform the scope of services defined in the solicitation documents, and are capable of providing the specified services at fair and reasonable prices; and

WHEREAS, staff and legal counsel have reviewed the proposals and have 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 award contracts to Corey, Canapary & Galanis, and EMC Research, Inc. for market research and survey services for an aggregate not-to-exceed amount of $1,357,000 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 market research and survey services to Corey, Canapary & Galanis and EMC Research, Inc. for a five-year term for an aggregate not-to-exceed amount of $1,357,000; and

BE IT FURTHER RESOLVED the Executive Director, or his designee, is authorized to execute contracts with Corey, Canapary & Galanis, and EMC Research, Inc. in full conformity with all of the terms and conditions of the RFP and agreement, and in a form approved by legal counsel.

Regularly passed and adopted this 7th day of June, 2018 by the following vote:

AYES:

NOES:

ABSENT:

________________________________
Chair, Peninsula Corridor Joint Powers Board

ATTEST:

______________________________
JPB Secretary
AGENDA ITEM #4 (h)  
JUNE 7, 2018

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

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

SUBJECT: AUTHORIZATION TO AMEND FUNDING AGREEMENTS WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION TO RECEIVE AN ADDITIONAL $252,250 FOR THE REDWOOD CITY GRADE CROSSINGS IMPROVEMENT PROJECT

ACTION
Staff Coordinating Council recommends the Board:

1. Authorize the Executive Director, or his designee, to amend the existing funding agreements with the California Department of Transportation (Caltrans) for the Peninsula Corridor Joint Powers Board (JPB) to receive an additional $252,250 in Section 130 Rail Safety Infrastructure Improvements grant funds for the improvement of three grade crossings in Redwood City (collectively the "Redwood City Grade Crossing Improvement Project" or "Project");

2. Authorize the Executive Director, or his designee, to file any other required documentation and to take any other actions necessary to give effect to the resolution.

SIGNIFICANCE
The Redwood City Grade Crossing Improvement Project involves the final design and construction of the grade crossings located at three intersections of the JPB's track in Redwood City: Main Street, Whipple Avenue, and Broadway. Improvements include, but are not limited to, replacing vehicle and pedestrian gate arms, installing pedestrian exit gates and improving pavement markings.

In late 2015, the JPB was awarded $1,408,250 in Section 130 Grade Crossing Improvement Program funds from the Caltrans Division of Rail and Mass Transportation. Since that time, Project design has been completed and the Board of Directors (Board) has awarded the construction Contract at its August 2017 meeting.

Since the contract award, the State approved an additional $252,250 in Section 130
funds to support the project. To receive the funds, the Board must execute amendments to the existing funding agreements for the Project. These amendments will also provide additional time to complete the work, extending the time from September 2018 to September 2019.

Additional actions will be necessary to allocate the funds. Staff intends to bring these actions before the Board at a later date.

**BUDGET IMPACT**
The project budget will be amended at a later date to include the additional funding.

**BACKGROUND**
The California Public Utilities Commission Section 130 Program provides funding for the elimination of hazards at existing at-grade railroad crossings. The goal of the program is to reduce the number and severity of accidents between trains and motorists, bicyclists, and pedestrians at crossings.

Prepared by: Leslie Fong, Senior Administrative Analyst  
Robert Tam, Program Manager  
650.508.6332  
650.508.7969
RESOLUTION NO. 2018 -

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

***

AUTHORIZING THE EXECUTION OF AMENDMENTS TO FUNDING AGREEMENTS WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION TO RECEIVE AN ADDITIONAL $252,250 FOR THE REDWOOD CITY GRADE CROSSINGS IMPROVEMENT PROJECT

WHEREAS, the California Department of Transportation (Caltrans) awards grant funding, including through the Section 130 Rail Safety Infrastructure Improvements program (Section 130), to increase safety at railroad crossings, train stations, and tracks across the state; and

WHEREAS, the Peninsula Corridor Joint Powers Board (JPB) was previously awarded $1,408,250 in Section 130 grants to fund the Redwood City Grade Crossings Improvements Project (Project); and

WHEREAS, the Project will make safety improvements at the Broadway, Whipple Avenue and Main Street crossings in Redwood City; and

WHEREAS, Caltrans has agreed to provide additional time and $252,250 in additional funding to complete the project, and to amend the existing agreement; and

WHEREAS, the Staff Coordinating Council (SCC) recommends the Board:

1. Authorize the Executive Director, or his designee, to execute the amendments to the agreements with Caltrans to receive the additional $252,250 in grant funds for the Project and to extend the term of the agreements; and
3. Authorize the Executive Director, or his designee, to file any other required documentation and to take any other actions necessary to give effect to this resolution.

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

1. Authorizes the Executive Director, or his designee, to amend the funding agreements with Caltrans for the Redwood City Grade Crossings Improvements Project to accept an additional $252,250 in Section 130 grant funds and to extend the term of the agreements; and

2. Authorizes the Executive Director, or his designee, to file any other required documentation and to take any other actions necessary to give effect to this resolution.

Regularly passed and adopted this 7th day of June 2018 by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

______________________________
Chair, Peninsula Corridor Joint Powers Board

ATTEST:

______________________________
JPB Secretary
TO: Joint Powers Board

THROUGH: Jim Hartnett  
Executive Director

FROM: Michelle Bouchard  
Chief Operating Officer, Rail

SUBJECT: UPDATE ON BLENDED SYSTEM PLANNING WITH CALIFORNIA HIGH SPEED RAIL

ACTION
Staff Coordinating Council recommends the Board receive the attached memo regarding the current status on the blended system planning with California High Speed Rail.

SIGNIFICANCE
Caltrain and the California High Speed Rail Authority are engaged with the planning for the blended system. In addition, the Authority has released its 2018 Business Plan, which sets the current vision for the new state-wide high speed rail system. Caltrain is also beginning its Business Planning process. This memo outlines the relationship between the two Business Plan efforts, and the approach for blended planning for the Peninsula Corridor.

BUDGET IMPACT
There is no impact on the budget.

BACKGROUND
The planned California high-speed rail (HSR) system will operate from San Francisco to Los Angeles. The northern and southern segments of the HSR system (called the bookends) will “blend” with regional and local operations. The blended system in the northern bookend from San Francisco to San Jose will support modernized Caltrain service and high-speed rail service primarily on shared tracks substantially within the existing Caltrain corridor. There has been much planning and coordination between Caltrain and the Authority on the northern blended corridor.

2011-2013: Establishment of the Blended System
- Congresswoman Anna Eshoo, State Senator Joe Simitian, and Assemblyman Rich Gordon introduce “Blended System” concept as a response to community concerns over proposal for 4-track, fully grade separated system on the Peninsula Corridor.
• The Authority’s 2012 Business Plan confirmed the Blended System approach for the Peninsula Corridor
• Caltrain, along with MTC, the Authority, and six other funding partners established an agreement to support joint Caltrain and High Speed Rail operation on a primarily 2-track Blended System and provide early investment to the Caltrain Modernization Program
• Senate Bill 557 provides Prop 1A funds and codifies into law requirement that the rail system “primarily consist of a 2-track blended system”

With the completion of an agreed-upon framework for a blended corridor, Caltrain and the Authority began to jointly conduct the planning work:
• 2012-2013 Initial Blended System “concept of operation” analyses were undertaken by Caltrain, in coordination with the Authority, and concluded that blended services can be achieved on the Peninsula with some additional infrastructure
• The “proof of concept” analyzed performance of the conditions with 6 Caltrain/2 High Speed trains and 6 Caltrain/4 High Speed Rail service options against various passing track arrangements
• These studies provided the basis for High Speed Rail’s “Early Investment” into Caltrain corridor, with the PCEP EIR subsequently completed in early 2015
• In 2016, the Authority initiated environmental clearance for the San Francisco to San Jose Project Section and the San Jose to Merced Project Sections, which started the required NEPA/CEQA work for the northern California portion of the state-wide system. At the same time, Caltrain and the Authority established an operational working group to further refine the blended system concept. This work looked at the trade-offs between service quality (e.g. journey times and frequency) and infrastructure options (e.g. passing tracks.)

Parallel Rail Planning Efforts
In addition to Blended Planning efforts undertaken by Caltrain and the Authority, a number of parallel rail planning efforts that inform outcomes in the Peninsula Corridor have been ongoing over the past several years. These include:
• The San Francisco Railyard Alternatives and I-280 Boulevard Feasibility Study and the Transbay Joint Powers Authority Downtown Extension supplemental EIR/EIS
• The SamTrans-led Dumbarton Transportation Corridor Study
• The Diridon Station Area Plan
• Multiple individual grade-separation studies and plans
• Various municipality-led station area plans
• The State of California 2018 State Rail Plan

California High Speed Rail Authority Draft 2018 Business Plan
On March 9, 2018, the Authority released its draft 2018 Business Plan. The Draft 2018 Business Plan proposes new strategies that would expand electrification of the Caltrain corridor south of San Jose to Gilroy, ensuring that all communities currently served by Caltrain will benefit from the advantages offered by electric trains, including increased service frequency, reduced travel times, enhanced reliability, and improved air quality. This new approach, which is part of the phased implementation of a Silicon Valley to Central Valley Line, is a continuation and an enhancement of the Authority’s
longstanding commitment to eventually connect the State with high-speed rail service in a way that also offers immediate improvements to existing regional rail services, including Caltrain.

The approach also focuses on the implementation of early interim high-speed rail service between San Francisco and Gilroy as early as 2027. The addition of high speed rail service to the Caltrain corridor has great potential for maximizing the benefits of corridor electrification, and providing communities along the corridor with new mobility options that will be a valuable part of our efforts as a region to address growing traffic congestion and maintain our economic competitiveness.

**Current Blended Planning**

As the Board of Director’s know, Caltrain has initiated its Business Plan process, which includes an in-depth technical analysis of the issues and considerations related to the expansion of services within the corridor, including the addition of high-speed rail. In 2017 Caltrain secured full funding for the Peninsula Corridor Electrification Project and issued notices to proceed to its contractors. Now that construction on this long-awaited project has begun, the agency has the opportunity to articulate a long term business strategy for the future of the system.

The planning for the San Francisco to Gilroy corridor has reached a pivot point. Caltrain and the Authority will continue to work closely together to continue development of the blended system, with Caltrain taking a lead-role to coordinate the Peninsula Corridor rail planning efforts.

Updates regarding the blended operational planning are anticipated to be coordinated and funneled through the Caltrain Business Plan activities. As such, the Board can expect to be provided further updates and provide input in the coming months.

Prepared by: Elizabeth Scanlon, Director of Caltrain Planning 650.295.6867
Overview

- Blended Planning current status
- California High Speed Rail Draft 2018 Business Plan
- Path Forward and Next Steps
Current Status

- Planning for the San Francisco – Gilroy corridor has reached a pivot point
  - CHSRA Draft 2018 Business Plan introduces the possibility of early electrified service from San Francisco to Gilroy
  - Caltrain Business Plan has been established as comprehensive planning exercise to consider the future of the corridor (and includes partnership with HSR)
- Caltrain Business Plan will now serve as the primary, coordinated venue for rail planning discussions
California High Speed Rail Update
DRAFT 2018 BUSINESS PLAN

Boris Lipkin, Acting Northern California Regional Director

Caltrain Board Meeting
May 3, 2018
HIGH-SPEED RAIL: Connecting California

LEGEND
- Phase 1
- Phase 2
- Proposed Station

- Increase Mobility
- Needed Alternative
- Better Air Quality
- Job Growth
HIGH-SPEED RAIL: Helping Shape Cities

• Ties Economies Together
  • San Jose to Fresno = 60 Minutes
  • Bakersfield to Los Angeles = 60 Minutes
  • San Francisco to Los Angeles = under three hours
• Connects With and Reinforces Local Mobility
• Foundation for Sustainable Growth
• Opportunities for Revitalization in Downtown Cores
HIGH-SPEED RAIL: It’s Happening!

- Approximately 119 Miles
- Madera to North of Bakersfield
- Approximately $3 Billion Investment
- 17 Active Construction Sites
- Over 1700 Workers
- 100% of Steel/Concrete Recycled
• Presents the program’s status at this point in time
• Summarizes our approach to implementing the system
• Includes:
  » Updated capital cost and other estimates
  » Updated ridership and revenue forecasts
  » Summary of progress over last two years
  » Review of our current challenges and how we are addressing them
DRAFT 2018 BUSINESS PLAN: New Approach

- Our costs have increased and we need more certainty on funding
- 83 percent of higher Phase 1 costs driven by:
  » Previously identified Central Valley construction delays
  » Inflation from schedule delays
  » Establishing higher contingency that better reflect risk and uncertainty
- New baseline estimates:
  » Central Valley – $10.6 billion – by 2022
  » Silicon Valley to Central Valley Line – $29.5 billion – by 2029
    • $1.9 billion of this is for extensions to San Francisco and Bakersfield
  » Phase 1 – $77.3 billion – by 2033
- New approach – apply ranges to costs and funding
• Deliver the Phase 1 System

• Deliver the Silicon Valley to Central Valley Line as soon as possible

• Invest bookend funds as full partner in the Burbank–LA–Anaheim corridor

• Continue planning for Phase 2 extensions
DRAFT 2018 BUSINESS PLAN: Phased Valley to Valley Line

- 119-mile Madera to Poplar Avenue by 2022
- 224 miles of high-speed rail ready infrastructure on two lines:
  » Central Valley
  » San Francisco/San José to Gilroy
  » Initiate service/testing by 2026/2027
- Isolate Pacheco Pass tunnels:
  » Early work to de-risk
  » Engage expertise on design
  » Explore funding strategy
- Merced remains high priority
- Full service by 2029
DRAFT 2018 BUSINESS PLAN: Submitting a Comment

• 60-day public comment period: March 9 through May 7
• Ways to comment:
  » Via our online comment form
  » Via email: 2018businessplancomments@hsr.ca.gov
  » Voicemail comment at 916-384-9516
  » Board hearings – March 20 (Sacramento)/April 17 (Los Angeles)
  » Mail your comment to:
    California High-Speed Rail Authority
    Attn: Draft 2018 Business Plan
    770 L Street, Suite 620, MS-1
    Sacramento, CA 95814
• Board adopts Final Business Plan at May meeting
• Submit to Legislature on June 1
Path Forward
Path Forward

• Caltrain Business Plan will be venue for comprehensive corridor planning going forward
  - CHSRA and Caltrain staff will continue technical coordination to ensure an integrated vision for the future of the corridor that meets the needs of both systems
  - Caltrain Business Plan structure will allow for direct involvement by a full spectrum of corridor stakeholders
  - Broad scope of Caltrain Business Plan allows for a flexible and comprehensive planning process that can addresses the full spectrum of service, organizational and community issues in the corridor
Path Forward

• Key Caltrain Business Plan Outcomes
  - JPB Board Action on integrated long range service vision for the Peninsula Corridor
  - Organizational assessment and strategy for evolving Caltrain service and corridor management
  - Assessment and strategy for addressing key rail-community interfaces including at-grade crossings and corridor development

• Caltrain Business Plan process will support environmental clearance for the Blended System
Questions?
MINUTES OF MAY 16, 2018

MEMBERS PRESENT:  C. Chang, P. Escobar, L. Fernandez, L. Klein, C. Tucker, J. Welch, B. Shaw (Chair)

MEMBERS ABSENT:  R. Valenciana (Vice Chair)

STAFF PRESENT:  J. Navarro, J. Navarrete, C. David, C. Bernardo

Chair Brian Shaw called the meeting to order at 5:48 p.m. and led the Pledge of Allegiance.

APPROVAL OF MINUTES OF APRIL 18, 2018
Motion/Second: Tucker/Chang
Ayes: Escobar, Welch, Shaw, Fernandez, Klein
Absent: Valenciana

PUBLIC COMMENT
Jeff Carter, Millbrae, mentioned that his comments are included in CAC public correspondence packet. He stated that during last month’s CAC meeting there was a presentation on fare study that mentioned elasticity value estimated to be -0.2. He requested staff to provide an explanation of elasticity. He also asked staff what ridership and revenue loss would look like with a 5% or 10% fare increase.

CHAIRPERSON'S REPORT
Chair Brian Shaw noticed that there have been minor equipment issues lately. He understands that the fleet is 30+ years old and wanted to mention the recent equipment issues.

COMMITTEE COMMENTS
Member Cat Chang stated that she noticed the correspondence packet included CAC applications with personal information although privacy was selected and she requested that information be removed. Staff advised that correspondence packet is only available in print at the meeting. Correspondence packets were collected and personal information was removed as requested.
CENTRALIZED TRAFFIC CONTROL

Joe Navarro, Director, Rail Operations, conducted a demonstration on how Centralized Traffic Control functions. He presented video replay of the morning peak hours at 4th and King St. Station. Joe explained that the system is a graphic representation of the railroad that allows the dispatch to see train location. The system allows for the dispatcher to remotely control signals and develop routes. Train movement does not happen automatically and is done by manual entry by the dispatch. When there is a service disruption the dispatch moves the trains accordingly. The video showed trains turning within the 20 minute goal at the 4th & King St. station during the morning peak hours.

Joe reported that there have been improvements made to the control system, most recently with a ROCS (Rail Operation Control System) refresh that included new hardware equipment obtained and updates to the existing software. Although there have been recent updates made, there are ongoing items that tie into the system that need to be resolved which include updates to PADS (Predictive Arrival/Departure System) and VMS (Visual Message Sign).

Public comment:
Roland Lebrun, San Jose, asked staff whether the video was a snapshot of the existing CATS system and Joe confirmed and stated that it was a 3 hour video snapshot condensed into 6 minutes of the AM peak hours. Roland asked whether it is ARINC and Joe confirmed. Roland went on to say that Caltrain has written a letter to the FRA that basically indicates block signaling will no longer be used due to switching to IATMS. Roland then said he had a couple of points to go over. First he said that trains are able to be turned within 5 minutes as he has witnessed it happening at the Tamien station. Roland said that not having a simulator on property is a problem as it would prove that no more than 2 tracks, in and out of the Transbay terminal, is needed.

UPDATE ON SIGNAGE PROPOSAL

Joe Navarro, Director, Rail Operations, reported an update on the Platform Signage. Joe advised that on May 7th, Platform Signs advising passengers of platform closures have been placed at the affected stations. He reports that approximately 2 complaints a week have been made since then, from passengers still not noticing these static signs on the platform. Joe stated that he is currently working with ARINC to update the VMS (Visual Message Sign) to reflect a standing message of “Platform Closed” at the affected platform and anticipates this update sometime in June. Joe advised that by taking these measures, there are significant cost savings to the District.

The Platform Signs read “Due to construction, track assignments can change with limited warning. The scrolling message on the digital sign and platform announcements provide the most up to date information”

Chair Brian Shaw asked whether these signs are placed directly below the VMS (Visual Message Sign) directing passengers to look up and asked whether the VMS then reflects the status of the platform. Joe confirmed that the static signs are on the platforms, however that the standing message, “Platform Closed” will be in effect in June. Chair Brian Shaw asked about the current process. Joe advised that currently
the static platform signs are stationed on the platform at all times, that there are audible station announcements and that the VMS (Visual Message Sign) scrolls an Ad Hoc message in intervals, however that between intervals the schedule message appears and may confuse passengers. The goal is to have a standing “Platform Closed” on the VMS at all times during platform closures and anticipates rolling this out in June.

UPDATE ON SOUTH SAN FRANCISCO STATION IMPROVEMENT PROJECT
Chuck (Charlemagne) Bernardo, Senior Project Manager, presented an update on the South San Francisco Station Improvement Project.

Project Elements / Benefits
- Pedestrian Underpass
- Shuttle Pick-up/Drop-off
- Accessibility Improvements
- Center Board Platform
- Removal of Holdout Rule
- Safety Improvements
- Fewer System-wide delays

Chuck then presented pictures of the progress to date of the project. He stated that most of the construction is related to track elements.
Current elements of construction
- Track Removal
- Track Shift
- Track Rehabilitation
(PowerPoint presentation available on Caltrain website)

Next elements of construction
- Platform construction on the Westside
- Electrification foundation installation
- Excavation for underpass

Member Paul Escobar asked what safety features will be in place at the pedestrian path underground for pedestrian safety. Chuck responded that the underpass was laid out in conjunction with the City of South San Francisco and that safety was an important element as part of the design. For example with the alignment of the path there will be no blind spots and there will be a clear view to the other side. There will always be sufficient lighting at any time of the day for pedestrian safety.

Chair Brian Shaw noticed that the shuttle pick has shifted from one side of the station to the other. Chuck confirmed this set up and said that all shuttles will be on the West side of the platform for the duration of the project. However once the project is complete both sides can accommodate shuttle service. The City of South San Francisco may take the lead on coordinating shuttle service on the East side, however the public will be notified if and when this occurs at the completion of the project.

Public comment:
Roland Lebrun, San Jose, asked the CAC members whether they know the definition of the “Hold out Rule”. Chair Brian Shaw explained that the hold out rule is currently in place at stations with narrow center platforms for passenger safety. The hold out rule allows only one train to enter the station at a time. Eliminating the hold out rule will allow trains to run more efficiently and effectively and will become very critical with High Speed Rail. (This project will improve passenger service and safety at the station, and will allow Caltrain to eliminate the “holdout rule”. Currently trains must “hold out” beyond the station if another train is in the station, and cannot enter the station until the first train has left. This project will allow more than one train to enter or pass through the station at a time, allowing for more flexibility in scheduling trains.) Roland continued to say that seven years ago several people were nearly killed due to a baby bullet speeding through a station. Roland pointed out that on the second slide of the PowerPoint presentation there is an overpass above the underpass and doesn’t make sense of it. Roland stated that this type of platform design is a disaster and that an island type of platform should not be designed on a High Speed Rail line that will run at 110 MPH. He asked what is the source of funding for this project. He mentioned that there will be a pedestrian crossing that is not in the design on the PowerPoint. Roland also stated that to his knowledge these are Union Pacific tracks.
STAFF REPORT UPDATE

Joe Navarro, Director, Rail Operations, reported:

On-time Performance (OTP) -
- **April:** The April 2018 OTP was 92.6% compared to 95.8% for April 2017.
  - **Mechanical Delays** - In April 2018 there were 1007 minutes of delay due to mechanical issues compared to 637 minutes in April 2017.
  - **Trespasser Strike** - There was one trespasser strike on April 7, resulting in a fatality.
- **March:** The March 2018 OTP was 94.3% compared to 96.5% for March 2017.

Special Event Train Service -
- **Services Performed:**
  - San Jose Sharks
  - Giants Baseball
- **Services Scheduled:**
  - Taylor Swift Concerts at Levi’s Stadium
  - Bay to Breakers
  - Memorial Day Holiday Service

Capital Projects
- San Francisco Highway Bridges
- San Mateo 25th Avenue Grade Separation Project
- South San Francisco Station Improvements
- Redwood City Grade Crossing Improvements
- FY16 Grade Crossing Improvements Project
- Sunnyvale Station Rehabilitation Project
- Inward Facing Cameras
- HVAC Improvements at the CCF Communications Equipment Room

San Bruno Station
Joe advised that staff is looking to improve communication at the San Bruno Station to inform passengers of platform closure from street level.

Caltrain Mobile Ticketing App
- In April, Caltrain Mobile sold 15,794 tickets, a 72.2% increase in ticket sales compared to March. About 75.1% of the tickets sold were One-way and the most common ticket category used was Adult category (89.7%). Caltrain Mobile was downloaded nearly 15,794 times in April.
- Currently staff is exploring with moovel North America, LLC the addition of daily parking and components for trip planning and real-time information on service updates, among other functions.
Go Pass Pilot Program

- Piloted by three companies participating in Go Pass.
- In April, Clipper system registered 8,390 unique users accounted for 132,752 boardings, a slightly decrease from previous month (<1%).
- The agency will continue to monitor and evaluate the pilot program throughout the year to determine future use of the Go Pass on Clipper by the remaining Go Pass participating companies.
- Early stages of possible procurement of new TVMs for FY19.

Chair Brian Shaw asked whether the inward facing cameras are a requirement. Joe responded that it is a requirement and will help with incident investigations.

Public Comment
Jeff Carter, Millbrae, stated that under item 10a) Customer Experience Task Force Update, the Go Pass Pilot Program indicates that the Clipper system registered 8,390 unique users and accounted for 132,752 boardings. Dividing the boardings by the users, it results in 15.82 boardings per user. Jeff asked whether that means that each Go Pass user only rides 15.82 times or 7-8 days per month? He also stated that it was similarly reported last month. He asked to reference his correspondence in the correspondence packet for further details. Jeff requested staff to provide clarification. Jeff also requested origin and destination data to be made available.

Joe Navarro, Director, Rail Operations, responded and said that he would have a response by the next meeting.

Chair Brian Shaw advised that the Go Pass is available for use 7 days a week, at any time during the day, in any direction.

Adrian Brandt, asked Staff for an update on previous possible solutions to help avoid drivers driving into the right of way to help reduce vehicle strikes.

Joe Navarro, Director, Rail Operations advised that staff is still working to resolve.

Roland Lebrun, San Jose, asked staff whether they needed a complete specification. Joe responded everything is handled.

JPB CAC Work Plan Update
Chair Brian Shaw advised that he and Vice Chair Ricardo spoke to staff to finalize the work plan for the remainder of the year.

Tentatively scheduled:
June 20, 2018
  ➢ Wi-Fi Update
  ➢ Mobile App update
July 18, 2018
  ➢ Visual Messaging System Station Signage
August 15, 2018

Chair Brian Shaw requested the committee to provide additional topics to be considered for the work plan.

Member Cat Tucker asked for an update on the budget and Chair Brian said that the update typically happens late summer.

Cat also asked about the Business Plan and Brian also advised that the update will be presented to the CAC at some point.

Paul Escobar asked whether ideas can be submitted at a later time and Brian confirmed that option is available.

Member Julia Welch requested a follow-up to the Fare Study. She stated that it was compelling information and serious cautions on interpretation of the findings were concerning particularly about the burden on low income passengers and whether there is a grant to help low income passengers. Brian Shaw mentioned that there will be a phase 2 on the fare study that will include Go Pass data.

DATE, TIME AND LOCATION OF NEXT REGULAR MEETING:
June 20, 2018 at 5:40 p.m., San Mateo County Transit District Administrative Building, 2nd Floor Bacciocco Auditorium, 1250 San Carlos Avenue, San Carlos, CA.

Adjourned at 6:37 pm
Date: May 25, 2018
To: Board of Directors
From: Jim Hartnett, Executive Director
Subject: June 7, 2018 JPB Board Meeting Executive Director’s Report

- **On-time Performance** –
  - **Through May 24:** The preliminary May 2018 OTP was 94.3 percent compared to 94.2 percent for May 2017.
  - **April:** The April 2018 OTP was 92.6 percent compared to 95.8 percent for April 2017.

  - **Trespasser Fatality** – There was one trespasser fatality in April. On Saturday, April 7, at approximately 10:12 a.m. a trespasser was struck by northbound train 801 at California Ave station. Due to this incident, there was a total of 213 minutes of delay.

- **Fare Evasion Policy** – Caltrain continues to inform the public of the new proof of payment system for fare enforcement. This includes Visual Message Sign (VMS) messages, Public Address (PA) system announcements and Conductor Announcements regarding the new fare ordinance. Passengers are directed to the dedicated webpage [www.caltrain.com/fines](http://www.caltrain.com/fines) for details of the Fare Evasion Policy. Transit Police Officers and Train Conductors continue to alert passengers of the ordinance change. The full roll-out of the program has been delayed to June due to the delayed contract execution with Turbo data, the third party vendor to support the ordinance.

- **Bikes Board First Pilot Program** – Caltrain’s five week pilot program that allowed bicyclists to board bike cars first on northbound trains during the morning peak at the Mountain View, Palo Alto and Redwood City stations started on April 16 ended on May 18. The goal was to improve on-time
performance by reducing station boarding and alighting times. The pilot program has had mixed results.

In June Caltrain is continuing the pilot program at three other stations during the morning peak (Sunnyvale – NB trains, Hillsdale – NB Trains and 22nd St. – SB trains) to gather more data and determine its effectiveness.

- **Station Platform Signage** – During construction, some Caltrain station platforms may be closed for varying periods of time requiring passengers to board on a single side of the platform (single tracking) for trains running in either direction. On May 7th, station platform signs advising passengers of platform closures were placed at impacted stations. Signs advise passengers to “Stop, Look Up and Listen” and read “Due to construction, track assignments can change with limited warning. The scrolling message on the digital sign and platform announcements provides the most up to date information.” The visual messaging for boarding and audible station announcements reflects boarding instructions for passenger’s respective train.

- **New Monthly Fare Rate** – Effective July 1, 2018, Caltrain will increase the Monthly Pass rate from 14 to 15 days beginning with July pass sales period starting June 21.

  Caltrain’s Board of Directors approved changes to the rail agency’s fares and parking fees during its August 3, 2017 Board Meeting, Resolution No. 2017-61. Fares were last adjusted on October 1, 2017.

- **CAC Meeting** – The Citizens Advisory Committee met on Wednesday, May 16, in San Carlos. Chuck Bernardo, Senior Project Manager, provided a presentation and update on the South San Francisco Station Improvement Project. Joe Navarro, Director - Rail Operations, presented a video on Centralized Traffic Control, an update on Signage Proposal and also provided the Staff Report. The next CAC meeting is scheduled for Wednesday, June 20, in San Carlos.

• **Special Event Train Service –**

**Services Provided**

• **San Jose Sharks** – The San Jose Sharks hosted three regular season home games in April. Total post-game additional riders boarding at San Jose Diridon station was 790. Total additional riders for the season, boarding at San Jose Diridon station, was 11,275, which represents a 23% decrease compared to the 2016/17 season.

The SJ Sharks hosted two post-season home games vs. the Anaheim Ducks in the 1st round playoffs and one post-season home game vs. the Las Vegas Knights in the 2nd round playoffs in April. Total additional post-game ridership was 935.

The SJ Sharks hosted two additional post-season home games round vs. the Las Vegas Knights in May. The Knights eliminated the Sharks in the 2nd round playoffs (4-2), ending the Sharks post-season run. Total additional post-game riders boarding at San Jose Diridon station was 872. Average ridership per game during the playoff season was 361, which represents a 13 percent increase compared to the 2016/17 playoffs.

• **Giants Baseball** – The Giants hosted 15 home games at AT&T Park in April. Total additional ridership alighting and boarding at the San Francisco station was 87,282.

The Giants hosted nine regular season home games in May. Total additional ridership alighting and boarding at San Francisco station was 46,636. Year-to-date pre and regular season ridership, alighting and boarding at San Francisco station, was 141,213, a 22 percent decrease compared to the same number of games in 2017.

• **Taylor Swift Concert at Levi’s Stadium** – On Friday, May 11 at 7:00 p.m. and Saturday, May 12 at 7:00 p.m. Taylor Swift’s Reputation Tour came to Levi’s Stadium. For both concerts, Caltrain provided one extra post-event northbound local train that departed Mountain View Station, which was coordinated with connecting VTA light rail service. Total additional riders at the Mountain View station on May 11 was 1,703 and on May 12 was 828.

• **Bay to Breakers** – On Sunday, May 20, 2018 Caltrain operated four scheduled special pre-event trains and three extra post-event trains departing for the Bay to Breakers Race which started at 8:00 a.m. in San
Francisco. Pre-sales for One-way, Day Passes, and daily parking permits were available on the Caltrain Mobile App beginning on Sunday, May 13 and on at TVMs beginning on Thursday, May 17 by selecting the “Bay to Breakers” button. This was the 1st year Pre-Sales Tickets were offered using Caltrain Mobile. Total Bay to Breakers Pre-Sales Tickets sold on Caltrain Mobile were 1,184. There were field staff and ambassadors at the San Jose Diridon and Palo Alto stations pre-event to assist passengers. Total northbound special trains ridership was 3,215, a decrease of 16 percent compared to 2017. Total southbound special trains ridership was 877, a decrease of 15 percent compared to 2017. Some potential factors that may contribute to the event ridership decline may include a decrease in overall race attendance and the overcast weather the morning of the event.

- **Memorial Day Holiday Service** – On Monday, May 28, Caltrain operated a Sunday schedule in observance of the Memorial Day holiday. The weekend Tamien-San Jose Diridon shuttle also operated that day.

**Services Scheduled:**

- **Giants Baseball** – Regular season continues through September. Caltrain will provide regular baseball service for all home games.

- **Gay Pride Parade & Festival** – On Sunday, June 24, Caltrain will be providing two special northbound express trains departing from San Jose for riders headed to the Gay Pride parade and festival in downtown San Francisco. Along with operating Giants Service for the 1:05 p.m. home game the same day, extra capacity will also be provided post-parade and festival to accommodate crowds.

- **Independence Day Holiday Service & SF Fireworks Service** – On Wednesday, July 4, Caltrain will operate a Sunday schedule in observance of the Independence Day holiday. This will be supplemented by extra evening service to accommodate passengers after the SF fireworks display in the Fisherman’s Wharf area.

- **Capital Projects** –

The Capital Projects information is current as of May 18, 2018 and is subject to change between May 18 and June 7, 2018 (Board Meeting).

- **San Francisco Highway Bridges:** Replace three obsolete overhead vehicular bridges located in San Francisco at 23rd Street, 22nd Street, and Paul Avenue. Construction started in March 2015 and was substantially completed in May 2017.
Resolution of a Buy America issue with Caltrans continues that will also resolve funding issues for the project. Discussions regarding cost reimbursement from the City of San Francisco for their Auxiliary Water Supply System (AWSS) continue. The AT&T relocation reimbursement request has been reviewed by legal counsel and will be transmitted to AT&T.

- **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. Construction of the elevated rail alignment and the new Hillsdale Station will be phased to limit impact to the operating railroad.

In May, work continued on the bridge abutments and bents at the 25th Avenue bridge and pedestrian underpass. Temporary protection of third party fiber optics was constructed to allow construction activities to continue on the 28th and 31st avenue bridges. With the UPRR agreement consummated in April, PG&E has commenced relocation of their natural gas lines that are in conflict with the project alignment. The relocation of 3rd party fiber optic communication cables is pending.

The temporary closure of the Hillsdale Station, to allow completion of the project, is forecast to occur in the Winter 2018 and Spring 2019. During the temporary closure, enhanced bus and shuttle service to the Belmont Station will be provided to minimize the temporary inconvenience. Overall construction is expected to complete in early 2020.

- **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 May, shoofly tracks have been constructed and the construction of the new centerboard platform has commenced. The relocation of the JPB’s Positive Train Control fiber optic lines is also underway. The construction of the pedestrian underpass and Third party utility relocations are still awaiting the City of South San Francisco’s acquisition of an encroachment permit from Caltrans. An Air Space Lease Agreement, which is also
needed for utility relocations and other construction, is still being executed between the City of South San Francisco and Caltrans.

- **Redwood City Grade Crossing Improvements**: The scope of this project is to improve the safety devices at three grade crossings within the city of Redwood City at Whipple Avenue, Main Street, and Broadway. The project will improve the Whipple Avenue crossing with new vehicular and pedestrian gates, new sidewalks and ramps, new pavement markings and striping. At Broadway, new pedestrian gates will be installed and new pavement markings will be added. At Main Street, new fencing, pedestrian gates and pavement markings will be installed. The design and construction schedule of this project has been coordinated with the City’s improvements in the same area.

During May, the contractor completed installation of new pedestrian gate mechanisms at throughout the project; the gate arms will be installed in the future concurrent with the activation of the pedestrian gates. The contractor also completed the foundations for the traffic signal cantilever at Whipple Avenue, began sidewalks and tactile tiles at Whipple, and completed and activated a new vehicle crossing gate at Main Street. Construction is expected to be substantially complete by July 2018.

An amendment to the Caltrans Funding Agreement is to be presented at the June Board Meeting to accept additional CPUC Section 130 funds of $252,250 that was requested due to receiving construction bids that were higher than planned. The capital budget will also be modified accordingly.

- **FY16 Grade Crossing Improvements Project**: The scope of this project is to improve the safety at 10 grade crossings along the corridor. Work items included are the installation of signals, fences, gates, curbs, lighting and signs. The existing grade crossing warning devices will be retrofitted to meet the latest California Public Utilities Commission standards. The crossings to be improved include 16th Street in San Francisco, Broadway in Burlingame, Peninsula and 4th Ave. in San Mateo, Ravenswood in Menlo Park, Alma and Charleston in Palo Alto, Rengstorff and Castro in Mountain View, and Mary in Sunnyvale.

The construction contract also includes the installation of medians at five crossings in Santa Clara County. The scopes of two projects were combined into a single construction contract to improve cost and administrative efficiency. These medians are required by the FRA and are intended to create a barrier that discourages vehicles from driving around down crossing gates. The five crossings are Churchill and East Meadow in
Palo Alto, Sunnyvale Avenue in Sunnyvale, and Auzerais and West Virginia in San Jose.

The Limited Notice to Proceed was issued on March 1, 2018 and the project is currently still in the administrative period before site construction can begin. Field work is expected to commence in late May or early June with the first location at Alma Street in Palo Alto. Overall construction is expected to complete by February 2019.

- **Sunnyvale Station Rehabilitation Project:** Replace the surface pavers in the station platform with colored cast-in-place concrete and the relocation of the north pedestrian crossing to the north by approximately 83 feet. Some of the surfaces of the platform pavers have become uneven and this project will create a smooth and even platform surface. The relocation of the north pedestrian crossing will help to clear the southern crossing that is currently partially blocked when northbound 6-car consists arrive at the Sunnyvale Station.

  Construction was suspended in March to address additional work for electrical grounding of the station platform. Contract modifications and procurement of materials for the additional work associated grounding has been ongoing. Preparatory work for the relocated north pedestrian crossing gate has been completed. Platform construction is expected to resume in late May; the schedule impact of the additional work and suspension is to be determined.

- **Inward Facing Cameras:** Install cameras on locomotives and cab cars that will video and voice record the train operators during revenue operations. Currently there are outward facing cameras on locomotives that record the right-of-way from the vantage point of the operators. The inward facing cameras are recommended by the National Transportation Research Board and assists in post-accident investigations. Inward facing cameras are already in service on Metrolink in Southern California and by railroads such as the Union Pacific and Burlington Northern Santa Fe.

  Installation and testing of the cameras has been completed. Training of TASI personnel in the operations and maintenance of the cameras is pending scheduling by the vendor who is balancing their resources and activities with the work that they are separately performing on behalf of the Positive Train Control (PTC) project for the installation of onboard PTC equipment.

- **HVAC Improvements at the CCF Communications Equipment Room:** Improve the cooling systems in the electronics equipment room at the
Central Control Facility in San Jose. The amount of electronic equipment has greatly increased which has resulted in overloading of the existing cooling system. With the addition of newer systems such as CBOSS/PTC, ROCS/PAIS, and upgrades to communications systems; the capacity of the existing cooling system is inadequate to maintain a sufficiently cool temperature. Equipment failure to critical systems such as dispatching and communications due to overheating is an unacceptable operational risk. This problem was being temporarily addressed by using rental cooling systems that was inadequate for future expansion and is costly. This project will address current and future cooling capacity by adding and replacing current cooling systems with newer and more efficient cooling equipment.

Site construction began in late March and one of the three new cooling units has been installed and is currently operational. The newly in-service cooling unit has replaced the rental cooling system. During May, the upgrade of the HVAC ductwork within the facility has been completed. Installation of the other two cooling units is in progress. The project is expected to complete by the summer of 2018.

- **F-40 Locomotive Mid-Life Overhaul Project:** Perform mid-life overhaul of three F40PH2C locomotives. The mid-life overhaul of the locomotives shall include 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 shall 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 December 2017. Both locomotives are still undergoing overhaul and are expected to be returned to the CEMOF facility in San Jose in August for Final Acceptance testing. Locomotive #922 is to be shipped to the vendor’s facility in June and the forecast date for return is January 2019 for Final Acceptance testing.

- **MP-36 Locomotive Mid-Life Overhaul Project:** Perform mid-life overhaul of six MP-36-3C Locomotives. The mid-life overhaul of the locomotives shall include 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 six locomotives are Locomotive #’s 923, 924, 925, 926, 927 and 928.

Technical specifications for the work were completed in February 2018. The Contracts & Procurement division is currently preparing Request for Proposal documents and coordinating legal review for advertising the contract. Award of the contract is currently forecast for late 2018 and completion of the work in Fall 2020.
April 2018
Monthly Progress Report

April 30, 2018
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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1.0 BACKGROUND

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

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

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

- **Improved Train Performance, Increased Ridership Capacity and Increased Service:** Electrified trains can accelerate and decelerate more quickly than diesel-powered trains, allowing Caltrain to run more efficiently. In addition, because of their performance advantages, electrified trains will enable more frequent and/or faster train service to more riders.

- **Increased Revenue and Reduced Fuel Cost:** An electrified Caltrain will increase ridership and fare revenues while decreasing fuel costs.

- **Reduced Engine Noise Emanating from Trains:** Noise from electrified train engines is measurably less than noise from diesel train engines. Train horns will continue to be required at grade crossings, adhering to current safety regulations.

- **Improved Regional Air Quality and Reduced Greenhouse Gas Emissions:** Electrified trains will produce substantially less corridor air pollution compared with diesel trains even when the indirect emissions from electrical power generation are included. Increased ridership will reduce automobile usage, resulting in additional air quality benefits. In addition, the reduction of greenhouse gas emissions will improve our regional air quality, and will also help meet the state’s emission reduction goals.
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 as shown in Figure 2-1. PCEP activities are described and summarized by work segments.

Figure 2-1 PCEP Work Segments
Overhead Contact System (OCS) pole installation continued in Segment (S) 2 Work Area (WA) 5. Foundation installation continued in Segment 2 and potholing continued in Segments 2 and 4.

Traction Power System design work is progressing in coordination with PG&E substation improvements.

Stadler’s Final Design Review (FDR) phase of the EMU systems is nearing completion with exception of truck and software intensive systems (monitoring and diagnostic and train control systems). Preparation for First Article Inspection (FAI) of Cab Car carshell is underway.

2.1 Funding Partners Participation in PCEP

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

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

Electrification – Engineering Meeting – Weekly

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

Activity this Month

Funding Partners: CHSRA: Ian Ferrier

Continued discussions on critical UPRR pole changes, resolution of outstanding issues for Segment 4 and 2 foundation installation, the progression of the interconnections design and PG&E interface, coordination between the PCEP and other JPB projects, the utility relocation status, status of the tunnel contract, updates of the Supervisory Control and Data Acquisition (SCADA) project, progress on Design-Build (DB) contract including design and construction updates, upcoming changes to the contract in preparation for the Change Management Board (CMB), critical Right of Way (ROW) issues, coordination with key third parties on design review and permitting for the project, and critical open items such as contractor Requests for Information (RFI), submittals and potential contract changes.
PCEP Delivery Coordination Meeting – Bi-Weekly

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

Activity this Month

April 10 Funding Partners: CHSRA: Ian Ferrier

The Quarterly Board Meeting has been scheduled for May 3, the Quarterly Funding Partners Meeting is anticipated to be scheduled for May 23, and the Quarterly FTA Meeting has been scheduled for June 14. Project Controls has issued a schedule for the Project Managers (PMs) to complete the Fiscal Year 2019 Annual Work Directive Proposal Requests. Safety is currently collecting information for the Centralized Equipment Maintenance and Operations Facility (CEMOF) Hazard Analysis. The Amtrak AEM-7 Electrification Test Locomotive and Spare proposal was received on March 26 and is currently under review. BBII and TRC Solutions are moving forward with design on Interconnection options for Traction Power Substation (TPS)-1 and TPS-2.

April 24 Funding Partners: CHSRA: Ian Ferrier and Wai-On Siu; SFCTA: Luis Zurinaga

The Risk Assessment Committee Meeting has been scheduled for the week of May 7. Additional Lessons Learned interviews will be conducted. The PMs have continued their effort on the FY19 Work Directives. BBII has updated their lightning protocol to be in compliance with the new agreed upon policy. The EMU project is moving into the component and systems level laboratory testing now that the FDRs have been completed for most car systems. The CEMOF Facility Upgrade Invitation for Bids (IFB) package has been finalized and is ready for release to potential bidders.

Systems Integration Meeting – Bi-Weekly

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

Activity this Month

Funding Partners: CHSRA: Ian Ferrier and Wai-on Siu

Bi-weekly PCEP interface meetings are held to monitor and resolve systems integration issues. The systems integration database is updated as issues are resolved or new items arise. Meetings are held bi-weekly with the electrification contractor to discuss design and construction integration issues. The Traction Power SCADA team also holds bi-weekly status meetings. Coordination with the EMU procurement, PTC and Caltrain Capital Projects managers responsible for delivery of the East 25th Avenue Grade Separation Project, Marin Napoleon Bridge Rehabilitation Project, and the South San Francisco Station Project is ongoing. Caltrain’s CEMOF modification project design is being finalized to issue a bid package. Progress on activities including systems integration testing activities, Federal Railroad Administration, FTA and safety certification are being tracked. The Systems Integration test plan has been submitted for review by the BBII.
Master Program Schedule (MPS) Meeting – Monthly

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

Activity this Month

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

The monthly meeting in April contained only minor updates. The overall schedule remains unchanged. The forecasted Revenue Service Date (RSD) remains December 2021. The addition of approximately five months of contingency to account for potential risk to the project yields an RSD of April 2022. The program critical path runs through PG&E design and construction to provide permanent power, and concludes with pre-revenue testing. The near-critical path runs through 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 meeting held this month.

See the Risk Management section (Section 11).

Change Management Board (CMB) – Monthly

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

Activity this Month

Funding Partners: CHSRA: Bruce Armistead and Boris Lipkin; MTC: Trish Stoops and Glen Tepke; SFCTA: Luis Zurinaga; VTA: Krishna Davey and Carol Lawson; SMCTA: Joe Hurley

Major topics included: contingency usage, potential changes to the Stadler contract and track access delays, differing site condition field orders updates, potential contract incentives as well as other potential changes as part of the BBII contract.

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.

BBII Contract

One change was approved.
Stadler Contract

One change was approved.

SCADA Contract

No changes were identified for consideration.

2.2 Schedule

The current Master Program Schedule (MPS) reflects a Revenue Service Date (RSD) of December 2021, without adjustment for contingency. This is consistent with the revised baseline established in November 2017. With the addition of approximately five months of contingency to account for potential risk to the project, the RSD is anticipated as April 2022. Due to FTA contingency requirements, a Full Funding Grant Agreement (FFGA) RSD will also be tracked. This date is forecast as August 22, 2022 and represents the final milestone in the Program Plan.

The program critical path runs through PG&E design and construction to provide permanent power, and concludes with pre-revenue testing. The near-critical path runs through design and manufacturing of EMU trainsets. There is no change to the critical and near-critical paths from the prior reporting month.

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

Table 2-1 Schedule Status

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Program Plan</th>
<th>Progress Schedule (April 2018)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Eight Miles of Electrification Complete to Begin Testing</td>
<td>11/21/2019</td>
<td>05/01/2020²</td>
</tr>
<tr>
<td>Arrival of First Vehicle at JPB</td>
<td>07/29/2019</td>
<td>07/15/2019</td>
</tr>
<tr>
<td>PG&amp;E Provides Permanent Power</td>
<td>09/09/2021</td>
<td>09/09/2021</td>
</tr>
<tr>
<td>Start Pre-Revenue Testing</td>
<td>09/10/2021</td>
<td>09/10/2021</td>
</tr>
<tr>
<td>RSD (w/o Risk Contingency)</td>
<td>12/09/2021</td>
<td>12/09/2021</td>
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<tr>
<td>RSD (w/ Risk Contingency)</td>
<td>04/22/2022</td>
<td>04/22/2022</td>
</tr>
<tr>
<td>FFGA RSD</td>
<td>08/22/2022</td>
<td>08/22/2022</td>
</tr>
</tbody>
</table>

Note:

¹ Dates may shift slightly as the update of this month’s Progress Schedule is still in progress.
² See “Notable Variances” in Section 7 for explanation on date shift.
2.3 **Budget**

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

**Table 2-2 Budget and Expenditure Status**

<table>
<thead>
<tr>
<th>Description of Work</th>
<th>Budget</th>
<th>Current Budget</th>
<th>Cost This Month</th>
<th>Cost To Date</th>
<th>Estimate To Complete</th>
<th>Estimate At Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Subtotal</td>
<td>$1,316,125,208</td>
<td>$1,316,125,208</td>
<td>$10,995,378</td>
<td>$347,726,737</td>
<td>$968,398,471</td>
<td>$1,316,125,208</td>
</tr>
<tr>
<td>EMU Subtotal</td>
<td>$664,127,325</td>
<td>$664,127,325</td>
<td>$1,578,328</td>
<td>$90,273,173</td>
<td>$573,854,152</td>
<td>$664,127,325</td>
</tr>
<tr>
<td>PCEP TOTAL</td>
<td>$1,980,252,533</td>
<td>$1,980,252,533</td>
<td>$12,573,707</td>
<td>$437,999,910</td>
<td>$1,542,252,623</td>
<td>$1,980,252,533</td>
</tr>
</tbody>
</table>

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

2.4 **Board Actions**

- **April**
  - Change order approval requests for FFGA delay costs and budgeted contractor incentives

**Future anticipated board actions include:**

- **May**
  - None

- **June**
  - Award Tunnel Modification construction contract
  - Authority to procure used electric locomotive

- **To Be Scheduled**
  - Change order authority for change orders paid for by third parties
  - Award Ambassador contract
  - Award Quality Assurance Independent Testing Lab Services contract
  - Award CEMOF Modifications construction contract
  - Change order approval requests

2.5 **Government and Community Affairs**

There were two outreach events this month.
3.0 ELECTRIFICATION – INFRASTRUCTURE

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

3.1 Electrification

The Electrification component of the PCEP includes installation of 138 miles of single track and 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 (SS), and seven paralleling stations (PS). Electrification will be performed using a DB delivery method.

Activity This Month

- OCS foundation installation continued in S2WA5 and S2WA4. The table below summarizes the current progress of foundation installation. Foundation installation will continue in both work areas in next month.
- OCS pole installation continues in S2WA5. The table below summarizes the current progress of pole installation.
- Potholing at proposed OCS locations continued in Segments 2 and 4 in advance of foundation installation. BBII also continued to resolve conflicts found during the potholing process, such as loose concrete, asphalt, and other debris.
- Relocation of signal cables found in conflict with planned OCS foundations continues as conflicts are identified.
- Continued progression of the OCS design with BBII in Segments 2 and 4. Received and reviewed S2WA2 and S2WA1 Foundation and Pole Layouts 95% submittals.
- Continued design review coordination with local jurisdictions for the OCS, Traction Power Facilities, and Bridge Attachments design in Segments 2 and 4, including responses to comments from jurisdictions.
- Continued to review and coordinate signal and communication design submittals with BBII.
  - Received Line of Sight S2WA1 & 2 Study Interim Submittal.
  - Reviewed BBII’s 95% Systemwide Bonding and Grounding Design.
  - Continued development of 95% Communications Systemwide Design.
  - Reviewed BBII’s IFC Traction Power Facilities Segment 2.
  - Reviewed BBII’s IFC Traction Power System Design Drawings.
  - The PCEP team and BBII continue to work through Site Specific Work Plans (SSWP) for upcoming field work.
  - Continued tree pruning and removals in Segment 3.
Continued coordination efforts with PG&E for infrastructure improvements, TPS interconnects and new service drop locations. The PCEP team continues to work with PG&E for the finalization of protection scheme studies. In February the Executive Director was authorized to execute PG&E Supplemental Agreement #4 for construction of PG&E substation improvements. PG&E and the Peninsula Corridor Joint Powers Board (JPB) are negotiating the terms of the agreement, with a target completion in May. A summary of the work progress by segment is provided in Table 3-1 below.

### Table 3-1 Work Progress by Segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>Work Area</th>
<th>Foundations</th>
<th>Poles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Required</td>
<td>Completed</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>256</td>
<td>172</td>
</tr>
<tr>
<td>4</td>
<td>366</td>
<td>156</td>
<td>294</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>622</td>
<td>328</td>
</tr>
</tbody>
</table>

Note: Foundations required do not match poles required as guy foundations are needed in some locations for extra support.

**Activity Next Month**

- Continue installation of OCS foundations in S2WA5 and S2WA4.
- Continue pole installation in S2WA5.
- 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 infrastructures such as overhead bridge protections.
- Continue potholing and clearing of obstructions at proposed OCS locations. Potholing will continue with a focus on Segment 2 and 4 for foundation installation.
- Perform cultural investigations in advance of OCS installation.
- Begin demolition and site work on TPS-2.
- Continue coordination with UPRR on signal and OCS design.
- Continue coordination with stakeholders on the constant warning solution.
- Continue review of BBII work plans for upcoming construction activities.
- Start 35% design for PG&E interconnection.
- Coordinate with PG&E on final design for PG&E infrastructure.
- Continue design reviews and coordination with local jurisdictions.
- 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 substations, PSs and the OCS. SCADA will be integrated with the base operating system for Caltrain Operations and Control, which is the Rail Operations Center System.

Activity This Month

- Reviewed technical submittals.
- Responded to Requests for Information.
- Baseline schedule was accepted with no objections.
- Monthly progress schedules are now being reviewed.
- Preliminary Design Review was accepted with no objections.
- FDR Contract Data Requirements Lists are forthcoming from ARINC.
- ARINC continues work on SCADA points list and database.
- Held bi-weekly meetings to advance design of SCADA.

Activity Next Month

- Continue bi-weekly technical meetings to advance SCADA design.
- Continue review of Preliminary Design.

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 Rehab Project. The Drainage Rehab Project is funded separately from PCEP. Construction will occur concurrently with the Electrification DB contractor’s efforts in Segment 1.

Activity This Month

- Continued to answer bidder inquires.
- Contract addendum was issued to extend the bid opening and change OCS scope of work in the tunnels into an option based on prospective bidder feedback.

Activity Next Month

- Open bids on May 11.
4.0 ELECTRIC MULTIPLE UNITS

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

4.1 Electric Multiple Units

The EMU procurement component of the PCEP consists of the purchase of 96 Stadler EMUs. The EMUs will consist of both cab and non-cab units configured as 16 six-car fixed trainsets. Power will be obtained from the OCS via roof-mounted pantographs, which will power the electric traction motors. The EMUs will replace a portion of the existing diesel locomotives and passenger cars currently in use by Caltrain.

Activity This Month

- The Final Design Phase of EMU systems is nearing completion, with exception of Truck (bogie), and software intensive systems (Monitoring and Diagnostic and Train Control Systems). The FDR of the Truck will be completed next month and the software intensive systems are scheduled for December 2019.
- Stadler commenced discussions with Wabtec as the Interoperable Electronic Train Management System (I-ETMS) supplier for carborne PTC equipment.
- EMU design coordination discussions continue with representatives from Caltrain Operations and Maintenance, Caltrain Public Outreach, the FRA, the FTA Project Management Oversight Contractor (PMOC), Safety and Quality Assurance personnel, and PCEP Program Scheduling.
- The PCEP Team continues to address systemwide interface issues involving the emerging EMU design and the existing wayside infrastructure.
- Preparation for First Article Inspection (FAI) of Cab Car carshell is underway. Documentation package and carshell nearing completion. FAIs are the last step in a component’s design validation. After prototype testing, the Design Team, as well as Caltrain, evaluates the ‘first’ production unit (‘article’) off the assembly line. The article is evaluated for ease of maintenance, including troubleshooting and access to replace components. The FAI confirms that the article is manufactured in accordance with approved drawings and procedures. FAIs also establish Caltrain’s level of quality that the article must maintain throughout production. The FAI piece is retained as the quality standard.

Activity Next Month

- Complete FDRs, including the Truck (bogie), but with exception of those systems heavily dependent on software development (e.g., Monitor and Diagnostic System and Train Control).
- First carshell to commence painting process.
- Third Cab Car shell to be sent to facility for structural strength and crash energy management design validation testing.
- Timeline for Wabtec’s submittal of technical and commercial proposal to Stadler due week of May 7.
- Continue work with the FRA on EMU compliance issues.
4.2 Centralized Equipment Maintenance and Operations Facility Modifications

The CEMOF Upgrade project will provide work areas for performing maintenance on the new EMUs.

Activity This Month

- After a one-month delay, the IFB package is being reviewed internally and readied for release to potential bidders.

Activity Next Month

- Release IFB to prospective bidders.
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

- Co-chaired the monthly project DB Safety and Security Certification meeting, and the Fire/Life Safety Committee meeting. Participated in the Capital Projects Safety Committee meeting.
- Project staff continued its participation in the BBII monthly “All Hands” contractor workforce meetings. Safety communication with project field staff on all work shifts continues on an ongoing basis to discuss project related hazards and mitigation initiatives.
- Continued to provide input and oversight of the contractor SSWP safety provisions and ongoing safety construction oversight and inspections.
- Performed an initial hazard analysis of proposed EMU electrification work flow processes at the vehicle equipment maintenance facility (CEMOF).
- Provided inspection of new contractor equipment to be used on the ROW prior to being placed into service.
- Performed a contractor incident investigation after a hi-rail excavator derailed while travelling on the drill track at six miles per hour. The incident occurred due to a defective wheel. Mitigation recommendations, including daily pre-work visual inspection of wheels, were provided to prevent future occurrences.
- Participated in weekly project coordination meetings with the contractor to review open issues and recommended action items.

Activity Next Month

- Monthly safety communication meetings continue to be scheduled for the Project Safety and Security Certification Committee, Fire/Life Safety Committee, and other project-related contractor and JPB safety meetings to discuss safety priorities.
- Continue to actively participate and present safety topics at the BBII “All Hands” monthly safety meetings.
- Continue focus on performing site safety inspections on the OCS foundation, pole installations and potholing field work to assess safety work practices and identify additional opportunities for improvement. Conduct contractor equipment inspections.
- Finalize the Hazards Analysis on the electrification of CEMOF shop to ensure safety while performing maintenance on the EMUs.
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 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 for work scope, performance of required duties, adequacy, non-conformances, test/inspection results, follow-up to unresolved issues, and preciseness.
- Continued review of BBII Material Receipt Reports 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.
- Regularly scheduled design reviews and surveillances began on project design packages and will continue through the summer of 2018.
- Continued review of Stadler QA activities, including: Nonconformance Report review, Inspection Exception Reports, Car History Reports and Weekly Status Reports.
- Two design package audits were conducted: PGH Wong on the IFC package for Line-of-Sight Analysis, Traction Power PS-7, Civil Works Segment 4, and Traction Power Systems.
Table 6-1 below provides details on the status of audits performed through the reporting period.

Table 6-1 Quality Assurance Audit Summary

<table>
<thead>
<tr>
<th>Quality Assurance Activity</th>
<th>This Reporting Period</th>
<th>Total to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audits Conducted</td>
<td>4</td>
<td>59</td>
</tr>
</tbody>
</table>

Audit Findings

<table>
<thead>
<tr>
<th>Audit Findings Activity</th>
<th>This Reporting Period</th>
<th>Total to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Findings Issued</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>Audit Findings Open</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Audit Findings Closed</td>
<td>7</td>
<td>43</td>
</tr>
</tbody>
</table>

Non-Conformances

<table>
<thead>
<tr>
<th>Non-Conformances Activity</th>
<th>This Reporting Period</th>
<th>Total to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Conformances Issued</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Non-Conformances Open</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Non-Conformances Closed</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

Activity Next Month

- Four audits are planned and scheduled, three design packages and BBII Field Activities.
7.0 SCHEDULE

The current Master Program Schedule (MPS) reflects a Revenue Service Date (RSD) of December 2021, without adjustment for contingency. This is consistent with the revised baseline established in November 2017. With the addition of approximately five months of contingency to account for potential risk to the project, the RSD is anticipated as April 2022. Due to FTA contingency requirements, an FFGA RSD will also be tracked. This date is forecast as August 22, 2022 and represents the final milestone in the Program Plan.

The program critical path runs through PG&E design and construction to provide permanent power, and concludes with pre-revenue testing. The near-critical path runs through manufacturing and testing of EMU trainsets. There is no change to the critical and near-critical paths from the prior reporting month.

Shown below, Table 7-1 indicates major milestone dates for the MPS. Items listed in Table 7-2 reflect the critical path activities/milestones for the PCEP. Table 7-3 lists near-critical activities on the horizon.

Notable Variances

BBII is currently reporting an overall delay to substantial completion, including the intermediate milestone of Segment 4/Test Track (first eight miles of electrification) completion. This delay is being evaluated by the BBII and JPB and does not constitute a schedule extension for the program at this time.

Table 7-1 Schedule Status

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Program Plan</th>
<th>Progress Schedule (April 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Eight Miles of Electrification Complete to</td>
<td>11/21/2019</td>
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</tr>
<tr>
<td>Begin Testing</td>
<td></td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>FFGA RSD</td>
<td>08/22/2022</td>
<td>08/22/2022</td>
</tr>
</tbody>
</table>

Note:
1. Dates may shift slightly as the update of this month’s Progress Schedule is still in progress.
2. See “Notable Variances” above for explanation on date shift.
# Table 7-2 Critical Path Summary

<table>
<thead>
<tr>
<th>Activity</th>
<th>Start</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG&amp;E Final Design and Construction to provide Permanent Power</td>
<td>April 2016</td>
<td>09/09/2021</td>
</tr>
<tr>
<td>Pre-Revenue Testing</td>
<td>09/10/2021</td>
<td>12/09/2021</td>
</tr>
<tr>
<td>RSD w/out Risk Contingency(^1)</td>
<td>12/09/2021</td>
<td>12/09/2021</td>
</tr>
<tr>
<td>RSD w/ Risk Contingency(^1)</td>
<td>04/22/2022</td>
<td>04/22/2022</td>
</tr>
</tbody>
</table>

Note:

\(^1\) Milestone activity.

# Table 7-3 Near-Term, Near-Critical with Less Than Three Months of Float

<table>
<thead>
<tr>
<th>Work Breakdown Structure</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles</td>
<td>EMU Manufacturing and Testing</td>
<td>Project Delivery</td>
</tr>
</tbody>
</table>
8.0 BUDGET AND EXPENDITURES

The summary of overall budget and expenditure status for the PCEP is shown in the following tables. Table 8-1 reflects the Electrification budget, Table 8-2 reflects the EMU budget, and Table 8-3 reflects the overall project budget.

Table 8-1 Electrification Budget & Expenditure Status

<table>
<thead>
<tr>
<th>Description of Work</th>
<th>Budget (A)</th>
<th>Current Budget (B)¹</th>
<th>Cost This Month (C)²</th>
<th>Cost To Date (D)³</th>
<th>Estimate To Complete (E)</th>
<th>Estimate At Completion (F) = (D) + (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELECTRIFICATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrification [E]</td>
<td>$ 696,610,558</td>
<td>$ 706,697,404</td>
<td>$ 7,073,007</td>
<td>$ 210,479,659</td>
<td>$ 496,217,744</td>
<td>$ 706,697,404</td>
</tr>
<tr>
<td>SCADA</td>
<td>$ -</td>
<td>$ 3,446,917</td>
<td>$ -</td>
<td>$ 1,378,767</td>
<td>$ 2,068,150</td>
<td>$ 3,446,917</td>
</tr>
<tr>
<td>Tunnel Modifications</td>
<td>$ 11,029,649</td>
<td>$ 11,029,649</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 11,029,649</td>
</tr>
<tr>
<td>Real Estate</td>
<td>$ 28,503,369</td>
<td>$ 28,503,369</td>
<td>$ 133,958</td>
<td>$ 13,519,668</td>
<td>$ 14,983,701</td>
<td>$ 28,503,369</td>
</tr>
<tr>
<td>Private Utilities</td>
<td>$ 63,515,298</td>
<td>$ 94,778,380</td>
<td>$ 1,147,992</td>
<td>$ 22,357,057</td>
<td>$ 72,421,323</td>
<td>$ 94,778,380</td>
</tr>
<tr>
<td>Management Oversight [M]</td>
<td>$ 141,506,257</td>
<td>$ 141,526,164</td>
<td>$ 1,781,763</td>
<td>$ 85,422,602</td>
<td>$ 56,103,562</td>
<td>$ 141,526,164</td>
</tr>
<tr>
<td>Executive Management</td>
<td>$ 7,452,866</td>
<td>$ 7,452,866</td>
<td>$ 156,575</td>
<td>$ 4,384,631</td>
<td>$ 3,068,235</td>
<td>$ 7,452,866</td>
</tr>
<tr>
<td>Planning</td>
<td>$ 7,281,997</td>
<td>$ 7,281,997</td>
<td>$ 72,946</td>
<td>$ 5,376,576</td>
<td>$ 1,905,421</td>
<td>$ 7,281,997</td>
</tr>
<tr>
<td>Community Relations</td>
<td>$ 2,789,663</td>
<td>$ 2,789,663</td>
<td>$ 6,013</td>
<td>$ 1,222,925</td>
<td>$ 1,566,738</td>
<td>$ 2,789,663</td>
</tr>
<tr>
<td>Safety &amp; Security</td>
<td>$ 2,421,783</td>
<td>$ 2,421,783</td>
<td>$ 70,667</td>
<td>$ 1,301,335</td>
<td>$ 1,120,447</td>
<td>$ 2,421,783</td>
</tr>
<tr>
<td>Project Management Services</td>
<td>$ 19,807,994</td>
<td>$ 19,807,994</td>
<td>$ 134,563</td>
<td>$ 9,386,947</td>
<td>$ 10,421,047</td>
<td>$ 19,807,994</td>
</tr>
<tr>
<td>Electrification Eng &amp; Mgmt</td>
<td>$ 50,461,707</td>
<td>$ 50,461,707</td>
<td>$ 820,487</td>
<td>$ 25,915,372</td>
<td>$ 24,546,335</td>
<td>$ 50,461,707</td>
</tr>
<tr>
<td>IT Support</td>
<td>$ 312,080</td>
<td>$ 331,987</td>
<td>$ -</td>
<td>$ 331,987</td>
<td>$ 0</td>
<td>$ 331,987</td>
</tr>
<tr>
<td>Operations Support</td>
<td>$ 1,445,867</td>
<td>$ 1,445,867</td>
<td>$ 31,106</td>
<td>$ 654,638</td>
<td>$ 791,229</td>
<td>$ 1,445,867</td>
</tr>
<tr>
<td>General Support</td>
<td>$ 4,166,577</td>
<td>$ 4,166,577</td>
<td>$ 121,848</td>
<td>$ 2,700,658</td>
<td>$ 1,465,919</td>
<td>$ 4,166,577</td>
</tr>
<tr>
<td>Budget / Grants / Finance</td>
<td>$ 1,229,345</td>
<td>$ 1,229,345</td>
<td>$ 37,897</td>
<td>$ 762,415</td>
<td>$ 466,930</td>
<td>$ 1,229,345</td>
</tr>
<tr>
<td>Legal</td>
<td>$ 2,445,646</td>
<td>$ 2,445,646</td>
<td>$ 59,552</td>
<td>$ 2,713,776</td>
<td>(268,130)</td>
<td>$ 2,445,646</td>
</tr>
<tr>
<td>Other Direct Costs</td>
<td>$ 5,177,060</td>
<td>$ 5,177,060</td>
<td>$ 56,259</td>
<td>$ 2,552,252</td>
<td>$ 2,624,807</td>
<td>$ 5,177,060</td>
</tr>
<tr>
<td>TASI Support</td>
<td>$ 55,275,084</td>
<td>$ 55,275,084</td>
<td>$ 761,248</td>
<td>$ 8,982,181</td>
<td>$ 46,292,902</td>
<td>$ 55,275,084</td>
</tr>
<tr>
<td>Insurance</td>
<td>$ 3,500,000</td>
<td>$ 4,305,769</td>
<td>$ -</td>
<td>$ 2,555,769</td>
<td>$ 1,750,000</td>
<td>$ 4,305,769</td>
</tr>
<tr>
<td>Environmental Mitigations</td>
<td>$ 15,798,320</td>
<td>$ 14,972,644</td>
<td>$ -</td>
<td>$ 712,000</td>
<td>$ 14,260,644</td>
<td>$ 14,972,644</td>
</tr>
<tr>
<td>Maintenance Training</td>
<td>$ 1,021,808</td>
<td>$ 1,021,808</td>
<td>$ -</td>
<td>-</td>
<td>$ 1,021,808</td>
<td>$ 1,021,808</td>
</tr>
<tr>
<td>Finance Charges</td>
<td>$ 5,056,838</td>
<td>$ 5,056,838</td>
<td>$ 91,660</td>
<td>$ 1,883,502</td>
<td>$ 3,737,336</td>
<td>$ 5,056,838</td>
</tr>
<tr>
<td>Contingency</td>
<td>$ 276,970,649</td>
<td>$ 232,923,805</td>
<td>$ -</td>
<td>-</td>
<td>$ 196,623,316</td>
<td>$ 276,970,649</td>
</tr>
<tr>
<td>Forecasted Costs and Changes</td>
<td>$ -</td>
<td>$ -</td>
<td>-</td>
<td>-</td>
<td>$ -</td>
<td>$ 36,300,489</td>
</tr>
<tr>
<td><strong>ELECTRIFICATION SUBTOTAL</strong></td>
<td>$ 1,316,125,208</td>
<td>$ 1,316,125,208</td>
<td>$ 10,995,378</td>
<td>$ 347,726,737</td>
<td>$ 968,398,471</td>
<td>$ 1,316,125,208</td>
</tr>
</tbody>
</table>

Notes regarding tables above:

1. “Current Budget” includes executed change orders and awarded contracts.
2. Column C “Cost This Month” represents the cost of work performed this month.
3. Column D “Cost To Date” includes actuals (amount paid) and accruals (amount of work performed) to date.
4. Cost To Date for “Electrification” includes 5% for Contractor’s retention until authorization of retention release.
5. The agency labor is actual through March 2018 and accrued for April 2018.
6. UPRR design review costs from the current and prior periods have been transferred from Engineering & Construction to Required Projects.

Budget and Expenditures 8-1  April 30, 2018
### Table 8-2 EMU Budget & Expenditure Status

<table>
<thead>
<tr>
<th>Description of Work</th>
<th>Budget</th>
<th>Current Budget</th>
<th>Cost This Month</th>
<th>Cost To Date</th>
<th>Estimate To Complete</th>
<th>Estimate At Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td>(E)</td>
<td>(F)</td>
</tr>
<tr>
<td>EMU</td>
<td>$550,899,459</td>
<td>$550,564,069</td>
<td>$674,160</td>
<td>$61,815,101</td>
<td>$488,748,968</td>
<td>$550,564,069</td>
</tr>
<tr>
<td>CEMOF Modifications</td>
<td>$1,344,000</td>
<td>$1,344,000</td>
<td>$747,989</td>
<td>$27,315,462</td>
<td>$36,823,641</td>
<td>$1,344,000</td>
</tr>
<tr>
<td>Management Oversight (<strong>N</strong>th)</td>
<td>$64,139,103</td>
<td>$64,139,103</td>
<td>$847,989</td>
<td>$27,315,462</td>
<td>$36,823,641</td>
<td>$64,139,103</td>
</tr>
<tr>
<td>Executive Management</td>
<td>$5,022,302</td>
<td>$5,022,302</td>
<td>$82,786</td>
<td>$2,756,751</td>
<td>$2,265,551</td>
<td>$5,022,302</td>
</tr>
<tr>
<td>Community Relations</td>
<td>$1,685,614</td>
<td>$1,685,614</td>
<td>$7,337</td>
<td>$421,331</td>
<td>$1,264,283</td>
<td>$1,685,614</td>
</tr>
<tr>
<td>Safety &amp; Security</td>
<td>$556,067</td>
<td>$556,067</td>
<td>$9,578</td>
<td>$32,169</td>
<td>$223,899</td>
<td>$556,067</td>
</tr>
<tr>
<td>Project Mgmt Services</td>
<td>$13,275,280</td>
<td>$13,275,280</td>
<td>$82,474</td>
<td>$6,171,145</td>
<td>$7,104,135</td>
<td>$13,275,280</td>
</tr>
<tr>
<td>Eng &amp; Construction</td>
<td>$89,113</td>
<td>$89,113</td>
<td>$-</td>
<td>$23,817</td>
<td>$65,296</td>
<td>$89,113</td>
</tr>
<tr>
<td>EMU Eng &amp; Mgmt</td>
<td>$32,082,556</td>
<td>$32,082,556</td>
<td>$526,141</td>
<td>$12,765,100</td>
<td>$19,317,456</td>
<td>$32,082,556</td>
</tr>
<tr>
<td>IT Support</td>
<td>$1,027,272</td>
<td>$1,027,272</td>
<td>$9,782</td>
<td>$401,260</td>
<td>$626,012</td>
<td>$1,027,272</td>
</tr>
<tr>
<td>Operations Support</td>
<td>$1,878,589</td>
<td>$1,878,589</td>
<td>$-</td>
<td>$277,200</td>
<td>$1,601,388</td>
<td>$1,878,589</td>
</tr>
<tr>
<td>General Support</td>
<td>$2,599,547</td>
<td>$2,599,547</td>
<td>$54,105</td>
<td>$1,171,099</td>
<td>$1,428,448</td>
<td>$2,599,547</td>
</tr>
<tr>
<td>Budget / Grants / Finance</td>
<td>$712,123</td>
<td>$712,123</td>
<td>$22,036</td>
<td>$435,775</td>
<td>$276,349</td>
<td>$712,123</td>
</tr>
<tr>
<td>Legal</td>
<td>$1,207,500</td>
<td>$1,207,500</td>
<td>$20,448</td>
<td>$995,473</td>
<td>$212,027</td>
<td>$1,207,500</td>
</tr>
<tr>
<td>Other Direct Costs</td>
<td>$4,003,139</td>
<td>$4,003,139</td>
<td>$33,303</td>
<td>$1,564,341</td>
<td>$2,438,798</td>
<td>$4,003,139</td>
</tr>
<tr>
<td>TASI Support</td>
<td>$2,740,000</td>
<td>$2,740,000</td>
<td>$-</td>
<td>$-</td>
<td>$2,740,000</td>
<td>$2,740,000</td>
</tr>
<tr>
<td>Required Projects</td>
<td>$4,500,000</td>
<td>$4,500,000</td>
<td>$-</td>
<td>$-</td>
<td>$4,500,000</td>
<td>$4,500,000</td>
</tr>
<tr>
<td>Finance Charges</td>
<td>$1,941,800</td>
<td>$1,941,800</td>
<td>$56,179</td>
<td>$1,142,610</td>
<td>$799,190</td>
<td>$1,941,800</td>
</tr>
<tr>
<td>Contingency</td>
<td>$38,562,962</td>
<td>$38,898,352</td>
<td>$-</td>
<td>$-</td>
<td>$37,962,352</td>
<td>$37,962,352</td>
</tr>
<tr>
<td>Forecasted Costs and Changes</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$936,000</td>
<td>$936,000</td>
</tr>
<tr>
<td><strong>EMU SUBTOTAL</strong></td>
<td>$664,127,325</td>
<td>$664,127,325</td>
<td>$1,578,328</td>
<td>$90,273,173</td>
<td>$573,854,152</td>
<td>$664,127,325</td>
</tr>
</tbody>
</table>

Notes regarding tables above:
1. “Current Budget” includes executed change orders and awarded contracts.
2. Column C “Cost This Month” represents the cost of work performed this month.
3. Column D “Cost To Date” includes actuals (amount paid) and accruals (amount of work performed) to date.
4. The agency labor is actual through March 2018 and accrued for April 2018.

### Table 8-3 PCEP Budget & Expenditure Status

<table>
<thead>
<tr>
<th>Description of Work</th>
<th>Budget</th>
<th>Current Budget</th>
<th>Cost This Month</th>
<th>Cost To Date</th>
<th>Estimate To Complete</th>
<th>Estimate At Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
<td>(E)</td>
<td>(F)</td>
</tr>
<tr>
<td>Electrification Subtotal</td>
<td>$1,316,125,208</td>
<td>$1,316,125,208</td>
<td>$10,995,378</td>
<td>$347,726,737</td>
<td>$968,398,471</td>
<td>$1,316,125,208</td>
</tr>
<tr>
<td>EMU Subtotal</td>
<td>$664,127,325</td>
<td>$664,127,325</td>
<td>$1,578,328</td>
<td>$90,273,173</td>
<td>$573,854,152</td>
<td>$664,127,325</td>
</tr>
<tr>
<td><strong>PCEP TOTAL</strong></td>
<td>$1,980,252,533</td>
<td>$1,980,252,533</td>
<td>$12,573,707</td>
<td>$437,999,910</td>
<td>$1,542,252,623</td>
<td>$1,980,252,533</td>
</tr>
</tbody>
</table>

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

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 three PCEP contracts are BBII, Stadler, and SCADA. Future PCEP contracts such as CEMOF Modifications and the Tunnel Notching will also follow the change management process.

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

Executed Contract Change Orders (CCO) This Month

<table>
<thead>
<tr>
<th>Electrification Contract</th>
<th>5% x $696,610,558 = $34,830,528</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Change Number</td>
</tr>
<tr>
<td>04/24/2018</td>
<td>BBI-053-CCO-002</td>
</tr>
<tr>
<td>04/24/2018</td>
<td>BBI-053-CCO-008</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

¹ Change approved by the Board of Directors – not counted against the Executive Director’s Change Order Authority.

EMU Contract

<table>
<thead>
<tr>
<th>EMU Contract</th>
<th>5% x $550,899,459 = $27,544,973</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Change Number</td>
</tr>
<tr>
<td>04/17/2018</td>
<td>STA-056-CCO-010</td>
</tr>
<tr>
<td>04/17/2018</td>
<td>STA-056-CCO-011</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

¹ Change approved by the Board of Directors – not counted against the Executive Director’s Change Order Authority.

SCADA Contract

<table>
<thead>
<tr>
<th>SCADA Contract</th>
<th>15% x $3,446,917 = $517,038</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Change Number</td>
</tr>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

¹ Change approved by the Board of Directors – not counted against the Executive Director’s Change Order 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. As previously noted, the JPB received approval of the FFGA from the FTA in May 2017. The Agreement provides the project with a commitment of $647 million in federal funding. To date, $172.9 million has been made available to the project by the FTA. The JPB anticipates receiving the next $100 million following the release of the FY2018 apportionments from the FTA.

![Funding Plan Diagram]

### 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) $8,000,000 0.40%
Bridge Toll Funds (RM1/RM2) $39,430,000 1.99%
Carl Moyer $20,000,000 1.01%
SF/CTA/SFMTA** $41,382,178 2.09%
SMCTA Measure A $41,382,178 2.09%
VTA Measure A $41,382,177 2.09%
Santa Clara (VTA) 7-Party MOU Contribution $20,000,000 1.01%
San Francisco 7-Party MOU Contribution $20,000,000 1.01%
San Mateo (SMCTA) 7-Party MOU Contribution $20,000,000 1.01%
Caltrain Low Carbon Transit Operations Cap and Trade $9,000,000 0.45%
Prior Local Contribution $9,000,000 0.45%
Total $1,980,252,533

**Notes:**
*Includes necessary fund transfer with SMCTA
**Includes $4M CMAQ Transfer considered part of SF local contribution
11.0 RISK MANAGEMENT

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

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

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

- BBII may be unable to develop grade crossing modifications that meet regulatory requirements prior to scheduled testing and commissioning of the system.
- A complex and diverse collection of major program elements and current Caltrain capital works projects may not be successfully integrated with existing operations and infrastructure.
- JPB may not be able to deliver work windows to contractor as dictated per contract.
- Additional work in the form of signal/pole adjustments may be required to remedy sight distance impediments arising from modifications to original design.
- Design changes may necessitate additional implementation of environmental mitigations not previously budgeted.
- Cost and schedule of Stadler contract could increase as a result of this change in PTC system.
- Cost and schedule of BBII contract could increase as a result of this change in PTC system.
- 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.
- 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.
- BBII may be unable to get permits required by jurisdictions for construction in a timely manner.
- UPRR does not accept catenary pole offsets from centerline of track necessitating further negotiation or relocation of poles.
Activity This Month

- Updates were made to 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.

- Risk retirement dates were updated 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 and Systems Integration meetings to monitor developments associated with risks and to identify new risks.

Tables 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.

Table 11-1 Monthly Status of Risks
Activity Next Month

- Conduct weekly monitoring of risk mitigation actions and continue publishing risk register.
- Update risk descriptions, effects, mitigations and retirement dates based on weekly monitoring.

Table 11-2 Risk Classification

<table>
<thead>
<tr>
<th>Category &amp; Owner</th>
<th>Top 10 Risks</th>
<th>Upcoming Risks</th>
<th>All Other Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>12</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>JPB</td>
<td>12</td>
<td>10</td>
<td>56</td>
</tr>
<tr>
<td>EMU</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D/B</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
</tbody>
</table>

Total Number of Active Risks = 92
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

- Approval obtained on the Drainage and Stormwater Plan for Traction Power Facilities in Construction Segments 2 and 4 by the SFWQCB in accordance with the permit requirements.

Activity Next Month

- The Drainage and Stormwater Plan for Traction Power Facilities in Construction Segments 2 and 4 – Paralleling Station 7 will be submitted for review and approval by the SFWQCB in accordance with permit requirements.

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 (EIR) 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, OCS pole setting, potholing for utility location, ductbank installation, tree trimming/removal, staging area development, etc.) occurring in areas that required monitoring. The monitoring was conducted in accordance with measures in the MMRP in an effort to minimize potential impacts on sensitive environmental resources.
- Tree trimming and removal in Segment 3.
- Noise and vibration monitoring also occurred during project activities, and non-hazardous soil was removed from the ROW.
- Pre-construction surveys for sensitive wildlife ahead of project activities occurred to help ensure no special-status species were impacted during project activities.
- Pre-construction nesting bird surveys during the nesting bird season continued (nesting bird season is defined as February 1 through August 31).
• Environmentally Sensitive Area (ESA) staking and/or fencing occurred to delineate jurisdictional waterways and other potentially sensitive areas that should be avoided during upcoming construction activities, and 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 continued at previously identified potential habitat locations.

• Silt fencing installation occurred at equipment staging areas and the TPS-2 site in accordance with the project-specific Stormwater Pollution Prevention Plan.

• Archaeological exploratory trenching occurred prior to construction activities within and adjacent to culturally sensitive areas.

Activity Next Month

• Environmental compliance monitors will continue to monitor project activities occurring in areas that require monitoring in an effort to minimize potential impacts on sensitive environmental resources in accordance with the MMRP.

• Noise and vibration monitoring of project activities will continue to occur and non-hazardous soil will continue to be removed.

• Tree trimming and removal will continue in Segments 2 and 3 and biological surveyors will continue to conduct pre-construction surveys for sensitive wildlife species ahead of project activities.

• Silt fencing installation will continue.

• ESA staking will continue to occur to delineate jurisdictional waterways and other potentially sensitive areas that should be avoided during upcoming project activities.

• Wildlife exclusion fencing will continue to be installed prior to upcoming construction activities adjacent to potentially suitable habitat for sensitive wildlife species.

• Biological surveyors will continue surveys for nesting birds ahead of project activities occurring during the nesting bird season (February 1 through August 31) and biological survey teams will continue to conduct protocol-level surveys for sensitive avian species.

• Archaeological exploratory trenching will continue to occur prior to construction activities within culturally sensitive areas.
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

- Work continued with all utilities on review of overhead utility line relocations based on the current design.
- Continued individual coordination with utility companies on relocation plans and schedule for incorporation with Master Program Schedule.
- Continued to work on relocation design review for PG&E and coordinate with PG&E on permitting and work planning.
- Begin work with Verizon on relocation of aerial fiber. Relocation for the corridor is scheduled to be completed by the end of 2018.
- Continued PG&E relocations in S2WA4.
- Begin relocation planning in Segment 4.
- Hold monthly utility coordination meeting to discuss overall status and areas of potential concern from the utilities.

Activity Next Month

- Continue to coordinate with 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 review of relocation design from PG&E and coordinate with PG&E on permitting and work planning for relocations.
- Conduct monthly utility meeting with utility owners.
- Continue PG&E relocations in S2WA4 and Segment 4.
- Continue coordination and planning with Verizon on relocation of aerial fiber.
14.0 REAL ESTATE

The PCEP requires the acquisition of a limited amount of real estate. In general, Caltrain uses existing ROWs 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 (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.

Activity This Month

- An alternate location for PS-2 is being internally finalized.
- One of the three active eminent domain actions in Segment 2 agreed to settle, with other property owners either settling or in active negotiations to settle.
- Two settlements were reached in Segment 3 with escrows opening; three other owners reached tentative settlements.

Activity Next Month

- Negotiations for all outstanding offers will continue.
- The remaining appraisals in Segment 1 will be completed.
- Design will continue on the two parcels in Segment 3 on design hold with the hope of finalizing design.
- Staff will continue to work with PG&E and Central Concrete as design progresses.
- Staff will continue to work with San Francisco Public Utilities Commission regarding two new parcels.
- Maps and appraisals for new parcels to be developed as they arise.
- Staff will send the appraisal for the SamTrans site to FTA for review, along with one other appraisal approval and two settlement approvals.
Table 14-1 below provides a brief summary of the Real Estate acquisition overview for the project.

Table 14-1 Real Estate Acquisition Overview

<table>
<thead>
<tr>
<th>Segment</th>
<th>No. of Parcels Needed</th>
<th>No. of Appraisals Completed</th>
<th>Offers Presented</th>
<th>Offers Accepted</th>
<th>Acquisition Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Escrow Closed</td>
</tr>
<tr>
<td></td>
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<td>Eminent Domain</td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>Action Filed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Segment 1</td>
<td>8</td>
<td>2</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>Segment 2</td>
<td>27</td>
<td>26</td>
<td>25</td>
<td>22</td>
<td>20</td>
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<tr>
<td>Segment 3</td>
<td>10</td>
<td>9</td>
<td>8</td>
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<tr>
<td>Segment 4</td>
<td>9</td>
<td>9</td>
<td>8**</td>
<td>1</td>
<td>0</td>
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<td>Additional Parcels*</td>
<td>5</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>Total</td>
<td>59</td>
<td>46</td>
<td>41</td>
<td>28</td>
<td>20</td>
</tr>
</tbody>
</table>

Note:
During design development, the real estate requirements may adjust to accommodate design refinements. Parcel requirements will adjust accordingly. The table in this report reflects the current property needs for the Project.

*Parcels being tracked but areas are not finalized.

**PG&E covers 4 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.

Table 15-1 Third-Party Agreement Status

<table>
<thead>
<tr>
<th>Type</th>
<th>Agreement</th>
<th>Third-Party</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governmental Jurisdictions</td>
<td>Construction &amp; Maintenance&lt;sup&gt;1&lt;/sup&gt;</td>
<td>City &amp; County of San Francisco</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Brisbane</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of South San Francisco</td>
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</tr>
<tr>
<td></td>
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<td>City of San Bruno</td>
<td>Executed</td>
</tr>
<tr>
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<td></td>
<td>City of Millbrae</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Burlingame</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of San Mateo</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
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<td>City of Belmont</td>
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<td></td>
<td></td>
<td>City of San Carlos</td>
<td>Executed</td>
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<tr>
<td></td>
<td></td>
<td>City of Redwood City</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Atherton</td>
<td>In Process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>County of San Mateo</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Menlo Park</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Palo Alto</td>
<td>In Process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Mountain View</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Sunnyvale</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Santa Clara</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
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<td>County of Santa Clara</td>
<td>Executed</td>
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<tr>
<td></td>
<td></td>
<td>City of San Jose</td>
<td>Executed</td>
</tr>
<tr>
<td>Condemnation Authority</td>
<td></td>
<td>San Francisco</td>
<td>In Process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>San Mateo</td>
<td>Executed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Santa Clara</td>
<td>Executed</td>
</tr>
<tr>
<td>Utilities</td>
<td>Infrastructure</td>
<td>PG&amp;E</td>
<td>Executed&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Operating Rules</td>
<td>CPUC</td>
<td>Executed</td>
</tr>
<tr>
<td>Transportation &amp; Railroad</td>
<td>Construction &amp; Maintenance</td>
<td>Bay Area Rapid Transit</td>
<td>Executed&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Construction &amp; Maintenance</td>
<td>California Dept. of Transportation (Caltrans)</td>
<td>Not needed&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Trackage Rights</td>
<td>UPRR</td>
<td>Executed&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Notes regarding table above:

1. Agreements memorialize the parties’ consultation and cooperation, designate respective rights and obligations and ensure cooperation between the JPB and the 17 cities and three counties along the Caltrain ROW and within the PCEP limits in connection with the design and construction of the PCEP.

2. The Master Agreement and Supplemental Agreements 1, 2, 3 and 5 have been executed. Supplemental Agreement 4 has JPB approval for execution by the Executive Director.

3. Utilizing existing agreements.

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

- Redwood City Council
- Belmont City Council

Third Party/Stakeholder Actions

- 95% Traction Power Facility Drawings shared with Redwood City for review
17.0 DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION AND LABOR STATISTICS

BBII proposed that 5.2% of the total DB contract value ($36,223,749) would be subcontracted to DBEs. As expressed in Figure 17-1 below, to date:

- $8,574,173 has been paid to DBE subcontractors.

Figure 17-1 DBE Participation

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

“In the month of May, 2018, we continue to anticipate increasing our DBE commitments to firms who we are currently negotiating pricing on proposed work or Professional Services Agreements. Also we will award an additional contract to a DBE firm in the area of Traffic Control services.”
18.0 PROCUREMENT

Invitation for Bid (IFB)/Request for Qualifications (RFQ)/ Request for Proposals (RFP) Issued this Month:

- RFP – 18-J-P-114 – Special Inspection & Testing Services

Bids, Proposals, Quotes 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:

- RFP – 18-J-P-115 – On-Call Construction Management Services for PCEP
- IFB – 18-J-C-071 – CEMOF Facility Upgrades for EMUs

Upcoming Contract Awards:

- RFP – 18-J-S-066 – Overhaul Services of Electric Locomotive for PCEP – Amtrak
- Memorandum of Understanding and Contract – 18-J-P-065 – Purchase of Electric Locomotives – Mitsui
- IFB – 18-J-C-070 – Tunnel Modifications for PCEP

Upcoming IFB/RFQ/RFP to be Issued:

- IFB – 18-J-C-071 – CEMOF Facility Upgrades for EMUs
- RFP – 18-J-P-115 – On-Call Construction Management Services for PCEP
- RFP – 18-J-P-072 – On-Call Safety & Security Services for PCEP

Existing Contracts Amendments Issued:

- None
19.0 TIMELINE OF MAJOR PROJECT ACCOMPLISHMENTS

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Began federal National Environmental Policy Act (NEPA) Environmental Assessment (EA) / state EIR clearance process</td>
</tr>
<tr>
<td>2002</td>
<td>Conceptual Design completed</td>
</tr>
<tr>
<td>2004</td>
<td>Draft NEPA EA/EIR</td>
</tr>
<tr>
<td>2008</td>
<td>35% design complete</td>
</tr>
<tr>
<td>2009</td>
<td>Final NEPA EA/EIR and Finding of No Significant Impact (FONSI)</td>
</tr>
<tr>
<td>2014</td>
<td>RFQ for electrification RFI for EMU</td>
</tr>
<tr>
<td>2015</td>
<td>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</td>
</tr>
<tr>
<td>2016</td>
<td>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) BBII JPB approves contract award (LNTP) Stadler FTA approval of entry into engineering for the Core Capacity Program Application for FFGA</td>
</tr>
<tr>
<td>2017</td>
<td>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)</td>
</tr>
<tr>
<td>2018</td>
<td>Completed all PG&amp;E agreements</td>
</tr>
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Appendix A – Acronyms
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
<th>Acronym</th>
<th>Description</th>
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</thead>
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<tr>
<td>AIM</td>
<td>Advanced Information Management</td>
<td>EIR</td>
<td>Environmental Impact Report</td>
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<tr>
<td>ARINC</td>
<td>Aeronautical Radio, Inc.</td>
<td>EOR</td>
<td>Engineer of Record</td>
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<td>BAAQMD</td>
<td>Bay Area Air Quality Management District</td>
<td>EMU</td>
<td>Electric Multiple Unit</td>
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<td>BBII</td>
<td>Balfour Beatty Infrastructure, Inc.</td>
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<td>Endangered Species Act</td>
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<td>ESA</td>
<td>Environmental Site Assessments</td>
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<td>Caltrain Modernization Program</td>
<td>FAI</td>
<td>First Article Inspection</td>
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<td>Caltrans</td>
<td>California Department of Transportation</td>
<td>FEIR</td>
<td>Final Environmental Impact Report</td>
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<td>CDFW</td>
<td>California Department of Fish and Wildlife</td>
<td>FNTP</td>
<td>Full Notice to Proceed</td>
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<td>CEMOF</td>
<td>Centralized Equipment Maintenance and Operations Facility</td>
<td>FAI</td>
<td>Finding of No Significant Impact</td>
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<td>California Environmental Quality Act (State)</td>
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<td>Federal Transit Administration</td>
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<td>CHSRA</td>
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<td>General Order</td>
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<td>Capital Improvement Plan</td>
<td>HSR</td>
<td>High Speed Rail</td>
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<td>CPUC</td>
<td>California Public Utilities Commission</td>
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<td>Interface Control Document</td>
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<td>Issued for Construction</td>
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<td>Design-Bid-Build</td>
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<td>Peninsula Corridor Joint Powers Board</td>
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<td>Disadvantaged Business Enterprise</td>
<td>LNTP</td>
<td>Limited Notice to Proceed</td>
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<td>Design, Engineering, and Management Planning</td>
<td>MMRP</td>
<td>Mitigation, Monitoring, and Reporting Program</td>
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<td>Environmental Assessment</td>
<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>Estimate at Completion</td>
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<td>National Marine Fisheries Service</td>
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<td>NTP</td>
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<td>PG&amp;E</td>
<td>Pacific Gas and Electric</td>
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<td>PHA</td>
<td>Preliminary Hazard Analysis</td>
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<td>Paralleling Station</td>
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<td>Positive Train Control</td>
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• Boris Lipkin  
• Ben Tripousis  
(info only)  
• Ian Ferrier (info only)  
• Wai Siu (info only) | • Anne Richman  
• Glen Tepke | • Luis Zurinaga | • April Chan  
• Peter Skinner | • Jim Lawson |
| **Funding Partners Quarterly Meeting** | • Bruce Armistead  
• Boris Lipkin  
• Ben Tripousis  
• John Popoff | • Trish Stoops | • Luis Zurinaga | • April Chan  
• Peter Skinner | • Krishna Davey |
| **Funding Oversight (monthly)** | • Ben Tripousis  
• Kelly Doyle | • Anne Richman  
• Glen Tepke  
• Kenneth Folan | • Anna LaForte  
• Maria Lombardo  
• Luis Zurinaga  
• Monique Webster  
• Ariel Espiritu Santo | • April Chan  
• Peter Skinner | • Jim Lawson  
• Marcella Rensi  
• Michael Smith |
| **Change Management Board (monthly)** | • Bruce Armistead  
• Boris Lipkin | • Trish Stoops | • Luis Zurinaga  
• Tilly Chang  
(info only) | • Joe Hurley | • Krishna Davey  
• Jim Lawson  
• Carol Lawson  
• Nuria Fernandez  
(info only) |
| **Master Program Schedule Update (monthly)** | • Ian Ferrier  
• Wai Siu | • Trish Stoops | • Luis Zurinaga | • Joe Hurley | • Jim Lawson |
| **Risk Assessment Committee (monthly)** | • Ian Ferrier  
• Wai Siu | • Trish Stoops | • Luis Zurinaga | • Joe Hurley | • Krishna Davey |
| **PCEP Delivery Coordination Meeting (bi-weekly)** | • Ian Ferrier  
• Wai Siu | • Trish Stoops | • Luis Zurinaga | • Joe Hurley | • Krishna Davey |
| **Systems Integration Meeting (bi-weekly)** | • Ian Ferrier  
• Wai Siu | • Trish Stoops | • Luis Zurinaga | • Joe Hurley | • Krishna Davey |
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<td>Segment 2</td>
<td>07/11/20</td>
<td>10/30/20</td>
<td></td>
</tr>
<tr>
<td>Testing &amp; Commissioning</td>
<td>07/25/16</td>
<td>12/04/20</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Actual Level of Effort and Progress are updated weekly, and Risk Contingency updates are reviewed monthly. The schedule update is draft until finalized at May 2018 Month End.
Appendix D – Standard Cost Codes
Peninsula Corridor Electrification Project
Monthly Progress Report

Description of Work
10 ‐ GUIDEWAY & TRACK ELEMENTS
10.02 Guideway: At‐grade semi‐exclusive (allows cross‐traffic)
10.07 Guideway: Underground tunnel
10.07 Allocated Contingency
30 ‐ SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS
30.03 Heavy Maintenance Facility
30.03 Allocated Contingency
30.05 Yard and Yard Track
40 ‐ SITEWORK & SPECIAL CONDITIONS
40.01 Demolition, Clearing, Earthwork
40.02 Site Utilities, Utility Relocation
40.02 Allocated Contingency
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks
40.05 Site structures including retaining walls, sound walls
40.06 Pedestrian / bike access and accommodation, landscaping
40.07 Automobile, bus, van accessways including roads, parking lots
40.08 Temporary Facilities and other indirect costs during construction
40.08 Allocated Contingency
50 ‐ SYSTEMS
50.01 Train control and signals
50.01 Allocated Contingency
50.02 Traffic signals and crossing protection
50.02 Allocated Contingency
50.03 Traction power supply: substations
50.03 Allocated Contingency
50.04 Traction power distribution: catenary and third rail
50.04 Allocated Contingency
50.05 Communications
50.07 Central Control
50.07 Allocated Contingency
60 ‐ ROW, LAND, EXISTING IMPROVEMENTS
60.01 Purchase or lease of real estate
60.01 Allocated Contingency
60.02 Relocation of existing households and businesses
70 ‐ VEHICLES (96)
70.03 Commuter Rail
70.03 Allocated Contingency
70.06 Non‐revenue vehicles
70.07 Spare parts
80 ‐ PROFESSIONAL SERVICES (applies to Cats. 10‐50)
80.01 Project Development
80.02 Engineering (not applicable to Small Starts)
80.02 Allocated Contingency
80.03 Project Management for Design and Construction
80.03 Allocated Contingency
80.04 Construction Administration & Management
80.04 Allocated Contingency
80.05 Professional Liability and other Non‐Construction Insurance
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.
80.06 Allocated Contingency
80.07 Surveys, Testing, Investigation, Inspection
80.08 Start up
80.08 Allocated Contingency
Subtotal (10 ‐ 80)
90
UNALLOCATED CONTINGENCY
Subtotal (10 ‐ 90)
100
FINANCE CHARGES
Total Project Cost (10 ‐ 100)

Appendix D – SCC

Approved Budget
(A)

Cost This Month
(B)

$
14,256,739 $
$
2,500,000 $
$
8,110,649 $
$
3,646,090 $
$
2,265,200 $
$
1,344,000 $
$
421,200 $
$
500,000 $
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270,176,151 $
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3,077,685 $
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93,455,599 $
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2,200,000 $
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32,679,208 $
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568,188 $
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804,933 $
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284,094 $
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116,946,444 $
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20,160,000 $
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502,766,044 $
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96,789,149 $
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2,451,000 $
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23,879,905 $
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1,140,000 $
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70,671,121 $
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28,464,560 $
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253,743,010 $
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18,064,000 $
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5,455,000 $
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2,090,298 $
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18,000 $
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35,675,084 $
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25,927,074 $
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8,748,010 $
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625,755,807 $
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588,831,901 $
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10,019,974 $
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8,140,000 $
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18,763,931 $
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325,821,092 $
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130,350 $
$
181,635,600 $
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1,742,144 $
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72,910,901 $
$
9,270,000 $
$
23,677,949 $
$
19,537,000 $
$
4,305,769 $
$
6,341,599 $
$
556,000 $
$
3,287,824 $
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1,797,957 $
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628,000 $
$ 1,776,716,117 $
$
146,956,179 $
$ 1,923,672,296 $
$
6,998,638 $
$ 1,930,670,934 $

D-1

1,534,281
1,088,949
45,750
399,582
1,700,022
1,700,022
133,958
133,958
1,243,532
1,243,532
7,814,074
5,957,242
1,681,639
115,642
59,552
0
12,425,867
12,425,867
147,839
12,573,707

Cost To Date
(C)

Estimate To
Complete
(D)

$
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$
14,356,739 $
14,356,739
$
2,600,000 $
2,600,000
$
8,110,649 $
8,110,649
$
3,646,090 $
3,646,090
$
2,265,200 $
2,265,200
$
1,344,000 $
1,344,000
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421,200 $
421,200
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500,000 $
500,000
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217,229,393 $
284,287,151
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2,803,685 $
3,252,685
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87,265,782 $
107,455,599
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2,200,000 $
2,200,000
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32,273,083 $
32,679,208
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568,188 $
568,188
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740,933 $
740,933
$
284,094 $
284,094
$
70,933,629 $
116,946,444
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20,160,000 $
20,160,000
$
475,521,228 $
498,716,494
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101,289,149
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23,879,905 $
23,879,905
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1,140,000 $
1,140,000
$
65,938,499 $
70,671,121
$
28,464,560 $
28,464,560
$
239,035,658 $
256,498,302
$
9,210,157 $
9,210,157
$
5,455,000 $
5,455,000
$
2,090,298 $
2,090,298
$
18,000 $
18,000
$
24,273,645 $
35,675,084
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14,549,832 $
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8,748,010 $
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975,803 $
1,000,000
$
542,749,222 $
625,755,807
$
506,761,317 $
589,767,901
$
9,083,974 $
9,083,974
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8,140,000 $
8,140,000
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18,763,931 $
18,763,931
$
130,495,524 $
331,214,675
$
(149,830) $
130,350
$
36,681,676 $
188,771,327
$
- $
$
33,880,736 $
72,910,901
$
9,270,000 $
9,270,000
$
27,841,521 $
31,376,420
$
11,838,529 $
11,838,529
$
1,750,000 $
4,305,769
$
3,125,998 $
6,341,599
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556,000 $
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3,274,937 $
3,287,824
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1,797,957 $
1,797,957
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628,000 $
628,000
$ 1,406,890,950 $ 1,792,271,149
$
131,401,147 $
131,401,147
$ 1,538,292,097 $ 1,923,672,296
$
3,972,527 $
6,998,638
$ 1,542,264,623 $ 1,930,670,934

67,057,758
449,000
20,189,818
406,125
46,012,815
23,195,266
1,000,000
4,732,622
17,462,644
11,401,440
11,377,242
24,198
83,006,585
83,006,585
200,719,151
280,180
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39,030,165
3,534,899
2,555,769
3,215,601
12,887
385,380,199
385,380,199
3,026,111
388,406,311

Estimate At
Completion
(E) = (C) + (D)

April 30, 2018


Appendix E – Change Order Logs
## Change Order Logs

### Electrification Contract

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Number</th>
<th>Description</th>
<th>CCO Amount</th>
<th>Change Order Authority Usage</th>
<th>Remaining Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/31/2017</td>
<td>BBI-053-CCO-001</td>
<td>Track Access Delays Q4 2016</td>
<td>$85,472</td>
<td>0.25%</td>
<td>$34,745,056</td>
</tr>
<tr>
<td>02/28/2018</td>
<td>BBI-053-CCO-003</td>
<td>Deletion of Signal Cable Meggering (Testing)</td>
<td>($800,000)</td>
<td>(2.30%)</td>
<td>$35,485,090</td>
</tr>
<tr>
<td>02/21/2018</td>
<td>BBI-053-CCO-004</td>
<td>Field Order for Differing Site Condition Work Performed on 6/19/17</td>
<td>$59,965</td>
<td>0.17%</td>
<td>$34,685,090</td>
</tr>
<tr>
<td>3/12/2018</td>
<td>BBI-053-CCO-006</td>
<td>Track Access Delays for Calendar Quarter 1 2017</td>
<td>$288,741</td>
<td>0.82%</td>
<td>$34,396,349</td>
</tr>
<tr>
<td>04/24/2018</td>
<td>BBI-053-CCO-002</td>
<td>Time Impact 01 Associated with Delayed NTP</td>
<td>$9,702,667</td>
<td>0.0%</td>
<td>2</td>
</tr>
<tr>
<td>04/24/2018</td>
<td>BBI-053-CCO-008</td>
<td>2016 Incentives (Safety, Quality, and Public Outreach)</td>
<td>$750,000</td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>

Total: $10,086,846 (1.05%) Remaining Authority: $34,396,349

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

### EMU Contract

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Number</th>
<th>Description</th>
<th>CCO Amount</th>
<th>Change Order Authority Usage</th>
<th>Remaining Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/22/2017</td>
<td>STA-056-CCO 001</td>
<td>Contract General Specification and Special Provision Clean-up</td>
<td>$0</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>10/27/2017</td>
<td>STA-056-CCO 002</td>
<td>Prototype Seats and Special Colors</td>
<td>$55,000</td>
<td>0.20%</td>
<td>$27,489,973</td>
</tr>
<tr>
<td>11/02/2017</td>
<td>STA-056-CCO 003</td>
<td>Car Level Water Tightness Test</td>
<td>$0</td>
<td>0.00%</td>
<td>$27,489,973</td>
</tr>
<tr>
<td>12/05/2017</td>
<td>STA-056-CCO 004</td>
<td>Onboard Wheelchair Lift 800 Pound Capacity Provisions</td>
<td>$848,000</td>
<td>3.08%</td>
<td>$26,641,973</td>
</tr>
<tr>
<td>11/03/2017</td>
<td>STA-056-CCO 005</td>
<td>Design Progression (multiple)</td>
<td>$0</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>12/12/2017</td>
<td>STA-056-CCO 006</td>
<td>Prototype Seats and Special Colors</td>
<td>($27,500)</td>
<td>(0.10%)</td>
<td>$26,669,473</td>
</tr>
<tr>
<td>01/17/2018</td>
<td>STA-056-CCO 007</td>
<td>Multi-Color Destination Signs</td>
<td>$130,760</td>
<td>0.47%</td>
<td>$26,538,713</td>
</tr>
<tr>
<td>02/09/2018</td>
<td>STA-056-CCO 008</td>
<td>Adjustment to Delivery and LDs due to delayed FNTP</td>
<td>$490,000</td>
<td>1.78%</td>
<td>$26,048,713</td>
</tr>
<tr>
<td>02/12/2018</td>
<td>STA-056-CCO 009</td>
<td>Ship Cab Mock-up to Caltrain</td>
<td>$53,400</td>
<td>0.19%</td>
<td>$25,995,313</td>
</tr>
<tr>
<td>04/17/2018</td>
<td>STA-056-CCO 010</td>
<td>Onboard Wheelchair Lift Locations</td>
<td>($1,885,050)</td>
<td>(6.84%)</td>
<td>$27,880,363</td>
</tr>
<tr>
<td>04/17/2018</td>
<td>STA-056-CCO 011</td>
<td>Multiple Change Group 3 and Scale Models</td>
<td>$0</td>
<td>0.00%</td>
<td></td>
</tr>
</tbody>
</table>

Total: ($335,390) (1.22%) Remaining Authority: $27,880,363

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

**Change Order Authority (15% of ARINC Contract)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Number</th>
<th>Description</th>
<th>CCO Amount</th>
<th>Change Order Authority Usage</th>
<th>Remaining Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>None to date</td>
<td></td>
<td></td>
<td><strong>$517,038</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. When the threshold of 75% is reached, staff may return to the Board to request additional authority.
2. Change approved by the Board of Directors – not counted against the Executive Director’s Change Order Authority.
Appendix F – Risk Table
### Listing of PCEP Risks and Effects in Order of Severity

<table>
<thead>
<tr>
<th>ID</th>
<th>RISK DESCRIPTION</th>
<th>EFFECT(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>279</td>
<td>BBII may be unable to develop grade crossing modifications that meet regulatory requirements prior to scheduled testing and commissioning of the system.</td>
<td>Crossing operations will not be acceptable to CPUC and FRA and therefore delay commissioning.</td>
</tr>
<tr>
<td>223</td>
<td>A complex and diverse collection of major program elements and current Caltrain capital works projects may not be successfully integrated with existing operations and infrastructure.</td>
<td>Proposed changes resulting from electrification may not be fully and properly integrated into existing system.</td>
</tr>
<tr>
<td>101</td>
<td>PG&amp;E may not be able to deliver permanent power for the project within the existing budget and in accordance with the project schedule</td>
<td>Additional project costs; potential delay to revenue service date.</td>
</tr>
<tr>
<td>242</td>
<td>JPB’s ability to deliver work windows to contractor as dictated per contract.</td>
<td>Delays to construction schedule and associated delay claims.</td>
</tr>
<tr>
<td>281</td>
<td>Additional work in the form of signal/pole adjustments may be required to remedy sight distance impediments arising from modifications to original design.</td>
<td>Add repeater signals, design duct bank would result in increased design and construction costs.</td>
</tr>
<tr>
<td>287</td>
<td>Design changes may necessitate additional implementation of environmental mitigations not previously budgeted.</td>
<td>Increased cost for environmental measures and delays to construct and overall delay in construction schedule</td>
</tr>
<tr>
<td>263</td>
<td>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.</td>
<td>Delay in progress of catenary installation resulting in claims and schedule delay.</td>
</tr>
<tr>
<td>276</td>
<td>BBII may be unable to get permits required by jurisdictions for construction in a timely manner.</td>
<td>Additional cost and time resulting from delays to construction.</td>
</tr>
<tr>
<td>294</td>
<td>UP does not accept catenary pole offsets from centerline of track necessitating further negotiation or relocation of poles.</td>
<td>Delay to construction and additional costs for redesign and ROW acquisition.</td>
</tr>
<tr>
<td>297</td>
<td>Cost and schedule of Stadler contract could increase because of this change in PTC system.</td>
<td>1) Full integrated testing between EMU and wayside cannot be conducted without PTC in place.</td>
</tr>
<tr>
<td></td>
<td>Delay of PTC may delay acceptance of EMUs.</td>
<td>2) Delay in EMU final design for PTC and potential PTC interfaces. Need to finalize.</td>
</tr>
<tr>
<td>ID</td>
<td>RISK DESCRIPTION</td>
<td>EFFECT(S)</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>298</td>
<td>Cost and schedule of BBII contract could increase as a result of this change in PTC system</td>
<td>Balfour contract: changes in datafiles could affect what Balfour provides; could delay timing for testing; could change books that FRA had to review. Delay in testing and increased costs</td>
</tr>
<tr>
<td>209</td>
<td>TASI may be unable to deliver sufficient resources to support construction and testing for the electrification contract.</td>
<td>• Testing delayed. Additional construction costs. • Change order for extended vehicle acceptance.</td>
</tr>
<tr>
<td>241</td>
<td>Balfour Beatty needs to build TP2 and Interconnection in time for PG&amp;E to supply power in time to support testing • Date is December 2018 to support contractor’s schedule • Interim power was mitigation to providing permanent power</td>
<td>Delay in testing and increased costs</td>
</tr>
<tr>
<td></td>
<td>Risk of PG&amp;E delay in interim power availability.</td>
<td></td>
</tr>
<tr>
<td>247</td>
<td>Timely resolution of 3rd party design review comments to achieve timely approvals</td>
<td>Delay to completion of design and associated additional labor costs.</td>
</tr>
<tr>
<td>257</td>
<td>Modifications to the CTC system hardware and software and Back Office Server database and systems to support DB must be completed in time for cutover and testing.</td>
<td>Failure to follow the DB Management process will result in major interruption to train service and overall capital projects delay.</td>
</tr>
<tr>
<td>267</td>
<td>Additional property acquisition is necessitated by design changes.</td>
<td>New project costs and delays to schedule.</td>
</tr>
<tr>
<td>268</td>
<td>Potential that vehicles will not receive timely notification of compliance from FRA. Most significant issues include: • Placement of windows as emergency exits • Compliance with acceptable alternate crash management standards</td>
<td>Delays to completion of construction and additional cost to changes in design.</td>
</tr>
<tr>
<td>213</td>
<td>Unable to acquire property required to build PS-2.</td>
<td>Extensive redesign of existing and future facilities and utilities resulting in potential delay an additional costs to D/B contractor.</td>
</tr>
<tr>
<td>240</td>
<td>Property not acquired in time for contractor to do work.</td>
<td>• Potential delays in construction schedule</td>
</tr>
<tr>
<td>ID</td>
<td>RISK DESCRIPTION</td>
<td>EFFECT(S)</td>
</tr>
<tr>
<td>----</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td>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.</td>
<td>Delay to construction and additional costs for redesign and ROW acquisition.</td>
</tr>
<tr>
<td>295</td>
<td>UP does not accept catenary pole offsets from centerline of track necessitating further negotiation or relocation of poles</td>
<td>Delay in installation of catenary poles resulting in claims and schedule delay. CBOSS FOC conflicts additional costs and delays include: 1. Potholing 2. Design 3. OCS materials 4. Encasement 5. ROW JPB Signal Cable conflicts additional costs and delays include: 1. Trenching 2. Splicing 3. Cable</td>
</tr>
<tr>
<td>64</td>
<td>Potential need for additional right-of-way beyond that initially envisioned and/or relocation of underground utilities by others, which could result in delays to the schedule and associated costs.</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>Other capital improvement program projects compete with PCEP for track access allocation and requires design coordination (design, coordination, integration).</td>
<td>Schedule delay as resources are allocated elsewhere, won’t get track time, sequencing requirements may delay PCEP construction, track access requirements must be coordinated.</td>
</tr>
<tr>
<td>136</td>
<td>UP may not complete review of BBI design in accordance with agreed deadlines (90 days in Segment 4, 60 days in other segments).</td>
<td>Delays to completion of design and claims for delay.</td>
</tr>
<tr>
<td>174</td>
<td>Installation of electrification infrastructure may require the relocation of signals, which would affect the block design.</td>
<td>Cost and schedule impacts resulting from the design, construction, and testing of modified signal system and review of revised block design.</td>
</tr>
<tr>
<td>260</td>
<td>EMU Contractor’s facility is not completed before needed for vehicle assembly.</td>
<td>Delay in commencement of assembly of EMUs delaying final delivery and system-wide testing.</td>
</tr>
<tr>
<td>261</td>
<td>EMU electromechanical emissions and track circuit susceptibility are incompatible.</td>
<td>Changes on the EMU and/or signal system require additional design and installation time and expense.</td>
</tr>
<tr>
<td>262</td>
<td>Configuration changes from other capital projects could necessitate changes to electrification design.</td>
<td>Potential increase or decrease in final construction cost for electrification; additional cost for rework of completed construction; delays to overall project schedule due to inefficiencies.</td>
</tr>
<tr>
<td>265</td>
<td>PG&amp;E must deliver interim power in time</td>
<td>Delay in testing and increased costs</td>
</tr>
<tr>
<td>ID</td>
<td>RISK DESCRIPTION</td>
<td>EFFECT(S)</td>
</tr>
<tr>
<td>----</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>277</td>
<td>Inadequate D-B labor to support multiple work segments</td>
<td>Additional cost and time</td>
</tr>
<tr>
<td>280</td>
<td>Field equipment installed by D/B contractor may not communicate with the Central Control Facility (CCF), the Back-Up Central Control Facility (BCCF) through SCADA and function as designed.</td>
<td>Could require the acquisition and installation of additional equipment at BCCF and CCF. Could therefore require additional cost and time</td>
</tr>
<tr>
<td>285</td>
<td>Potential for inflation, (except with respect to Maintenance Option) to increase contractor costs.</td>
<td>Higher cost</td>
</tr>
<tr>
<td>286</td>
<td>Potential for wage escalation, (except for Maintenance Option) to increase contractor costs.</td>
<td>Higher cost</td>
</tr>
<tr>
<td>296</td>
<td>BBII needs to complete interconnection and traction power substations be sufficiently complete to accept interim power.</td>
<td>Delay in testing and increased costs</td>
</tr>
</tbody>
</table>
| 56 | Lack of O&M support for testing and/or vehicle operations. Includes operational readiness and personnel hired and scheduled to be trained.                                                                           | • Testing delayed.  
• Change order for extended vehicle acceptance.                                                                                                                                                                                                                                                                                  |
| 88 | 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.                                                                                                                                                                                                                                                                                                                               |
| 179| Risk that municipal reviews take additional time due to absence of municipal agreement.                                                                                                                                                                                   | Possible delay to:  
(1) design review;  
(2) permit issuance;  
(3) construction within local jurisdiction right-of-way                                                                                                                                                                                                                 |
<p>| 183| Installation and design of new duct bank takes longer because of UP coordination                                                                                                                                                                                           | Schedule - Delay. May need to use condemnation authority to acquire easement.                                                                                                                                                                                                                                                                   |
|     |                                                                                                                                                                                                                                                                       | Cost - Additional cost for PG&amp;E to make connections increasing project 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.                                                                                           |</p>
<table>
<thead>
<tr>
<th>ID</th>
<th>RISK DESCRIPTION</th>
<th>EFFECT(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>259</td>
<td>Work on 25th Avenue Grade Separation Project could delay Balfour construction</td>
<td>• Increased cost for BBI as catenary construction in this section was anticipated to be</td>
</tr>
<tr>
<td></td>
<td>schedule.</td>
<td>constructed under the 25th Avenue Grade Separation Project.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Potential delays in construction schedule</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Risk is delay to BBI</td>
</tr>
<tr>
<td>266</td>
<td>Relocation of Verizon must precede installation of foundations and connections</td>
<td>Delay in progress of catenary installation resulting in claims and schedule delay</td>
</tr>
<tr>
<td></td>
<td>to TPSs. Relocation work will be performed by others and may not be completed to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>meet BBII’s construction schedule.</td>
<td></td>
</tr>
<tr>
<td>270</td>
<td>OCS poles or structures as designed by Contractor fall outside of JPB row</td>
<td>Additional ROW Take, additional cost and time</td>
</tr>
<tr>
<td>82</td>
<td>Unexpected restrictions could affect construction progress:</td>
<td>• Reduced production rates.</td>
</tr>
<tr>
<td></td>
<td>&lt;&gt; night work</td>
<td>• Delay</td>
</tr>
<tr>
<td></td>
<td>&lt;&gt; noise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;&gt; local roads</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;&gt; local ordinances</td>
<td></td>
</tr>
<tr>
<td>119</td>
<td>Coordination of electrification design with Operations</td>
<td>• Qualified individuals may not be available.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Training may take longer than anticipated.</td>
</tr>
<tr>
<td>253</td>
<td>Risk that existing conditions of Caltrans-owned bridges will not support bridge</td>
<td>Delays to issuance of permit for construction while negotiating and executing an operation and</td>
</tr>
<tr>
<td></td>
<td>barriers. The existing bridge conditions and structural systems are unknown and</td>
<td>maintenance agreement for equipment installed on bridges; existing bridge deficiencies could</td>
</tr>
<tr>
<td></td>
<td>may not support mounting new work.</td>
<td>result in additional costs to PCEP.</td>
</tr>
<tr>
<td></td>
<td>Design will need to prove new barriers will not impact existing capacity of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bridges prior to Caltran’s approval for construction.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Without approval of design and issuance of permit, there is risk to the schedule</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for the work and also budget if during design existing bridge will require some</td>
<td></td>
</tr>
<tr>
<td></td>
<td>upgrades due to the introduction of new attachments.</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>Need for unanticipated, additional ROW for new signal enclosures.</td>
<td>Delay while procuring ROW and additional ROW costs.</td>
</tr>
<tr>
<td>154</td>
<td>Potential for encountering unidentified or unknown private crossings along the</td>
<td>Additional cost and time to acquire ROW by condemnation</td>
</tr>
<tr>
<td></td>
<td>corridor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Could impose unanticipated rights or requirements on the design.</td>
<td></td>
</tr>
<tr>
<td>171</td>
<td>Electrification facilities could be damaged during testing.</td>
<td>Delay in commencing electrified operations.</td>
</tr>
<tr>
<td>195</td>
<td>Introduction of electrified train service will</td>
<td>Safety hazards resulting in incidents that</td>
</tr>
<tr>
<td>ID</td>
<td>RISK DESCRIPTION</td>
<td>EFFECT(S)</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>251</td>
<td>Subcontractor and supplier performance to meet aggressive schedule &lt;&gt;Potential issue meeting Buy America requirements</td>
<td>Delay to production schedule resulting in increased soft costs and overall project schedule delay.</td>
</tr>
<tr>
<td>271</td>
<td>Need for additional construction easements beyond that which has been provided for Contractor proposed access and staging</td>
<td>Additional cost and time</td>
</tr>
<tr>
<td>272</td>
<td>Final design based upon actual Geotech conditions</td>
<td>Could require changes</td>
</tr>
<tr>
<td>288</td>
<td>Independent checker finds errors in signal design and technical submittals</td>
<td>Additional cost and time</td>
</tr>
<tr>
<td>289</td>
<td>Coordination and delivery of permanent power for power drops for everything except traction power substations along alignment</td>
<td>Can't test resulting in delays to schedule and associated additional project costs.</td>
</tr>
<tr>
<td>291</td>
<td>Order/manufacture of long lead items prior to 100% IFC design document that proves to be incorrect</td>
<td>Design change and/or delays</td>
</tr>
<tr>
<td>292</td>
<td>Potential that UPS will not fit in the spaces allotted to communications work within the buildings.</td>
<td>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.</td>
</tr>
<tr>
<td>19</td>
<td>Potential for vehicle delivery to be hampered by international conflict; market disruption; labor strikes at production facility.</td>
<td>Delay in production of vehicle with associated cost implications.</td>
</tr>
<tr>
<td>42</td>
<td>Full complement of EMUs not available upon initiation of electrified revenue service</td>
<td>Late delivery impacts revenue service date.</td>
</tr>
<tr>
<td>150</td>
<td>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.</td>
<td>Delay.</td>
</tr>
<tr>
<td>245</td>
<td>Failure of BBI to submit quality design</td>
<td>Delays to project schedule and additional</td>
</tr>
<tr>
<td>ID</td>
<td>RISK DESCRIPTION</td>
<td>EFFECT(S)</td>
</tr>
<tr>
<td>----</td>
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<td>-----------</td>
</tr>
<tr>
<td></td>
<td>and technical submittals in accordance with contract requirements  • $3-$5M/month burn rate for Owner’s team during peak</td>
<td>costs for preparation and review of submittals.</td>
</tr>
<tr>
<td>252</td>
<td>Failure of BBI to order/manufacture long lead items prior to 100% IFC design document approval by JPB</td>
<td>Delays to project schedule and additional cost for contractor and JPB staff time.</td>
</tr>
<tr>
<td>264</td>
<td>Design coordination with other capital improvement projects is required</td>
<td>Rework resulting in cost increases and schedule delays</td>
</tr>
<tr>
<td>10</td>
<td>Delays in parts supply chain result in late completion of vehicles.</td>
<td>• Delay in obtaining parts / components.  • Cost increases. (See Owner for allocation of costs)  • Schedule increase - 3 months (See Owner for allocation of damages associated with this Risk)</td>
</tr>
<tr>
<td>12</td>
<td>Potential for electromagnetic interference (EMI) to private facilities with sensitive electronic equipment caused by vehicles.</td>
<td>• Increased cost due to mitigation  • Potential delay due to public protests or environmental challenge.</td>
</tr>
<tr>
<td>50</td>
<td>Leadership and / or key personnel changes with car builder results in delays to completion of design and manufacture of vehicles.</td>
<td>• Cost Increase  • Schedule Increase – not supported by a TIA</td>
</tr>
<tr>
<td>51</td>
<td>Damage during delivery of first six EMUs.</td>
<td>Schedule delay</td>
</tr>
<tr>
<td>54</td>
<td>Infrastructure not ready for vehicles (OCS, TPS, Commissioning site / facility).</td>
<td>Increases cost if done off property</td>
</tr>
<tr>
<td>69</td>
<td>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.</td>
<td>Increased cost  Delay</td>
</tr>
<tr>
<td>87</td>
<td>Unanticipated HazMat or contaminated hot spots encountered during foundation excavations for poles, TPSS, work at the yards.</td>
<td>Increased cost for clean-up and handling of materials and delay to schedule due to HazMat procedures.</td>
</tr>
<tr>
<td>93</td>
<td>Unanticipated subsurface conditions affecting pole or TPSS installation.</td>
<td>• Delay to take actions to remedy conditions or relocate foundations.  • Increased cost for design and construction of remediation</td>
</tr>
<tr>
<td>106</td>
<td>Potential that DB contractor will have insufficient field resources (personnel or equipment) to maintain aggressive schedule.  Multiple segments will need to be under</td>
<td>Delay.</td>
</tr>
<tr>
<td>ID</td>
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<td>EFFECT(S)</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>design simultaneously.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>146</td>
<td>Wayside signal / pole adjustments to avoid sighting distance problems.</td>
<td>Change order.</td>
</tr>
<tr>
<td>148</td>
<td>Potential impact to advancing construction within the vicinity of any cultural finds that are excavated.</td>
<td>Minor disruption of the construction work</td>
</tr>
<tr>
<td>151</td>
<td>Public could raise negative concerns regarding wheel/rail noise.</td>
<td>Increased cost to mitigate: &lt; grind rails  &lt; reprofile wheels  &lt; sound walls</td>
</tr>
<tr>
<td>182</td>
<td>Compliance with Buy America requirements for 3rd party utility relocations.</td>
<td>• Increased cost  • Delay</td>
</tr>
<tr>
<td></td>
<td>&lt;&gt;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  &lt;&gt;Installation of new equipment inside PG&amp;E substations that will provide all PG&amp;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%  &lt;&gt;Risk is substation not relocations  &lt;&gt;Substation equipment is available domestically, has 6 month longer lead time and increased cost of 20%</td>
<td></td>
</tr>
<tr>
<td>189</td>
<td>EMUs will need I-ITCS equipment that is compatible with wayside equipment. Same supplier thereby reducing the risk.</td>
<td>Could drive up price because the car builder may not be a priority customer.</td>
</tr>
<tr>
<td>192</td>
<td>Environmental compliance during construction. Failure to meet the commitments contained within the PCEP EA, FEIR and permit conditions</td>
<td>• Delay  • Cost increase</td>
</tr>
<tr>
<td>237</td>
<td>JPB needs and 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</td>
<td>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</td>
</tr>
<tr>
<td>ID</td>
<td>RISK DESCRIPTION</td>
<td>EFFECT(S)</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>248</td>
<td>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.</td>
<td>revenue service.</td>
</tr>
<tr>
<td>249</td>
<td>3rd party coordination &lt;&gt;Jurisdictions, Utilities, UP, Contractors &lt;&gt;D/B needs to provide timely information to facilitate 3rd party coordination &lt;&gt;Risk is for construction</td>
<td>Delays in approvals resulting in project schedule delays and associated costs.</td>
</tr>
<tr>
<td>254</td>
<td>Coordination and delivery of permanent power for power drops along alignment</td>
<td>Delays in completion of construction and testing with associated increase in costs.</td>
</tr>
<tr>
<td>254</td>
<td>Potential that bridge clearance data are inaccurate and that clearances are not sufficient for installation of catenary.</td>
<td>Results in additional design and construction to create sufficient clearance.</td>
</tr>
<tr>
<td>269</td>
<td>Potholing unearths the fact that pole locations conflict with utilities. OCS pole or structure locations as designed by Contractor conflict with utilities where conflict could have been avoided by allowable final design adjustments.</td>
<td>Additional cost and time</td>
</tr>
<tr>
<td>273</td>
<td>Contractor generates new hazardous materials, necessitates proper removal and disposal of existing hazardous materials identified in the Contract for D-B remediation.</td>
<td>Delay to construction while removing and disposing of hazardous materials resulting in schedule delay, increased construction costs, and schedule delay costs.</td>
</tr>
<tr>
<td>274</td>
<td>JPB as-built dwgs and existing infrastructure to be used as basis of final design and construction is not correct</td>
<td>Additional cleanup of as-builts after PCEP construction</td>
</tr>
<tr>
<td>275</td>
<td>DB fails to verify as-built dwgs and existing infrastructure</td>
<td>Additional cleanup of as-builts after PCEP construction</td>
</tr>
<tr>
<td>278</td>
<td>Failure of D/B contractor and subcontractors and suppliers to meet Buy America requirements</td>
<td>Delays while acceptable materials are procured and additional costs for delays and purchase of duplicative equipment.</td>
</tr>
<tr>
<td>282</td>
<td>Failure to maintain dynamic envelope and existing track clearances consistent with requirements.</td>
<td>Redesign entailing cost and schedule impacts.</td>
</tr>
<tr>
<td>283</td>
<td>Fluctuation in foreign currency v US dollar</td>
<td>Increase in costs</td>
</tr>
<tr>
<td>284</td>
<td>Compliance with project labor agreement could result in inefficiencies in staffing of construction.</td>
<td>Increase in labor costs and less efficient construction resulting in schedule delays.</td>
</tr>
<tr>
<td>290</td>
<td>Delays in agreement and acceptance of initial VVSC requirements database.</td>
<td>Delay to design acceptance</td>
</tr>
<tr>
<td>293</td>
<td>Readiness of 115kV interconnect for temporary power to support testing</td>
<td>Delay in testing</td>
</tr>
</tbody>
</table>
Appendix G – MMRP Status Log
### Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Pre-Construction</th>
<th>Construction</th>
<th>Post-Construction</th>
<th>Operation</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AES-2a: Minimize OCS construction activity on residential and park areas outside the Caltrain ROW.</strong></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>AES-2b: Aesthetic treatments for OCS poles, TPFs in sensitive visual locations, and Overbridge Protection Barriers.</strong></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>AES-4a: Minimize spillover light during nighttime construction.</strong></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>AES-4b: Minimize light spillover at TPFs.</strong></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Upcoming</td>
<td>The design requirements indicated in the measure are being used in the design process of the TPFs.</td>
</tr>
<tr>
<td><strong>AQ-2a: Implement BAAQMD basic and additional construction mitigation measures to reduce construction-related dust.</strong></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Ongoing</td>
<td>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.</td>
</tr>
</tbody>
</table>
Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AQ-2b:</strong> Implement BAAQMD basic and additional construction mitigation measures to control construction-related ROG and NOX emissions.</td>
<td>Pre-Construction: X  Construction: X  Post-Construction: X  Operation: Ongoing</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>AQ-2c:</strong> Utilize clean diesel-powered equipment during construction to control construction-related ROG and NOX emissions.</td>
<td>Pre-Construction: X  Construction: X  Post-Construction: X  Operation: Ongoing</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>BIO-1a:</strong> Implement general biological impact avoidance measures.</td>
<td>Pre-Construction: X  Construction: X  Post-Construction: X  Operation: Ongoing</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>BIO-1b:</strong> Implement special-status plant species avoidance and revegetation measures.</td>
<td>Pre-Construction: X  Construction: X  Post-Construction: X  Operation: Complete</td>
<td>Complete</td>
<td>Not applicable. Subsequent habitat assessment and avoidance of Communication Hill eliminated any potential to affect special-status plant species. The measure is not needed.</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
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<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO-1c: Implement California red-legged frog and San Francisco garter snake avoidance measures.</strong></td>
<td>X X</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>BIO-1d: Implement western pond turtle avoidance measures.</strong></td>
<td>X X</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>BIO-1e: Implement Townsend’s big-eared bat, pallid bat, hoary bat, and fringed myotis avoidance measures.</strong></td>
<td>X X</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
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<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO-1f: Implement western burrowing owl avoidance measures.</strong></td>
<td>X</td>
<td>X</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>BIO-1g: Implement northern harrier, white-tailed kite, American peregrine falcon, saltmarsh common yellowthroat, purple martin, and other nesting bird avoidance measures.</strong></td>
<td>X</td>
<td>X</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>
### Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
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<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO-1h: Conduct biological resource survey of future contractor-determined staging areas.</strong></td>
<td>X X</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>BIO-1i: Minimize impacts on Monarch butterfly overwintering sites.</strong></td>
<td>X X</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>BIO-1j: Avoid nesting birds and bats during vegetation maintenance.</strong></td>
<td></td>
<td>X Upcoming</td>
<td>To be completed during Project operation.</td>
</tr>
<tr>
<td><strong>BIO-2: Implement serpentine bunchgrass avoidance and revegetation measures.</strong></td>
<td>X X X</td>
<td>Complete</td>
<td>Not applicable. Subsequent habitat assessment and avoidance of Communication Hill eliminated any potential to affect serpentine bunchgrass. This measure is no longer needed.</td>
</tr>
<tr>
<td><strong>BIO-3: Avoid or compensate for impacts on wetlands and waters.</strong></td>
<td>X X X</td>
<td>Complete</td>
<td>The JPB has compensated for unavoidable wetland impacts by purchasing adequate credits from a wetlands mitigation bank approved by USACE and SFRWQCB.</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-5: Implement Tree Avoidance, Minimization, and Replacement Plan.</td>
<td>Pre-Construction: X</td>
<td>X</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Construction: X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Construction: X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-6: Pay Santa Clara Valley Habitat Plan land cover fee (if necessary).</td>
<td>Pre-Construction: X</td>
<td></td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Construction: X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Construction:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL-1a: Evaluate and minimize impacts on structural integrity of historic tunnels.</td>
<td>Pre-Construction: X</td>
<td></td>
<td>Upcoming</td>
</tr>
<tr>
<td></td>
<td>Construction: X</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Post-Construction:</td>
<td></td>
<td></td>
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<td></td>
<td>Operation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL-1b: Minimize impacts on historic decorative tunnel material.</td>
<td>Pre-Construction: X</td>
<td></td>
<td>Upcoming</td>
</tr>
<tr>
<td></td>
<td>Construction: X</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Post-Construction:</td>
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<td></td>
<td>Operation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL-1c: Install project facilities in a way that minimizes impacts on historic tunnel interiors.</td>
<td>Pre-Construction: X</td>
<td></td>
<td>Upcoming</td>
</tr>
<tr>
<td></td>
<td>Construction: X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Construction:</td>
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<tr>
<td></td>
<td>Operation:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tree removal and pruning activities were initiated in August 2017 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.

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.

To be implemented prior to construction in tunnels.
### Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUL-1d: Implement design commitments at historic railroad stations</td>
<td>X</td>
<td>Complete</td>
<td>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.</td>
</tr>
<tr>
<td>CUL-1e: Implement specific tree mitigation considerations at two potentially historic properties and landscape recordation, as necessary.</td>
<td>X  X</td>
<td>Complete</td>
<td>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.</td>
</tr>
<tr>
<td>CUL-1f: Implement historic bridge and underpass design requirements.</td>
<td>X</td>
<td>Ongoing</td>
<td>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 &amp; 4 are in process and designs are not yet complete. The D-B will forward to the Architectural Historian once complete.</td>
</tr>
<tr>
<td>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</td>
<td>X</td>
<td>Ongoing</td>
<td>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</td>
</tr>
<tr>
<td>Mitigation Measure</td>
<td>Mitigation Timing</td>
<td>Status</td>
<td>Status Notes</td>
</tr>
<tr>
<td>--------------------</td>
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</tr>
<tr>
<td></td>
<td>Pre-Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unique archaeological resources under PRC 21083.2 are present.</td>
<td></td>
<td></td>
<td>conclusion of construction activities.</td>
</tr>
<tr>
<td>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.</td>
<td>X</td>
<td>Ongoing</td>
<td>Exploratory trenching and subsurface testing of all potentially culturally sensitive areas is occurring 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.</td>
</tr>
<tr>
<td>CUL-2c: Conduct limited subsurface testing before performing ground-disturbing work within 50 meters of a known archaeological site.</td>
<td>X</td>
<td>Ongoing</td>
<td>Exploratory trenching and subsurface testing of all potentially culturally sensitive areas is occurring 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.</td>
</tr>
<tr>
<td>CUL-2d: Conduct exploratory trenching or coring of areas within the three zones of special sensitivity where subsurface project disturbance is planned.</td>
<td>X</td>
<td>Ongoing</td>
<td>Exploratory trenching and subsurface testing of all potentially culturally sensitive areas is occurring 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.</td>
</tr>
</tbody>
</table>

Appendix G – MMRP Status Log

G-8

April 30, 2018
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Present for all exploratory trenching and subsurface testing work.</strong></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL-2e: Stop work if cultural resources are encountered during ground-disturbing activities.</td>
<td>X</td>
<td>X</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No prehistoric or historic-period cultural materials have been observed during cultural monitoring.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL-2f: Conduct archaeological monitoring of ground-disturbing activities in areas as determined by JPB and SHPO.</td>
<td>X</td>
<td></td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL-3: Comply with state and county procedures for the treatment of human remains discoveries.</td>
<td>X</td>
<td></td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No human remains have been observed to date on the Project.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EMF-2: Minimize EMI effects during final design, Monitor EMI effects during testing, commission and operations, and Remediate Substantial Disruption of Sensitive Electrical Equipment.</strong></td>
<td>Pre-Construction: X</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>GEO-1: Perform a site-specific geotechnical study for traction power facilities.</td>
<td>X</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>GEO-4a: Identification of expansive soils.</td>
<td>X</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>GEO-4b: Mitigation of expansive soils.</td>
<td>X</td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAZ-2a: Conduct a Phase II Environmental Site Assessment prior to construction.</strong></td>
<td>Pre-Construction: X</td>
<td>Complete</td>
<td>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.</td>
</tr>
<tr>
<td><strong>HAZ-2b: Implement engineering controls and best management practices during construction.</strong></td>
<td>Pre-Construction: X</td>
<td>Ongoing</td>
<td>Field activities are being monitored daily for significant color changes or odors which may indicate contamination.</td>
</tr>
<tr>
<td><strong>HYD-1: Implement construction dewatering treatment, if necessary.</strong></td>
<td>Pre-Construction: X</td>
<td>Ongoing</td>
<td>Facilities &amp; BMPs are in place to deal with this requirement should it arise in the OCS foundations.</td>
</tr>
<tr>
<td><strong>HYD-4: Minimize floodplain impacts by minimizing new impervious areas for TPFs or relocating these facilities.</strong></td>
<td>Pre-Construction: X</td>
<td>Ongoing</td>
<td>The design requirements indicated in the measure are being implemented through the final design as described. The TPFs in Construction Segments 2 &amp; 4 are currently in design. The design minimizes hardscape only to required structure foundations; yard areas are to receive a pervious material.</td>
</tr>
<tr>
<td><strong>HYD-5: Provide for electrical safety at TPFs subject to periodic or potential flooding.</strong></td>
<td>Pre-Construction: X</td>
<td>Ongoing</td>
<td>The design requirements indicated in the measure are being implemented through the final design as described. The TPFs in Construction Segments 2 &amp; 4 are currently in design. The design plan currently raises the TPFs above the floodplain.</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Construction</td>
<td>Post-Construction</td>
<td>Operation</td>
</tr>
<tr>
<td>HYD-7: Implement sea level rise vulnerability assessment and adaptation plan.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>NOI-1a: Implement Construction Noise Control Plan.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>NOI-2a: Implement Construction Vibration Control Plan.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>PSU-8a: Provide continuous coordination with all utility providers.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU-8b: Adjust OCS pole foundation locations.</td>
<td>X</td>
<td>Ongoing</td>
<td>The design requirements indicated in the measure are being implemented through the final design as described.</td>
</tr>
<tr>
<td>PSU-8c: Schedule and notify users about potential service interruptions.</td>
<td>X X</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td>PSU-9: Require application of relevant construction mitigation measures to utility relocation and transmission line construction by others.</td>
<td>X X</td>
<td>Ongoing</td>
<td>JPB has initiated coordination with PG&amp;E regarding transmission line construction. Construction has not begun.</td>
</tr>
<tr>
<td>TRA-1a: Implement Construction Road Traffic Control Plan.</td>
<td>X X</td>
<td>Upcoming</td>
<td>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 and 4 and submitted.</td>
</tr>
<tr>
<td>TRA-1c: Implement signal optimization and roadway geometry improvements at impacted intersections for the 2020 Project Condition.</td>
<td>X X</td>
<td>Upcoming</td>
<td>This measure has not started</td>
</tr>
</tbody>
</table>
Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Construction</td>
<td>Construction</td>
<td>Post-Construction</td>
</tr>
<tr>
<td>TRA-2a: Implement construction railway disruption control plan.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>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</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Mitigation Timing</th>
<th>Status</th>
<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOI-CUMUL-2:</strong> Conduct project-level vibration analysis for Blended System operations and implement vibration reduction measures as necessary and appropriate for the Caltrain corridor</td>
<td>Pre-Construction</td>
<td>X</td>
<td>In Progress</td>
</tr>
<tr>
<td><strong>TRA-CUMUL-1:</strong> Implement phased program to provide traffic improvements to reduce traffic delays near at-grade crossings and Caltrain stations</td>
<td>Post-Construction</td>
<td>X</td>
<td>Upcoming</td>
</tr>
<tr>
<td><strong>TRA-CUMUL-2:</strong> Implement technical solution to allow electric trolley bus transit across 16th Street without OCS conflicts in cooperation with SFMTA.</td>
<td>Operation</td>
<td>X</td>
<td>Complete</td>
</tr>
<tr>
<td>Mitigation Measure <strong>TRA-CUMUL-3:</strong> As warranted, Caltrain and freight operators will partner to provide Plate H clearance as feasible between San Jose and Bayshore.</td>
<td></td>
<td>X</td>
<td>Upcoming</td>
</tr>
</tbody>
</table>
Peninsula Corridor Joint Powers Board
March 2018
Treasury Ratios
Preliminary and Unaudited

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Unrestricted Cash:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Cash</td>
<td>$33.7</td>
<td>$23.1</td>
<td>$17.4</td>
<td>$15.1</td>
<td>$15.8</td>
<td>$19.2</td>
<td></td>
</tr>
<tr>
<td>Capital Cash</td>
<td>23.5</td>
<td>35.8</td>
<td>40.9</td>
<td>34.2</td>
<td>33.6</td>
<td>29.2</td>
<td></td>
</tr>
<tr>
<td>Total Unrestricted Cash</td>
<td>57.2</td>
<td>58.9</td>
<td>58.4</td>
<td>49.3</td>
<td>49.4</td>
<td>48.4</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Restricted Cash:</strong></td>
<td>26.1</td>
<td>26.4</td>
<td>26.2</td>
<td>26.0</td>
<td>25.9</td>
<td>25.2</td>
<td>20.9</td>
</tr>
<tr>
<td>Total Cash</td>
<td>$83.3</td>
<td>$85.2</td>
<td>$84.6</td>
<td>$75.3</td>
<td>$75.4</td>
<td>$73.6</td>
<td>25.1</td>
</tr>
<tr>
<td><strong>Days Cash on Hand:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td>128</td>
<td>88</td>
<td>69</td>
<td>63</td>
<td>69</td>
<td>87</td>
<td>-</td>
</tr>
<tr>
<td>All Unrestricted Cash</td>
<td>217</td>
<td>226</td>
<td>231</td>
<td>206</td>
<td>216</td>
<td>220</td>
<td>13</td>
</tr>
<tr>
<td>All Cash</td>
<td>317</td>
<td>327</td>
<td>334</td>
<td>315</td>
<td>329</td>
<td>335</td>
<td></td>
</tr>
<tr>
<td><strong>Debt Service as a % of Operating Revenue</strong></td>
<td>0.9%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Debt Outstanding as a % of Operating Revenue</strong></td>
<td>23.6%</td>
<td>26.3%</td>
<td>26.0%</td>
<td>25.5%</td>
<td>24.7%</td>
<td>24.2%</td>
<td>35.8%</td>
</tr>
<tr>
<td><strong>Debt Service Coverage (including Formula Grants)</strong></td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
<td>3.9</td>
</tr>
</tbody>
</table>
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: CALTRAIN POSITIVE TRAIN CONTROL PROJECT UPDATE - MAY 2018

ACTION
Staff Coordinating Council recommends that the Board receive the Positive Train Control (PTC) report for May 2018.

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. Status on Major Milestones to Successfully Enter RSD December 2018

<table>
<thead>
<tr>
<th>Key Project Activity</th>
<th>Expected Completion</th>
<th>Progress As Of 5/31/18</th>
<th>Progress On Track?</th>
<th>Mitigation Required / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of Designated RSD Test Request</td>
<td>May 31</td>
<td>In Process</td>
<td>Yes</td>
<td>Test Request submitted in April to FRA for review and approval</td>
</tr>
<tr>
<td>Approval of revised project PTC Implementation Plan (PTCIP) and Request for Amendment (RFA)</td>
<td>May 31</td>
<td>In Process</td>
<td>Yes</td>
<td>Revised PTCIP and RFA submitted in May for review and approval, to be used by FRA in conjunction with their review of the Test Request</td>
</tr>
<tr>
<td>Pilot Installations (4) Completed</td>
<td>June 20</td>
<td>In Process</td>
<td>Yes</td>
<td>First pilot completed, next pilot in process</td>
</tr>
<tr>
<td>Submit Designated RSD Application</td>
<td>Oct 15</td>
<td>Not Started</td>
<td>Not Started</td>
<td>No issues at this time, discussions with FRA ongoing to insure clarity in process</td>
</tr>
<tr>
<td>Complete Critical Feature V&amp;V</td>
<td>Oct 30</td>
<td>In Process</td>
<td>Yes</td>
<td>Designated RSD area informal V&amp;V survey in process, no issues at this time</td>
</tr>
<tr>
<td>Designated RSD Training Complete</td>
<td>Nov 14</td>
<td>Not Started</td>
<td>Not Started</td>
<td>Master Test Plan reviewed, material development starts in July</td>
</tr>
<tr>
<td>Designated RSD - Required Vehicle Install Completion*</td>
<td>Nov 27</td>
<td>Not Started</td>
<td>Not Started</td>
<td>(44) Total installs required – (4) pilot plus (40) other vehicles</td>
</tr>
<tr>
<td>Complete All Designated RSD Testing (Lab, Functional and FQT)</td>
<td>Dec 18</td>
<td>Not Started</td>
<td>Not Started</td>
<td>Lab testing begins Aug 16, field testing Sept 28, PTC functional testing Nov 27</td>
</tr>
<tr>
<td>Start of Designated RSD*</td>
<td>Dec 18</td>
<td>Not Started</td>
<td>Not Started</td>
<td>Complete (44) installs and receive FRA approval to run in PTC mode in Designated RSD area</td>
</tr>
</tbody>
</table>

*Key project activity that is tied to Wabtec performance incentive payment
Major Wabtec activities started and/or completed in May:

- Mobilized Wabtec onboard installation resources (personnel, office and storage space) for commencement of pilot installations, including safety training, security clearance requirements.
- Completed first pilot installation of I-ETMS onboard equipment on a Caltrain locomotive (including removal of I-ITCS equipment no longer required). Second pilot has begun (installation on a Caltrain cab car).
- Initial field survey of the designated RSD section (approximately 15 miles) using hi-rail vehicles.
- Began system-wide fiber audit to determine the scope of repair required from the installation performed under the previous integrator. This audit will also result in updated As-Built drawings that correctly display the PTC fiber network and will be used by other capital projects as needed for their work as well as Caltrain day to day maintenance of the overall system.
- Large number of contract submittals have been submitted by Wabtec, reviewed and comments returned by Caltrain project team. A sampling of the submittals include:
  - Installation Validation Test Procedure
  - Subdiv Issues Log
  - F40PH-2CAT Installation Guide
  - Brake Testing
  - Project Management Plan
  - Gallery Cab Car Survey
  - Master Training Plan
  - Field V&V Critical Features Test Plan
  - Quality Management Plan
  - Systems Engineering Plan
- Antenna study of Caltrain locomotives to determine if current configurations are appropriate for use with I-ETMS equipment.
- Audit of Caltrain base stations and determination of modifications required for implementation of full PTC operational mode.

2. **Change Order Log** – There have been no change orders requested from Wabtec during this reporting period, and there are none in process or review by JPB. This section will track all change activity on the contract.

3. **Risk Management** - JPB and Wabtec agreed to share the management of an identified list of risk items which 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 the JPB. Risk review meetings between the JPB and Wabtec will be held on a quarterly basis, the first review will occur in June, with the resulting update and actions to be noted in this report. 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):
<table>
<thead>
<tr>
<th>Risk Item</th>
<th>Type</th>
<th>Mitigation Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential EMU delay due to move from I-ITCS to I-ETMS</td>
<td>External</td>
<td>Support EMU team effort to bring Wabtec under contract to provide PTC solution required for EMU cars with minimal delay</td>
</tr>
<tr>
<td>FRA process changes</td>
<td>External</td>
<td>Maintain close and open relationship with key FRA contacts to insure all submittals are done correctly and within required time frame to achieve 2018 RSD</td>
</tr>
<tr>
<td>FRA review cycle delays</td>
<td>External</td>
<td>Potential for delays incurred due to significant volume of submittals from all properties requiring review and approval of RSD documentation prior to year end</td>
</tr>
<tr>
<td>Interoperability delays</td>
<td>External</td>
<td>Work with UPRR and tenants to insure agreed to interoperability schedule dates are maintained</td>
</tr>
<tr>
<td>Missing WIU mapping files</td>
<td>Internal</td>
<td>Required configuration files not received from previous system integrator, could lead to significant re-work effort if Wabtec is required to recreate them.</td>
</tr>
<tr>
<td>Onboard installation delays</td>
<td>Internal</td>
<td>Uphold review schedule for pilot design approval and insure production installation schedule is maintained by Wabtec to achieve required 2018 installs to achieve RSD</td>
</tr>
<tr>
<td>Track access delays</td>
<td>Internal</td>
<td>Insure field test schedule is maintained by coordinating all field work in combination with other capital projects needs</td>
</tr>
<tr>
<td>Back Office Server (BOS) documentation scope creep</td>
<td>Internal</td>
<td>Insure standard documentation supplied by Wabtec meets requirements of Caltrain specification criteria</td>
</tr>
</tbody>
</table>

4. Cost – Spend vs budget

<table>
<thead>
<tr>
<th>Project Cost Analysis</th>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>(E)</th>
<th>(F) = (C – E)</th>
<th>(G) = (D/E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROOSS PTC Project (Jan 2016 - Feb 2019)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original Budget (US$MM)</td>
<td>$231.30</td>
<td>$258.60</td>
<td>$297.67</td>
<td>$297.67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Caltrain PTC Project (March 1st 2018 - June 2020):

<table>
<thead>
<tr>
<th>Project Cost Analysis</th>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>(E)</th>
<th>(F) = (C – E)</th>
<th>(G) = (D/E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrator WABTEC Contract</td>
<td>$45.91</td>
<td>$45.91</td>
<td>$2.34</td>
<td>$2.34</td>
<td>$0.00</td>
<td>-</td>
<td>5.20%</td>
</tr>
<tr>
<td>Other Contractors</td>
<td>$6.90</td>
<td>$6.90</td>
<td>$0.00</td>
<td>$0.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Potential Changes</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Potential Incentive - WABTEC</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Program Costs</td>
<td>$39.34</td>
<td>$39.34</td>
<td>$1.11</td>
<td>$1.11</td>
<td>$0.00</td>
<td>-</td>
<td>3.67%</td>
</tr>
<tr>
<td>Project Contingency</td>
<td>$6.90</td>
<td>$6.90</td>
<td>$0.00</td>
<td>$0.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total PTC Project</td>
<td>$89.41</td>
<td>$89.41</td>
<td>$3.35</td>
<td>$3.35</td>
<td>$0.00</td>
<td>-</td>
<td>3.75%</td>
</tr>
</tbody>
</table>

Note: Expanded and Actual to Date is through April 30, 2019.
1. Expanded and Actual to Date is through April 30, 2019.
2. Integrator WABTEC Contract Value includes Shared Risk with total not to exceed total of $1.33MM.
3. Other Contractors amount includes ROOSS Modification and potential fiber fixes.
4. Potential Changes amount is set for future project change orders as result of WABTEC assessment and survey for the communications and office subsystems.
5. Potential Incentive amount reflects what is in the WABTEC confirmed agreement.
6. Other Program Costs includes JIP project oversight costs, T&I support and other direct cost for PTC project delivery.
7. Project contingency includes a) contingencies for WABTEC contract per board staff reports; b) JIP project team cost contingency.
8. ROOSS PTC project budget and actual cost are highlighted to reflect prior March 1st, 2018 ROOSS project financial data.
5. **Items of note in May** - This section reports on PTC general progress and issues being tracked outside the Wabtec contract during the current reporting month.

1) Completed a scope of work and issued the Notice To Proceed (NTP) to ARINC / Rockwell Collins for CAD support required to upgrade the Caltrain ROCS system as related to the Back Office Server (BOS) upgrade to be performed by Wabtec as a part of the PTC project. Work has begun to update BCCF equipment in support of BOS upgrade.

2) Submitted revised PTC Implementation Plan (IP) and Request For Amendment (RFA) on Monday May 7, 2018 detailing the move from I-ITCS to I-ETMS to the FRA for review / approval. This are key project submittals linking to the successful approval other documents required to achieve RSD.

3) Revised and re-submitted the FTA / FRA testing grant ($2.8M) to reflect the move from I-ITCS to an I-ETMS PTC solution for the Caltrain system.

4) Project reviewing WIU mapping / configuration files received by JPB legal team from previous integrator and required for new integrator to implement PTC system. Project considering path forward to maintain WIU updates via maintenance agreement with previous integrator signaling subcontractor.

5) Submitted 2017 Annual PTC Status Report to FRA

6) Began review of application requirements and review criteria for potential new grant under recently announced Consolidated Rail Infrastructure and Safety Improvements funding.

7) Ongoing informal updates to the FRA to insure the Caltrain PTC project provides all information required in timely and correct manner expected to achieve RSD this year. Building strong relationships with the FRA regional personnel key to insuring minimal if any delays in the review process.

8) Continued updates to Caltrain tenant railroads and the UPRR, discussing the Caltrain project re-start and plans to achieve PTC interoperability for the Caltrain and UPRR properties.
   a. Supplied high level project schedules to Caltrain tenants to provide tentative interoperability testing dates for tenant planning purposes.

9) Project team in final stages of completing review / replan of overall program budget required to complete the PTC project. Once replan is complete, the JPB executive staff will submit the revised budget to the PTC Ad Hoc committee and Board for review.

10) The PTC project continues its coordination efforts with the Electrification and EMU programs via regularly scheduled status meetings such as the Biweekly CalMod Systems Integration, the PCEP Delivery Coordination and the PTC-PCEP coordination meetings. Ad hoc meetings to discuss topics requiring indepth or immediate decisions are held as needed.

11) Supplied high level baseline schedules to Caltrain capital projects for planning / coordination purposes.

12) Hosted meeting of MTA04 regional partners (BNSF, UPRR) to status PTC progress and plan coordination activities for federated network activities.

13) Performed field audit of Wayside Interface Units (WIUs) in designated RSD section. Four units determined not functioning but corrective action taken to restore functionality.

14) Caltrain configuration management (CM) manager is fully integrated into project team to insure all Caltrain CM requirements are maintained during project execution and transition to daily operations upon project completion.

15) Caltrain Go Live team reinstated to insure smooth transition of PTC operations and maintenance upon project completion. These efforts include manloading planning for
both Caltrain and TASI operations as well as coordination of Master Service Agreements (MAS) negotiations with key suppliers required to support PTC long term service needs.

6. **Upcoming Key Activities in June**
   1) Initiate and complete all remaining pilot onboard installations on Caltrain fleet - Wabtec will install their onboard PTC product on (4) types of vehicles that have been chosen for the (44) total vehicles to be installed and tested to complete the RSD requirements for fleet installations.
   2) Complete anticipated FRA approval for the designated RSD track segment (15 miles) required for achieving RSD in 2018.
   3) Continue V&V testing activities in designated RSD area to insure PTC equipment is in good working condition prior to start of full filed testing this summer.
   4) Informal submission of project PTC functional test procedures to FRA for comment
   5) Begin implementation and testing of Caltrain test lab system
   6) Attend (with freight and other commuter rail authorities) proposed FRA coordination meeting in Washington, D.C. to gain FRA direction / insights to insure smooth coordination and reviews of RSD application documentation toward goal of gaining 2018 RSD approvals.
   7) Attend key quarterly APTA meeting in Denver to discuss RSD progress with APTA representatives and other railroads.
   8) Select project and integrator team members will attend training session covering MTA04 design topics approved by the PTC-220, Spectrum Management Committee.

Prepared By: Matt Scanlon, Deputy Director, Systems 650.622.7819
AGENDA ITEM #8  
JUNE 7, 2018

PENINSULA CORRIDOR JOINT POWERS BOARD  
STAFF REPORT

TO: Joint Powers Board  
THROUGH: Jim Hartnett  
Executive Director  
FROM: Derek Hansel  
Chief Financial Officer  
SUBJECT: APPROVAL AND RATIFICATION OF THE FISCAL YEAR 2019 INSURANCE PROGRAM

ACTION  
Staff Coordinating Council (SCC) recommends the Board approve and ratify the Peninsula Corridor Joint Powers Board (JPB) insurance program for Fiscal Year (FY) 2019 at a total premium cost not to exceed $4,173,802 inclusive of the following:

- Increase the self-insured retention on the liability program from $1 million to $2 million;
- Purchase $198 million of coverage for Railroad Liability, Commercial General Liability and Excess Automobile Liability, including terrorism coverage, at an annual premium of $3,125,484;
- Purchase property insurance with limits of $400 million at an annual premium of $783,423 for real and personal property, to include Centralized Equipment Maintenance and Operations Facility (CEMOF), stations, tunnels, bridges, culverts, signals, railroad equipment, and rolling stock. This insurance also continues to provide coverage against terrorism, as well as boiler and machinery perils for real property and CEMOF sufficient to meet the State of California inspection requirements;
- Purchase a $15 million Public Officials Liability policy at an annual premium of $118,318.
- Purchase an annual Special Events and Emergency Drill liability policy with a $2 million limit for a premium of $28,085;
- Purchase Railroad Protective Liability coverage at an annual premium of $44,941; and
- Purchase a $10 million Pollution liability policy for a new 2-year term for a premium of $73,551.

SIGNIFICANCE  
The proposed FY2019 insurance program will provide the JPB with coverage levels similar to those that exist in the FY2018 insurance program with the exception of the
increase in the self-insured retention. The coverage as a whole is being provided at a lower cost due to the JPB’s excellent loss experience and as a result of the increase in self-insured retention. Staff concluded that the increase in retention is advisable because of the favorable loss history and the premium savings associated with the retention increase.

Property catastrophes nationwide were substantial last year, which has impacted the property insurance market, resulting in higher premiums. Despite a 5 percent increase in exposures, the JPB’s property insurance program’s rate decreased 5 percent as it is in the second-year of a two-year program that included an attractive rate reduction feature. This lower rate is dependent on no losses exceeding 25 percent of the premiums; while the JPB currently has some open claims, they are not expected to exceed that cap.

Limits on the JPB’s Public Officials liability program remain the same, at $15 million, while the deductible of $75,000 is also the same. Premiums remain flat. The JPB was able to renew an annual Special Events liability policy with a limit of $2 million. This coverage includes a $25,000 self-insured retention and protects the JPB during what are sometimes higher hazard operations for its annual special train events and Emergency Training exercises. The JPB renewed a new two-year term for Pollution Liability this year at a premium that was slightly more than two years ago. The JPB maintains the blanket Railroad Protective Liability program with the same program limits.

Below is an overview of the JPB’s FY2018 and FY2019 premiums:

<table>
<thead>
<tr>
<th>Premium Element</th>
<th>FY2018</th>
<th>FY2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liability: Railroad, Commercial General, Excess Automobile</td>
<td>$3,382,547</td>
<td>$3,125,484</td>
</tr>
<tr>
<td>Liability: Environmental (no premium was included for FY2018)</td>
<td>$0</td>
<td>$73,551</td>
</tr>
<tr>
<td>Public Officials, Special Events &amp; Railroad Protective Liability</td>
<td>$191,306</td>
<td>$191,344</td>
</tr>
<tr>
<td>Property</td>
<td>$782,639</td>
<td>$783,423</td>
</tr>
<tr>
<td>Totals</td>
<td>$4,356,492</td>
<td>$4,173,802</td>
</tr>
</tbody>
</table>

**BUDGET IMPACT**
Estimated funds to underwrite the recommended program are included in the FY2019 Operating Budget proposed for adoption at this June 7 Board meeting.

**BACKGROUND**
The JPB’s liability limits remain at $200 million with an additional $100 million provided by Transit America Services, Inc. (TASI) for a total of $300 million in FY2019. Underwriters are continuing to focus on risk selection, adjusting pricing to reflect exposures and claims.

Prepared by: Marshall Rush, Claims Administrator 650.508.7742
RESOLUTION NO. 2018-

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

***

APPROVING AND RATIFYING THE INSURANCE PROGRAM FOR
FISCAL YEAR 2019

WHEREAS, the Executive Director of the Peninsula Corridor Joint Powers Board (J PB) has approved an insurance program for Fiscal Year (FY) 2019 with premiums totaling $4,173,802, which program was presented to the Staff Coordinating Council (SCC); and

WHEREAS, in conjunction with the expiration of the J PB’s existing insurance program on June 30, 2018, J PB staff renewed its insurance program for FY2019 based on the plan approved by the Executive Director, with the following significant elements:

1. A self-insured retention in the amount to $2 million;
2. Railroad Liability, Commercial General Liability and Excess Automobile Liability policies, including Terrorism (TRIA) coverage, with a total limit of $198 million, in excess of the $2 million self-insured retention, at an annual premium of $3,125,484;
3. Property insurance, including Special Risk property policies, at an annual premium of $783,423 with limits of $400 million to cover real and personal property, including stations, the Centralized Equipment Maintenance and Operations Facility, tunnels, bridges, culverts, signals, railroad equipment, and rolling stock, as well as Boiler and Machinery insurance sufficient to meet the State of California inspection requirements;
4. Public Officials Liability coverage with $15 million limits at an annual premium of $118,318;
5. Annual Special Events and Emergency Drill liability with a $2 million limit at a premium of $28,085;

6. Railroad Protective Liability coverage with an annual premium of $44,941;

7. Pollution Liability insurance at a $10 million limit for a new 2-year term for a premium of $73,551; and

WHEREAS, SCC recommends that the Board approve and ratify the renewal of the JPB’s insurance program for FY2019, as delineated above.

NOW, THEREFORE, BE IT RESOLVED that the Peninsula Corridor Joint Powers Board hereby approves and ratifies the renewal of the JPB’s insurance program for FY2019, including the types of coverage, limits and premiums recited above.

Regularly passed and adopted this 7th day of June, 2018 by the following vote:

AYES:

NOES:

ABSENT:

Chair, Board of Directors

ATTEST:

______________________________

J PB Secretary
AGENDA ITEM #9
JUNE 7, 2018

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board
THROUGH: Jim Hamnett
Executive Director
FROM: Michelle Bouchard Derek Hansel
Chief Operating Officer Chief Financial Officer
SUBJECT: ADOPTION OF FISCAL YEAR 2019 OPERATING BUDGET AND FISCAL YEAR 2019 CAPITAL BUDGET, AND ESTABLISHMENT OF A REVENUE STABILIZATION FUND

ACTION
Staff Coordinating Council (SCC) recommends the Board:
1. Adopt a Fiscal Year (FY)2019 Operating Budget of $151,514,821;
2. Adopt an FY2019 Capital Budget of $42,748,255; and
3. Establish a $4.0 million Revenue Stabilization Fund (RSF) from Peninsula Corridor Joint Powers Board (JPB) reserves as part of the Operating Budget.

The RSF would be used, subject to Board of Directors (Board) authority, to fund JPB operating requirements.

SIGNIFICANCE
In the development of the FY2019 budgets, staff attempted to address a number of challenges to the JPB's ability to achieve structural balance. These challenges include increasing costs for “baseline” service, costs associated with legal mandates (including Positive Train Control (PTC)), risks associated with certain uncontrollable expenses (including fuel), and the JPB's lack of a dedicated non-fare-revenue funding stream. These challenges are exacerbated by the three JPB member agencies being unable to keep up with the operating and capital demands of the system, and by limited Caltrain system operating capacity during peak periods, which materially limits Caltrain’s flexibility to modify service levels.

Fiscal Year 2019 Operating Budget
The proposed Operating Budget, outlined in the following pages, reflects a number of hard choices. Service levels in the proposed Operating Budget remain unchanged from the current service levels. On the revenue side, staff has included increased fare revenue associated with the fare increases adopted by the Board in August 2017, as well as an assumption of 2% ridership growth (which is consistent with recent trends). On the expense side of the budget, a number of costs are projected to increase due to inflation and contractual requirements. Operating costs associated with PTC implementation are projected to increase by approximately $0.5 million, which cost will
increase substantially in FY20. The proposed budget includes staffing additions of 2.4 full-time-equivalent (FTE), the costs of which are largely offset by an increase in the projected vacancy rate from 3% to 6%. Use of contract resources, both for specific projects as well as seconded staff, is projected at a slight increase from forecasted FY18 actuals, but a substantial decrease from the FY18 budget. The budget includes a modest increase in diesel fuel prices, and assumes that the need to reserve for insurance claims remains relatively modest.

Assuming no increase in operating funding contributions from the JPB’s member agencies over FY2018, the budget would be left with a projected deficit of $6.2 million. As discussed during the Board’s special meeting on April 4, 2018, and during the Board’s May 3, 2018 regular meeting, staff has recommended that the JPB member agencies agree to invest an additional $5.0 million, in the aggregate, for FY2019 operations. As a result, staff proposes the establishment of a “Revenue Stabilization Fund” (RSF), in the amount of $4.0 million, funded by JPB reserves. A portion of the RSF would be used to close what would otherwise be an operating budget deficit.

Both the San Francisco Municipal Transportation Authority (SFMTA) and the San Mateo County Transit District (SMCTD) have agreed to increase their shares of the operating budget for FY19. The balance of the member agencies’ combined $5.0 million additional contribution will be provided by the Santa Clara Valley Transportation Authority (VTA), which has agreed to a reallocation of its existing level of funding.

Fiscal Year 2019 Capital Budget
For the capital budget, staff has proposed that member agency funding increase from $15.0 million in aggregate ($5.0 million per member) to $22.5 million in aggregate ($7.5 million per member). This increase will allow the JPB to undertake critical work relative to rolling stock “state-of-good-repair” that has been deferred for a number of years; nonetheless, it is important to note that even with this increased funding, the capital budget would fall well short of desired levels in this critical area. If capital funding from the member agencies were to continue at the FY18 levels, it would not be possible to do this work, which staff believes could impact system-wide performance levels.

The SFMTA has agreed to increase its capital funding to $7.5 million. The San Mateo County Transportation Authority is expected to allocate $7.5 million for FY19 capital budget during summer 2018, consistent with its typical practice. The VTA is being asked to approve providing an additional $4.3 million in capital funding from its Measure B, which, when combined with existing capital funding of $3.2 million (subsequent to the reallocation of VTA’s current funding levels discussed above) will bring VTA’s combined capital funding investment up to $7.5 million for FY19.
CALTRAIN’S OPERATING BUDGET

The FY19 Proposed Operating Budget attempts to strike a balance between the needs of the service and the fiscal realities discussed above. Staff has worked to develop an expense budget that is realistic; that recognizes the realities of the revenue constraints of the agency and that is clear as to the risks being taken in the context of the budget. On the revenue side, we have factored in the already adopted fare increases that will take effect in FY19. Additionally, we have worked with staff of the JPB’s member agencies to lay the groundwork for additional operating investments that could significantly lower the projected operating deficit.

Please refer to Attachment A - FY19 Proposed JPB Financial Statement- Comparative Budgets

A comparative schedule of the FY19 Proposed Operating Budget shows the FY2017 actual, FY18 Revised Budget, FY18 Forecast and the FY19 Proposed Budget.

The line numbers for each revenue and expense item refer to the corresponding line numbers on Attachment A

Following is a description of the sources of revenue for PCJPB.

Fiscal Year 2019 Revenue Projections

Total revenues for FY19 are projected to be $150.3 million, an increase of $14.2 million or 10.4% over the FY18 Forecast.

Revenue from Operations for FY19 is projected at $119.4 million, an increase of $9.8 million or 8.9% over the FY18 Forecast. The revenue from Operations accounts for 79.4% of total revenue.

Revenue from Contributions for FY19 is projected at $30.9 million, an increase of $4.4 million or 16.6% higher than the FY18 Forecast.

REVENUE FROM OPERATIONS

Line 1 Farebox Revenue
Farebox revenue includes fare receipts collected directly from rail passengers or through pass sales. Farebox revenue for FY19 is projected at $107.8 million, an increase of $9.4 million or 9.5% over the FY18 Forecast. In FY19, Farebox revenue is projected to recover 71.6% of total expenses. GoPass is projected to account for 19.0% of total Farebox revenue in FY19.
With the increasing cost of operations, the uncertainties in other fund sources and the anticipated completion of a fare study, the Board approved in its August 2017 meeting, several rail agency fare increases to be implemented over a period of time. The FY19 proposed budget reflects the approved fare increases for FY19.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caltrain Fares</td>
<td>78,145,033</td>
<td>84,917,839</td>
<td>84,917,839</td>
<td>87,297,684</td>
<td>2,379,845</td>
<td>2.8%</td>
</tr>
<tr>
<td>GoPass</td>
<td>14,283,856</td>
<td>13,509,669</td>
<td>13,509,669</td>
<td>20,497,645</td>
<td>6,987,976</td>
<td>51.7%</td>
</tr>
<tr>
<td>Farebox Revenue</td>
<td>92,428,889</td>
<td>98,427,508</td>
<td>98,427,508</td>
<td>107,795,329</td>
<td>9,367,821</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

With the increasing cost of operations, the uncertainties in other fund sources and the anticipated completion of a fare study, the Board approved in its August 2017 meeting, several rail agency fare increases to be implemented over a period of time. The FY19 proposed budget reflects the approved fare increases for FY19.

Line 2 Parking Revenue
Parking revenue is generated from fees at parking lots at various passenger stations and from a parking lot located at the SAP Center adjacent to the San Jose Diridon station. Together with the rail agency fare increase was an increase in the monthly parking pass. This parking rate increase went into effect with the October 2017 monthly pass. Parking revenue for FY18 Forecast is projected to be lower than FY18 revised budget due to an accounting change and lower parking demand.
Line 3 **Shuttle Revenue**

The Shuttle Service Program is funded by participating employers, the San Mateo County Transportation Authority, AB434 Bay Areas Air Quality Management District funds and JPB operating funds. This particular revenue account refers to the revenue generated from participating local area employers. This shuttle program provides rail passengers the last-mile connections between Caltrain stations and the participating local area employers. For FY19, this revenue source is projected at $2.7 million, an increase of $0.2 million or 9.0% over the FY18 Forecast.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>Change from FY2019 Proposed to FY2018 Forecast</th>
<th>% of Change from FY2019 Proposed to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Revenue-TVM/Others</td>
<td>4,607,540</td>
<td>5,464,023</td>
<td>4,303,557</td>
<td>(125,775)</td>
<td>-2.9%</td>
</tr>
<tr>
<td>Parking Revenue-Central</td>
<td>709,390</td>
<td>855,238</td>
<td>811,563</td>
<td>183,123</td>
<td>22.6%</td>
</tr>
<tr>
<td>Parking Revenue-Arena</td>
<td>350,182</td>
<td>413,365</td>
<td>386,543</td>
<td>96,969</td>
<td>25.1%</td>
</tr>
<tr>
<td>Parking Citation Program</td>
<td>160,039</td>
<td>138,976</td>
<td>88,821</td>
<td>101,098</td>
<td>113.8%</td>
</tr>
<tr>
<td>Total Parking Revenue</td>
<td>5,827,151</td>
<td>6,871,603</td>
<td>5,590,484</td>
<td>255,416</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

Over a 3-year period, employer share averaged 49.0% of total shuttle revenues.

Line 4 **Rental Income**

Rental income is generated from the right of way properties and from bike locker rentals. Rental income for FY19 is projected at $1.9 million, an increase of $0.1 million or 7.6% over the FY18 Forecast.
Rental income from bike lockers is projected to be reduced by 81.7% in FY19. This is a result of the closure of bike locker facilities due to construction activities in several of the larger rail stations, including San Francisco, Palo Alto and San Carlos.

Line 5 Other Income
Other Income consists of income earned on invested funds, shared track usage maintenance fees, and advertising Income. Other Income for FY19 is projected at $1.2 million, a decrease of 14.7% from the FY18 Forecast.

In FY19, the projected advertising revenue is lower than FY18 Forecast due to the contract’s compensation structure which does not guarantee that revenue will remain at these levels.

In FY2017, shared track maintenance revenue represents a one-time catch-up maintenance payment from Union Pacific Railroad.

CONTRIBUTIONS

Line 9 AB434 & TA Shuttle Funding
In 1991, Assembly Bill (AB) 434, the California State Legislature authorized the State to impose a $4 surcharge on cars and trucks to fund projects that reduce on-road motor vehicle emissions. This fund provides partial funding for the JPB shuttle program through a competitive grant process. AB434 & TA Shuttle Funding for FY19 is projected at $1.8 million or 1.6% below the FY18 Forecast.
Operating Grants

The State Transit Assistance (STA) revenue is generated from the statewide sales tax on diesel fuel and is allocated to the region’s transit operators by formula. The formula allocates funds on the basis of population, amount of passenger fares and local support revenues collected by transit operators. The funding for FY19 is projected at $3.7 million, a decrease of $0.6 million or 13.2% lower than the FY18 Forecast.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>A8434 - California Clean Air A</td>
<td>1,125,139</td>
<td>557,300</td>
<td>557,300</td>
<td>537,200</td>
<td>(20,100)</td>
<td>-3.6%</td>
</tr>
<tr>
<td>TA Contr-SM Cnty Caltrain Shut</td>
<td>708,419</td>
<td>1,239,000</td>
<td>1,239,000</td>
<td>1,230,500</td>
<td>(8,500)</td>
<td>-0.7%</td>
</tr>
<tr>
<td>A8434 &amp; TA Shuttle Funding</td>
<td>1,833,559</td>
<td>1,796,300</td>
<td>1,796,300</td>
<td>1,767,700</td>
<td>(28,600)</td>
<td>-1.6%</td>
</tr>
</tbody>
</table>

JPB Member Agencies

JPB has three member agencies: the San Francisco Municipal Transportation Agency (SFMTA), the San Mateo County Transit District (SMCTD) and the Santa Clara Valley Transportation Authority (SCVTA). Funds from agency members are calculated based on an allocation methodology of average weekday boarding data including Gilroy, adjusted with passenger data collected in FY2017.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPB Member Agencies</td>
<td>20,448,014</td>
<td>20,448,014</td>
<td>20,448,014</td>
<td>25,448,014</td>
<td>5,000,000</td>
<td>24.5%</td>
</tr>
</tbody>
</table>

The aggregate JPB member agency funding commitments are broken down as follows: $7.0 million SFMTA, $7.6 million SMCTD and $10.8 million SCVTA.

Following is a description of the primary expenses incurred by JPB. A comparative schedule of the FY19 Operating Budget shows the FY2017 actual expenses, FY18 Revised Budget, FY18 Forecast and the FY19 Proposed Budget.

Fiscal Year 2019 Expense Projections

Grand Total Expense for FY19 is projected at $151.5 million, an increase of $11.2 million or 8.0% over the FY18 Forecast.
Operating Expense for FY19 is projected at $123.9 million, an increase of $7.1 million or 6.1% over the FY18 Forecast.

Administrative Expense for FY19 is projected at $26.4 million, an increase of $4.1 million or 18.6% over the FY18 Forecast.

OPERATING EXPENSE

Line 19 Rail Operator Service
The JPB contracts out for rail operation service. The current operator contract is with TransitAmerica Services, Inc. (TASI). TASI was awarded the contract on September 1, 2011 for a five year agreement which expired on June 30, 2017, with an option to extend for up to another 5 years. On February 2, 2017, the Board approved to execute an amendment to exercise the five one-year options to extend the contract through June 30, 2022.

TASI provides rail operations, maintenance and support services in the following areas: Administration/Safety, Operations and Dispatch, Maintenance of Equipment, Track, Communications and Signals, Stations; Construction Support and State of Good Repair (SOGR). TASI is paid on cost plus a Performance Fee contract structure.

The FY18 Forecast is at lower levels than budgeted due to the diversion of TASI resources to the Peninsula Corridor Electrification Program. The FY19 Proposed Budget reflects the resumption of TASI work on Rail Operator Services.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Operator Service</td>
<td>80,378,952</td>
<td>84,418,672</td>
<td>83,378,587</td>
<td>87,385,577</td>
<td>4,006,990</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

The FY18 Forecast is at lower levels than budgeted due to the diversion of TASI resources to the Peninsula Corridor Electrification Program. The FY19 Proposed Budget reflects the resumption of TASI work on Rail Operator Services.

Line 20 Positive Train Control
Positive Train Control (PTC) is an advanced signal system that will equip the corridor with federally-mandated safety technology and increase system capacity to help accommodate future increases in ridership demand. This control technology will provide a system capable of reliability and functionality to prevent train-to-train collisions, over-speed derailments, and the movement of a train through a main line switch in the wrong position.

The FY19 budget includes those portions of the PTC Maintenance contract and rent expense for the Backup Control Center Facility (BCCF) that are not appropriately capitalized as system development expenses. In FY19, the PTC budget was focused on the development of the configuration management program. The PTC expense for FY19 is projected at $1.4 million, an increase of $0.5 million or 60.2% over the FY18 forecast.
Security Services

Security services are provided through a law enforcement contract and a communications services contract with the San Mateo County Sheriff’s Office. These services support Rail operations and provide for additional sheriff coverage for special events. These contracts were renegotiated in the second half of FY18 and are reflected in the forecast. Security services are projected at $6.2 million for FY19, an increase of $0.3 million or 5.2% over the FY18 Forecast.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Train Control</td>
<td>278,691</td>
<td>900,000</td>
<td>900,000</td>
<td>1,442,000</td>
<td>542,000</td>
<td>60.2%</td>
</tr>
<tr>
<td>Security Services</td>
<td>5,434,038</td>
<td>5,882,760</td>
<td>5,865,760</td>
<td>6,172,151</td>
<td>306,391</td>
<td>5.2%</td>
</tr>
<tr>
<td>Shuttle Service</td>
<td>4,584,884</td>
<td>5,161,000</td>
<td>4,760,700</td>
<td>5,444,500</td>
<td>683,800</td>
<td>14.4%</td>
</tr>
</tbody>
</table>

Shuttles

Shuttle service provides for last-mile connections for Caltrain passengers. The FY18 Forecast is lower than budgeted due to reduced service levels for routes affected by driver shortages. The total Shuttle service cost is projected at $5.4 million, an increase of $0.7 million or 14.4% over the FY18 Forecast. The FY19 proposed budget includes additional service to the Pacific Shores route.

Fuel

This covers the cost of diesel fuel for JPB locomotive operations, including the associated taxes. Fuel costs for FY19 are projected at $10.8 million, an increase of $0.9 million or 8.6% over the FY18 Forecast.
Timetables and Tickets

Timetables and Tickets include the cost of design, update and printing of Time Tables, Schedules, Maps and the Caltrain tickets. Timetables and Tickets costs for FY19 are projected at slightly lower than the FY18 Forecast.

### Timetables and Tickets Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Tables, Schedules, &amp; Maps</td>
<td>55,198</td>
<td>90,000</td>
<td>90,000</td>
<td>90,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tickets</td>
<td>69,793</td>
<td>54,700</td>
<td>54,700</td>
<td>53,500</td>
<td>(1,200)</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Total</td>
<td>124,991</td>
<td>144,700</td>
<td>144,700</td>
<td>143,500</td>
<td>(1,200)</td>
<td>-0.8%</td>
</tr>
</tbody>
</table>

**FY18 Revised Budget**

- **Price / Gallon**: 2.00
- **Projected Fuel Consumption - No. of Gallons**: 4,425,927
- **Projected Fuel Cost**: 8,851,854
- **Taxes**: 1,747,435
- **Total Projected Fuel Cost including taxes**: 10,599,289

**FY19 Proposed Budget**

- **Price / Gallon**: 2.10
- **Projected Fuel Consumption - No. of Gallons**: 4,238,525
- **Projected Fuel Cost**: 8,900,902
- **Taxes**: 1,864,455
- **Total Projected Fuel Cost including taxes**: 10,765,356

**Change from FY19 Proposed Budget to FY18 Forecast**

- **% of Change from FY19 Proposed Budget to FY18 Forecast**: 8.6%

### Insurance

The JPB maintains Liability and Property insurance. Insurance costs are projected at $5.8 million for FY19, an increase of 4.5% over the FY18 Forecast. This budget also includes an increase in premiums to reflect the current environment for railroads accident levels. The FY18 Forecast reflects a lower than anticipated reserves for claims.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance</td>
<td>7,105,001</td>
<td>6,108,156</td>
<td>5,500,000</td>
<td>5,750,000</td>
<td>250,000</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

### Facilities and Equipment Maintenance

This budget covers expenses related to Clipper Operator charges, revenue collection services, ticket vending machines, and other contract services. Facilities and Equipment Maintenance for FY19 is projected at $3.2 million, an increase of $0.4 million or 12.8% over the FY18 Forecast.
Line 27 **Utilities**
This budget covers the cost of gas & electric, data circuits, telephone, and water & sewer. Utilities for FY19 are projected at $2.1 million, an increase of 4.0% over the FY18 Forecast. The increase reflects the cost of additional data circuits for Positive Train Control.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED BUDGET</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED BUDGET</th>
<th>FY2018 Forecast</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities &amp; Equipment Maintenance</td>
<td>2,503,026</td>
<td>2,975,921</td>
<td>2,800,227</td>
<td>3,158,276</td>
<td>358,049</td>
<td>80,263</td>
<td>12.8%</td>
</tr>
</tbody>
</table>

Line 28 **Maintenance & Services - Building and Other**
This budget covers the cost of building maintenance services, printing and information services, and the repair and maintenance of computers and office equipment. Services for FY19 are projected at $1.5 million, an increase of 2.6% over the FY18 Forecast.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED BUDGET</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED BUDGET</th>
<th>FY2018 Forecast</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>1,172,622</td>
<td>1,509,598</td>
<td>1,490,658</td>
<td>1,529,098</td>
<td>38,440</td>
<td>2.6%</td>
<td></td>
</tr>
</tbody>
</table>

**ADMINISTRATIVE EXPENSE**

Line 32 **Wages & Benefits**
Wages & Benefits reflects the cost of staffing for Caltrain operations. Wages & Benefits for FY19 is projected at $11.5 million, $3.0 million higher or 35.4% higher than the FY18 Forecast. Built into this budget is a 6.0% vacancy rate, a 3% wage increase and an increase in the fringe benefits rate.

The FY18 forecast is substantially below budget due to very high vacancy rates which the JPB is working to address. Therefore, the bulk of the growth in this area is tied to the filling
of currently and recently vacant positions.

Fringe benefit costs are applied to actual staff wages as a rate. With SMCTD as the managing agency for the three business units (SMCTD, SMCTA and PCJPB), the District aggregates all estimated annual fringe benefit costs (payroll taxes, pension, medical, dental and vision premiums, life insurance, long-term disability, unemployment, and paid time-off) and then divides that amount by the total projected wages for the upcoming year to arrive at a fringe benefit rate. Actual fringe benefits costs are trued-up annually and reflected in future years' fringe benefits rates. The FY19 proposed budget includes a request for 8 new positions with a full-time equivalent of 2.4.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REvised BUDGET</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages &amp; Benefits</td>
<td>7,807,444</td>
<td>10,003,789</td>
<td>8,500,000</td>
<td>11,507,399</td>
<td>3,007,399</td>
<td>35.4%</td>
</tr>
</tbody>
</table>

### Line 33 Managing Agency Admin OH Cost
Managing Agency Admin OH Cost reflects the cost of SMCTD personnel dedicated to the Caltrain business. Managing Agency Admin OH costs for FY19 are projected to remain the same as the FY18 Forecast at $5.9 million.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REvised BUDGET</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Agency Admin OH Cost</td>
<td>6,752,429</td>
<td>6,051,231</td>
<td>5,899,231</td>
<td>5,899,231</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

These amounts are determined pursuant to the application of an Internal Cost Allocation Plan (ICAP). The ICAP calculates the indirect cost rate used to recover overhead costs related to agency indirect administrative overhead and capital projects. The District procured the assistance of an outside consulting firm to develop a methodology that equitably allocates the costs incurred by SMCTD for services and functions shared by the different agencies. The consultant team was chosen for its experience and knowledge in developing allocation methodologies for governmental and public entities.

The ICAP was prepared in accordance with the principles and guidelines set forth in the Office of Management and Budget (OMB) Circular A-87 “Cost Principles for State, Local and Indian Tribal Governments” and ASMB C-10 “Cost Principles and Procedures for Developing Cost Allocation Plans and Indirect Cost Rates for Agreements with the Federal Government”.

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The ICAP calculates two components:

Agency Indirect Administration (AIA) – The pool of costs that cannot be directly attributed to a specific agency.

This is made up of labor and non-labor support function costs that benefit each of the 3 agencies managed by SMCTD. Examples include the time charged by the Payroll Department to process the biweekly payroll or the cost to post recruitment on industry websites. These costs are distributed to each department based on specific statistics. The payroll department costs, for example, are distributed to each department based on the number of Full Time Equivalents (FTEs). SMCTD incurs all of the AIA costs but then recovers from SamTrans Capital, JPB Operating and Capital and the TA budgets for their share of the AIA.

<table>
<thead>
<tr>
<th>AGENCY BUDGET</th>
<th>AIA (Central Service) Cost</th>
<th>% of Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>SamTrans Operating</td>
<td>8,266,921</td>
<td>50%</td>
</tr>
<tr>
<td>SamTrans Capital</td>
<td>506,502</td>
<td>3%</td>
</tr>
<tr>
<td>Caltrain Operating</td>
<td>5,899,231</td>
<td>36%</td>
</tr>
<tr>
<td>Caltrain Capital</td>
<td>1,175,665</td>
<td>7%</td>
</tr>
<tr>
<td>TA Operating</td>
<td>331,944</td>
<td>2%</td>
</tr>
<tr>
<td>TA Capital</td>
<td>266,162</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16,446,425</strong></td>
<td></td>
</tr>
</tbody>
</table>

The total for AIA costs is $16.5 million. Based on the ICAP methodology, $8.3 million is charged to SamTrans operating budget, $5.9 million is charged to Caltrain operating budget and $332K is charged to the TA operating budget. The remainder, to be recovered from SamTrans, JPB and TA capital budgets is charged to each capital project through the ICAP rates.

Capital Overhead – The pool of costs that support the capital projects and cannot be directly attributed to a specific capital project.

The capital overhead rate is calculated for each agency. An example of a capital overhead cost would be the time charged by an administrative assistant who supports multiple capital project engineers. The capital overhead costs are tracked and collected and included in the ICAP rate that is charged to each capital project.

Board of Directors

This covers the cost of honoraria, seminars & training, business travel and meetings for the Board of Directors. The Board of Directors budget for FY19 is projected to remain the same as the FY18 Forecast.
Line 35 **Professional Services**
This covers the cost of consultants, legal services and legislative advocate expenses. Professional Services expenses for FY19 are projected at $5.1 million, an increase of $0.3 million or 6.8% over the FY18 Forecast.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Directors</td>
<td>10,819</td>
<td>14,600</td>
<td>14,600</td>
<td>14,600</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Professional Services</td>
<td>4,246,015</td>
<td>5,254,009</td>
<td>4,800,000</td>
<td>5,125,000</td>
<td>325,000</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

Offsite consultants for FY19 include a contract for a Business Process Review, certain costs associated with Caltrain’s mobile ticketing application and other contract services. Onsite consultants include increased support for Quality Assurance and Quality Control engineering, document control, and configuration management.

Line 36 **Communications and Marketing**
This covers the cost of promotional advertising for fare increases, schedule changes and the cost of providing the riding public with a mobile app. The promotional advertising expenses for FY19 are projected at $0.3 million, an increase of $0.1 million or 56.6% over the FY18 Forecast.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PROPOSED</th>
<th>Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 PROPOSED Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications and Marketing</td>
<td>165,926</td>
<td>211,500</td>
<td>202,045</td>
<td>316,500</td>
<td>114,455</td>
<td>56.6%</td>
</tr>
</tbody>
</table>

Line 37 **Other Office Expense and Services**
This covers the cost of software maintenance & license renewal, recruitment advertising, professional development, rent expense, bank fees, agency fees, office vehicle maintenance, and property taxes.

Other Office Expense and Services for FY19 are projected at $3.5 million, an increase of $0.7 million or 24.4% over the FY18 Forecast.
The FY19 budget reflects Caltrain’s efforts to address the high vacancy rate and an increased commitment to professional development towards staff retention and improvement. This budget also includes the renewal of software maintenance and licenses.

<table>
<thead>
<tr>
<th>Major Items</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REvised</th>
<th>FY2018 Forecast</th>
<th>Change from FY2019 Proposed Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 Proposed Budget to FY2018 Forecast</th>
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<tbody>
<tr>
<td>Recruitment Advertising</td>
<td>106,500</td>
<td>260,000</td>
<td>128,293</td>
<td>280,000</td>
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<td>Seminar &amp; Training</td>
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<td>77,050</td>
<td>58,844</td>
<td>113,650</td>
<td>54,806</td>
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<td>Software Maintenance &amp; Licenses</td>
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<td>522,613</td>
<td>522,988</td>
<td>828,313</td>
<td>305,325</td>
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<td>Rent Expense</td>
<td>339,232</td>
<td>451,950</td>
<td>371,191</td>
<td>465,509</td>
<td>94,318</td>
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<td>Bank Fees</td>
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<td>1,166,621</td>
<td>1,166,621</td>
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</table>

**Line 40 Long Term Debt Expense**

This covers the interest cost of the long term debt incurred for the acquisition and rehabilitation of passenger rail cars. Long term debt expense for FY19 is projected to remain the same as the FY18 Forecast at $1.3 million.

**CALTRAIN’S CAPITAL BUDGET**

The Proposed FY19 Capital Budget presents very difficult choices given the lack of funding. The initial capital ask based on needs was $79.4 million. Staff has worked with our partners to discuss increases above the existing $5.0 million provided annually by each partner. We have asked for them to increase these amounts to $7.5 million annually. Even at these increased levels, we are unable to perform important state-of-good-repair work to Caltrain’s rolling stock (especially the passenger cars). This follows several years of SOGR and Mid-life deferral on Caltrain’s rolling stock. In the event that the funding commitment from the partners are not met, staff will make adjustments to the capital project requests.

We note that this capital budget excludes all items associated with the Calmod program, which are budgeted for separately. We also note that this capital budget currently excludes any additional program costs associated with Positive Train Control implementation. Additional analysis is being conducted on the need for additional program costs beyond calendar 2018, and we will return to the Board with a Capital Budget amendment as necessary. Finally, this budget excludes potential capital funding from the TIRCP grant process. These results may be known prior to the May board meeting and will be amended into the Capital Budget as necessary.

Please refer to Attachment B – JPB FY19 Proposed Capital Budget.
Details include the requested Board Authority and the corresponding Proposed funding plan for each project.

**PROPOSED FY19 CAPITAL BUDGET** - $42,748,255

i. **STATE OF GOOD REPAIR (SOGR)** - $36,006,655

   RIGHT OF WAY - $15,540,000
   1. Guadalupe River Bridge Replacement - Request: $3,000,000
      Replace the Guadalupe River Bridge in San Jose that has been damaged by weather and arson.
   2. Marin St. & Napoleon Avenue Bridges Rehabilitation - Request: $540,000
      Rehabilitate the bridges over Marin Street and Napoleon Avenue in San Francisco.
   3. System Wide Track Rehab - SOGR 2019 - Request: $5,500,000
      Replace track components, wedging, surfacing and few minor bridge repairs.
   4. Tunnels 1&4 track and Drainage Rehabilitation - Request: $6,500,000
      Rehabilitate the drainage systems within the tunnels to improve drainage that affects track structure stability and rebuild track work within the tunnel to current design standards.

   **SIGNALS & COMMUNICATIONS** - $832,000
   5. Signal System SOGR - Request: $300,000
      Repair and replace battery racks, aluminum gate arms with fiberglass, aging AC units and setup of Dual Tone multi Frequency (DTMF) to allow mobile control at five crossings.
   6. Railroad COM SOGR - Request: $532,000
      Upgrade the Uninterrupted power supply (UPS) system at Central control facility (CCF), high priority Control Points (CPs) with generator plugs and radio coverage around CP Lick area. Implementation of Software Configuration Management Study.

   **ROLLING STOCK** - $17,034,655
   7. Bombardier Car Mid-Life Overhaul - Request: $3,319,948
      Perform Mid-life Overhaul of select Bombardier Cars to meet service requirements. Planning for electrification has identified the need to retain a
select number of Bombardier Cars. The Bombardier identified for post electrification service requirements are due for a mid-life overhaul to sustain reliability and extend useful life.

8. Bombardier Car SOGR - Request: $267,803
   Anti-Skid Cars /Battery Replacement - Trailer Cars. Battery Replacement - Cab Cars /Cables for Cars.

9. F40 In-Frame Overhaul - Request: $1,267,150
   Overhaul for Locomotives.

10. F40 Locomotive SOGR - Request: $366,459
    Refurbish locomotive cars, toilets, replacement batteries and rehabilitate controllers.

11. Gallery Car mid-Life Overhaul - Request: $2,694,057
    Perform Mid-Life Overhaul of select Gallery Coaches to meet service requirements. There is a requirement for a small diesel powered Coach Fleet post electrification of Caltrain. A number of Gallery Coaches have been identified to become part of the remaining fleet. Mid-life overhaul of the selected coaches are required to sustain reliability and extend useful life.

12. Gallery Car SOGR - Request: $792,510
    Refurbish the cables, door system, car striping, anti-skid, flooring for cars, toilet and battery and replace trailer cabs, cars, HVAC suspension.

13. MP36 Mid-Life Overhaul - Request: $7,514,100
    Overhaul two Locomotives.

14. MP36 SOGR - Request: $217,228
    Refurbish and replace traction motors

15. Other MOE - Request: $500,000
    Purchase minor parts.

16. Switcher Locomotives SOGR - Request: $95,400
    Replace switcher locomotives are for three trucks.

STATION AND INTERMODAL ACCESS - $2,600,000

17. CCF Quarters - Request: $100,000
    Replace and improve the aging of trailer compound.
18. South San Francisco Station Improvement - Request: $1,300,000
   Remove existing team tracks and a loading dock from the existing station to
   allow JPB to make station improvements.

19. System Wide Station Improvements - SOGR - Request: $500,000
   Provide minor improvements at various the stations.

20. Ticket Vending Machine Rehab Program(TVM) - Request: $500,000
   Rehabilitate and upgrade the existing TVM, which includes adding of Clipper
   functionalities.

21. San Francisco Restroom Renovation - Request: $200,000
   The San Francisco Station restrooms have been subject to many years of abuse
   and vandalism. Includes a full restoration of the restrooms with modern vandal
   resistant fixtures and finishes

ii. LEGAL MANDATES AND REQUIRED ENHANCEMENTS - $1,326,831

22. Transit Asset Management(TAM) - Request: $600,000
   This project will meet the TAM rule requirements with the completion and agency
   approval of the TAM Plan. This will also include implementation and initialization
   of asset management best practices as identified in the TAM Plan.

23. Updated Short Range Transit Plan(SRTP) - Request: $300,000
   Develop an updated Short Range Transit Plan to align with Caltrain Business Plan.

24. Personal Credit Card Information – Request: $426,831
   Enhance control and protection of credit card information that is
   collected and processed through the Ticket Vending Machines. Includes
   installation and update of servers, switches and storage, backup
   capabilities and enhanced internal file integrity monitoring.

iii. OPERATIONAL IMPROVEMENTS / ENHANCEMENTS - $2,049,769

25. Clipper Card Interface Device(CID)Installation, Relocation Plan
   &Construction - Request: $200,000
   Develop a set of plans, specifications, estimate, bid documents and procure
   construction services for the addition of new CIDs and relocation of existing CIDs.

26. Grade Crossing Improvements - Request: $400,000
   Design and implement safety improvements to the next group of grade crossings
   identified in the Grade Crossing Hazard Analysis.
27. Right of Way Fencing - Request: $469,000
   Install new Right of Way Fencing.

   Install network security for micro segmentation of Card Data Environment (CDE).

29. Security Network (VOIP)- media converter replacements - Request: $7,692
   Replace TVM Media Converters as TVM’s cannot communicate with fiber on the ROW and require media converters to connect to the network.

30. Security Network - ROW & district access layer switch - Request: $34,615
   Upgrade switches every year.

31. Backup Central Control Facility (BCCF) Office remodel - Request: $900,000
   Build additional office space.

iv. PLANNING / STUDIES - $3,365,000

32. Capital Contingency Funds - Engineering - Request: $330,000
   Support unforeseen capital expenditure related to the delivery of capital projects/programs.

33. Capital Contingency Funds - Rail - Request: $660,000
   Support unforeseen capital expenditure related to rail operations.

34. Capital Program Management - Request: $500,000
   Support unforeseen capital needs related to rail operations, including the Gilroy segment.

35. Capital Project Development - Request: $500,000
   Implement planning and engineering study activities.

36. Grade Crossing Policy Dev & Program Management - Request: $350,000
   Support Caltrain’s administration and oversight of the grade separation planning process.

37. Historic Station Evaluation Study - Request: $100,000
   Assess the seven historic stations and also have a preservation plan to insure compliance with state conveyance.
38. Rail Corridor Use Policy - Request: $100,000
   Support updates to the Rail Corridor Use Policy, including aligning with Caltrain Business Plan.

39. Regional Rail/ Mega regional Rail Planning - Request: $75,000
   Provide planning resources for Caltrain's role in the Regional Rail efforts.

40. SF Station Building Corrosion Study & Rehab - Request: $350,000
   The station structure and external metal work is rusting. The condition requires a professional assessment and recommendation to arrest the problem and make required repairs.

41. Station Management Toolbox - Request: $100,000
   Support updates to the Station Management Toolbox project, including aligning with Caltrain Business Plan.

42. Updated Strategic Plan - Request: $300,000
   Develop a new updated strategic plan of Caltrain to align with the Caltrain Business Plan.
<table>
<thead>
<tr>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019 PROPOSED TO FY2018 FORECAST</th>
<th>FY2019 PROPOSED TO FY2018 FORECAST</th>
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<tr>
<td></td>
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<td>ACTUAL</td>
<td>BUDGET</td>
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<td>6,871,603</td>
<td>5,590,484</td>
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<td>3 Shuttles</td>
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<td>2,461,000</td>
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<tr>
<td>4 Rental Income</td>
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<td>1,740,200</td>
<td>1,740,200</td>
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<td>5 Other Income</td>
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<td>8 CONTRIBUTIONS:</td>
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<td>9 AB434 &amp; TA Shuttle Funding</td>
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<td>15 EXPENSE</td>
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<td>18 OPERATING EXPENSE:</td>
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<td>19 Rail Operator Service</td>
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<td>22 Shuttle Service</td>
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<td>144,700</td>
<td>144,700</td>
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<td>28 Maint &amp; Services-Bldg &amp; Other</td>
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<td>1,490,858</td>
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<td>31 ADMINISTRATIVE EXPENSE</td>
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<td>35 Professional Services</td>
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<td>36 Communications and Marketing</td>
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<td>37 Other Office Expense and Services</td>
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<td>44 PROJECTED SURPLUS/(DEFICIT)</td>
<td>(2,041,344)</td>
<td>(8,490,979)</td>
<td>(4,136,388)</td>
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<td>46 PROJECTED USE OF REVENUE STABILIZATION FUND (RSF)</td>
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Projected Unrestricted Funds, Beginning Balance 25,199,401
Establishment of Revenue Stabilization Fund (RSF) (4,000,000)
Unrestricted Funds, Ending Balance 21,199,401

RSF, Beginning Balance 4,000,000.00
Projected Use FY19 (1,208,870.60)
Projected RSF, Ending Balance 2,791,129
## Proposed FY2019 Capital Budget

### Attachment B

**June 2018**

<table>
<thead>
<tr>
<th>Item</th>
<th>PROJECT TITLE / Description</th>
<th>Previously Programmed</th>
<th>Proposed Budget</th>
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<td></td>
<td></td>
<td></td>
<td>STA SOGR</td>
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<td></td>
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<td>Federal Funds</td>
<td>State Funds</td>
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<td>Guadalupe River Bridge Replacement</td>
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<td>3,000,000</td>
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<td>2</td>
<td>Marin St. &amp; Napolean Avenue Bridges Rehabilitation</td>
<td>x</td>
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<td>3</td>
<td>System Wide Track Rehab- SOGR FY19</td>
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<td>4,400,000</td>
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<td>4</td>
<td>Tunnel 1 &amp; 4 Track and drainage Rehabilitation</td>
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<td><strong>Total SOGR</strong></td>
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<td>5</td>
<td>Signal System SOGR FY19</td>
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<td>Railroad COM SOGR FY19</td>
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<td><strong>Rolling Stock</strong></td>
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<tr>
<td>7</td>
<td>Bombardier Car Mid-Life Overhaul</td>
<td>3,319,948</td>
<td>2,694,057</td>
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<tr>
<td>8</td>
<td>Bombardier Car SOGR</td>
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<td>9</td>
<td>F40 In-Frame Overhaul FY19</td>
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<td>792,510</td>
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<td>F40 Locomotive SOGR FY19</td>
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<td>11</td>
<td>Gallery Car Mid-Life Overhaul</td>
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<td>Gallery Car SOGR</td>
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<td>758,542</td>
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<td>MP36 Mid-Life Overhaul</td>
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<td>MP36 SOGR</td>
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<td>Other MOE(Includes CEMOF, minor parts and activities)</td>
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<td>16</td>
<td>Switcher Locomotives SOGR</td>
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<td><strong>Station &amp; Intermodal Access</strong></td>
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<td>17</td>
<td>CCF Quarters</td>
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<td>18</td>
<td>South San Francisco Station Improvement</td>
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<td>19</td>
<td>System Wide Station Improvements- SOGR</td>
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<td>20</td>
<td>Ticket Vending Machine Improvements-SOGR</td>
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<td>21</td>
<td>San Francisco Restroom Renovation</td>
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<td><strong>Total SOGR</strong></td>
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<td><strong>758,542</strong></td>
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# LEGAL MANDATES AND REQUIRED ENHANCEMENTS

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<tr>
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<th>PROJECT TITLE / Description</th>
<th>Previously Programmed</th>
<th>Proposed BUDGET</th>
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</thead>
<tbody>
<tr>
<td>22</td>
<td>Transit Asset Management</td>
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<tr>
<td>23</td>
<td>Updated SRTP</td>
<td>300,000</td>
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</tr>
<tr>
<td>24</td>
<td>Personal Credit Information Infrastructure</td>
<td>426,831</td>
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<tr>
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<td></td>
<td>1,326,831</td>
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## OPERATIONAL IMPROVEMENTS/ENHANCEMENTS

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<th>Item</th>
<th>PROJECT TITLE / Description</th>
<th>Previously Programmed</th>
<th>Proposed BUDGET</th>
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<tbody>
<tr>
<td>25</td>
<td>Clipper CID installation and Relocation plan construction</td>
<td>200,000</td>
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<tr>
<td>26</td>
<td>FY19 Grade crossing Improvements</td>
<td>400,000</td>
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<tr>
<td>27</td>
<td>Right of way Fencing</td>
<td>469,000</td>
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<tr>
<td>28</td>
<td>Security Network Voip</td>
<td>38,462</td>
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<tr>
<td>29</td>
<td>Security Network Voip-media converter replacement</td>
<td>7,692</td>
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<tr>
<td>30</td>
<td>Security Network Voip- ROW &amp; dist access layer switch</td>
<td>34,615</td>
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<tr>
<td>31</td>
<td>Backup Central Control Facility Office Remodel</td>
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## PLANNING/STUDIES

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1. Reserves designated for capital use
RESOLUTION NO. 2018-

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

***

ADOPTING FISCAL YEAR 2019 OPERATING BUDGET IN THE AMOUNT OF $151,514,821 AND FISCAL YEAR 2019 CAPITAL BUDGET IN THE AMOUNT OF $42,748,255, AND ESTABLISHING A REVENUE STABILIZATION FUND

WHEREAS, the Joint Powers Agreement of the Peninsula Corridor Joint Powers Board (JPB) requires the Board of Directors (Board) to approve annual operating and capital budgets; and

WHEREAS, the adoption of an operating budget is necessary for obtaining both Federal and State funds to support the Peninsula Commute Service operation known as Caltrain; and

WHEREAS, the adoption of a capital budget complements the JPB's strategic planning process; and

WHEREAS, the Executive Director and the Staff Coordinating Council recommend that the Board adopt the Fiscal Year (FY) 2019 Operating Budget shown as Attachment A, and the FY2019 Capital Budget shown as Attachment B; and

WHEREAS, the Executive Director and Staff Coordinating Council recommend that the Board establish a new $4.0 million Revenue Stabilization Fund, as part of the FY 2019 Operating Budget, with the understanding the Fund will draw from the JPB's reserves and will help ensure that the JPB can fund its expected operating requirements for the year; and
WHEREAS, the local match funding component of the FY2019 Capital Budget is $22.5 million, requiring a capital investment of $7.5 million from each of the JPB's three member agencies; and

WHEREAS, the City and County of San Francisco will provide its $7.5 million FY2019 capital investment from Proposition K funds through the San Francisco County Transportation Authority; and

WHEREAS, San Mateo County will provide its $7.5 million FY2019 capital investment through the San Mateo County Transportation Authority; and

WHEREAS, Santa Clara County will provide its $7.5 million FY2019 capital investment through the Santa Clara Valley Transportation Authority.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Peninsula Corridor Joint Powers Board hereby adopts the FY2019 Operating Budget, a copy of which is attached hereto and incorporated herein as Attachment A, in the amount of $151,514,821, and which includes a $4.0 million JPB Revenue Stabilization Fund; and

BE IT FURTHER RESOLVED that the Board adopts the FY2019 Capital Budget in the amount of $42,748,255, attached hereto and incorporated herein as Attachment B, with the understanding that the three JPB member agencies will each contribute $7.5 million to meet their FY2019 capital investment commitments; and

BE IT FURTHER RESOLVED that the Executive Director, or his designee, is requested to forward a copy of the FY2019 Operating Budget and the FY2019 Capital Budget to the JPB member agencies at the earliest practicable date; and

BE IT FURTHER RESOLVED that the Board authorizes the Executive Director, or his designee, to take such additional actions as may be necessary to give effect to this resolution.
Regularly passed and adopted this 7th day of June, 2018 by the following vote:

AYES:

NOES:

ABSENT:

Chair, Peninsula Corridor Joint Powers Board

ATTEST:

J PB Secretary
AGENDA ITEM #10
JUNE 7, 2018

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Derek Hansel
Chief Financial Officer
John Funghi
Chief Officer, CalMod Program

SUBJECT: AWARD OF CONTRACTS FOR THE PURCHASE AND OVERHAUL OF USED AEM-7AC ELECTRIC LOCOMOTIVES FOR THE PENINSULA CORRIDOR ELECTRIFICATION PROGRAM

ACTION
Staff Coordinating Council recommends the Board:

1. Award two contracts, on a non-competitive basis, to support critical testing of the Peninsula Corridor Electrification Program's (PCEP) electrification system as follows:

   a. Contract #1: to Mitsui & Co. (U.S.A), Inc. (Mitsui) of New York, New York, for the purchase of two used AEM-7AC electric locomotives for the total not-to-exceed amount of $270,000.

   b. Contract #2: to National Railroad Passenger Corporation (Amtrak) of Wilmington, Delaware, for Amtrak to provide the following services related to the two AEM-7AC electric locomotives for the total not-to-exceed amount of $340,597: overhaul services and storage; acceptance testing and commissioning; training of Peninsula Corridor Joint Powers Board (JPB) staff, and shipment to Caltrain’s Centralized Equipment Maintenance and Operations Facility (CEMOF).

2. Authorize the Executive Director, or his designee, to execute the contracts with Mitsui and Amtrak in full conformity with the terms and conditions set forth in the negotiated agreements, and in a form approved by legal counsel.

3. Authorize the Executive Director to exercise contract change order authority of up to $150,000 for the contract with Amtrak.
SIGNIFICANCE
The Peninsula Corridor Joint Powers Board's (JPB) PCEP is undertaking electrification of the rail corridor between San Francisco and San Jose. The traction power substations and an overhead contact system (OCS) must be verified to be mechanically and electrically compatible with the new bi-level electric multiple unit vehicles (EMUs). Rather than bringing two new systems online simultaneously, PCEP staff determined it would be in the PCEP's best interest to first test the traction power system and OCS using a used electric rail vehicle, and then test the new EMUs. This staged approach will greatly reduce the likelihood of exposing the new EMUs to possible 25 kilovolt-ampere (kVa) traction power abnormalities, and to OCS wire initial installation and validation activities, either of which could damage the pantograph.

Staff recommends the purchase of two electric locomotives: one that will be utilized for testing and the other that will be utilized for replacement parts. After the purchase from Mitsui is complete, a separate contract with Amtrak will provide overhaul services for the electric locomotives, as well as storage, acceptance testing and commissioning, training, and transporting the locomotives to CEMOF.

BUDGET IMPACT
The proposed award of both contracts is for a total amount of $610,597, plus up to $150,000 proposed change order authority, if needed. Exercise of the proposed change order authority could increase this to as much as $760,597. The PCEP budget for the work associated with both contracts is $1.5 million. This budget item is included in the PCEP project budget for Required Projects as shown in Section 8.0, Budget and Expenses, Table 8-2 of the Monthly Progress Report.

BACKGROUND
The PCEP's design-build contract, which was awarded to Balfour Beatty Infrastructure, Inc. (Balfour), is currently in the construction phase. The work under the Balfour contract includes traction power substations and an OCS that must be verified to be mechanically and electrically compatible with the new bi-level EMUs. Balfour will provide the design of the pantograph security verification, which will be procured and installed by Amtrak for the test locomotive.

PCEP staff and consultants analyzed various avenues to obtain rolling stock suitable for the PCEP electrification system testing. Various passenger railroads, including Philadelphia’s SEPTA, New Jersey Transit, Montreal AMT, Maryland’s MARC and Amtrak, were contacted for the JPB to either purchase or lease electric rolling stock suitable for such testing. In all cases, equipment was not available.

In addition, Siemens, the manufacturer of newer model ACS-64 locomotives, was contacted about leasing possibilities; however, all of Siemens’ on-order locomotives
were needed by their passenger railroad customers, including Amtrak and staff determined that purchasing a new ACS-64 locomotive was cost prohibitive. Finally, AEM-7AC locomotives previously operated by Amtrak, and leased by Amtrak from Mitsui, were located and determined to be the most feasible option from a cost and PCEP project implementation schedule perspective. Amtrak retired the AEM-7AC locomotives within the last 2 years, when replaced by Amtrak's new fleet of Siemens ACS-64 25 kVa electric locomotives.

Upon completion of the PCEP electrification system testing, scheduled for 2020, the JPB will dispose of the used locomotives in full compliance with the JPB’s Procurement Policy and Federal Transit Administration rules.

The proposed $150,000 contract change order authority will provide the flexibility needed to address any specification and scope changes that may arise during acceptance testing, commissioning, and JPB staff training on the locomotives at the Amtrak facility. This change order authority only applies to the Amtrak contract.

Sr. Contract Officer: Alicia Fraumeni 650.508.6442
Project Manager: Dave Couch, Director, PCEP Project Delivery 650.508.7790
RESOLUTION NO. 2018 ___

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

*   *   *

AWARDING A CONTRACT TO MITSUI & CO. (U.S.A.), INC. FOR THE PURCHASE OF TWO
USED ELECTRIC LOCOMOTIVES FOR THE PENINSULA CORRIDOR ELECTRIFICATION
PROGRAM IN THE TOTAL NOT-TO-EXCEED AMOUNT OF $270,000 AND AWARDING A
CONTRACT TO THE NATIONAL RAILROAD PASSENGER CORPORATION
FOR THE OVERHAUL AND DELIVERY OF THE TWO LOCOMOTIVES
IN THE TOTAL NOT-TO-EXCEED AMOUNT OF $340,597

WHEREAS, the Peninsula Corridor Joint Powers Board (JPB) Peninsula Corridor
Electrification Program’s (PCEP) design-build contract was awarded to Balfour Beatty
Infrastructure, Inc., and the contract for new bi-level electric multiple units (EMU)
vehicles (EMU Trainsets) was awarded to Stadler US, Inc., in July 2017; and

WHEREAS, the Balfour Beatty Infrastructure, Inc. contract, including the
construction of traction power substations and an overhead wire power distribution
contact system (OCS), must be verified to be mechanically and electrically compatible
with the new EMU Trainsets by electrically load testing and validating the condition and
adequacy of the electric power; and

WHEREAS, rather than testing an unproven system on the new EMU Trainsets,
PCEP staff has determined it is in the PCEP’s best interest to first test the traction power
system and OCS using a used rail vehicle, which approach will greatly reduce the
likelihood of exposing the new EMUs to possible 25 kilovolt-ampere traction power
abnormalities, and to OCS wire initial installation and validation activities, either of
which could damage the pantograph; and

WHEREAS, staff recommends purchasing two used AEM-7AC electric locomotives
from Mitsui & Co. (U.S.A.), Inc. (Mitsui) of New York, New York, on a non-competitive
basis, with the expectation that one locomotive will be utilized for testing and the other locomotive will be utilized for replacement parts for the testing locomotive; and

WHEREAS, staff also recommends contracting with the National Railroad Passenger Corporation (Amtrak) of Wilmington, Delaware, on a non-competitive basis, for overhaul, storage, testing, and transporting of the locomotives from Delaware to Caltrain’s Centralized Equipment Maintenance and Operations Facility, as well as related training of PCEP personnel; and

WHEREAS, JPB staff has successfully completed negotiations on contractual terms and conditions with each firm, and has concluded that each contract’s pricing terms are fair and reasonable; and

WHEREAS, Staff Coordinating Council (SCC) recommends, and the Executive Director concurs, that a contract be awarded to Mitsui for the purchase of two used AEM-7AC electric locomotives and a contract be awarded to Amtrak to provide overhaul services, including testing, storage, and shipment of the two used AEM-7AC electric locomotives, and associated training, for total not-to-exceed amounts of $270,000 and $340,597, respectively; and

WHEREAS, SCC also recommends that the Executive Director be authorized to exercise change order authority of up to $150,000 on the Amtrak contract to allow for flexibility to address any specification and scope changes that may arise during acceptance testing, commissioning, and JPB staff training on the locomotives at the Amtrak facility.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors (Board) of the Peninsula Corridor Joint Powers Board hereby awards a contract to Mitsui & Co. (U.S.A.), Inc. (Mitsui) for the purchase of two used AEM-7AC electric locomotives in a total not-
to-exceed amount of $270,000, and awards a contract to the National Railroad Passenger Corporation (Amtrak) for overhaul services of the two used AEM-7AC electric locomotives in a total not-to-exceed amount of $340,597, with the understanding that the Executive Director, or his designee, is authorized to execute amendments to the contract with Amtrak increasing compensation under the contract by up to $150,000; and

**BE IT FURTHER RESOLVED** that the Board authorizes the Executive Director, or his designee, to execute the contracts on behalf of the JPB with Mitsui and Amtrak, in full conformity with the terms and conditions of the negotiated agreements.

Regularly passed and adopted this 7th day of June, 2018 by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

___________________________
Chair, Peninsula Corridor Joint Powers Board

**ATTEST:**

___________________________
JPB Secretary
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Derek Hansel     John Funghi
Chief Financial Officer   Chief Officer, CalMod Program

SUBJECT: AWARD OF CONTRACT FOR TUNNEL MODIFICATIONS AND TRACK REHABILITATION PROJECT FOR THE PENINSULA CORRIDOR ELECTRIFICATION PROGRAM

ACTION
Staff Coordinating Council recommends the Board:

1. Award a contract to the lowest, responsive and responsible bidder, Proven Management, Inc., (PMI) of Oakland, CA, in the total lump sum base bid amount of $41,837,777 for the Tunnel Modifications and Track Rehabilitation Project (Project) to facilitate the Peninsula Corridor Electrification Program (PCEP).

2. Authorize the Executive Director, or his designee, to execute a contract with PMI in full conformity with the terms and conditions set forth in the solicitation documents, and in a form approved by legal counsel.

SIGNIFICANCE
The Project objective is to perform tunnel modifications for PCEP, including providing clearances to accommodate future electrified vehicles and existing diesel vehicles for both passenger and freight operations in four existing tunnels (Tunnel Nos. 1, 2, 3, and 4), and installation of anchor bolts and portal structures for the Overhead Contact System (OCS) in the tunnels.

The contract will also improve drainage, stabilize the track bed, rebuild the tracks, and minimize pumping in Tunnel Nos. 1 and 4 for the Tunnel Drainage and Track Rehabilitation Project.

BUDGET IMPACT
The proposed award of this contract is for a total amount of $41,837,777, which consists of $28,641,170 for PCEP and $13,196,607 for the Tunnel Drainage and Track Rehabilitation Project.
The $28,641,170 for PCEP work will exceed the current PCEP budget of $10,494,884 for Tunnel Modifications by $18,146,286. The $18,146,286 will be drawn from the PCEP contingency fund.

The total board authority for the Tunnel Drainage and Track Rehabilitation Project is $9.7 million. The FY19 proposed capital budget includes a request for an additional $6.5 million for this Project, bringing the total board authority to $16.2 million. In addition, the Project will be seeking an additional $1.0 million FY19 FTA funding, utilizing newly available State money as the match. This Project will be funded with federal funds, with local match from member agency as well as State funds.

BACKGROUND
The Project will provide required infrastructure improvements and modifications for four tunnels (nos. 1, 2, 3 and 4) located on the Caltrain Corridor Right of Way (ROW) within the City and County of San Francisco. The base scope of work provides infrastructure improvements needed for PCJPB to provide clearance to accommodate the future electrified vehicles and existing diesel vehicles for both passenger and freight operations in four existing tunnels, and to improve drainage, stabilize track bed, and minimize pumping in tunnels. This work on the ROW from the Bayshore Station to the 16th Street grade crossing will be conducted during a series of tunnel outages over a specified time period. Siding or staging access may extend beyond those limits to just North of the 16th Street grade crossing to the Visitacion Lead south of Bayshore Station.

The Project solicitation also included an optional scope of work for the installation of the overhead catenary system (OCS) in all four tunnels including interconnection to the cross spans at eight portal termination structures. Bidders were not required to submit a price to perform the OCS work to be considered responsive to the Invitation for Bids. The JPB has sole discretion to incorporate the Optional OCS work into the contract at time of award.

A solicitation was advertised in a newspaper of general circulation and on the JPB’s procurement website, which includes Small Business Enterprises and Disadvantaged Business Enterprises (DBE) registered in the vendor database. Over 65 construction contractors, subcontractors, suppliers, and plan rooms downloaded the solicitation documents, but only one bid was received. Staff polled the firms that did not submit bids and they indicated that they did not submit bids for a variety of reasons including because they did not have the expertise to provide the required specialty services, could not provide the services at a competitive rate due to the complexity of the Project, and did not have capacity to complete the work within the desired timeframe. The Office of Small and Disadvantaged Business Enterprises assigned a seven percent SBE goal to this Project.
One bid was received as listed below:

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<td>$9,892,900 - Option Bid - OCS</td>
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<td>1. Proven Management, Inc.</td>
<td>$41,837,777.00 - Base Bid</td>
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<tr>
<td>Oakland, CA</td>
<td>$19,639,614.00 - Option Bid - OCS</td>
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PMI submitted all required bid documentation for the base bid and Option OCS bid. Staff has determined, and legal counsel concurred, that the bid submitted by PMI is responsive. The base bid from PMI was approximately 41 percent higher than the engineer’s estimate. The Option OCS bid was approximately 98 percent higher than Engineer’s estimate. Staff reviewed the engineer’s estimate and noted that due to the complexity and specialized requirements to perform the scope of work required for this Project, there is a small group of firms that are qualified to perform the complex tunnel work. Based on this, staff has determined that the difference between the engineer’s estimate for the base bid and PMI’s base bid is fair and reasonable. Staff also has determined not to proceed with the award for the Option for OCS.

The Office of Small and Disadvantaged Business Enterprises reviewed the bid which included an 8.87% DBE utilization commitment for the base bid, and a 7.67% DBE utilization commitment for the base bid plus option. The bidder has met the DBE requirements of the contract.

PMI is an established regional contractor and company reference checks confirmed that it is experienced and competent. PMI has been in business for 23 years and completed many similar public works projects for municipalities, counties and state agencies. Based upon these findings, staff concludes that PMI is appropriately qualified and capable of meeting the requirements of the contract and is therefore the lowest, responsive and responsible bidder.

Sr. Contract Officer: Alicia Fraumeni 650.508.6442
Project Manager: Dave Couch, Director, PCEP Project Delivery 650.508.7790
RESOLUTION NO. 2018 -

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

* * *

AWARDING A CONTRACT TO PROVEN MANAGEMENT, INC. FOR THE
TUNNEL MODIFICATIONS AND TRACK REHABILITATION PROJECT FOR THE PENINSULA
CORRIDOR ELECTRIFICATION PROGRAM FOR A TOTAL AMOUNT OF $41,837,777

WHEREAS, the Peninsula Corridor Joint Powers Board (JPB) solicited competitive
bids for the Tunnel Modification Project (Project) to facilitate the Peninsula Corridor
Electrification Project (PCEP); and

WHEREAS, in response to the JPB’s Invitation for Bids, one firm submitted a bid; and

WHEREAS, staff and legal counsel reviewed the bid and determined that Proven
Management, Inc., (PMI) of Oakland, CA is the lowest, responsive and responsible
bidder; and

WHEREAS, the Staff Coordinating Council recommends, and the Executive
Director concurs, that a contract be awarded to PMI whose bid meets the
requirements of the solicitation documents.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Peninsula
Corridor Joint Powers Board hereby awards a contract to Proven Management, Inc. for
the Tunnel Modifications Project for a total amount of $41,837,777; and

BE IT FURTHER RESOLVED that the Executive Director, or his designee, is authorized
to execute a contract on behalf of the JPB with PMI, in full conformity with all the terms
and conditions of the solicitation documents and in a form approved by legal counsel.
Regularly passed and adopted this 7th day of June, 2018 by the following vote:

AYES:

NOES:

ABSENT:

______________________________
Chair, Peninsula Corridor Joint Powers Board

______________________________
J PB Secretary

Page 2 of 2
AGENDA ITEM #12
JUNE 7, 2018

PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

TO: Joint Powers Board
THROUGH: Jim Hartnett
Executive Director
FROM: Michelle Bouchard
Chief Operating Officer, Rail
SUBJECT: APPROVAL OF COOPERATIVE AND FUNDING AGREEMENTS FOR PARTICIPATION IN THE PREPARATION OF THE SAN JOSE DIRIDON INTEGRATED STATION CONCEPT PLAN

ACTION
Staff Coordinating Council recommends the Board authorize the Executive Director, or his designee, to execute the Cooperative Agreement, and associated Funding Agreement, for the San Jose Diridon Integrated Station Concept Plan (Plan) project in full conformity with the terms and conditions set forth in the negotiated agreements, and in forms approved by legal counsel.

SIGNIFICANCE
Staff of the Peninsula Corridor Joint Powers Board (JPB) is engaged in co-creating the Plan, which will set a vision for the future of San Jose Diridon Station, in partnership with the Santa Clara Valley Transportation Authority (VTA), the California High Speed Rail Authority (CAHSR) and the City of San Jose (City) (together, the “Partners”).

The San Jose Diridon Station (Station) is a major transit hub located within downtown San Jose, the nation’s 10th largest city. It is a historic train depot with not only Caltrain transit service, but also train service provided by Amtrak, Capitol Corridor Joint Powers Authority (CCJPA), and Altamont Commuter Express (ACE), as well as VTA light rail and bus service. The JPB owns the historic station depot, the Caltrain parking lots, the bus loop area, and the tracks and platforms. As the landowner, the JPB has a vested stake in the planning process not just for potential shaping of the Station itself, but also as it relates to development in the surrounding area.

With the planned addition of Bay Area Rapid Transit (BART) and California High Speed Rail service at the Station, as well as expanded Caltrain, ACE, Capitol Corridor and Amtrak service, the Station is expected to become one of the busiest intermodal stations in North America. Private development of the surrounding area in conjunction with the City of San Jose is accelerating, providing opportunities to fully integrate development with the Station itself. In recent months, Google has publically announced intentions for development near the Station.
To effectively accommodate this planned activity and future capacity needs, the Station must be reconfigured in an integrated fashion that connects all these transit services with each other and with the development surrounding the Station.

The Partners are working together to prepare the Plan and to maximize funding to implement the Plan to deliver a world-class destination and transportation hub that provides seamless customer experience for movement between transit modes within the Station and into the surrounding neighborhoods and Downtown.

The Cooperative Agreement between the Partners will govern the roles and responsibilities of each of them in developing the Plan. The Funding Agreement will establish the terms under which the JPB will contribute funds to the VTA to pay for the consultant assisting with the Plan. The VTA also will enter into funding agreements with CAHSR and the City regarding their contributions.

**BUDGET IMPACT**

The JPB’s contribution would be up to $630,000 for its portion of Plan consultant costs. The JPB’s contribution is funded through a combination of $130,000 in FY2018 Project Development Funds and a $500,000 portion of the JPB’s Transit and Intercity Rail Capital Program (TIRCP) grant.

**BACKGROUND**

As the owner and operator of the Station, the JPB is the steward of this asset, including real property interests, facilities, and improvements that comprise the Station, and as such, has a fiduciary responsibility to manage it. However, collaboration with the JPB’s public agency partners broadens the spectrum of opportunities for the JPB and its property in a manner that may not be possible for any one agency working alone.

The formation of this partnership is critical to realizing a bold, new vision for the Station. While each partner may be relinquishing some level of control through this process and will need to find areas of compromise, the benefit of working together offers tremendous opportunity for leveraging multiple funding/financing resources; truly integrated infrastructure and development with the Station facilities; integration of the Station into the community fabric; and opportunity for civic engagement that yields feedback to meaningfully shape the area.

The Plan will be developed with the assistance of a consultant team solicited through a Request for Proposals (RFP) issued by VTA in the fall 2017. The Partners coordinated in the selection of the Consultant and the development of the Consultant’s scope of work. As a result of this process, VTA has sent a Letter of Intent to Award the contract to Arcadis/Benthem Crouwel. VTA will act as the contract manager for the consultant, but the Partners will collectively fund and manage the Consultant’s day to day work. The Plan is expected to be completed in two main phases over the course of about 18 months. Over the course of about 6-8 months, Phase I work will intensely focus on the spatial and organization framework to arrive at a preferred spatial scenario for the Station. This will contemplate programming for transit and transportation components.
and integration with potential development, both within the Station and in the surrounding area. Phase II will then more deeply define the preferred scenario to arrive at a fully detailed Concept Plan.

The development and delivery of the Plan will be performed in two phases. During the first phase, the Consultant will develop a single preferred option. In Phase II, the Consultant will develop a detailed concept plan for the Station. The estimated cost for the completion of Phases I and II is approximately $6.5 million, with Phase I estimated at about $3.4 million, Phase II at about $2.5 million and a contract contingency. Currently, the Partners' contributions plus additional grant funds will adequately fund Phase I. The Partners have agreed to jointly pursue funding for Phase II, and have targeted several viable funding sources including US DOT “BUILD” (formerly TIGER) grant funds.

Prepared by: Elizabeth Scanlon, Director of Planning 650.295.6867
RESOLUTION NO. 2018 -

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

***

APPROVING COOPERATIVE AND FUNDING AGREEMENTS FOR PARTICIPATION IN DEVELOPMENT OF THE SAN JOSE DIRIDON INTEGRATED STATION CONCEPT PLAN

WHEREAS, the Peninsula Corridor Joint Powers Boards (JPB), owner and operator of the Caltrain commuter rail system, also owns and controls the historic San Jose Diridon Station (Station), with not only Caltrain transit service, but also train service provided by Amtrak, Capitol Corridor Joint Powers Authority (CCJPA), and Altamont Commuter Express (ACE), as well as Santa Clara Valley Transportation Authority (VTA) light rail and bus service; and

WHEREAS, with the addition of Bay Area Rapid Transit (BART) and California High Speed Rail service, and expanded Caltrain, ACE, and Amtrak Capitol Corridor and long-distance service, the Station is expected to become one of the busiest intermodal stations in North America; and

WHEREAS, in addition to expanded transportation services at the Station itself, major employers are planning to build space for tens of thousands of new workers and residents adjacent to the station, which will transform the station district into a preeminent mixed-used development center in the Bay Area; and

WHEREAS, to effectively accommodate this planned activity and future capacity needs, the Station must be reconfigured in an integrated fashion that connects all of these transit services with each other and with the development surrounding the Station; and
WHEREAS, JPB staff is engaged in co-creating the Jose Diridon Integrated Station Concept Plan (Plan), which will set a vision for the future of the Station, in partnership with the VTA, the California High Speed Rail Authority and the City of San Jose (together, the "Partners"); and

WHEREAS, the Plan is a critical building block to achieving the potential of the Station, the track envelope, and the surrounding area, and coordination between the Partners is essential to establish an agreed-upon plan for the Station and to maximize funding to deliver a world-class destination and transportation hub that provides seamless customer experience for movement between transit modes within the Station and into the surrounding neighborhoods and Downtown San Jose; and

WHEREAS, the JPB desires to enter in a Cooperative Agreement between the Partners to govern the roles and responsibilities of each of them in developing the Plan, and a Funding Agreement with VTA to establish the terms under which the JPB will contribute funds to pay for the consultant assisting with the Plan, with the understanding that VTA also will enter into funding agreements with CAHSR and the City of San Jose related to their contributions; and

WHEREAS, in accordance with the Funding Agreement, the JPB will contribute up to $630,000 for its portion of Plan consultant costs; and

WHEREAS, the Executive Director recommends, and Staff Coordinating Council concurs, that the Board of Directors authorize the Executive Director, or his designee, to execute a Cooperative Agreement, and associated Funding Agreement, for the Plan in full conformity with the terms and conditions set forth in the negotiated agreements, and in forms approved by legal counsel.
NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Peninsula Corridor Joint Powers Board authorizes the Executive Director, or his designee, to execute a Cooperative Agreement, and associated Funding Agreement, for the Plan in full conformity with the terms and conditions set forth in the negotiated agreements, and in forms approved by legal counsel.

BE IT FURTHER RESOLVED that the Board of Directors authorizes the Executive Director, or his designee, to take any other actions that may be necessary to give effect to this resolution.

Regularly passed and adopted this 7th day of June, 2018 by the following vote:

AYES:

NOES:

ABSENT:

Chair, Peninsula Corridor Joint Powers Board

ATTEST:

J PB Secretary
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: UPDATE ON CALTRAIN PLANNING STUDIES AND TRANSIT-ORIENTED
DEVELOPMENT POLICY DEVELOPMENT

ACTION
This report is for information only. No Board action is required at this time.

SIGNIFICANCE
This information item provides an update to the Board on the status of two Caltrain
Planning initiatives related to station access and transit-oriented development: the Rail
Corridor Use Policy and Station Management Toolbox. Related to these two initiatives,
the presentation will also provide a brief update on the effort to develop a Transit-
Oriented Development Policy, an initiative being led by the Real Estate and Property
Development Department. These projects were first introduced to the Board in
November 2016, and a written memo to the Board provided an update on the projects
in August 2017.

BUDGET IMPACT
There is no impact on the budget.

BACKGROUND
Caltrain staff is engaged in a number of interrelated planning and policy analyses
addressing station access and transit-oriented development. Individual projects
currently underway include:

- Rail Corridor Use Policy: this effort will develop a policy framework around
  the use of JPB-owned property. It will inventory land owned by the JPB
  and will develop decision frameworks related to the near- and long-term
  use of JPB property, including evaluation of potential conflicts between
  development opportunities and future transit uses.

- Station Management Toolbox: this effort is funded by an FTA planning
  grant. It will develop a quantitative tool to help Caltrain evaluate
tradeoffs and make decisions at its stations, including how to balance and manage investments in different access modes at stations and how to evaluate the potential use of station real estate for joint development projects.

- **Transit-Oriented Development Policy**: this effort will establish goals for transit-oriented development (TOD) on Caltrain property. It will set forth policies to guide: the disposition of real estate assets; business objectives associated with joint development decisions (including the balance between affordable housing and revenue); engagement with local planning efforts; and other actions to promote the successful execution of TOD on JPB-owned property, as well as on property around transit facilities owned by third parties.

Together, these three efforts will provide a cohesive framework of policy direction and decision-making tools related to access and TOD at Caltrain stations. All three efforts are complementary to the Caltrain Business Plan and are being undertaken in close coordination with the Business Plan process. To that end, the ultimate timing and finalization of these efforts may adjust to ensure that they are fully synchronized with the Business Plan.

The diagram shows the relationship between the three efforts.
TRANSIT-ORIENTED DEVELOPMENT (TOD) AND STATION ACCESS AT CALTRAIN STATIONS: WHAT, WHO, HOW, AND WHY

**RAIL CORRIDOR USE POLICY**

**WHAT** can be developed on Caltrain’s property?
**WHO** can use Caltrain ROW and real estate?
- Evaluate balance between transit needs and revenue opportunities on JPB property
- Create inventory of real estate assets and holdings
- Enhance policies for use/management of Caltrain real estate and ROW
- Formalize process for making decisions on use of Caltrain property

Data from RCUP will be incorporated into Toolbox

 Toolbox performance analyses can inform RCUP updates over time

**STATION MANAGEMENT TOOLBOX**

Answers to **WHY**: Assess potential outcomes and trade-offs at stations.
- Create data-driven approach to station management and decision making
- Test or evaluate options to aid policy development and decision making
- Evaluate performance against goals established through policy documents

TOD goals and policies will inform Toolbox performance measures and targets

**TOD POLICY**

**HOW** should Caltrain develop available property?
- Establish goals for TOD on Caltrain property
- Set forth policies to guide disposition of real estate assets; business objectives associated with joint development decisions (including balance between affordable housing and revenue); engagement with local planning efforts; and other actions to promote TOD

Data from RCUP will inform TOD Policy development (eg, inventory of opportunity sites, etc.)

Toolbox analysis will inform TOD policy development, including trade-offs analyses (eg, affordability v. revenue, parking v. TOD, etc.)
**Rail Corridor Use Policy:**
The Rail Corridor Use Policy (RCUP) is being developed to facilitate the processing, review, and approval of proposed uses and projects on JPB property. The project is being led by the Caltrain Planning team and commenced in mid-2017. The objectives of the Rail Corridor Use Policy include:

- Create a framework for evaluating and managing the inherent tradeoffs between the preservation of JPB property for current and future railroad uses relative to the use of property for non-operational uses, such as real estate development, commercial leases, and community uses.
- Provide a coherent process for the review of proposed uses and projects on JPB property, ranging from the granting of routine easements to the approval of large-scale developments.
- Provide Board-level input and transparency on long term, high dollar value decision-making processes and outcomes related to JPB property.

The scope of work includes the following tasks:
- Update inventory of JPB-owned property.
- Establish broad “property use” zones based on current, planned, and potential future needs for railroad uses.
- Analyze the tradeoffs between preserving JPB property for potential future railroad needs and allowing potential commercial leases, joint development projects, and community uses on the property.
- Develop an administrative framework for processing property use decisions, including clear guidance around what kinds of use decisions can be permitted at a staff-level, versus decisions when Board direction is needed or when additional technical analysis will be required.

**Station Management Toolbox:**
The Caltrain Station Management Toolbox is being developed to provide decision-making tools and technical analysis related to multi-modal access improvements and joint development opportunities at and around Caltrain stations. The project is being led by the Caltrain Planning team.

The objectives for the project include:
- Establish performance goals and metrics related to Caltrain’s station-based assets and programs in areas related to ridership, finance, sustainability, and equity.
- Understand the performance of Caltrain’s existing stations, and facilitate decision making about how limited space and funding can be leveraged and prioritized to improve performance and fill unmet needs.
- Provide Caltrain with a methodology to quickly and transparently evaluate the performance of potential access investments and TOD projects at and near stations.
- Provide a set of tools enabling Caltrain staff to more effectively coordinate with and support its partners, cities, and community stakeholder groups in the
planning of station improvements, access amenities, and the development of station area plans.

Caltrain staff recognizes that providing analytical support to the station planning processes through a robust “Toolbox” approach is critical. It will encourage partnership and collaboration by ensuring that decisions and planning can proceed in a way that is neither predetermined nor prescriptive but is sensitive to the unique context and stakeholder considerations at each station. Additionally, the incorporation of quantified performance goals and measures into the Toolbox project will enforce transparency and accountability throughout the planning process and will help Caltrain adopt an asset management approach to decisions impacting its facilities.

This project is funded by a Federal Transit Administration (FTA) grant, and began in mid-2017. There are three phases for the Station Management Toolbox:

- **Phase 1- Create the Toolbox Framework:** The Station Management Toolbox will be designed to measure and address financial, ridership, social and geographic equity, and environmental sustainability considerations as they relate to station planning. The Toolbox framework will cover a range of decision and planning scenarios and propose tools for quantitative analysis to aid in decision-making.

- **Phase 2- Build the Toolbox:** The Station Management Toolbox is envisioned as a methodological framework that will facilitate analysis of financial, programmatic, and capital strategies to maximize the performance of access and TOD investments at and around Caltrain stations. The Toolbox will be tested and calibrated using a range of different scenarios and station environments.

- **Phase 3- Test the Toolbox:** The Toolbox will be tested extensively through case studies along the Caltrain corridor. The Toolbox will be used to develop individual station access and TOD case study plans in collaboration with the cities of South San Francisco, Belmont, and Redwood City.

**Transit-Oriented Development Policy:**

The TOD Policy will build on the information developed as part of the RCUP and Toolbox to advance agency goals related to TOD. It will set forth a series of policies for disposition of JPB real estate assets; business objectives associated with joint development decisions; and other activities to promote TOD and leverage value in station areas.

The objectives of the policy include:

- Hone the list of development opportunity sites as provided in the RCUP to identify key opportunities to promote TOD in station areas and target prioritized sites and development goals for each.
- Use information provided by the Toolbox to analyze trade-offs between access improvements and development.
- Address the interplay between revenue objectives and other agency objectives to develop overarching goals for development of agency property.
• Develop a set of general business objectives to guide disposition of agency property for development and create policies to guide joint development decisions, including the balance between affordable housing and revenue.

• As it relates to development third party-owned property near Caltrain stations, adopt policies related to the agency’s role as an advocate and stakeholder, such as:
  o Engagement with jurisdictions having land use authority over TOD areas;
  o Strategies to capture value beyond JPB-owned properties; and
  o Criteria for endorsement of development projects near stations.

Work on the policy will commence in autumn 2018 with a background study that will summarize the initial findings of the RCUP and Toolbox and address ongoing agency TOD projects and other related local TOD efforts. The project will be undertaken by the Real Estate and Property Development Department.

Relationship to the Caltrain Business Plan:
All three initiatives are being closely coordinated with the Caltrain Business Plan and form part of a larger suite of planning and policy tools that will support comprehensive and informed decision making around JPB property interests. The ongoing work and refinement of these efforts is being synchronized with the work of the Caltrain Business Plan and additional updates to the Boards and the public are anticipated in conjunction with the Business Plan process in 2018.

Prepared by: Elizabeth Scanlon, Director of Caltrain Planning 650.295.6867
Update On Caltrain Planning Studies And Transit-Oriented Development Policy Development

Board of Directors
June 7, 2018
Agenda Item 13
Overview

• Purpose and Relationship between the Projects
• Rail Corridor Use Policy Overview
• Station Management Toolbox Overview
• Transit-Oriented Development Policy Overview
• Relationship to Caltrain Business Plan
Purpose of the Three Projects

• Three interrelated planning and policy analyses to address station access and transit-oriented development (TOD)

• Key questions for each project:
  - **Rail Corridor Use Policy**: What can be developed on JPB property? Who can use JPB right-of-way and real estate?
  - **TOD Policy**: How should Caltrain develop available property?
  - **Station Management Toolbox**: Help answer “Why?” questions, to help assess outcomes and trade-offs of station access and TOD decisions
TOD and Station Access at Caltrain Stations: What, Who, How, and Why

Relationship between the three projects
Purpose: Develop a policy to facilitate the processing, review, and approval of proposed uses and projects on JPB property

Objectives:
- Create a framework to evaluate potential conflicts between future transit uses and long-term development opportunities
- Provide a coherent process for the review of proposed uses and projects on JPB property
- Provide Board-level input and transparency on long term, high dollar value decision-making processes and outcomes related to JPB property
Rail Corridor Use Policy (RCUP)

- Tasks include:
  - Update inventory of JPB-owned property assets
  - Establish broad “property use” zones based on current, planned, and potential future needs for railroad uses
  - Analyze the tradeoffs between preserving JPB property for potential future railroad needs and allowing potential commercial leases and joint-development projects on the property
  - Develop an administrative framework for processing property use decisions (including distinguishing between staff-level decisions and Board-level decisions)

- Timing: Targeting Board adoption end of 2018
Station Management Toolbox

- **Purpose**: Provide a decision-making tool and technical analysis to help assess potential outcomes and trade-offs associated with access improvements and TOD at stations.
- **Funded by FTA planning grant**
- **Objectives**:
  - Establish performance goals and metrics related to Caltrain’s station-based assets and programs.
  - Provide Caltrain with a methodology to quickly and transparently evaluate the performance of potential access investments and transit oriented developments at and near stations.
Station Management Toolbox

• Tasks include:
  - Phase 1 – Create the Toolbox Framework: Establish the range of decision and planning scenarios where the Toolbox is needed, and propose tools for quantitative analysis to aid in decision-making
  - Phase 2 – Build the Toolbox: Create the set of tools that will comprise the Toolbox and facilitate technical analysis
  - Phase 3 – Test the Toolbox: Use case studies of three Caltrain stations (South San Francisco, Belmont, and Redwood City) to test the Toolbox and develop case study plans

• Timing: Phase 1 and 2 – summer 2018
  Phase 3 TBD – aligning with Business Plan
Station Management Toolbox – Draft
Graphic User Interface for Tool Inputs

SYSTEMWIDE INPUT
Service Level: 100 % of baseline
Fare: 100 % of baseline
Ride Hailing Trend: High
Parking Cost: 100 % of baseline

STATION INPUT
Station: Redwood City

AREA DEVELOPMENT
Caltrain Transit-Oriented Development Options
Site: A 2016 Baseline
- Residential: 0 DU
- Office: 0 KSF
- Retail: 0 KSF
- Other Commercial: 0 KSF
- Affordable Housing: 0 %

Site: B 2016 Baseline
- Residential: 0 DU
- Office: 0 KSF
- Retail: 0 KSF
- Other Commercial: 0 KSF
- Affordable Housing: 0 %

Site: C No site available
- Residential: 0 DU
- Office: 0 KSF
- Retail: 0 KSF
- Other Commercial: 0 KSF
- Affordable Housing: 0 %

Caltrain Parking
- Station has free
- Baseline Parking: 557 Spaces
- Parking Removed by TOD: 0 Spaces
- Parking Added by TOD: 0 Spaces
- New Parking Total: 557 Spaces

STATION INPUT (Continued)
Other Station Area Developments
- Residential: Baseline 0, New Total 0
- Office: Baseline 641, New Total 641 KSF
- Retail: Baseline 598, New Total 598 KSF
- Other Commercial: Baseline 2301, New Total 2301 KSF
- Affordable Housing: Baseline 0, New Total 0 %

AREA CONNECTIVITY
Public Transit Access
- Default: Med
- Med - Station has regular bus transfer opportunities

Capital Costs for Access Improvements
- Value: 0 $K NPV
- Operating/Maintenance Costs for Access Improvements
- Value: 0 $K Annual

Employee Shuttle Program
- Shuttle during AM Peak Hour: Value 0, New Total 0 Shuttles
- Capital Costs for Access Improvements: Value 0 $K NPV
- Operating/Maintenance Costs for Access Improvements: Value 0 $K Annual

Station Area Walkability
- Default: Med
- Med - Station area is accessible to pedestrians but marginally comfortable

Capital Costs for Access Improvements
- Value: 0 $K NPV
- Operating/Maintenance Costs for Access Improvements: Value 0 $K Annual

Bikeway miles within 1 mile of station
- Value: 0.9 Lane Miles
- Class I: 1.5 Lane Miles
- Class II: 13 Lane Miles
- Class IV: 0 Lane Miles
- Capital Costs for Access Improvements: Value 0 Dollars
- Operating/Maintenance Costs for Access Improvements: Value 0 Dollars

Current Station
Modified Station
Restore Systemwide Default
Restore Station Default
See Detailed Report
Station Management Toolbox – Draft

Graphic User Interface for Tool Outputs

**RIDERSHIP**

| Scenario Year | 2040 |

<table>
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<tr>
<th></th>
<th>STATION Baseline</th>
<th>STATION New Total</th>
<th>SYSTEM Baseline</th>
<th>SYSTEM New Total</th>
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<tr>
<td>Daily Boardings</td>
<td>6,705</td>
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<td>125,261</td>
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<td>Change in Off-Peak Ridership</td>
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<tr>
<td>Change in Peak Balance</td>
<td>-</td>
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<tr>
<td>Modal Access Efficiency Index</td>
<td>5.5</td>
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</table>

**AM Peak Mode of Access**

- Park-and-Ride: 17% Baseline, 17% New Total
- Other drop-off: 7% Baseline, 7% New Total
- Ride Hall: 19% Baseline, 19% New Total
- Transit: 46% Baseline, 46% New Total
- Bike: 32% Baseline, 32% New Total
- Walk: 49% Baseline, 49% New Total

**AM Peak Mode of Egress**

- Park-and-Ride: 11% Baseline, 11% New Total
- Other drop-off: 7% Baseline, 7% New Total
- Ride Hall: 73% Baseline, 73% New Total
- Transit: 49% Baseline, 49% New Total
- Bike: 27% Baseline, 27% New Total
- Walk: 27% Baseline, 27% New Total

**REVENUE**

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<tr>
<th></th>
<th>STATION Baseline</th>
<th>STATION New Total</th>
<th>SYSTEM Baseline</th>
<th>SYSTEM New Total</th>
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<tbody>
<tr>
<td>Passenger Revenue Annual $1K</td>
<td>$6,547</td>
<td>$6,547</td>
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<td>Parking Revenue Annual $1K</td>
<td>$800</td>
<td>$800</td>
<td>$9,645</td>
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<td>Other Operating Costs Annual $1K</td>
<td>$0</td>
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<tr>
<td>Development Revenue NPI $1K</td>
<td>$0</td>
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<td>$0</td>
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<tr>
<td>Other Capital Costs NPI $1K</td>
<td>$0</td>
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**EQUITY & ENVIRONMENTAL**

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<tr>
<th>Jobs within 1/2 mile</th>
<th>STATION Baseline</th>
<th>STATION New Total</th>
<th>SYSTEM Baseline</th>
<th>SYSTEM New Total</th>
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<tr>
<td>17,256</td>
<td>17,256</td>
<td>488,474</td>
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<td>New affordable housing 1/2 mile</td>
<td>0</td>
<td>0</td>
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<td>Access/Egress VMT</td>
<td>3,619</td>
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**PARKING**

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<th></th>
<th>Station Value</th>
<th>2016 Park &amp; Ride Riders by Access Distance</th>
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<tr>
<td></td>
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<td>STATION</td>
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<tr>
<td>Baseline Parking Spaces</td>
<td>557</td>
<td>60%</td>
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<tr>
<td>Parking Occupancy</td>
<td>72%</td>
<td>24%</td>
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<td>Net Change Parking Spaces</td>
<td>0</td>
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<tr>
<td>Net Change Park &amp; Ride Riders</td>
<td>0</td>
<td>1-1</td>
</tr>
<tr>
<td>Net Change Non-Park &amp; Ride Riders</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Net Change Total Ridership</td>
<td>0</td>
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<tr>
<td>10%</td>
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Transit-Oriented Development (TOD) Policy

• **Purpose:** Establish agency goals related to TOD and set forth a series of policies for disposition of JPB real estate assets

• **Objectives:**
  - Hone the list of development “opportunity sites” from the RCUP to identify key opportunities to promote TOD, and analyze trade-offs with the Toolbox
  - Adopt policies related to the agency’s role as an advocate and stakeholder related to third-party development near Caltrain
  - Develop a set of general business objectives to guide disposition of agency property for development (including balancing revenue vs. affordable housing)
TOD Policy

• Tasks include:
  - Create detailed summary of potential opportunity sites, potential development scales, and potential revenue
  - Characterize key trade-offs for JPB’s goals, business terms, and other activities (e.g., affordability targets vs. revenue)
  - Identify potential value capture strategies
  - Explore benefits of development in broader station areas near Caltrain corridor and possible criteria for endorsement of development projects near stations

• Timing: commencing summer 2018; targeting Board adoption summer 2019
Relationship to Caltrain Business Plan

• These three projects will form a comprehensive technical and policy-based understanding of the extent to which the JPB’s real estate assets can be effectively monetized

• Caltrain Business Plan will closely coordinate with these three initiatives, leveraging their technical findings and incorporating any policy direction the Board provides through these studies
Questions and comments?