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

May 3, 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 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
5. Chairperson’s Report
6. Report of the Citizens Advisory Committee
7. Report of the Executive Director
   a. Presentation on Dedicated Law Enforcement Services
   b. Peninsula Corridor Electrification Project Quarterly Report and Monthly Report for March 2018
8. Caltrain Fare Study Update
9. Presentation of Preliminary Fiscal Year 2018-19 Operating and Capital Budgets
10. Update on Blended System Planning with California High Speed Rail
11. Correspondence
12. Board Member Requests

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

14. 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

15. Adjourn
INFORMATION FOR THE PUBLIC

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

If you have questions on the agenda, please contact the JPB Secretary at 650.508.6279. 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.
CALL TO ORDER/PLEDGE OF ALLEGIANCE
Chair Bruins called the meeting to order at 9:03 a.m. and welcomed the public to a Special Meeting on the budget workshop. Director Davis led the Pledge of Allegiance.

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

PRELIMINARY FISCAL YEAR 2018/2019 AND FISCAL YEAR 2020 BUDGET OUTLOOK
General Manager/CEO Hartnett provided a brief history of Caltrain, the electrification infrastructure under construction, ridership increases and demands upon the current system. He discussed the future needs of the system, including investment in capital infrastructure and personnel.

Mr. Hartnett stated the budget workshop was intended as informational and the budget itself has been pared down extensively as best as possible, with deep cuts incorporated to both operating and capital sides. He noted a very conservative revenue projection, noting there are inherent risks included in the budget, such as rising fuel costs. He discussed the projected budget deficit and closing the gap will require many components, including possibly increased member contributions, using reserves, borrowing, fare increases and noted the consequences of each. Mr. Hartnett stated that staff would be back in May and June with subsequent presentations on a final budget.

Mr. Hartnett introduced Michelle Bouchard, Chief Operating Officer, Rail, and Chief Financial Officer, Derek Hansel, who presented and discussed in detail the FY 18 Budget Performance and FY 19 Budget Outlook.

Chief Operating Officer, Rail, Bouchard discussed the objectives of the presentation including service background, average weekday ridership (62,000 average weekday), distribution of riders and capacity of trains. She then reviewed revenue and fare history, noting the extraordinary farebox recovery currently being received. Further, she discussed the operating contributions from San Mateo County, Valley Transit and San Francisco.

Chief Financial Officer Hansel discussed the sources of funding in the operating budget and associated expenses (use of the funds), including federal, state, other, and
member agencies’ contributions. On the capital budget side, Mr. Hansel noted that the use of funding has escalated in the area of facilities and equipment, (grade separations, etc.) and the State of Good Repair/deferred maintenance.

At that time, Ms. Bouchard and Mr. Hansel answered questions of Board members.

Mr. Hansel then reviewed the FY 18 budget performance and projections, including operating revenue, contributed revenue, total revenue, operating expenses, administrative expense, long term debt expense, and total expenses. He announced the current year budget deficit of approximately $2.9m; down from $8.5m and reasons for the welcomed decrease in deficit.

Next, Mr. Hansel reviewed the current key expense drivers, including the rail contractor, TransitAmerica Services, Inc. (TASI) expenses and other key drivers including, diesel fuel, insurance premiums, expenses related to the mandated Positive Train Control expenses, security and wages and benefits.

Mr. Hansel reviewed annualized costs for 2.4 for Fiscal Year 2018 2.25 new operating full-time equivalent requests, adjustment in wages and fringe benefit and vacancy of six percent. He reviewed where the 64.8 FTE employees fall into operations, grants, etc.

Regarding Fiscal Year 2018-19, Mr. Hansel reviewed the preliminary budget outlook in the similar budget categories, showing a current projected deficit of $6.3m. He discussed anticipated refinancing of the 2007 and 2015 revenue bonds and the new money needs, including real property acquisition verses leasing of property. He cautioned into dipping into restricted reserves.

Ms. Bouchard focused on the Fiscal Year 2019 Capital Budget of $78m and the subsequent available funding resulting in a shortfall of $37m. She discussed the impacts of deferred capital investment, most notably the State of Good Repair (“SOGR”) deferred maintenance issues, noting that budget category has been halved each year to meet budget shortfalls, which is now evident with main line locomotive failures and train car deferred maintenance. To the riding public, there are service recovery protocols in place, however, they are getting harder to accomplish without ongoing repairs.

Ms. Bouchard discussed possible solutions to the deficit, including budget savings, use of one-time revenues, fare structure modifications, advertising revenues, and/or additional member agency contributions. She discussed demand elasticity with possible fare increases including a scenario testing and reduction in Clipper card discounts.

In order to close the projected budget gap, Ms. Bouchard recommended utilizing increased member contributions for San Francisco, San Mateo and Valley Transportation Authority, as well as a member-agency increase to fund the capital operations deficit needs to relieve the deferred maintenance issues.
Mr. Hartnett concluded by inviting board member commentary on the presentation.

Chair Bruins invited public comment:

Public Comment

Jeff Carter, Millbrae.
Roland Lebrun, San Jose.
Adina Levin, Friends of Caltrain.
Andy Chow, San Francisco.

Board members thanked staff for the informative and transparent budget workshop, asked clarifying questions and provided extensive commentary on the budget presentation.

Date/Time of Next Regular Meeting: Thursday, April 5, 2018 10:30 a.m.

Adjourn
The meeting adjoumed at 10:42 a.m.
MINUTES OF APRIL 5, 2018

MEMBERS PRESENT: J. Bruins (Chair), C. Brinkman, C. Chavez, D. Davis, G. Gillett, J. Gee, C. Stone, M. Zmuda

MEMBERS ABSENT: D. Pine


1. CALL TO ORDER/PLEDGE OF ALLEGIANCE

Chair Jeannie Bruins called the meeting to order at 10:58 a.m.

2. ROLL CALL

Assistant District Secretary Gumpal called the roll. A quorum was present.

3. PUBLIC COMMENT

Vincent DeMartell, Palo Alto, spoke regarding bicycles and electric multiple unit design.

Curt Relick, Redwood City, discussed the importance of allowing bicycles on board.

Scott Yarborough, San Francisco, expressed appreciation for bikes on Caltrain.

Vaughn Wolfe, Sunnyvale, discussed electrification and cost of diesel fuel.

Elika, Oakland, commented on the processing of written comments to the board.

Shirley Johnson, discussed reliability of service and bicycles on board.

Roland Lebrun, San Jose, discussed electric multiple units.

John Aikin, San Mateo, discussed the importance of having bicycles in view of their owners.

Adina Levin, Friends of Caltrain, reported on a 300-person activity conducted regarding train best business planning practices.

Lois Kelleman, Mt. View, discussed refunds bicycles that are bumped off trains.
4. CONSENT CALENDAR

MOTION
M/S (Davis Brinkman) moved approval of Consent Calendar items a-f.

Vote: 8-0-1
Absent: Pine

a. Approval of Minutes of Special Meeting of March 1, 2018
b. Approval of Minutes of March 1, 2018
   Amended, Page 5, to state that the next board meeting should be “April 5.”

Public Comment
Roland Lebrun, San Jose.

c. Acceptance of Statement of Revenues and Expenditures for February 2018
d. Receive Key Caltrain Performance Statistics – February 2018
e. Receive State and Federal Legislative Update
f. Authorize Rejection of Bids for New Control Point at Brittan Avenue

Public Comment
Roland Lebrun, San Jose.

5. CHAIRPERSON’S REPORT

None.

6. REPORT OF THE CITIZENS ADVISORY COMMITTEE

Brian Shaw, Chair of the Caltrain Citizens Advisory Committee, provided highlights of his written report from the last advisory committee meeting.

7. REPORT OF THE EXECUTIVE DIRECTOR

Mr. Hartnett referred to his written report provided in the packet.

a. Financial Dashboard
b. Caltrain Transit and Intercity Rail Capital Program (TIRCP) Update
Director of Planning Liz Scanlon, provided a brief overview of the program, scope of the application and the cost of the grant application. Ms. Scanlon and Ms. Bouchard answered questions of board members regarding the connection and interaction with the Gilroy station, timeline for the decision on the award of the grant.

Public Comment

Roland Lebrun, San Jose.
Shirley Johnson, San Francisco.
Scott Yarborough, San Francisco.
Miguel Lopez, San Francisco.
Curt Relick, Redwood City.
Jeff Carter, Millbrae.
Elika, Oakland.
Adina Levin, Friends of Caltrain.
Andy Chow, San Francisco.

c. Peninsula Corridor Electrification Project Monthly Report for February 2018

Chief Officer, CalMod, John Funghi, provided a monthly brief report on the electrification project, most notably, the design of the electrification project, the overhead catenary system design, tracks and power system, interconnection design and finally, a tunnel modification contract, currently out for bid and due back April 18. Finally, 35 pole foundations have been erected in San Bruno. He discussed electric vehicle body welding taking place in Utah.

d. Positive Train Control Monthly Report

Chief Officer, Rail, Bouchard stated she is pleased with recent interactions with Wabtec. She responded to questions of board members regarding the contract.

Mr. Hartnett added that he met with the Federal Railroad Administrative executive recently regarding the Positive Train Control project, responded to a public comment regarding a door not closing on a moving train car, and discussed the High Speed Rail Business Plan and stated he would be commenting on the plan soon.

8. AUTHORIZE THE EXECUTIVE DIRECTOR TO EXECUTE CONTRACT CHANGE ORDERS FOR DELAY IN ISSUING FULL NOTICES TO PROCEED FOR DESIGN BUILD CONTRACT WITH BALFOUR BEATTY, INC. AND ELECTRIC MULTIPLE UNIT (EMU) PROCUREMENT CONTRACT WITH STADLER AND AWARD OF CONTRACT INCENTIVES IN THE DESIGN BUILD CONTRACT.

Chief Officer, CalMod, John Funghi, provided background information on the delay of the contract, discussed the budgeted contract incentives, and recommended award
of three change orders, including reinserting the 5.2 percent Disadvantaged Business Enterprise goal, which was inadvertently excluded but budgeted for.

Mr. Fungi responded to directors’ questions regarding contract incentives. Director Gee commented on the Bay Area’s robust construction market certain and the incentives that are often necessary in the market.

Public Comment

Jeff Carter, Millbrae.
Roland Lebrun, San Jose.

RESOLUTION
M/S (Gillett/Brinkman) moved approval of Resolution 2018-12, Authorizing the Executive Director to Execute Contract Change Orders for Delay in Issuing Full Notices to Proceed for Design Build Contract with Balfour Beatty, Inc. and Electric Multiple Unit Procurement Contract with Stadler U.S., Inc. and Award of Contract Incentives in the Design Build Contract.

ADOPTED: AYES - Bruins, Brinkman, Chavez, Davis, Gillett, Gee, Stone, Zmuda
ABSENT: Pine

9. AUTHORIZE DELEGATION OF AUTHORITY TO EXECUTIVE DIRECTOR AND CHAIRPERSON OF THE BOARD OF DIRECTORS TO APPROVE CERTAIN REAL ESTATE OFFERS, TRANSACTIONS AND PROPERTY RIGHTS CONVEYANCES

Director of Real Estate, Brian Fitzpatrick, clarified questions of the board. A request was made to amend the Resolution No. 2018-14 to include a provision where staff reports back to the board on periodic transactions.

RESOLUTION
M/S (Stone/Davis) moved approval of Resolution 2018-13, Authorizing the Executive Director, in Consultation with the Chairperson of the Board of Directors, to Approve Certain Real Estate Transactions in Connection with Peninsula Corridor Joint Powers Board Capital Projects.

RESOLUTION
M/S (Stone/Davis) moved approval of Resolution 2018-14, Authorizing the Executive Director to Convey Certain Property Rights to Cities Utility Companies and Other Third Parties to Support Peninsula Corridor Joint Powers Board Capital Projects, as amended to direct the Executive Director, or designee, to provide quarterly updates to the Joint Powers Board on transactions entered into pursuant to this resolution.

ADOPTED: AYES - Bruins, Brinkman, Chavez, Davis, Gillett, Gee, Stone, Zmuda
ABSENT: Pine
10. AUTHORIZE EXECUTION OF MEMORANDUM OF UNDERSTANDING WITH STANFORD UNIVERSITY AND FUNDING AGREEMENTS FOR MEMBER AGENCY SUPPORT OF THE CALTRAIN BUSINESS PLAN, AND INCREASING THE CAPITAL BUDGET

At that time, Director Brinkman recused herself from the meeting and left the room.

Principal Planner, Sebastian Petty, provided a presentation on the overview of the project, a funding update, and next steps to keep the project moving. He discussed the partnership with Stanford University to assist in the delivery of the business plan, including access to technical assistance.

Board members inquired about the contract with Stanford, third party contractors and payment therein. Mr. Petty responded to board members.

CEO Hartnett thanked Stanford for its willingness to partner in such an important endeavor.

Public Comment
Leslie Low, Senior Environmental Planner, Stanford University.
Jeff Carter, Millbrae.

RESOLUTION
M/S (Gee/Chavez) moved approval of Resolution 2018-15, Authorizing the Execution of a Memorandum of Understanding with Leland Stanford Junior University and the Execution of Funding Agreements to Receive Up to $1.5 million of Member Agency Support for the Development of the Caltrain Business Plan and Amending and Amending to Increase the Fiscal Year 2018 Capital Budget By $1.5 million for a Total Capital Budget of $72,823,295.

ADOPTED: AYES - Bruins, Chavez, Davis, Gillett, Gee, Stone, Zmuda
ABSENT: Brinkman, Pine

11. AUTHORIZE ADOPTING OF THE NEGATIVE DECLARATION CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) DOCUMENT FOR THE SAN MATEO SET OUT TRACK PROJECT

Project Manager, Rafael Bolon, reviewed the project, which consists of 1,000 feet of replacement track at 25th Avenue in San Mateo.

RESOLUTION
M/S (Gee/Stone) moved approval of Resolution 2018-16, Adopting Negative Declaration and Approving the San Mateo Set Out Track Project - 25th Avenue Grade Separation.

ADOPTED: AYES - Bruins, Brinkman, Chavez, Davis, Gillett, Gee, Stone, Zmuda
ABSENT: Pine
CORRESPONDENCE
Correspondence received was contained in the reading file.

Public Comment
Roland Lebrun, San Jose.
Elka, Oakland.

BOARD MEMBER REQUESTS
Director Gillett requested an election timeline for a potential November ballot measure and a future agenda item on Transit Oriented Development use policy “toolbox.”

DATE/TIME/PLACE OF NEXT REGULAR MEETING: The next meeting will be held Thursday, May 3, 2018 at 10 a.m., 1250 San Carlos Avenue, 2nd Floor, San Carlos.

ADJOURN
Adjoumed at 12:35 p.m.
AGENDA ITEM #4 (c)  
MAY 3, 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 MARCH 31, 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 March 2018.

This staff report provides a brief discussion of significant items and trends on the attached Statement of Revenues and Expenses through March 31, 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:  There have been no changes to the forecast from the prior month. 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.

Year to Date Revenues:  As of March year-to-date actual, the Total revenues (page 1 of the Statement of Revenues and Expenses, line 17) are $2.5 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), Operating Grants (page 1, line 11), JPB Member agency contributions (page 1, line 12) that were reduced due to a decrease in the annual insurance premiums and Other Income (page 1, line 5) due to Union Pacific shared track and maintenance revenue.
Year to Date Expenses: As of March year-to-date actual, the Total Expense (page 1, line 48) is $0.2 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 March 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**

**March 2018**

<table>
<thead>
<tr>
<th>REVENUE</th>
<th>OPERATIONS:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOCAL ORGANIZATION:</strong></td>
<td><strong>FOCAL ORGANIZATION:</strong></td>
</tr>
<tr>
<td>Farebox Revenue</td>
<td>68,064,597</td>
</tr>
<tr>
<td>Parking Revenue</td>
<td>4,167,261</td>
</tr>
<tr>
<td>Shuttles</td>
<td>1,305,184</td>
</tr>
<tr>
<td>Rental Income</td>
<td>1,395,187</td>
</tr>
<tr>
<td>Other Income</td>
<td>2,152,557</td>
</tr>
</tbody>
</table>

**TOTAL OPERATING REVENUE**

| **TOTAL OPERATING REVENUE** | 77,084,786 | 79,744,900 | 2,660,114 | 3.5% | 110,493,655 | 110,898,230 | 404,575 | 0.4% |

**CONTRIBUTIONS:**

1. **AB434 Peninsula & TA Shuttle Funding** | 1,316,957 | 1,343,514 | 26,557 | 2.0% | 1,796,300 | 1,796,300 | - | 0.0% |
2. **Operating Grants** | 3,305,175 | 3,199,237 | (105,938) | (3.2%) | 4,265,650 | 4,265,650 | - | 0.0% |
3. **JPB Member Agencies** | 16,909,508 | 16,863,047 | (46,461) | (0.3%) | 20,448,014 | 20,448,014 | - | 0.0% |
4. **Use of Reserves** | - | - | - | - | 8,490,979 | 2,855,269 | (5,635,710) | (66.4%) |

**TOTAL CONTRIBUTED REVENUE**

| **TOTAL CONTRIBUTED REVENUE** | 21,531,640 | 21,405,798 | (125,842) | (0.6%) | 35,000,943 | 29,365,233 | (5,635,710) | (16.1%) |

**GRAND TOTAL REVENUE**

| **GRAND TOTAL REVENUE** | 98,616,426 | 101,150,698 | 2,533,272 | 2.6% | 145,494,598 | 140,263,463 | (5,231,135) | (3.6%) |

### EXPENSE

#### OPERATING EXPENSE:

| Shuttles Services | 3,302,698 | 3,529,415 | 226,717 | 6.9% | 5,161,000 | 4,760,700 | (400,300) | (7.8%) |
| Security Services | 4,042,282 | 4,466,678 | 424,396 | 10.5% | 5,865,760 | 5,865,760 | - | 0.0% |
| Rail Operator Service | 58,772,557 | 58,908,831 | 136,274 | 0.2% | 84,418,672 | 83,378,587 | (1,040,085) | (1.2%) |
| Communications and Marketing | 98,299 | 145,738 | 47,439 | 48.3% | 211,500 | 202,045 | (9,455) | (4.5%) |
| Professional Services | 3,051,313 | 3,531,923 | 480,610 | 15.8% | 6,015,928 | 4,800,557 | (1,215,371) | (20.2%) |
| Timetables and Tickets | 59,768 | 3,327 | (56,441) | (94.4%) | 144,700 | 144,700 | - | 0.0% |
| Facilites and Equipment Maint | 938,388 | 972,405 | 34,017 | 3.6% | 1,509,598 | 1,490,658 | (18,940) | (1.3%) |
| Fuel and Lubricants | 6,405,898 | 7,252,275 | 846,377 | 13.2% | 10,599,289 | 9,911,789 | (687,500) | (6.5%) |
| Utilities | 1,481,560 | 1,454,057 | (34,503) | (2.4%) | 1,964,783 | 1,955,456 | (9,327) | (0.5%) |
| **TOTAL OPERATING EXPENSE** | 80,186,894 | 79,630,104 | (556,790) | (0.7%) | 119,253,252 | 116,737,878 | (2,515,374) | (2.1%) |

### ADMINISTRATIVE EXPENSE

| Wages and Benefits | 5,800,190 | 6,203,180 | 402,990 | 6.9% | 9,628,400 | 8,500,000 | (1,128,400) | (11.7%) |
| Managing Agency Admin OH Cost | 4,252,784 | 4,316,530 | 63,746 | 1.5% | 6,051,231 | 5,899,231 | (152,000) | (2.5%) |
| Board of Directors | 8,136 | 11,354 | 3,218 | 39.6% | 14,600 | 14,600 | - | 0.0% |
| Professional Services | 3,051,313 | 3,531,923 | 480,610 | 15.8% | 6,015,928 | 4,800,557 | (1,215,371) | (20.2%) |
| Communications and Marketing | 98,299 | 145,738 | 47,439 | 48.3% | 211,500 | 202,045 | (9,455) | (4.5%) |
| Other Office Expenses and Services | 1,722,698 | 1,332,757 | (389,941) | (22.6%) | 3,021,012 | 2,810,476 | (201,536) | (7.0%) |

**TOTAL ADMINISTRATIVE EXPENSE**

| **TOTAL ADMINISTRATIVE EXPENSE** | 14,933,420 | 15,541,483 | 608,062 | 4.1% | 24,942,671 | 22,226,909 | (2,715,762) | (10.9%) |

**NET SURPLUS / (DEFICIT)**

| **NET SURPLUS / (DEFICIT)** | 2,518,809 | 4,810,134 | 2,291,325 | 91.0% | 0 | 0 | 0 | 0.0% |

4/24/18 11:32 AM
**PENINSULA CORRIDOR JOINT POWERS BOARD**

**INVESTMENT PORTFOLIO**

**AS OF MARCH 31, 2018**

<table>
<thead>
<tr>
<th>TYPE OF SECURITY</th>
<th>MATURITY DATE</th>
<th>INTEREST RATE</th>
<th>PURCHASE PRICE</th>
<th>MARKET PRICE</th>
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<tbody>
<tr>
<td>Local Agency Investment Fund (Unrestricted)</td>
<td>Liquid Cash</td>
<td>1.524%</td>
<td>73,128</td>
<td>73,128</td>
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<tr>
<td>County Pool (Restricted)</td>
<td>Liquid Cash</td>
<td>1.528%</td>
<td>1,000,000</td>
<td>1,000,000</td>
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<tr>
<td>County Pool (Unrestricted)</td>
<td>Liquid Cash</td>
<td>1.528%</td>
<td>981,817</td>
<td>981,817</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>
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<tr>
<td>Other (Restricted)</td>
<td>Liquid Cash</td>
<td>0.200%</td>
<td>25,117,358</td>
<td>25,117,358</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>$ 83,313,223</td>
<td>$ 83,313,223</td>
</tr>
</tbody>
</table>

Accrued Earnings for March 2018          $ 8,735.10  
Cumulative Earnings FY2018               $ 67,858.71  

* 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 March 2018, the total cost of the Total County Pool was $4,983,162,961.13 and the fair market value per San Mateo County Treasurer's Office was $4,970,065,501.45.

*** 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 - MARCH 2018

ACTION
Staff Coordinating Council recommends that the Board receive the Performance Report for March 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 March 2018, Caltrain’s average weekday ridership (AWR) increased 0.6 percent to 59,364 from March 2017 AWR of 58,991. The total number of passengers who rode Caltrain in March 2018 decreased 2.4 percent to 1,589,931 from 1,629,054 in March 2017. This month ticket sales for One Way tickets (up 18.2 percent), ED One Way tickets (up 6.5 percent) and ED Monthly Passes (up 1.6 percent) increased from March 2017. Ticket sales for Day Passes (down 12.5 percent), ED Day Passes (down 10.3 percent) and Monthly Passes (down 3.2 percent) decreased from March 2017. The shift in fare product usage is due to the recent 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 0.7 percent (11,556 rides) of March 2018 rides and 1.1 percent of March 2018 Monthly Ticket Sales Revenue. The number of Eligible Go Pass Employees decreased 2.6 percent to 74,675 from 76,664 from March 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 126 from 121 from March 2017. Farebox Revenue increased 2.4 percent to $8,103,016 from $7,911,150 in March 2017.
On-time performance (OTP) for March 2018 was 94.3 percent, compared to 96.5 percent OTP for March 2017. In March 2018 there were 515 minutes of delay due to mechanical issues compared to 408 minutes in March 2017.

Looking at customer service statistics, there were 7.6 complaints per 100,000 passengers in March 2018 which remained the same from March 2017.

Shuttle ridership for March 2018 is down 5.2 percent from March 2017. For the station shuttles, the Millbrae-Broadway shuttle averaged 158 daily riders. The Belmont-Hillsdale shuttle averaged 39 daily riders. The weekend Tamien-San Jose shuttle averaged 24 daily riders. When the Marguerite shuttle was removed, the impact to ridership was a decrease of 14.2 percent.

**Caltrain Promotions - March 2018:**

**Transit Driver Appreciation Day** - On Friday, March 16, Caltrain and other Bay Area transit agencies participated in Transit Driver Appreciation Day. As a way to say “We appreciate you” to all the men and women that transport our customers to where they need to go, staff encouraged customers throughout the Bay Area to give thanks to transit operators. Caltrain celebrated by showcasing TASI Engineers and Conductors from the field and shared on all social media platforms and Peninsula Moves Blog.

**Partnership** - Caltrain again partnered with Cinequest Film Festival, an annual independent festival that celebrates the cinematic arts with Silicon Valley innovation. In 2018 the Cinequest Film & Creativity Festival was held downtown San Jose and Redwood City. It took place from March 5 to March 17. This was the perfect opportunity to partner with Caltrain as a transit partner. Communications included news release/blogs, social media and the event showcased on go.caltrain.com. Ad cards were also placed onboard trains to promote and encourage people to use transit.

**On-going promotions:**

**Caltrain Mobile Ticketing App Launch** - Caltrain’s Mobile Ticketing App launched in February. The campaign runs from February 10 and extended through the end of July. Ad campaign strategies included geo-targeted sponsored Facebook ads and SEO/SEM search click to web campaign. The Mobile App solution will be heavily promoted during the 2018 Giants season.

**San Jose Sharks at SAP Center** - The Sharks have clinched a playoff spot. There were eight home games played in March. Caltrain carried an additional 2,514 riders. Year-to-date additional ridership boarding at San Jose Diridon was 10,485.
Caltrain Digital Metrics - March 2018

New Followers
+2936
Mar, 18 - 180,673
Feb, 18 - 177,737
Mar, 17 - 132,689

Top Tagged Issues
1. Delays
2. CalMod
3. Compliment
4. Clipper
5. Bike Car

Caltrain.com Pageviews
Mar, 18 - 765,157
Feb 18 - 681,590
Mar, 17 - 734,646

Monthly Yelp & FB Rating
☆☆☆☆☆
(2 reviews)

Mobile App - Mar, 18
8,410 - Downloads
10,028 - Active Users
9,167 - Tickets Sold
2.3 - Overall Rating

Social Sentiment
Neutral 1818
Positive 964
Negative 1,247

Social Media Impression Spikes
March, 2018

Your Tweets earned 1.5M impressions over this 31 day period

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

#### March 2018

<table>
<thead>
<tr>
<th></th>
<th>FY2017</th>
<th>FY2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Ridership</td>
<td>1,629,054</td>
<td>1,589,931</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Average Weekday Ridership</td>
<td>58,991</td>
<td>59,364</td>
<td>0.6%</td>
</tr>
<tr>
<td>Total Farebox Revenue</td>
<td>$7,911,150</td>
<td>$8,103,016</td>
<td>2.4%</td>
</tr>
<tr>
<td>On-time Performance</td>
<td>96.5%</td>
<td>94.3%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Average Caltrain Shuttle Ridership</td>
<td>9,911</td>
<td>9,393</td>
<td>-5.2%</td>
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#### 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>13,899,118</td>
<td>14,006,704</td>
<td>0.8%</td>
</tr>
<tr>
<td>Average Weekday Ridership</td>
<td>58,263</td>
<td>60,170</td>
<td>3.3%</td>
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<tr>
<td>Total Farebox Revenue</td>
<td>$68,064,597</td>
<td>$71,506,077</td>
<td>5.1%</td>
</tr>
<tr>
<td>On-time Performance</td>
<td>94.3%</td>
<td>94.8%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Average Caltrain Shuttle Ridership</td>
<td>9,286</td>
<td>8,820</td>
<td>-5.0%</td>
</tr>
</tbody>
</table>

### Graph A

**Caltrain Average Weekday Ridership**

- FY2017: 58,991
- FY2018: 59,364
PENINSULA CORRIDOR JOINT POWERS BOARD  
STAFF REPORT

TO: Joint Powers Board

THROUGH: Jim Hartnett  
Executive Director

FROM: Seamus Murphy  
Chief Communications Officer

SUBJECT: STATE AND FEDERAL LEGISLATIVE UPDATE

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

SIGNIFICANCE
The 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
FY 2018 Omnibus Passes, Funding Government Through September: On March 23, Congress passed a $1.3 trillion FY 2018 omnibus spending bill, narrowly avoiding a government shutdown. The measure boosts funding for defense and domestic programs, and is consistent with the two-year budget caps deal reached earlier in February, which allowed for a $80 billion increase in defense spending, and a $63 billion increase for nondefense programs.

The bill also includes $10 billion for infrastructure which funds programs at the Army Corps of Engineers, Environmental Protection Agency (EPA), Bureau of Reclamation, and the Department of Transportation (DOT). This funding was based on the two-year bipartisan budget deal that included $20 billion, split between 2018 and 2019, for infrastructure defined as “to invest in infrastructure, including programs related to rural water and wastewater, clean and safe drinking water, rural broadband, energy, innovative capital projects, and surface transportation.”

The bill provides funding for all of the federal agencies for fiscal year 2018 (which ends on September 30, 2018). The bill passed with bipartisan support with a vote of 256-17 in the House and 65-32 in the Senate. Below is a summary of the funding for DOT departments and programs.

The FY 2018 Omnibus Appropriations bill includes $86,854,866,000 for the Department of Transportation, a $8.257 billion increase over FY 2017 funding.

Highways: $47.5 billion for the Federal Highway Administration (FHWA), a $2.18 billion increase over FY 2017 funding.

- Does not rescind any federal-aid highway contract authority.

- $44.234 billion from the Highway Trust Fund for the Federal-Aid Highways Program, consistent with the FAST Act authorization and a $968 million increase over FY 2017 funding.

  o Appropriates an additional $2.525 billion for FHWA programs from the Treasury General Fund, in addition to the contract authority programs:

    - $1.98 billion for Surface Transportation Block Grant Program (STBG)—Apportioned to states in the ratio that states receive obligation limitation distribution under the omnibus. Funding is available for obligation for FY 2018-2021. Money can be spent on construction of highways, bridges, tunnels, including designated routes of the Appalachian development highway system and
local access roads under section 14501 of title 40.” Cannot spending money on the transportation alternative projects.

- $225 million for a **competitive highway bridge program** for states that have a population density of less than 100 individuals per square mile

- Allows states to reprogram “dead earmarks” (at least 10 years old and have had no more than 10 percent of its available funding obligated) and transfer the money to other STBGP-eligible purposes located within 50 miles of the original earmark.

**TIGER:** $1.5 billion for TIGER grants, which is $1 billion more than the FY 2017 funding.

- Provides up to $15 million for **planning grants**, with no minimum grant size.
- Maximum grant size remains $25 million, and minimum grant size remains $5 million.
- Maximum TIGER share of a project cost is still 80 percent.
- 30 percent of the money for rural areas with a minimum grant size of $1 million and the maximum federal share is 100 percent.
- The maximum amount given to any one state is still 10 percent of the total, which is $147.5 million.
- “the Secretary shall not use the federal share as a selection criteria in awarding projects.”
- DOT will be required to issue the NOFA by May 22. All grant applications will be received by August 20. DOT will have to announce grant recipients by December 18, 2018.

**Federal Transit Administration (FTA):** $13.5 billion for the FTA, a $1 billion increase from the FY 2017 level.

- $2.64 billion for **Capital Investment Grants**, a $232 million increase from the FY 2017 funding.
  - $1.5 billion for **New Starts** projects-- limits federal match for New Starts Full Funding Grant Agreements to 51%.
  - $716 million for **Core Capacity** projects
  - $400 million for **Small Starts** projects
  - Orders the DOT Secretary to “continue to administer the capital investment grant program in accordance with the procedural and substantive requirements of section 5309.”
  - Orders the FTA to obligate at least 85 percent of the FY 2018 money by December 31, 2019.

- The bill provides the FAST Act authorized $9.733 billion for **transit formula grants** from the Highway Trust Fund plus an additional $834 million from the General Treasury Fund for transit infrastructure grants.
  - $400,000,000 for **State of Good Repair Formula**
  - $209,104,000 for **Buses – Formula**
  - $161,446,000 for **Buses – Discretionary**
$29,450,000 for Buses – Low/No Emission  
$30,000,000 for High Density State Formula

**Federal Railroad Administration (FRA):** $3,091,445,000 for the FRA, $1.24 billion increase over FY 2017 funding.

- $1.94 billion for **Amtrak**, a $446 million increase over the FY 2017 enacted funding.
  - $650 million for Northeast Corridor grants
  - $1.3 billion to support the national network including $50 million for “the development, installation and operation of **railroad safety technology**, including the implementation of a **positive train control system**, on State-supported routes as defined under section 24102(13) of title 49, United States Code, on which positive train control systems are not required by law or regulation.”

- **$863 million** for three new rail grant programs established by the FAST Act:
  - $593 million for **Consolidated Rail Infrastructure and Safety Improvements (CRISI)**, a $525 million increase over the FY 2017 funding, and includes $250 million for positive train control implementation. Commuter railroads are eligible for this money which is new.
  - $250 million for the **Federal State Partnership for State of Good Repair** grants program, which is $225 million more than the FY 2017 funding.
  - $20 million for **Restoration and Enhancement Grants**, a $15 million increase over FY 2017 funding.

- **$25 million** for **Railroad Rehabilitation & Improvement Financing (RRIF)** credit subsidy authority and orders the Office of Management and Budget (OMB) to start rating RRIF loans by annual cohort.

- Drops the House provision that projects funding for the California High Speed Rail.

**Federal Aviation Administration (FAA):** $18 billion for the FAA, a $1.59 billion increase over the FY 2017 funding.

- **Six month extension** of the FAA authorization bill.

- Includes full funding for all air traffic control personnel.

- **$3.35 billion** from the FAA for the **Airport Improvement Program (AIP)** plus an additional $1 billion from the Treasury General Fund. This funding will be distributed by discretionary grants, and FAA will give priority to nonprimary, nonhub, and small hub airports, and the federal cost share of projects at the nonprimary airports shall be 100 percent.

- $100 million for a new program, Highly Automated Vehicles research and development.
  
  o $38 million to establish a joint research program between NHTSA, FMCSA, FTA and FHWA, of which no more than $5 million is for R&D for advanced driver assistance systems (ADAS – the SAE Level 1 and 2 vehicles) and the remainder for R&D for highly autonomous vehicles (HAV – Levels 3, 4 and 5). The research program “advances DOT’s understanding of HAV and ADAS technologies to the benefit of both commercial motor vehicle and light duty vehicle safety and is consistent with the comprehensive plan developed pursuant to GAO’s recommendation. The research should leverage the expertise of the private sector to identify methods and criteria for measuring the cyber security assurance levels deployed in autonomous vehicles. The Secretary is expected to prioritize research topics that fill gaps in research being conducted by the private sector, have the strongest potential to advance the safe deployment of HAV and ADAS technologies, and deliver the highest net benefits to road safety.”

  o $60 million for demonstration grants to public sector entities to test HAV and ADAS deployment. The maximum grant size is $10 million, and no more than $15 million in grants can go to a single state. DOT is expected to “include as eligible activities the following: technologies associated with autonomous vehicles and other collision avoidance technologies, including systems using cellular technology; advanced safety systems, including vehicle-to-vehicle and vehicle-to-infrastructure communications; advanced mobility and access technologies, such as dynamic ridesharing and information systems to support human services for elderly and disabled individuals; dynamic road network mapping; roadway marking and signage; community education and outreach; and transportation data collection and analysis.”

  o $1.5 million for a joint DOT-Department of Labor study to provide “a comprehensive analysis of the impact ADAS and HAV technologies on drivers and operators of commercial motor vehicles, including labor displacement.”

  o $500,000 for DOT to develop a comprehensive plan to manage its AV activities to address recent GAO recommendations.

Congress May Complete FAA Reauthorization Bill Before August: With the current authorization for the Federal Aviation Administration (FAA) set to expire at the end of the month, the FY18 omnibus spending deal contained a provision to extend the authorization of the through September 2018. However, House and Senate authorizing committees have said a full reauthorization of the agency may receive a vote prior to August congressional recess. House Transportation and Infrastructure Committee Chairman Bill Shuster (R-PA) and Senate Commerce Committee Chairman John Thune (R-SD) met last week to discuss the next steps in reconciling the chambers’ authorization bills – H.R. 2997 and S. 1405. Since Chairman Shuster
is no longer pursuing privatization of air traffic control and Chairman Thune dropped a controversial provision on pilot training, lawmakers believe they can quickly reconcile the bills and provide a full authorization for the agency before in the next deadline in September.

Infrastructure Adviser Departs White House: The White House’s top infrastructure adviser, DJ Gribbin, announced he would be leaving the Administration to pursue other opportunities. Gribbin was a key drafter of the Administration’s infrastructure plan, which released in February. However, given that Congress is still considering the plan through committee hearings, and midterm elections are approaching in November, an infrastructure proposal is unlikely to come through Congress in 2018.

Secretary Chao Testifies Before THUD Appropriations Subcommittees: On April 11 and April 12 respectively, Senate and House Transportation-HUD (THUD) Appropriations Subcommittees questioned Transportation Secretary Elaine Chao on the budget for the DOT. During the Senate hearing, Democrats questioned the Secretary over funding for the major Gateway project, a controversial infrastructure project that would provide money to build a tunnel under the Hudson River, connecting New Jersey and New York City. The Secretary also fielded questions about the Administration’s infrastructure plan, which would be funded partially through cuts to programs in the DOT FY 2019 budget – cuts would come from discretionary grant programs favored by appropriators, such as TIGER. Congress has shown reluctance in approving these cuts, most recently providing full funding to TIGER in the FY 2018 omnibus.

In the House hearing, members stated their concern to Secretary Chao over the reduction in funding for several critical grant programs, including TIGER and cuts to the Capital Investment Grants (CIG) program. Several members raised the $2.6 billion appropriation for the CIG program in the recently enacted FY 2018 omnibus appropriations bill. House THUD Chairman Mario Diaz-Balart (R-FL) emphasized to the Secretary that the bill requires her to obligate at least 80 percent of the CIG money by December 31, 2019, which the Secretary said would be a tight timeline. She promised House THUD Ranking Member David Price (D-NC) that she would submit a list of timetables for projects that are moving from phase to phase of the CIG program, but would not commit to any timeline for signing full funding grant agreements (FFGAs). In response to criticism of cuts to TIGER, Secretary Chao mentioned that the President recommended redirecting funding from the grant to a more comprehensive program that highlighted rural investment. She also stated that she hopes to announce INFRA grants awards by the end of May.

Members also questioned the Administration’s infrastructure plan. Rep. Charlie Dent (R-PA) expressed concerns of the lookback provision for the “incentive grants”. He said that the state of Pennsylvania enacted a massive revenue increase for transportation, but the law was passed in 2013. The Secretary responded that the Administration had tried to be “fair and compromised” with a three-year lookback provision to give credit for revenues raised prior to enactment of the infrastructure legislation.

When members criticized her for not introducing a plan to extend the solvency of the Highway Trust Fund past 2020, the Secretary said that all revenue sources “are on the table” and mentioned that the trucking industry and other are support a gas tax increase.
FTA Nomination Hearing in April: The Senate Committee on Banking, Housing, and Urban Affairs is scheduled to meet on April 17 to conduct a hearing on the nomination of former Rep. Thelma Drake to serve as FTA Administrator. Drake previously served in Congress, representing Virginia. Most recently, she served as the city of Norfolk, VA’s assistant director of transportation.
April 13, 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 – APRIL 2018

Overview
April is generally the busiest month in the California Legislature, as every bill with fiscal impact must pass its first policy committee hearing before the end of April. Therefore, several hundred bills are being heard in every policy committee of each house throughout the month. Often, the policies in these bills are not fully developed or are contentious, especially before the first hearing. This causes hearings to run long and for bills to morph overnight with amendments to deal with opposition. Additionally, the Budget Subcommittees are meeting in earnest to deliberate on the details of the Governor’s proposed budget which must be approved by June 15. Combined with legislative lobby days and end of school-year field trips to the Capitol, the month of April is a crazy, chaotic time in the Legislature.

High Speed Rail
As we have previously reported, the High Speed Rail Authority released its statutorily required updated business plan on March 9. The Legislature held hearings on the plan on April 2 in the Assembly and April 3 in the Senate. The business plan highlights the significant long-term funding challenges and the projected cost increase for completing the various segments, including the Silicon Valley to Central Valley segment. Leading up to the hearings, there was much media discussion and skepticism regarding cost and completion of the project. It was expected that the legislative committees would be fairly hostile toward the business plan and the new Executive Director, Brian Kelly. However, while there was some doubt about the project and cost estimates expressed by committee members, we would characterize the hearings as perfunctory and uneventful.

Caltrain CEO Jim Hartnett testified at both hearings to present Caltrain’s perspective on the business plan and how it interacts with the ongoing Caltrain electrification. Specifically, noting that High Speed Rail (HSR) investments to date have helped lead to work on the Caltrain corridor to roll out electrification. Also noted was the value that would be provided by the plan to expand electrification on the Caltrain corridor from San Jose to Gilroy.
Position Recommend

AB 2249 (Cooley) – Local Agency Contracting: SUPPORT
The California Uniform Public Construction Cost Accounting Act (Act) authorizes a special district subject to uniform construction cost accounting procedures to perform certain work internally or without the use of formal bidding procedures if the work is under certain cost thresholds. The Act authorizes public projects of $45,000 or less to be performed by the employees of a public agency, authorizes public projects of $175,000 or less to be let to contract by informal procedures, and requires public projects of more than $175,000 to be let to contract by formal bidding procedures. The agency is currently exploring participation in the accounting procedures established by the Act and this bill would raise the limits to $60,000 and $200,000, respectively.

Other Bills of Note

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) who represents many employees in local JPA’s. This bill is set for hearing on April 18 in the Assembly Public Employees, Retirement and Social Security 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 currently pending on the Assembly Appropriations Committee 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 dealing with leased land, as well as other provisions. The author has committed to work with opponents of the bill as it moves forward as a “work-in-progress” measure. This bill passed the Assembly Local Government Committee on a 6-3 vote. It will be heard next in the Assembly Appropriations Committee.
<table>
<thead>
<tr>
<th>Bill ID/Topic</th>
<th>Location</th>
<th>Summary</th>
<th>Position</th>
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<tbody>
<tr>
<td>AB 1756</td>
<td>1/16/2018-A. TRANS. 1/16/2018-Referred to Com. on TRANS</td>
<td>Existing law, the Road Repair and Accountability Act of 2017, establishes a comprehensive transportation funding program by increasing the motor vehicle fuel (gasoline) tax by $0.12 per gallon with an inflation adjustment, increasing the diesel excise tax by $0.20 per gallon with an inflation adjustment, creating a new transportation improvement fee imposed under the Vehicle License Fee Law with a varying fee between $25 and $175 based on vehicle value and with an inflation adjustment, creating a new $100 annual vehicle registration fee applicable only to zero-emission vehicles model year 2020 and later and with an inflation adjustment, and increasing the additional sales and use tax rate on diesel fuel by an additional 4%. This bill would repeal the Road Repair and Accountability Act of 2017. This bill contains other related provisions.</td>
<td>Opposed April 2018</td>
</tr>
<tr>
<td>AB 1912</td>
<td>A. P.E., R. &amp; S.S. 3/20/2018-Re-referred to Com. on P.E., R., &amp; S.S. 4/18/2018 9 a.m. - State Capitol, Room 444 ASSEMBLY PUBLIC EMPLOYEES, RETIREMENT, AND SOCIAL SECURITY, RODRIGUEZ, Chair</td>
<td>Under the Joint Exercise of Powers Act, if the 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. Current law also permits a party to an agreement to separately contract for, or assume responsibilities for, specific debts, liabilities, or obligations of the agency. Current law, with respect to electrical loads, permits entities authorized to be community choice aggregators to participate as a group through a joint powers agency and to also specify in their joint powers agreement that the debts, liabilities, and obligations of the agency shall not be those of the members of the agency. This bill would eliminate the above provisions within the Joint Exercise of Powers Act and those related provisions for community choice aggregators that permit an agreement between one or more parties to specify otherwise as to their debts, liabilities, and obligations and that permit a party to separately contract for those debts, liabilities, or obligations.</td>
<td>Watch</td>
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<tr>
<td>AB 2034</td>
<td>A. APPR. SUSPENSE FILE 4/4/2018-In committee: Set, first hearing. Referred to APPR. suspense file.</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</td>
<td>Watch</td>
</tr>
<tr>
<td>Bill</td>
<td>Description</td>
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<td>ACA 4</td>
<td>Local government financing: affordable housing and public infrastructure: voter approval.</td>
<td>Referred to Coms. on L GOV. and APPR.</td>
<td>Local government financing: affordable housing and public infrastructure: voter approval.</td>
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<td>ACA 5</td>
<td>Motor vehicle fees and taxes: restriction on expenditures: appropriations limit.</td>
<td>Chaptered by Secretary of State - Chapter 30, Statutes of 2017</td>
<td>Would 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.</td>
</tr>
<tr>
<td>AB 2065</td>
<td>Local agencies: surplus land.</td>
<td>From committee: Amend, and do pass as amended and re-refer to Com. on APPR. (Ayes 6. Noes 3.) (April 11).</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 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>
</tr>
<tr>
<td>AB 2249</td>
<td>Public contracts: local agencies: alternative procedure.</td>
<td>From committee: Do pass. To Consent Calendar. (Ayes 9. Noes 0.) (April 11).</td>
<td>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.</td>
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<tr>
<td>SB 827</td>
<td></td>
<td>Set for hearing April 17.</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...</td>
</tr>
<tr>
<td>Bill</td>
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<tr>
<td>SB 1119</td>
<td>Newman D</td>
<td>Low Carbon Transit Operations Program.</td>
<td>4/10/2018-From committee: Do pass and re-refer to Com. on EQ. with recommendation: To consent calendar. (Ayes 13. Noes 0.) (April 10). Re-referred to Com. on EQ.</td>
</tr>
<tr>
<td>SCA 6</td>
<td>Wiener D</td>
<td>Local transportation measures: special taxes: voter approval.</td>
<td>5/25/2017-May 25 hearing: Held in committee and under submission.</td>
</tr>
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</table>

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.

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.
<table>
<thead>
<tr>
<th>Proposition 69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Taxes &amp; Fees Lockbox</td>
</tr>
<tr>
<td>Placed on June 5, 2018 statewide ballot by the State Legislature through the enactment of ACA 5 (Frazier), Chapter 30, Statutes of 2017</td>
</tr>
</tbody>
</table>

Proposition 69, was placed on the ballot by the State Legislature as part of a legislative package that included SB 1. SB 1, which was also known as the Road Repair and Accountability Act of 2017 enacted an estimated $5.2 billion annual increase in transportation-related taxes and fees, including a $0.12 cents per gallon increase of the gasoline excise tax, a $0.20 cents per gallon increase of the diesel excise tax, a 4 percentage points increase of the diesel sales tax, an annual $25 to $100 Transportation Improvement Fee, and an annual $100 zero-emission vehicles fee. The state constitution already prohibits the diversion of gasoline or diesel excise tax revenues for general non-transportation purposes.

The main feature of Proposition 69 is that it also protects proceeds derived from the Transportation Improvement Fee ($1.6 billion in vehicle registration fees, which funds competitive programs) and the sales tax on diesel, which funds the Public Transportation Account. The zero-emission fee is left unprotected.

| Supported April 2018 |
AGENDA ITEM #4 (f)  
MAY 3, 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: AUTHORIZING THE THIRD AMENDMENT OF THE USE, OPERATING AND MAINTENANCE (UOM) AGREEMENT FOR THE MILLBRAE INTERMODAL STATION

ACTION
Staff Coordinating Council (SCC) recommends the Board:

1. Authorize the Executive Director to execute the Third Amendment to the Use, Operating and Maintenance Agreement (UOM Agreement) with BART for the Millbrae Intermodal Station, to extend the JPB cost sharing and payment schedule through Fiscal Year 2023.

SIGNIFICANCE
The UOM Agreement governs the day-to-day management of the Millbrae Intermodal Station and the adjacent 3.4 miles of rail corridor shared by the San Francisco Bay Area Rapid Transit District (BART) and Caltrain. The UOM Agreement addresses the coordination of operations between BART and Caltrain at the Millbrae station.

Under the UOM Agreement, JPB has rights to use the station platforms and station concourse areas as part of the operation of its Caltrain commuter rail service. These rights include the rights of ingress and egress for passengers, employees and contractors. These rights also include Caltrain passenger use of the 3,005 spaces in the Joint Use Parking Area.

BUDGET IMPACT
The proposed Third Amendment to the UOM Agreement specifies that the amount paid by JPB for FY2019 through FY2023, inclusive, shall be the amount paid the previous fiscal year plus a CPI-based inflationary adjustment. The FY2019 payment amount will be $915,774, a 3.1 percent increase over the FY2018 payment amount of $888,239. Payment of each fiscal year will be due in four equal quarterly installments.

The Third Amendment also states that the method for calculating the JPB share for FY2019 through FY2023 may be revised by means of a written notification submitted by either entity no later than September 30 with negotiations commencing on or before
October 31. If these conditions are not met or if there is no mutual agreement on a revision by December 31 the methodology shall remain unchanged for the subsequent fiscal year.

**BACKGROUND**
In June 1999, BART, San Mateo County Transit District and the JPB enter into a “Railroad Construction and Maintenance Agreement” (C&M Agreement) regarding the construction of the BART/SFO Extension Project on JPB property. That agreement contemplated that the parties would negotiate a future agreement that would govern the joint operation of the Millbrae Station and the management of the adjacent rail alignments.

A working group, which later included legal counsel, developed the present agreement, which is dated February 18, 2005, entitled the “Use, Operating and Maintenance Agreement for the Millbrae Station and BART/J PB/SamTrans Facilities Related to the BART SFO Extension Project” or simply the “UOM Agreement.” The UOM Agreement included a cost sharing schedule with the JPB for FY2004 through FY2008.

The UOM Agreement sets forth the services performed by BART for which the JPB is to pay a share of the annual expenses to maintain the station, structures, grounds and parking garage as well as keeping all public and employee areas clean and safe. This includes but is not limited to janitorial, landscaping, lighting, heating, plumbing, electrical, glass replacement, pest control, painting and graffiti removal. The UOM Agreement included a JPB cost sharing schedule with the JPB for FY2004 through FY2008.


Prepared By: Tomisha P. Young, Rail Contract Administrator 650.508.7968
WHEREAS, in June of 1999, the San Francisco Bay Area Rapid Transit District (BART), the San Mateo County Transit District and the Peninsula Corridor Joint Powers Board (JPB) entered into a “Railroad Construction and Maintenance Agreement” regarding the construction of the BART SFO Extension Project on the Caltrain rail corridor; and

WHEREAS, that agreement contemplated that the parties would negotiate an agreement that would govern the joint operation of the Millbrae Station, including the management of the adjacent rail alignments; and

WHEREAS, on February 18, 2005 the parties entered into the “Use, Operating and Maintenance Agreement for the Millbrae Station and BART/JPB/SamTrans Facilities Related to the BART SFO Extension Project” ("UOM Agreement") for the joint operation of the Millbrae Intermodal Station and the 3.4 miles of adjacent rail corridor shared by BART and Caltrain; and

WHEREAS, pursuant to Resolution 2008-27, adopted on August 7, 2008, the Board authorized a First Amendment of the UOM Agreement and, pursuant to Resolution 2013-20, adopted on April 4, 2014, authorized a Second Amendment of the UOM Agreement; and
WHEREAS, the Staff Coordinating Council recommends that the Board of Directors authorize the Executive Director to execute the Third Amendment of the UOM Agreement.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Peninsula Corridor Joint Powers Board hereby authorizes the amendment of the UOM Agreement to extend the term through Fiscal Year 2023 with a revised cost sharing schedule; and

BE IT FURTHER RESOLVED that the Executive Director or his designee is authorized to execute the Third Amendment of the UOM Agreement.

Regularly passed and adopted this 3rd day of May, 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: SAN JOSE DIRIDON STATION PLANNING UPDATE

ACTION
Staff Coordinating Council recommends the Board receive the attached memo regarding the planning efforts underway for the San Jose Diridon Station.

SIGNIFICANCE
Staff has prepared the attached memo on the planning efforts underway for the San Jose Diridon Station. In particular, this memo addresses the Draft Cooperative Agreement with Partner Agencies as well as the Draft Funding Agreement with the Santa Clara Valley Transportation Authority (VTA). It is anticipated these Agreements will be presented for Action as early as the June 2018 Board of Directors meeting.

BUDGET IMPACT
There is no budget impact associated with receiving this presentation.

BACKGROUND
JPB staff is engaged in a significant planning study for the future of the San Jose Diridon Station, which is being conducted in partnership with VTA, the City of San Jose, and the California High Speed Rail Authority (collectively called “Partner Agencies”). Staff presented an Information presentation on these efforts to the Board at the March 2018 meeting to provide an overview of the scope and purpose of the efforts.

The Information Memo attached describes in detail the Integrated Station Concept Plan as well as the Cooperative and Funding Agreements to support the Plan.

Prepared by: Elizabeth Scanlon, Director of Planning 650.295.6867
Overview:
The San Jose Diridon 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 service provided by Amtrak long distance, Capitol Corridor Joint Powers Authority (CCJPA), Altamont Commuter Express (ACE), and VTA light rail and bus service. The JPB is the owner of the historic station depot, the Caltrain parking lots, the area of the bus loop, 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 with the surrounding area development.

With the planned addition of Bay Area Rapid Transit (BART) and California High Speed Rail Service (CAHSR) at San Jose Diridon Station, as well as expanded Caltrain, ACE, Capitol Corridor and Amtrak service, the future of 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 publicly announced intentions for development near the San Jose Diridon Station.

Caltrain, City of San Jose, CAHSR, and VTA have formed a public agency partnership to coordinate their respective capital projects in a manner that realizes the potential for both the transit station facilities and the surrounding development area in an integrated fashion. Planning efforts have been on-going for some time and JPB and its partners are committed to the planning of reinventing the Station to reflect the cutting edge of commercial development and transportation by seeking a bold, new vision.

The formation of this partnership is critical to realizing a bold, new vision for San Jose Diridon 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 JPB is the owner and operator of the San Jose Diridon Station. 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 our public agency partners broadens the spectrum of opportunity for JPB for the future of this facility in a manner that may not be possible on its own.

**Integrated Station Concept Plan**

To realize the Partner Agencies' shared vision for the Station, an implementation strategy is needed to inform the Partner Agencies on how best to ultimately fund, design, construct, and operate the intermodal station that catalyzes local and regional development. The Partner Agencies agree that a unified vision and cohesive strategy for investments at the Station and the broader Station area is anticipated to generate more value than if the Partner Agencies planned and acted on development opportunities individually. To accomplish this, the Partner Agencies agree that an Integrated Station Concept Plan must be prepared.

To accomplish this, the Partner Agencies have embarked to hire a consultant team to prepare the Plan. VTA will act as the contract manager, and solicited services via Request for Proposals (RFP) in the fall 2017. The Partner Agencies will collectively manage the Consultant's day to day work. The Partner Agencies also aided in the selection of the Consultant and the development of the Consultant's scope of work. The RFP was qualifications based, and asked that the Consultant team be familiar with complex, multi-agency infrastructure and urban design projects, such as major capital transit projects, to strategize concepts to ensure that constraints and conflicts are properly handled and resolved between the Partner Agencies, as well as facilitate decision-making at key milestones. The solicitation also encouraged international expertise. VTA has sent a Letter of Intent to Award the contract to Arcadis/Benthem Crouwel.

The Consultant will also coordinate with additional project stakeholders, participate in various Board and City Council meetings, and assist in coordinating public outreach efforts amongst the Partner Agencies. In addition to spatial layout and sketches of the future Station, including track envelope, the Plan is intended to provide strategies for (i) navigating the phasing of construction; (ii) environmental clearance and permitting process at the National, State, and Local levels; and (iii) funding, staffing, and operation of the future Station.

**Cooperative and Funding Agreement**

The Partner Agencies intend to enter into a Cooperation Agreement that outlines the roles, responsibilities, and process for management and oversight of this Consultant. Together, the Partner Agencies developed the following Guiding Principles to facilitate the oversight of the Integrated Station Concept Plan:

- Follow the communication and organizational models and decision making process that will be agreed upon in the Plan process.

- Treat the San Jose Diridon Station area as a singular, urban transit project rather than an overlap of several capital projects, but mutually support each Partner Agency's endeavor to complete their individual capital projects.

- Plan and design transit and station infrastructure for future capacity needs.
• Delineate the spatial needs of the Station to support the rail and transit operations while focusing on the experience of the transit and station user.

• Focus on the interaction and cohesiveness between transit systems, public space, and private development.

• Emphasize regional interconnectivity to expand and enhance the service provided to customers and its ability to relieve regional traffic congestion.

• Be respectful of the fact that each agency has its own projects, policies, procedures, constraints, opportunities, funding availability and sources, and schedules.

• Develop an integrated community engagement process by all agencies for work related directly to the Station.

• Commit to the Plan through the final construction stages once a plan is completed.

The DRAFT Cooperative Agreement is attached. Staff is working to complete the final Cooperative Agreement for Action by the policy bodies of the Partner Agencies. It is anticipated the Caltrain Board of Director’s will be asked for Action on this Agreement in Summer 2018.

Each Partner Agency is also contributing toward the Consultant contract. The contracting agency is VTA, but management of the work will be via all four Partner Agencies. The Partner Agencies are in the process of development of the Scope of Work with the Consultant team. VTA will hold a separate Funding Agreement with each Partner Agency. The JPB currently has approximately $130,000 in Project Development funds to contribute to this effort. The JPB has also requested additional funds via its application for Transit and Intercity Rail Capital Program grant. Staff anticipates award announcement on the grant at the end of April 2018. As such, the final amount of the JPB’s contribution will be determined after the grant awards are announced. The DRAFT Funding Agreement with VTA is attached. Staff will bring both the Cooperative and Funding Agreements to the Board of Director’s as a single item for Action.

Google
In 2014, the City of San Jose completed the Diridon Station Area Plan that establishes the land use and planning framework for the area surrounding the Station. The Plan is comprehensive and addresses many areas including
• Preferred land uses including three distinct sub-areas
• Urban design guidelines and place making strategy
• Access and circulation plan
• Transportation and parking demand management strategy
• Affordable housing strategy

In the Summer 2017, Google announces its intent to develop near San Jose Diridon Station. The Google project could result in more development much earlier than was
envisioned in the Station Area Plan. The potential benefits of the Google project include more jobs closer to residents of San Jose; revenue for City services; support of higher ridership on transit; and potentially significant private partnership to aid in the cohesive, quality development of the station area. The City of San Jose, in cooperation with Google, Caltrain, VTA and California High Speed Rail, has begun civic engagement efforts with the Diridon Station Area Advisory Group. This outreach will continue throughout the development of the Integrated Station Concept Plan.

**San Jose Diridon Station Today**
The Station is a bustling transit hub today.

- 9 station tracks with 5 platforms
- About 9,600 weekday Caltrain ridership
- Transportation Service Providers:
  - VTA Light Rail and Bus
  - Regional Rail connections with J PB’s tenant operators: Altamont Corridor Express, Capitol Corridor, and Amtrak Coast Starlight
  - Regional Bus services to Santa Cruz and Monterey Counties as well as Greyhound
  - Union Pacific Railroad

Current Station amenities include:

- Historic Passenger terminal building with main access onto Cahill Street and underground tunnel access to the platforms and to the VTA light rail
- Bike amenities including lockers; bike racks; and Ford GoBike bikeshare
- About 600 Caltrain passenger parking stalls ($5 daily)
- Drop-off/Pick-up loop in front of station for TNC, Taxi and shuttle connections
- Bathrooms; waiting areas/benches, ticket kiosks, and small retail spaces for purchasing food and beverages
- Amtrak Customer Service
COOPERATIVE AGREEMENT FOR
SAN JOSE DIRIDON STATION

This Cooperative Agreement (AGREEMENT) dated ____________ of 2018, is entered into by and between the Santa Clara Valley Transportation Authority (VTA), Peninsula Corridor Joint Powers Board (PCJPD), California High Speed Rail Authority (HSR), and the City of San Jose (City) (collectively referred to as the “Agencies,” and individually as “Agency”).

SECTION I – RECITALS

A. WHEREAS, the San Jose Diridon Station is a major transit hub serving Amtrak, Altamont Commuter Express (ACE), PCJPB, and VTA light rail and bus located in the City of San Jose, on property owned and controlled by Caltrain. With the addition of Bay Area Rapid Transit (BART) and HSR service, and expanded Caltrain, ACE and Amtrak Capitol Corridor and Amtrak service, San Jose Diridon Station will become one of the busiest intermodal stations in North America.

B. WHEREAS, major employers are planning to build space for tens of thousands of new workers adjacent to the station, which will transform the station district into a preeminent employment center in the Bay Area.

C. WHEREAS, to effectively accommodate this planned activity and future capacity needs, the station must be completely reconfigured in an integrated fashion that connects all these transit services with each other and with the development surrounding the station.

D. WHEREAS, the Agencies desire to cooperatively work together to prepare a San Jose Diridon Integrated Station Concept Plan (Plan), which will be a plan of a reconfigured Diridon Station that meets the goals expressed in Recital C. The Plan is a critical building block to achieving the potential of this station, the track envelope, and the surrounding area. Coordination between Agencies 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.

E. WHEREAS, VTA is a special district responsible for public transit services, congestion management, specific highway improvement projects, and countywide transportation planning for Santa Clara County, California.

F. WHEREAS, PCJPB is a joint powers authority with three member agencies: the City and County of San Francisco, the San Mateo County Transit District, and the Santa Clara Valley Transportation Authority. The PCJPB owns, manages and operates the commuter rail line, and passenger stations, connecting three counties: San Francisco, San Mateo and Santa Clara. It is responsible for the railroad operations, engineering, planning, and maintenance of the rail corridor and stations, including the San Jose Diridon Station, from San Francisco to Tamien, and for rail services from Tamien to Gilroy.
G. WHEREAS, HSR is responsible for planning, designing, building, and operating the first high-speed rail system in the nation. The system will run from San Francisco to the Los Angeles basin.

H. WHEREAS, City is a Municipal Corporation and a Charter City in the State of California. The City is responsible for land use regulations and the operation and maintenance of public utilities, such as water, sewer, storm, and streets, within its corporate boundaries.

I. WHEREAS, the purpose of this AGREEMENT is to establish the framework for the coordination between the four Agencies for the preparation of the Plan, including defining roles and responsibilities, funding requirements, and schedule. Guiding principles of this AGREEMENT and Plan process are included in Section 2.

J. WHEREAS, the Agencies wish to set forth in this Agreement their commitment and respective obligations in connection with the preparation of the Plan.

NOW, THEREFORE, in consideration of the mutual promises contained in this Agreement, the Parties agree as follows:

SECTION II – SCOPE OF AGREEMENT

1. GUIDING PRINCIPLES.

The Agencies shall be guided by the following principles, which shall be applied in the preparation of the Plan:

- Follow the communication and organizational models and decision making process that will be agreed upon in the Plan process.
- Treat the San Jose Diridon Station area as a singular, urban transit project rather than an overlap of several capital projects.
- Plan and design transit and station infrastructure for future capacity needs.
- Delineate the spatial needs of the Station to support the rail and transit operations while focusing on the experience of the transit and station user.
- Focus on the interaction and cohesiveness between transit systems, public space, and private development.
- Emphasize regional interconnectivity to expand and enhance the service provided to customers and its ability to relieve regional traffic congestion.
- Be respectful of the fact that each agency has its own projects, policies, procedures, constraints, opportunities, funding availability and sources, and schedules.
- Develop a more integrated community engagement by all Agencies for work related directly to the Intermodal Station.

- Commit to the Plan through the final construction stages once a plan is completed.

2. **INTEGRATED STATION CONCEPT PLAN WORK PRODUCT.**

   VTA leads the process of selecting a contractor that will prepare and deliver the Plan (the “Contractor”) under a task order contract, which is a contract for services that does not specify a firm quantity of services (other than a minimum or maximum quantity) and that provides for the issuance of orders for the performance of specific tasks during the period of the contract. Services by the Contractor shall only commence upon the issuance of a specific task-order for the services requested in the specific task order. Once VTA, in collaboration with the Agencies has selected a Contractor, the Agencies, through the working committee as set forth in Section 4, will mutually agree upon the scope of the task orders to be issued to the Contractor for work to be performed. The scope of the task order(s) will generally include, in whole or in part, managing the process of Agencies’ decision making, coordinating the short and long term plans and needs of the Agencies for efficient rail and transit service, reviewing intermodal access to the Station, assessing Agencies funding capabilities, strategizing on the environmental clearance process, and providing organization models. The deliverable will include a final Plan that will finalize and visually present Agency commitments, environmental and funding strategies, architectural renderings, cost estimates, and project phasing for the San Jose Diridon Station.

3. **ROLES AND RESPONSIBILITIES.**

   A. **VTA:** VTA will solicit, contract with, and manage the Contractor that will deliver the Plan on behalf of the Agencies. VTA will be responsible for providing information related to VTA design standards and operational requirements for the BART, lightrail, and bus systems within the Diridon Station Area and to actively participate in meetings, document review, and public outreach. VTA will be the signatory to the agreement with the Contractor and shall act as the project manager in connection with the preparation of the Plan. Upon the agreement of the Agencies on the scope of the task order and upon execution of the funding agreements whereby the Agencies contribute toward the cost of the Contractor services, VTA may issue the task order to the Contractor. VTA will have the discretion to not issue any task order to the Contractor if there is insufficient funding to pay for the services in the task order. VTA will also share in the cost of the Contractor, as set forth in Section 5, Funding.

   B. **PCJPD:** Caltrain will be responsible for providing Caltrain design standards and operational requirements within the Diridon Station Area, and to actively participate in meetings, document review, and public outreach. Caltrain will also share in the cost to prepare Plan, as set forth in Section 5, Funding.
C. **HSR:** HSR will be responsible for providing High Speed Rail design standards and operational requirements within the Diridon Station Area, and to actively participate in meetings, document review, and public outreach. HSR will also share in the cost to prepare the Plan, as set forth in Section 5, Funding.

D. **CITY:** City is responsible for providing design standards and operational requirements related to City infrastructure, urban guidelines, within the Diridon Station Area, specifically transportation-related infrastructure, and to actively participate in meetings, document review, and public outreach. Infrastructure information includes existing capital projects either programmed or anticipated, as required to support station and other development with the Diridon Station Area. City will also share in the cost to prepare the Plan, as set forth in Section 5, Funding.

4. **ORGANIZATION.**

In order to facilitate the technical analysis and communication, the Agencies shall establish two committees, as follows:

i. A steering committee, consisting of one executive-level member from each Agency, shall be responsible to set executive level direction for the Plan effort. Participation in regular meetings (i.e., quarterly) will be required for each member of the steering committee member to ensure the Plan continues to move forward.

ii. A working committee consisting of one manager-level member from each agency will serve as project level technical management committee for the Plan. The working committee will be available to the VTA project manager to upon execution of an agreement, provide direction to the Contractor regarding contractual and performance issues, such as changes in scope and schedule. The working committee is also authorized by each Agency, to review all administrative and final drafts prepared by Contractor and to recommend modifications or acceptance as appropriate.

The Agencies may establish other committees based on the recommendations of the selected Contractor.

5. **FUNDING.**

A. The Agencies agree to contribute financially toward the cost of Contractor contracts to prepare the Plan. The goal is for each of the Agencies to equally share, 25 percent, in the cost. The Agencies agree to jointly pursue funding opportunities where applicable. When joint funds are secured, the applicable funds will be utilized to fund the Plan beyond the individual partner shares. Joint funds cannot be used to supplement an individual partners’ prorate share. Specific funding commitments and funding arrangement will be
subject to separate funding agreements between VTA and each Agency. Any and all costs (direct, indirect, or staff time) incurred by the Agencies, with the exception of the costs for Contractor’s services, are the responsibility of each respective Agency.

B. Upon execution of this Agreement, each Agency must identify the source of funds to be contributed to the preparation of the Plan and management of the planning and organization process. Any restricted funds must be identified prior to execution of any Contractor agreement so the agreement with the Contractor can accommodate all reporting forms and language as may be required. Agencies are responsible for submission of necessary paperwork and reports to meet contributed funding source requirements and maintaining records for auditing purposes. VTA will provide copies of Contractor invoices to each of the Agencies.

C. Upon execution of this Agreement by the Agencies, each Agency and VTA will execute funding agreements for each Agency’s funding commitment. Upon execution of the funding agreement and receipt of Contractor invoices, VTA will request reimbursements from each Agency per the Funding Agreement. Contractor

D. VTA may issue task orders to the Contractor for the Contractor to proceed with services upon execution of this Agreement and upon the mutual agreement of the Agencies relating to the scope of the task order. However, VTA may, in its sole discretion, wait for sufficient funding commitments from the Agencies before issuing a task order to ensure that there will be sufficient funds to pay Contractor for services rendered under the task order.

6. **TERM.**

This Agreement shall become effective upon full execution of the Agreement and shall remain in effect for 24 months, through ________________.

7. **TERMINATION.**

Any Agency may terminate this Agreement at any time, for any reason, upon giving thirty (30) calendar days written notice to the other Agencies in compliance with the Notice provision of this Agreement.

8. **GENERAL CONDITIONS.**

A. **Audit and Record Retention.** The representative of each Agency may audit the expenses incurred in the performance of this Agreement. Each Agency shall retain all records related to the performance of this Agreement and the preparation of the Plan for three (3) years after the completion of this endeavor. During this period, Each Agency shall make these records available within a reasonable time to any of the Agencies for inspection upon request.
B. **Parties’ Representatives.** The General Manager of VTA or he designee is hereby made the representative of VTA for all purposes under this Agreement. The ___________ for CITY or the Director’s designee is hereby made the representative of CITY for all purposes under this Agreement. The __________________ for HSR or his/her designee is made a representative of HSR for all purposes under this Agreement. The __________ for PCBJP or his/her designee is hereby made the representative of CITY for all purposes under this Agreement.

C. **Indemnification.** Pursuant to Government Code Section 895.4, each of the Agencies hereto shall fully indemnify, defend and hold the other Agencies, their officers, employees and agents, harmless from any damage or liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying Agency, its officers, employees or agents, under or in connection with any work, authority or jurisdiction delegated to such Agency under this Agreement. No Agency, nor any officer, employee or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the other Agencies hereto, their officers, employees or agents, under or in connection with any work, authority or jurisdiction delegated to such other Agency under this Agreement.

D. **No Waiver.** The failure of any Agency to insist upon the strict performance of any of the terms, covenants, and conditions of this Agreement shall not be deemed a waiver of any right or remedy that any Agency may have, and shall not be deemed a waiver of its right to require strict performance of all of the terms, covenants, and conditions thereafter.

E. **Notice.** Any notice required to be given by any of the Agency, or which any Agency may wish to give, shall be in writing and sent by U.S. Mail or personal delivery, along with a courtesy copy by email as follows:

To VTA: Santa Clara Valley Transportation Authority

___________________________________
3331 North First Street, Bldg. B-2
San Jose, CA 95134-1906

Email:
Telephone:________________________
To CITY:

City of San Jose
TBD
200 East Santa Clara Street, 17th Floor
San Jose, CA 95113
Email: TBD@sanjoseca.gov
Telephone:

To HSR:

To PCJPB: Peninsula Corridor Joint Powers Board

Attn: Elizabeth Scanlon, Director of Planning

1250 San Carlos Avenue
San Carlos, CA 94070
Telephone: 650-295-6867

Notice shall be deemed effective on the date personally delivered or, if mailed, three (3) days after deposit in the United States mail.

F. Dispute Resolution. If a question arises regarding interpretation of this Agreement or its performance, or the alleged failure of an Agency to perform, the Agency raising the question or making the allegation shall give written notice thereof to the other Agencies. The Agencies shall promptly meet in an effort to resolve the issues raised. If the Agencies fail to resolve the issues raised, alternative forms of dispute resolution, including mediation or binding arbitration, may be pursued by mutual agreement. It is the intent of the Agencies, to the extent possible, that litigation be avoided as a method of dispute resolution.

G. Entire Agreement. This Agreement constitutes the entire Agreement between the Agencies pertaining to the subject matter contained therein and supersedes all prior or
contemporaneous agreements, representations and understandings of the Agencies relative thereto.

H. **Amendments.** This Agreement may be amended only by mutual written agreement signed by each of the Agencies.

I. **Warranty of Authority to Execute Agreement.** Each Agency to this Agreement represents and warrants that each person whose signature appears hereon has been duly authorized and has the full authority to execute this Agreement on behalf of the entity that is a party to this Agreement.

J. **Severability.** If any term, covenant, condition or provision of this Agreement, or the application thereof to any person or circumstance, shall to any extent be held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, covenants, conditions and provisions of this Agreement, or the application thereof to any person or circumstance, shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby.

K. **Governing Law.** This Agreement shall be construed and its performance enforced under California law.

L. **Venue.** If a suit is brought by any party to this Agreement, the Agencies agree that venue shall be exclusively vested in the State courts of the County of Santa Clara or, if federal jurisdiction is appropriate, exclusively in the United States District Court for the Northern District of California, in San José, California.
WITNESS THE EXECUTION HEREOF the day and year first hereinabove set forth.

Santa Clara Valley Transportation Authority
“VTA”
Santa Clara Valley Transportation Authority
a public agency

By: ________________________________
   General Manager and CEO
   Nuria I. Fernandez

Date: ____________________________

APPROVED AS TO FORM:
By: ________________________________
   Counsel

Date: ____________________________

California High Speed Rail Authority

By: ________________________________
   Title: ________________________________
   Date: ________________________________

APPROVED AS TO FORM:
By: ________________________________
   Counsel

Date: ____________________________
City of San Jose

By: _________________________________
Title: _______________________________
Date: _______________________________

APPROVED AS TO FORM:

By: _________________________________
   Counsel

Date: _______________________________

Peninsula Corridor Joint Powers Board (Caltrain)

By: _________________________________
Title: _______________________________
Date: _______________________________

APPROVED AS TO FORM:

By: _________________________________
   Counsel

Date: _______________________________
FUNDING AGREEMENT
BETWEEN THE AGENCY AND
SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
FOR THE DIRIDON INTEGRATED STATION CONCEPT PLAN

THIS AGREEMENT ("Agreement") dated ____________, 2018, for purposes of reference, is made and entered into by and between the PENINSULA CORRIDOR JOINT POWERS BOARD (PCJPB) and SANTA CLARA VALLEY TRANSPORTATION AUTHORITY, a public agency organized as a special district under California law ("VTA"). Hereinafter, CITY and VTA may be individually referred to as "Agency" or collectively referred to as "Agencies."

I. RECITALS

A. WHEREAS, a Cooperative Agreement dated _____________ of 2018, has been entered into by and between the Santa Clara Valley Transportation Authority (VTA), Peninsula Corridor Joint Powers Board (PCJPB), California High Speed Rail Authority (HSR), and the City of San Jose (City) for the San Jose Diridon Integrated Station Concept Plan (PLAN).

B. WHEREAS, to effectively accommodate the planned activity and future capacity needs, the San Jose Diridon station must be completely reconfigured in an integrated fashion that connects all these transit services with each other and with the development surrounding the station.

C. WHEREAS, the Agencies desire to cooperatively work together to prepare the Plan, which will be a plan of a reconfigured San Jose Diridon Station that meets the goals expressed in the Cooperation Agreement dated __________ of 2018. The Plan is a critical building block to achieving the potential of this station, the track envelope, and the surrounding area. Coordination between agencies 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.

D. WHEREAS, the Roles and Responsibilities, Organization, and Deliverable are expressed in the Cooperation Agreement dated __________ of 2018.

E. WHEREAS, the Agencies wish to set forth their respective obligations in regard to funding of the PROJECT (as defined below).

F. WHEREAS, VTA is a special district responsible for public transit services, congestion management, specific highway improvement projects, and countywide transportation planning for Santa Clara County, California.

G. WHEREAS, PCJPB is a joint powers authority with three member agencies: the City and County of San Francisco, the San Mateo County Transit District, and the
Santa Clara Valley Transportation Authority. The PCJPB owns, manages and operates the commuter rail line connecting three counties: San Francisco, San Mateo and Santa Clara. It is responsible for the railroad operations, engineering, planning, and maintenance of the rail corridor and stations from San Francisco to Tamien, and for rail services from Tamien to Gilroy.

NOW, THEREFORE, in consideration of the mutual promises contained in this Agreement, the Agencies agree as follows:

II. AGREEMENT

1. Funding Related Roles of the Agencies

   a. Consultants. VTA may retain consultants in the performance of the PLAN. VTA may issue task orders to the Consultant for the Consultant to proceed with services. However, VTA may, in its sole discretion, wait for sufficient funding commitments from the AGENCIES before issuing a task order to ensure that there will be sufficient funds to pay the Consultant for services rendered under the task order.

   b. Expenditure Updates. VTA shall actively monitor actual PLAN expenditures to ensure that AGENCY’s Contribution (defined in Section 2, below) is used to pay for allowable PLAN expenditures. If PLAN expenditures are projected not to exceed AGENCY’s Contribution, VTA, upon completion of the PLAN, shall reimburse AGENCY for any unused funds from AGENCY’s Contribution or VTA and AGENCY may formulate and implement a strategy to expand the scope of VTA services to the satisfaction of VTA and AGENCY’s Director of Transportation. Any such expansion of the scope of services shall be in writing and approved by both Agencies.

   VTA will provide consultant invoices to the AGENCY, at a minimum, quarterly. AGENCY is responsible for submission of necessary paperwork and reports to meet contributed funding source requirements and maintaining records for auditing purposes.

   c. Agency Costs. Any and all costs (direct, indirect, or staff time) incurred by the Agencies, with the exception of the Contractor services cost, are the responsibility of each respective Agency.

2. AGENCY’s Financial Contribution to the PLAN. AGENCY shall contribute to the PLAN an amount not to exceed $xx (“AGENCY’s Contribution”). Upon execution of the Agreement, VTA shall invoice AGENCY for the AGENCY’s Contribution and, upon receipt, will deposit the AGENCY’s Contribution into an interest-bearing account. AGENCY shall pay to VTA the amount set forth in the VTA Invoice within thirty (30) days after receipt of invoice.
3. **Use of AGENCY’s Contribution.** VTA will use the AGENCY’s Contribution and the interest earned thereon for allowable costs and expenses related to PLAN.

4. **VTA’s Financial Contribution for PLAN.** VTA will contribute $xx toward the development of the PLAN.

5. **Compliance with Governmental Requirements.** VTA shall comply with all laws and regulations pertaining to the PLAN.

6. **Term of Agreement.** This Agreement shall become effective upon full execution by the agencies and shall remain in effect through VTA’s full expenditure of AGENCY’s Contribution on PLAN-related expenses, December 31, 2020, or completion of the PLAN, whichever occurs first. Upon written request of VTA, the AGENCY’s Director of Transportation or his designee is authorized to extend the term of the Agreement for up to six (6) months after the initial termination date, upon written notice to VTA and without formal amendment of this Agreement. If the PLAN is delayed beyond December 31, 2020, or cancelled completely, either Agency may terminate this Agreement, which can be accomplished by either Agency giving written notice to the other agency of such termination consistent with Section 7 below.

7. **Written Termination.** In addition to termination pursuant to the terms of the preceding section, this Agreement may be terminated upon mutual written agreement of the Agencies.

8. **Refund of AGENCY’s Contribution.** Any balance of AGENCY’s Contribution, including interest, remaining after completion of the PLAN or, if the PLAN does not proceed for any reason, upon early termination of the PLAN, less any amounts necessary to pay for eligible expenses incurred prior to the date of completion of the PLAN or the effective date of the termination of the Agreement, shall be refunded to AGENCY. VTA shall refund to AGENCY the remaining balance, if any, within thirty (30) calendar days of the effective date of completion of the PLAN or sooner termination of the Agreement.

9. **Audit and Record Retention.** AGENCY may audit the expenses incurred in the performance of this Agreement. VTA shall retain all records related to the PLAN for three (3) years after the completion of the PLAN. During this period, VTA shall make these records available within a reasonable time to the AGENCY for inspection upon request.

10. **Agencies’ Representatives.** The General Manager of VTA or the General Manager’s designee is hereby made the representative of VTA for all purposes under this Agreement. The TITLE for AGENCY or the TITLE’s designee is hereby made the representative of AGENCY for all purposes under this Agreement.

11. **Indemnification.**

   a. Neither VTA nor any officer or employee thereof shall be responsible for any
damage or liability occurring by reason of anything done or omitted to be done by AGENCY under or in connection with any work, authority or jurisdiction associated with the PLAN. In addition, pursuant to Government Code §895.4, AGENCY shall fully indemnify and hold VTA harmless from any liability imposed for injury (as defined by Government Code §810.8) occurring by reason of anything done or omitted to be done by AGENCY under or in connection with any work, authority or jurisdiction delegated to AGENCY under this Agreement.

b. Neither AGENCY nor any officer or employee thereof shall be responsible for any damage or liability occurring by reason of anything done or omitted to be done by VTA under or in connection with any work, authority or jurisdiction associated with the PLAN. In addition, pursuant to Government Code §895.4, VTA shall fully indemnify and hold AGENCY harmless from any liability imposed for injury (as defined by Government Code §810.8) occurring by reason of anything done or omitted to be done by VTA under or in connection with any work, authority or jurisdiction delegated to VTA under this Agreement.

12. **No Waiver.** The failure of either Agency to insist upon the strict performance of any of the terms of this Agreement shall not be deemed a waiver of any right or remedy that either Agency may have, and shall not be deemed a waiver of their right to require strict performance of all of the terms thereafter.

13. **Notice.** Any notice required to be given by either Agency, or which either Agency may wish to give, shall be in writing and served either by personal delivery or sent by certified or registered mail, postage prepaid, addressed as follows:

To VTA: Santa Clara Valley Transportation Authority
Carolyn Gonot, Chief of Engineering and Project Delivery
3331 North First Street, Bldg. A
San Jose, CA 95134-1906

To AGENCY: Peninsula Corridor Joint Powers Board
TITLE: Elizabeth Scanlon, Director of Planning
1250 San Carlos Avenue
San Carlos, CA 94070

Notice shall be deemed effective on the date personally delivered or, if mailed, three (3) days after deposit in the United States mail.

14. **Dispute Resolution.** If a question arises regarding interpretation of this Agreement or its performance, or the alleged failure of an Agency to perform, the Agency raising the question or making the allegation shall give written notice thereof to the other Agency. The Agencies shall promptly meet in an effort to resolve the issues raised. If the Agencies fail to resolve the issues raised, alternative forms of dispute resolution, including mediation or arbitration, may be pursued by mutual agreement. It is the intent of the Agencies to the extent possible that litigation be avoided as a method of dispute resolution.
15. **Entire Agreement.** This Agreement constitutes the entire Agreement between the Agencies pertaining to the subject matter contained therein and supersedes all prior or contemporaneous agreements, representations and understandings of the Agencies relative thereto.

16. **Amendments.** Future amendments to this Agreement shall be processed by mutual written agreement of the Agencies. Unless otherwise provided herein, any amendments to this Agreement must be approved by PCJPB’s Executive Director and the VTA’s General Manager. Whenever possible, a request to amend this Agreement shall be provided to the other Agency thirty (30) calendar days prior to the desired effective date of such amendment.

17. **Warranty of Authority to Execute Agreement.** Each Agency to this Agreement represents and warrants that each person whose signature appears hereon has been duly authorized and has the full authority to execute this Agreement on behalf of the entity that is a Agency to this Agreement.

18. **Severability.** If any term, covenant, condition or provision of this Agreement, or the application thereof to any person or circumstance, shall to any extent be held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, covenants, conditions and provisions of this Agreement, or the application thereof to any person or circumstance, shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby.

**WITNESS THE EXECUTION HEREOF** the day and year first hereinabove set forth.

“**AGENCY**”
Peninsula Corridor Joint Powers Board,  
a public agency.

By: ____________________________  
Joan L. Cassman  
General Counsel

“**VTA**”  
Santa Clara Valley Transportation Authority  
a public agency.

By: ____________________________  
Nuria Fernandez  
General Manager

Date: ___________________________

APPROVED AS TO FORM:  

APPROVED AS TO FORM:  

By: ____________________________  
NAME  
TITLE

By: ____________________________  
Victor Pappalardo  
Senior Assistant Counsel
CITIZENS ADVISORY COMMITTEE (CAC)  
PENINSULA CORRIDOR JOINT POWERS BOARD (JPB)  
SAN MATEO COUNTY TRANSIT DISTRICT ADMINISTRATIVE BUILDING  
Bacciocco Auditorium, 2nd Floor  
1250 San Carlos Avenue, San Carlos CA 94070  

MINUTES OF APRIL 18, 2018

MEMBERS PRESENT: C. Chang, P. Escobar, C. Tucker, R. Valenciana, J. Welch, B. Shaw (Chair)

MEMBERS ABSENT: L. Fernandez, L. Klein

STAFF PRESENT: J. Navarro, J. Navarrete, C. David, M. Jones, L. Low

Chair Brian Shaw called the meeting to order at 5:42 p.m. and led the Pledge of Allegiance.

APPROVAL OF MINUTES OF MARCH 21, 2018
Motion/Second: Tucker/Chang  
Ayes: Escobar, Welch, Shaw  
Absent: Fernandez, Klein, Valenciana

Member Ricardo Valenciana arrived at 5:46 p.m.

PUBLIC COMMENT  
No public comment

CHAIRPERSON’S REPORT  
Chair Brian Shaw noticed that train 365 that arrives at 4:44 pm at Palo Alto has been increasingly crowded. Wondered whether there has been a change in equipment, however has noticed an increase in ridership.

COMMITTEE COMMENTS  
Member Cat Chang stated that the Go Pass program provides her employer a great incentive for the employees to take public transportation. Cat stated that her place of employment has increased in staff (size in the hundreds) and that the number of employees that commute via public transit has also increased from 30% to over 50%.

Member Paul Escobar stated that he would like to know more about WiFi on the trains and also about the Suicide Prevention tactics that have been implemented. Chair Brian Shaw stated that both are on the Work Plan; the WiFi update is scheduled for the May Meeting and the Suicide Prevention item is on the list of items to be scheduled.

Member Julia Welch stated that she received positive feedback regarding the Bikes Board First Pilot program. She said that at the Palo Alto station, it is visible and is being
very well received. She also mentioned that she appreciates the media coverage on the Pilot program and heard the announcement on the radio.

**UPDATE ON PENINSULA CORRIDOR ELECTRIFICATION PROJECT (PCEP)**

Lori Low, Government and Community Affairs Officer, presented an update on the Peninsula Corridor Electrification Project. Lori reported that Caltrain Ridership has increased in the past years with bi-directional commute with riders standing on trains going both southbound and northbound. She reported that Caltrain is at capacity today and has an aging fleet with some cars nearing the end of their service life.

**Electrification Project**

**Area:**
- 51 miles from San Francisco to San Jose (Tamien Station)

**Project:**

**Electrification**
- Overhead Wiring
- Traction Power Facilities

**Electric Trains (EMUs)**
- 75 percent of fleet

**Service:**

Up to 79 mph Service Increase
- 6 trains / hour / direction
- More station stops / reduced travel time
- Restore Atherton & Broadway service

Mixed-fleet service (interim period) Continue tenant service
- ACE, Capital Corridor, Amtrak, Freight

**Service Benefits:**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Today</th>
<th>PCEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example Baby Bullet Train</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retain 5-6 stops</td>
<td>60 minutes</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Retain SF to SJ</td>
<td>6 stops</td>
<td>13 stops</td>
</tr>
<tr>
<td>Example Redwood City Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Train stops / peak hour</td>
<td>3 stops</td>
<td>5 stops</td>
</tr>
</tbody>
</table>

Note: Prototypical Train and Schedule

**Capacity Increase:**
The CalMod program lays the foundation for continued capacity growth on the corridor. Unlike diesel trains, electric trains can maintain performance while expanding the number of train cars.
Key Regional Benefits (2040):

Note: 2013 BAC Report, generates $2.5B economic activity and 9,600 jobs

Broad Coalition Support
Over 250 entities support electrification, including various organizations and businesses.

Groundbreaking
- Caltrain Electrification Groundbreaking July 2017
- Salt Lake City Vehicle Plant Groundbreaking October 2017

Construction Phasing
- The corridor is segmented into 4 segments and construction will take place at 2 segments at a time; 2 & 4 followed by 1 & 3
- Daytime work and night work from 8 p.m. - 6 a.m. in order to continue train service
- Some 24 hour weekend work
- Crews will utilize acoustical barrier blankets and position lights away from homes

Construction Activities
- Construction has begun
  - Drilling of foundation
  - Poles have been put in place

Construction Outreach
Tools:
- Community meetings, direct mailers, door hangers, weekly website / email update, social media, project phone & email, outreach office

New Project Website:
- www.calmod.org
Electric Train (EMU)
Stadler
- Preliminary Designs Reviews for all major systems conducted being finalized
- Car-shell extrusions in production
- Car-body subassemblies being fabricated
- Car-shell structures being welded
- Manufacturing and Final Assembly Facility beginning construction in Salt Lake City area

Electric Train Activities
- Exterior Paint Test Samples on Sidewall Extrusion
- Upper and Lower car-body subassemblies are in progress

Electric Train Outreach
- 2015 Capacity Board Decision (bike to seat ratio, onboard bathrooms, upper doors)
- 2017 Design Progressing, Additional Public Input
  - Completed: Exterior design, Seat colors, Bike Storage
- 2018 Virtual Reality 360 Tour

Budget $1.98B
- Federal 49%
- State 38%
- Local 10%
- Regional 3%

Budget & Expenditures  (in the millions)

<table>
<thead>
<tr>
<th>Item</th>
<th>Budget</th>
<th>Current Budget*</th>
<th>Q2 Costs</th>
<th>Costs to Date</th>
<th>Estimate at Completion</th>
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<tbody>
<tr>
<td>Electrification</td>
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<td>$696.70</td>
<td>$26.70</td>
<td>$183.90</td>
<td>$696.70</td>
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<td>SCADA</td>
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<td>EMU</td>
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<td>$551.80</td>
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<td>$417.20</td>
<td>$20.50</td>
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<td>$0.00</td>
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<td>PCEP Total</td>
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<td>$1,980.30</td>
<td>$64.40</td>
<td>$388.50</td>
<td>$1,980.30</td>
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* Includes executed change orders and awarded contracts
Note: Budget / Expenditures as of December 31, 2017

Lori stated that the budget is on track.
**Contingency Drawdown Curve**
Although contingency drawdown curve has dropped, the curve remains above the minimum contingency level.

**Schedule**
Lori reported schedule is still on track to meet the scheduled timeline.

Member Cat Tucker asked whether the project of electrification from San Jose to Gilroy belongs to Caltrain. Joe Navarro, Director of Rail Operations, advised that that territory belongs to Union Pacific. Lori Low advised that further information would be found in the Caltrain Business Plan.

Chair Brian Shaw appreciated the presentation and the status of the electrification project. Joe confirmed that the presentation is available on the CAC website.

**Public Comment**
Jeff Carter, Millbrae, stated that he along with other people, have been advocating for electrification for over 30 years. He noticed 35 poles have been put up in Millbrae and San Bruno and said that the poles blend in well with the vegetation. Jeff said that although complaints regarding Atherton have been made, in his opinion, there are no grounds for complaint as the poles blend in well with the surroundings. Jeff went on to say that Caltrain is applying for grant to expand trains to 8 cars instead of 6 car trains and appreciates the attempt to extend trains. He stated that Caltrain’s capacity is constrained and eventually Caltrain will need to run 10-12 car trains and will need more frequent service. Lastly, Jeff stated that he is disappointed with bathroom issue and would like to see more than just one bathroom on the train. He said that there is a need for more restrooms on the trains.

Andy Chow stated that in his 20 years of transit advocacy, he has experienced that once a transit project is under construction, there is a good chance the project will be completed. He also stated that in regards to High Speed Rail, he feels that construction in the Central Valley will be completed, however prospects of Electrification past San Jose, in his opinion, still has a long way to go.

Adrian Bradnt asked, regarding PTC implementation, how is Wabtec technology interfacing with the new contractor doing electrification. Adrian advised that in the monthly Board packet there is a list of risks with Electrification that have been identified. He stated that the top risk identified is with Balfour Beatty. He stated that this is the same company that electrified trains in Denver where they experienced incompatibility issue with their Constant Time Warning device at the grade crossings. He said that because of this incompatibility, grade crossings needed to be protected 24/7. He does not want Caltrain to have this same problem. He requested staff to address this issue and to provide an update.

Chair Brian Shaw requested a response to the public comment from Adrian Bradnt and requested the response be added to next month’s staff report.
Member Julia Welch shared her experience with Hillsdale parking and said that staff has done an amazing job and has improved the parking there.

**UPDATE ON BIKE PARKING PLAN**

Melissa Jones, Senior Planner, provided an update on the Bike Parking plan.

Melissa Jones advised that the Caltrain Board of Directors adopted a new Bicycle Parking Management Plan in November 2017. Since then, Caltrain has successfully created a position for a dedicated bike access project manager. It is a principal planner position; the official title is Principal Planner - Station Access Programs. The position closes on May 4th and is posted on [www.smctd.com/jobs](http://www.smctd.com/jobs).

Melissa also reported that Caltrain has been successful in receiving funding from the State Rail Assistance Program in the amount of $500,000. The funds will be used to hire outside bike parking vendors to better manage the bike parking system. Once the Principal Planner for Station Access Programs is hired, that person will lead the RFP process.

Caltrain submitted a grant application with TIRCP - Transit and Intercity Passenger Rail Program. The scope of the grant application included a request for $3.5M to be used for Caltrain’s capital improvements to the bike parking system. Grant approval response to be shared by end of April.

Lastly, Caltrain is exploring the bike share programs and working with local jurisdictions who are in turn working with various bike share providers on launching pilot programs. Caltrain is hoping to develop a foundational policy to help guide efforts with bike share by summer or early fall.

Member Cat Chang said that she has noticed electric scooters near 22nd street and 4th and King Caltrain stations and asked for Caltrain’s commentary regarding the scooters. Melissa Jones said that she does not have a formal comment, however mentioned that the City of San Francisco is looking to regulate them. Cat Chang also mentioned that the Ford bike share program seems to be working great. Melissa responded and said that Ford Go Bike is doing very well and mentioned that their number one station is Caltrain’s 4th and King station.

Chair Brian Shaw asked whether the bike parking vendor will operate as they do at 4th & King, a valet type of bike parking. Melissa confirmed that it is an option and a type of service that will be provided. She also stated that Caltrain will look into better managing the key and lock system. Chair Brian Shaw, as a Stanford Representative, offered to meet with the new Principal Planner for Station Access Programs, once they are hired as they have a lot of experience in bike management programs.

Public comment:
Jeff Carter, Millbrae, thanked staff for the update on the Bike Parking plan. He said that it will improve the current bike capacity problem as with an improved Bike Parking
system, passengers will more likely park their bikes at the Station and not bring them onboard the train.

Adrian Brandt stated that there is a study that was completed by staff regarding bike locker utilization which reflects low utilization. Adrian said that lockers were being used as storage units and shelter for the homeless. He then said that Bike Link is a better system as it is day use, first come first serve, type of bike parking system that is reasonably priced.

Chair Brian Shaw stated that there is an opportunity to improve the bike parking system as new technology is now available.

FARE STUDY UPDATE
Melissa Jones, Senior Planner, presented an update on the Fare Study.

Overview of presentation
- Study overview
- Key findings from Existing Conditions and Peer Comparison Reports
- Estimated elasticity of demand for Caltrain’s current system
- Update on MTC’s Regional Means-Based Fare Study
- Next steps

Study Overview
- Currently, Caltrain has no fare policy in place
- Fare Study objectives:
  - Identify potential opportunities to maximize revenue;
  - Enhance ridership; and
  - Safeguard social and geographic equity.
- Explore the trade-offs with Caltrain’s current funding structure
- Promulgate policy

Key Questions for the Fare Study
- What is the current elasticity on the system?
- How much revenue can and should Caltrain generate from fares?
- Is the current fare and pass structure the right fit for Caltrain?
- How should Caltrain phase and implement changes to its fare system?

Key Findings from Existing Conditions and Peer Comparison Reports
Based on Average Weekday Riders by Fare Product, 2007 – 2016
- Ridership has doubled since 2007
- Large growth in Go Pass and Clipper Card use in recent years

Based on Total Revenue by Fare Product, 2007 – 2016
- Fastest growing revenue source is One-Way tickets
- Monthly Pass revenue has also had high growth
Fare Products by Annual Household Income

<table>
<thead>
<tr>
<th>Fare Product</th>
<th>Under $50,000</th>
<th>$50,000 - $100,000</th>
<th>$100,000 - $150,000</th>
<th>$150,000 - $200,000</th>
<th>$200,000 or more</th>
<th>Total</th>
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<tr>
<td>One-way Ticket</td>
<td>38%</td>
<td>23%</td>
<td>16%</td>
<td>8%</td>
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<td>29%</td>
<td>25%</td>
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<td>8%</td>
<td>19%</td>
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<tr>
<td>Go Pass</td>
<td>5%</td>
<td>27%</td>
<td>15%</td>
<td>12%</td>
<td>19%</td>
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<td>25%</td>
<td>18%</td>
<td>24%</td>
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<tr>
<td>All Riders</td>
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<td>24%</td>
<td>22%</td>
<td>15%</td>
<td>23%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: 2016 Caltrain Triennial Survey

Fare Product Use by Annual Household Income (2016)
- As annual household income increases, usage of high-value products like Go Pass or Monthly Pass increases
- One-way tickets are most common in lowest income groups

October 2016 Revenue Per Rider for Full Price Products
- Revenue per rider is highest for One-way TVM and Day Pass
- Revenue per rider is lowest for Go Pass

October 2016 Revenue Per Mile for Full Price Products
- Revenue per mile is highest for One-way TVM and Day Pass
- Revenue per mile is lowest for Go Pass

Peer System Characteristics
- Fare structure for 19 systems studied (including Caltrain):
  - 12 operate with zone-based fare system
  - 7 operate with fare system of station-to-station pairs
- Zones-based system is regarded as easier to understand for passengers and is easier to enforce
- Station-to-station fares can be seen as more fair for passengers but harder to enforce
- Of the 19 systems studied, Caltrain has fares that are about average (as of May 2017 Clipper Cash fares):
  - 11th highest base fare (no change after FY18 fare increase)
  - 8th highest maximum fare (7th highest after FY18 fare increase)
  - 10th highest price per track mile (no change after FY18 fare increase)
- Majority of peer systems studied offer monthly pass:
  - Some discount longest trip; some discount shortest trip
Others do multiplier for number of trips (like Caltrain)

Farebox Recovery Ratio
- Caltrain has highest farebox recovery of commuter rail systems (2015)

**Estimated Elasticity of Demand for Caltrain's System**

Price Elasticity of Demand
- Demand elasticity is the relationship between the price of a good and the quantity of the good that is consumed
  - How price sensitive is a good?
  - Elastic = a small change in price results in large changes in consumption (high price sensitivity)
  - Inelastic = price changes have little effect on consumption (low price sensitivity)

Caltrain System’s Demand Elasticity
- Calculated using Caltrain’s newly developed fare elasticity model
- Demand elasticity modeling results:
  - Caltrain’s ridership is inelastic
  - Elasticity value: estimated to be -0.2
- Fare increases are unlikely to result in steep drops in ridership on Caltrain and should be revenue positive
- Resulting policy question: how much revenue should Caltrain generate from its fares?

**MTC’s Means-Based Fare Study**

Regional Coordination on MTC Means-Based Fare Study
- MTC study for region commenced in 2015
  - Caltrain staff is continuing to participate in regional conversations with MTC and transit operators
- Study goals:
  - Make transit more affordable for low-income residents
  - Move toward a more consistent regional standard for fare discounts
  - Develop implementation options that are financially viable and administratively feasible

**Next Steps**
- Update JPB in May 2018
- Finalize analysis of potential fare scenarios
- Draft Phase 1 Final Report
- Integrate analysis and findings into Caltrain Business Plan
- Determine next steps for Fare Study Phase 2:
  - Additional Go Pass analysis
  - Develop fare policy
  - Pursue Parking Study (anticipated FY19)

Member Cat Tucker was surprised that Caltrain does not have a fare policy and instead operates with a fare objective. Cat asked, how are objectives set and how do they change. Melissa said that the fare objectives are approved by the Board of Directors. Cat asked whether there will be a fare increase due to the fare study results. Melissa
stated that there will be no increase on fares based on the fare study results and is a tool to help analyze the effects of a fare increase.

Member Cat Chang comment was around equity in the fares. She said that it is great that Caltrain is exploring potential fare discounts. She also encourages Caltrain to look at the Go Pass as a separate product as the end users are different. In one instance the customer purchases their own ticket and in the other, the employer of the customer makes the purchase. Cat pointed out that only employees are eligible to receive the Go Pass and that contractors are not eligible. She said that those are the vast amount of people that earn the lowest salary and is a shame the Go Pass is not an available option. Cat said that the elasticity model is a great tool and asked for the main demand drivers that go into the elasticity model. Melissa said that there are a whole host of items. She also stated that low income riders are less inelastic and less price sensitive than higher income riders and is common amongst sister transit agencies. The general explanation for that is that riders who have higher income generally have an alternative transportation option and riders with lower income do not and have less transportation options. Cat encouraged Caltrain to look at the impacts of fare changes on lower income riders.

Member Paul Escobar stated that the Fare Study update is incredibly insightful. He is glad that Caltrain has a tool to possibly help low income riders. He also recommended that Caltrain not only look at revenues generated from its fares, but from which fares in regards to fare policy.

Member Julia Welch asked what the comparison is between the single ride fare media compared to the monthly pass daily rate. Julia said that the study reflects that the largest revenue contributors are low income passengers with the most expensive fares.

Member Ricardo Valenciana asked whether there is an opportunity on the weekends since there are different types of riders on the weekends. Melissa said that the opportunity is with service changes. Joe Navarro stated that the weekend ridership/fare has been looked at and unable to make changes to fares at this time.

Chair Brian Shaw referred to p.4 regarding the GO Pass. He asked whether the comparison of the GO pass is based on the ridership or based on the Go pass distribution. Melissa said that it is based on the share of ridership attributed to Go Pass determined by the Triannual Survey. Chair Brian said that the data does not reflect the many factors contributed to Go Pass and is not the same comparison to individually based fare media and encourages a more in depth look at the Go Pass in the next phase of the fare study.

Chair Brian Shaw referred to the graph on p.6 that reflects the business metrics. He asked why Caltrain struggles with budget crisis, when this graph reflects Caltrain generating revenue from fares. Joe Navarro responded that there is an aging fleet and funding is used to rebuild and repair equipment. In addition, Caltrain TVMs are 18 years old and also need attention. Additionally, in order to improve customer flow with the increase in ridership, the clipper card reader machines need to be repositioned. There are many projects pending and Joe will have further information as the year goes on.
Member Cat Tucker advised that Caltrain is not the only transit agency that has had projects deferred. Chair Brian Shaw encourages staff to present a graph that tells the complete story and include the various factors that attribute to budget for example, the aging fleet, future operation growth and member agency contributions so that the full picture is understood.

Cat Chang left at 7:06pm

Public Comment
Jeff Carter, Millbrae, said that regarding elasticity, there is a significant amount riders that participate in Go Pass and those riders do not feel the fare increase as they do not pay for their Caltrain pass. He said that there needs to be more studies completed on the subsidized compared to non-subsidized riders. He asked whether the fare study was completed in-house or with consultants. Melissa advised that Caltrain has a consultant team working on this study. Jeff said that the chart shows that member contributions have gone down and this is why Caltrain has had to increase fares.

Doug Delon, Mountain View, said that Caltrain may not have a fare policy, but he thinks that the board has adopted a farebox recovery policy. He also stated that HUD (Housing Authority) has regulations and a formal definition of income categories. Doug requested to interpret the data from the fare study to fit into the HUD standard income categories.

Andy Chow said that one of the reasons low income riders do not take advantage of the discounts is because the fare media would have to be paid for upfront. He suggests more flexible options to low income riders just as in Oregon that offers a fare cap. In addition, he suggested charging passengers riding to the Giants game full price to maximize revenue for visitors and giants fans.

Adrian Brandt said that nearly a quarter of Caltrain’s ridership earns over $200k/yr and 60% earn over $100k/yr. The lowest income riders are paying most per mile and the highest earning riders are paying the least and this is an equity issue. He also talked about reduction in JPB member contribution and said that there have been contribution cuts by over 75% in the last 7 to 8 years which makes for Caltrain to rely more heavily on passenger fares which makes Caltrain vulnerable to ridership decline. Lastly, Adrian suggests Caltrain to move to distance based fares.

Susan Wright, Belmont, said that regarding elasticity, she feels due to the study based on current ridership, a group of riders have been left out; the ones that were priced out. She suggests to poll people that are interested in riding however not a feasible option. It might be helpful information.

STAFF REPORT UPDATE
Joe Navarro, Director, Rail Operations, reported:

On-time Performance (OTP) -
- March: The March 2018 OTP was 94.3% compared to 96.5% for March 2017.
  - Vehicle Strikes - There was one vehicle strike on March 25.
Vehicle on Tracks - There were two days, March 1 and 4, with a vehicle on the tracks that caused train delays.

Mechanical Delays - In March 2018 there were 515 minutes of delay due to mechanical issues compared to 408 minutes in March 2017.

Trespasser Strikes - There was one trespasser strike on March 5, resulting in a fatality.

February: The February 2018 OTP was 93.7% compared to 93.8% for February 2017.

Mechanical Delays
Mr. Navarro explained that the Mechanical delay minutes do not reflect the time a particular train is out of service, but that it includes the overall delayed minutes throughout the system on that day. Today the dispatch center is able to recover more quickly and affect the reduction in delayed minutes for the day. The dispatch team has done a great job in maneuvering around the mechanical issues to get service back up and running as quickly as possible.

Tunnel Closure
After San Francisco Giants Baseball season in October, there will be a tunnel closure for 24 weekend service. There will be no service from Bayshore to 4th & King St. due to construction.

TVM
Looking at replacing 10-12 Ticket Vending Machines for FY19 budget

Platform Closure Static Signage
There will be a media blitz informing passengers know of the new signage.

Ms. Navarrete reported:

Bikes Board First Pilot
- On Monday, April 16, Caltrain will launch a five week pilot program that hopes to make boarding more efficient. This will allow bicyclists to board bike cars first at the Mountain View, Palo Alto and Redwood City stations. Caltrain staff will be on hand at those stations to assist passengers as needed.

Caltrain Mobile Ticketing App-
- In March, Caltrain Mobile sold 9,167 tickets. About 67.3 percent of the tickets sold were One-way and the most common ticket category used was Adult category. Caltrain Mobile was downloaded nearly 8,500 times in March.
- 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 -
In March, Clipper system registered 8,240 unique users accounted for 133,269 boardings.

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.

Public Comment
No public comment

**DATE, TIME AND LOCATION OF NEXT REGULAR MEETING:**
May 16, 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 7:25 pm
Date: April 25, 2018

To: Board of Directors

From: Jim Hartnett, Executive Director

Subject: May 3, 2018 JPB Board Meeting Executive Director’s Report

1. On-time Performance –

   • Through April 18: The preliminary April 2018 OTP was 92.6 percent compared to 95.8 percent for April 2017.
     - Trespasser Strike – There was one trespasser strike on April 7, resulting in a fatality.

   • March: The March 2018 OTP was 94.3 percent compared to 96.5 percent for March 2017.
     - Trespasser Strike – There was one trespasser strike on March 5, resulting in a fatality.

2. Fare Evasion Policy – In April, Caltrain implemented a soft launch of the new proof of payment system for fare enforcement that established an administrative process for fare evasion. The soft launch included Visual Message Sign (VMS) messages, Public Address (PA) system announcements and Conductor Announcements regarding the new fare ordinance throughout the month of April. During the week of April 23, transit police officers and conductors handed out 2”X3.5” cards to alert passengers of the upcoming ordinance change. Communications messages included “Don’t Risk It, Buy A Ticket” and “No Ticket = $75 Notice of Violation.” Passengers were directed to the dedicated webpage www.caltrain.com/fines for details of the Fare Evasion Policy. Messaging also emphasized Caltrain’s zero-tolerance policy for fare evaders. All conductors and customer service staff have been trained. The program is expected to be
fully rolled out in June due to final contract negotiations with TurboData (a third party processor to support the ordinance).

3. **Bikes Board First Pilot Program** – On Monday, April 16 Caltrain launched a five week pilot program that allows bicyclists to board bike cars first at the Mountain View, Palo Alto and Redwood City stations. Caltrain staff was on hand at those stations to enforce the policy, which would prevent bicyclists from having to navigate through a crowd of riders blocking the entrance. These boardings were timed and compared to the standard boarding process to determine if this new approach could make Caltrain service overall more efficient. The findings of this pilot, which was crafted with input from the Caltrain Bicycle Advisory Committee and bicycle advocacy groups, will be presented at the Bicycle Advisory Committee meeting in May.

4. **Revenue Advertising Contract Update** – Outfront Media currently holds the Caltrain advertisement contract and is expanding the advertising inventory at San Francisco station by adding 17 **ON Smart Media** digital displays. By running functional ad applications and allowing the displays to communicate with one another to deliver synchronized content, this new advertising option is expected to increase sales volume by approximately $500,000 per year, of which Caltrain would receive a portion of the net revenue.

   Since the start of the contract, the vendor has been selling above and beyond the minimum guarantee thus the revenue share of 60 percent has been paid. During calendar year 2017, Outfront paid the agency a $98,837.14 minimum annual guarantee and due to additional sales in the year, Caltrain received an additional $923,498 revenue.

   These customized digital displays are the first of their kind on the West Coast, making Caltrain the pioneers in this new advertising platform amongst California transit agencies. The displays are expected to be installed by the end of May. Caltrain will also have the opportunity to use the display to promote its own services.


6. **Caltrain 2018 Annual Count Survey** – A summary presentation to the Board and the Key Findings Report posted on the Caltrain website is targeted for July.

7. **CAC Meeting** – The Citizens Advisory Committee met on Wednesday, April 18, in San Carlos. Melissa Jones, Senior Planner, provided a Fare Study Update presentation and Bike Parking Plan update. Lori Low, Government
& Community Affairs Officer, provided a presentation on the Peninsula Corridor Electrification Project (PCEP). Joe Navarro, Director - Rail Operations, provided the Staff Report. The next CAC meeting is scheduled for Wednesday, May 16, in San Carlos.

8. **BAC Meeting** – The next Bicycle Advisory Committee meeting is scheduled for Thursday, May 17, in San Carlos.

9. **Special Event Train Service** –

**Services Provided** (Ridership for events occurring in April will be reported in June):

- **San Jose Sharks** – The San Jose Sharks hosted eight home-games in March. Total post-game additional riders boarding at San Jose Diridon station was 2,514. Total year-to-date post-game additional riders boarding at the San Jose Diridon station was 10,485.

  The SJ Sharks hosted three regular season home games in April. The last regular season home game was on Saturday, April 7. Total post-game additional riders boarding at the San Jose Diridon station was 790.

  The SJ Sharks also hosted two Stanley Cup playoff home games vs. the Anaheim Ducks in the first playoff round on April 16 and 18. The Sharks beat the Ducks in a 4-0 sweep. They will be hosting at least two more games vs. the Vegas Golden Knights in the second playoff round.

- **Giants Baseball** – The Giants held two exhibition games against the Oakland A’s at AT&T Park on Monday, March 26 and Tuesday, March 27. Caltrain provided 2 extra post-game trains for each game. Total ridership including regular riders and Giants fans alighting and boarding at San Francisco station was 14,473.

  The Giants hosted fifteen regular season home games in April.

**Services Scheduled:**

- **San Jose Sharks** – The Sharks post-season continues. Caltrain will track post-game service ridership for all post-season home games. Special Service for the playoffs will be determined as additional game information is announced.

- **Giants Baseball** – Regular season continues through September. Caltrain will provide regular baseball service for all home games.
• **Taylor Swift Concerts 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 comes to Levi’s Stadium. For both concerts, Caltrain will provide one extra post-event northbound local train that will depart the Mountain View Station approximately 75 minutes after the event ends, or when full. Post-event service will be coordinated with connecting VTA light rail service.

• **Bay to Breakers** – On Sunday, May 20, Caltrain will operate four scheduled special pre-event trains and three extra post-event trains departing at 1:15 p.m., 1:45 p.m. and 2:45 p.m. that will express from SF to Belmont and make all local stops to San Jose Diridon for the Bay to Breakers Race which starts at 8:00 a.m. in San Francisco. Riders are encouraged to purchase pre-sales for Day Passes available beginning Sunday, May 13 on the new Caltrain Mobile App. In addition, pre-sales for One-way, Day Passes and daily parking permits will be available beginning Wednesday, May 16 on the TVMs by selecting the “Bay to Breakers” button. There will be field staff and ambassadors at the San Jose Diridon and Palo Alto stations pre-event to assist passengers. Alcohol will be prohibited on the special trains.

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

10. **Capital Projects** –

The Capital Projects information is current as of April 13, 2018 and is subject to change between April 14 and May 3, 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.

Specialized materials, in order to resolve a Buy America issue with Caltrans related to the City of San Francisco fire hydrants, were installed by the end of March. Resolution of this Buy America issue is a precondition of Caltrans before resolving funding issues for the project. Staff is also continuing discussions with Caltrans, City of San Francisco, and third-party utilities to secure additional funding and reimbursement for additional incurred costs associated with their portion of work. PG&E has reimbursed the PCJPB for their associated costs. Discussions regarding cost reimbursement from the City of San Francisco for their Auxiliary Water Supply System (AWSS) continue. The AT&T relocation reimbursement
request was completed by staff and is still under review by legal counsel before transmittal 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 April, precast bridge girders were set at the Beresford Creek Bridge, formwork and rebar placement for the center median bent and abutments for the 25th Avenue Bridge was in progress, and concrete placement was completed for the abutments of the Pedestrian Underpass. The precast bridge girders for the Pedestrian Underpass should be set in May. Approval is pending from the Fiber Optic carriers for the protection plan for their communications lines. Upon approval, work on the abutments for the bridges at 28th and 31st Avenue can proceed. Ground improvements at 28th Avenue were also underway to provide structural support for bridge and MSE walls at that location. The cost reimbursement agreement with the UPRR was completed which kicks off the process for the 3rd party fiber optic carriers to relocate their utilities that conflict with project.

The temporary closure of the Hillsdale Station, to allow completion of the project, is forecast to occur in late 2018. 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.

  During the past month, passenger service has been shifted from the existing station platforms to temporary platforms to allow construction of shoofly tracks. Upon completion of the shoofly tracks, service will be shifted to the shoofly tracks to allow construction of the new pedestrian underpass and new centerboard platform. Third party utility relocations, except for Kinder-Morgan fuel lines, are still awaiting the City of South San
Francisco’s acquisition of an encroachment permit from Caltrans. A traffic simulation study for the highway off-ramp that is affected by this project is being completed to address Caltrans concerns that should lead to issuance of the encroachment permit. An Air Space Lease Agreement, which is also needed for utility relocations and other construction, is 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 the past month, the contractor completed installation of new crossing ties and crossing panels at Main Street. The installation of pedestrian gate foundations and associated underground electrical was underway at Main Street, Broadway, and Whipple. Potholing for the foundations for the future traffic signal cantilever at Whipple Avenue was conducted and a utility conflict was discovered that will require a redesign. Construction is expected to be substantially complete by July 2018.

- **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 in the 60-day administrative period before site construction can begin that is expected to commence in May. 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 began on March 12th and approximately 200 feet of platform at the southern end was closed and demolished for surface replacement. Work was suspended to address additional work that was requested by the Electrification program for grounding of the station platform. Construction has resumed; 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 began on March 5th and has achieved approximately 80% progress as of April 13. 100% completion of cameras is forecast by the end of April 2018.

- **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 PTC, ROCS/PADS, 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.
Currently, this problem is being temporarily addressed by using rental cooling systems that are 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. Work is now in progress for installation of the other two cooling units and to also upgrade the HVAC ductwork within the facility. The project is expected to complete by the summer of 2018.
TO: Joint Powers Board

THROUGH: Jim Hartnett
General Manager/CEO

FROM: Carter Mau
Deputy General Manager

SUBJECT: DEDICATED LAW ENFORCEMENT SERVICES

ACTION
This report is for information only.

SIGNIFICANCE
Since 2002, the San Mateo County Sheriff’s Office Transit Police Bureau has provided contracted law enforcement services to the Board in support of our bus and rail operations. This interagency agreement has resulted in a true partnership between the Board and the Sheriff’s Office. The agreement allows for consistent, highly trained and dedicated law enforcement staff to meet the unique requirements of Caltrain.

The Transit Police Bureau’s responsibilities are different and unique as compared to a policing municipality. Transit Police handles all major rail investigations to ensure timely restoration of transit services to the public. These investigations include suicides, trespassers, vandalism, and theft of property. The agreement provides the JPB with access to Homeland Security, the Office of Emergency Services, the Bomb Squad, SWAT, explosive detecting K-9 units, crime scene investigation, criminal forensics, coroner’s services, and support personnel as needed.

A short video presentation captures the essence of the role and responsibilities of the San Mateo County Sheriff’s Office Transit Police Bureau and the areas of expertise that resides within the Bureau.

BUDGET IMPACT
There is no budget impact associated with this item.

BACKGROUND
The Transit Police Bureau has developed specific tactics and enforcement methods to be effective in the transit environment.
These methods support a philosophy and methodology that enhances transit policing distilled from over 15 years of experience. The four main tenets of the approach to policing for the Agencies include Staffing with Specialized Expertise, Visibility for Engagement and Enforcement, Specialized Training, and Community Outreach. Following these 4 Tenets has resulted in building a unique and elite team of officers with expertise in bomb disposal, SWAT teams, Crisis Negotiation, K-9 teams with certification in explosives detection, and special event policing.

For the year ending December 2017, Transit Police Bureau provided 3,280 passing checks of stations and facilities; 597 dispersals; 4084 parking citations; 863 citations for dangerous conduct at grade crossings, 558 traffic citations; 63 citations for trespassing; 28 felony arrests; 154 misdemeanor arrests along with numerous educational visits and presentation on safety and security to community groups.

Prepared By: William Grizard

650-622-7856
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Background:

Since January 2002, the San Mateo County Sheriff’s Office Transit Police Bureau has been the contracted law enforcement provider on behalf of the San Mateo County Transit District (samTrans) and the Peninsula Corridor Joint Powers Board (Caltrain). The Transit Police bureau is responsible for policing all samTrans’ buses, kiosks, vehicles and facilities, as well as all Caltrain rail equipment, stations, right-of-ways and facilities throughout San Francisco, San Mateo and Santa Clara counties.

The San Mateo County Sheriff’s Office Transit Police Bureau provides law enforcement services seven days per week, twenty hours per day, every day, between the hours of 5:00AM and 1:00AM of the subsequent day. Between the hours of 1:00AM and 5:00AM all law enforcement services are provided by allied agencies within the three jurisdictional counties.

San Mateo County Sheriff’s Office Mission Statement:

The San Mateo County Sheriff’s Office protects life and property and preserves the public peace. The Sheriff’s Office enforces State laws and County ordinances, prevents crime, apprehends criminals, cares for incarcerated prisoners, processes civil actions and provides security to the courts. The Sheriff’s Office is committed to providing the highest level of professional law enforcement service in the most efficient and cost effective manner possible. All Sheriff’s Office employees will strive to accomplish this mission in the performance of their duties.

Core Values, Objectives, Priorities:

The core values of the San Mateo County Sheriff’s Office Transit Police Bureau are commitment, integrity, and compassion. The safety and security of passengers, employees, contractors and the general public who come in contact with the transit system are the foremost priorities. Our core values align with the Transit District’s mission to supply the public with a high-quality, safe and efficient transportation system that should enhance quality of life by increasing access and mobility, reducing congestion, improving the environment and promoting economic vitality.

Roles/Responsibilities:

The Transit Police Bureau’s responsibilities are different and unique as compared to policing a municipality. The Transit Police Bureau handles major rail and bus incident investigations. The investigations are handled efficiently and accurately, allowing for the timely restoration of transit services to the public.

The Transit Police Bureau is responsible for policing 77 miles of rail in three counties, stretching from San Francisco to Gilroy. There are a total of 32 stations along the Caltrain transit rail line (4 in San Francisco County, 16 in San Mateo County, and 14 in
Santa Clara County). The Transit Police Bureau operates in three counties, working collaboratively with all allied law enforcement agencies and communities within the three jurisdictional counties.

The Transit Police Bureau is responsible for investigating all rail and bus accidents and fatalities. This includes all rail related suicides along the Caltrain corridor. The Transit Police Bureau is responsible for investigating crimes committed on District property and for proactively preventing criminal activity on the rail and bus lines. This includes investigating property crimes, crimes against persons, and workplace violence.

**Organizational Structure:**

The Transit Police Bureau Commander has a direct reporting responsibility to the San Mateo County Sheriff’s Office – North County Field Operations Division Captain. The Commander is the direct liaison to the San Mateo County Transit District Director of Safety and Security.

The Transit Police Bureau is comprised of a Sheriff’s Lieutenant (Bureau Commander), two Sheriff’s Sergeants, one Detective, two Special Enforcement Deputies, five Transit Patrol Deputies, three K-9 Handlers, one Special Enforcement Officer and one Management Analyst.
2017 YEAR IN REVIEW

Total Calls for Service
9,988

Average Response Time
23 Minutes 2 Seconds

Reports Taken
818
Rail: 616
Bus: 202

High-Intensity Strategic Enforcement
863

Life Endangering Interventions
47
Rail: 40
Bus: 7

Special Events
165
San Francisco Giants: 86
San Francisco 49ers: 10
San Jose Sharks: 47
Stanford: 6
Other: 16 (Special Details, HISEP Enforcement, concerts)
The Bay Area covers 7,179 square miles and is home to over 7 million residents. The region’s economic growth in various industries has created a high demand for public transportation needs as well as jobs, housing, and population growth. Both traffic congestion and transit demand are reaching an all-time high according to a new study by the Metropolitan Transportation Commission. Public transportation is the second most used form of transportation for Bay Area residents.

Statistics based on the Metropolitan Transportation Commission (MTC) newly released 2015 Vital Signs:

- **Population**: The Bay Area’s population rose to 7.6 million by the end of 2015, with about one out of every four residents living in Santa Clara County;
- **Employment**: Bay Area employment hit an all-time high of 3.7 million in 2015, with nearly half of the region’s jobs located in San Francisco or Silicon Valley;
- **Housing**: Permitting of new units continues to run well below 1970s and 1980s levels, despite a much larger 2015 population and a deepening affordability crisis;
- **Miles Traveled in Congestion**: 94 percent of the Bay Area’s total freeway mileage was traveled in free-flow or moderate-flow conditions last year, down a percentage point from 2014
Transit security concerns have increased throughout the nation and critical infrastructure, such as Caltrain Transit facilities are considered soft targets for terrorist activity. Transit facilities have traditionally been targets for terrorist activities due to the high number of people traveling throughout the system. Caltrain is particularly vulnerable due to its open barrier system. This type of system allows entry to the public without the purchase of a ticket. The high ridership and open system allows for terrorists to have the most disruption with limited resources. Caltrain and SamTrans service municipalities that house some of the most advance technological companies in the world.

According to the Federal Bureau of Investigations (FBI) a third of all terrorist attacks worldwide target mass transit. Recent high profile terrorist attacks further highlight this concern.

- March 22, 2016: Metro Station in Brussels was targeted killing 32 people
- April 3, 2017: St. Petersburg in Russia was targeted killing 16 people
- June 20, 2017: Metro Station in Brussels was targeted no one was hurt
- September 15, 2017: Parsons Green subway station in London was targeted 30 people injured

Caltrain and SamTrans utilizes Industry Safe, a web-based safety management software which tracks customer comments and concerns. Public safety has been shown to be the highest priority by patrons based on customer service comments and complaints. The Transit Police Bureau understands the highly specialized nature of providing law enforcement services to a transit agency. As part of the agreement between the District and San Mateo County Sheriff’s Office Transit Police Bureau affords the District with access to Homeland Security, The Office of Emergency Services, the Bomb Squad, SWAT, explosive detecting 5-9 units, crime scene investigation, criminal forensics, corrections, coroner’s services, and support personnel as needed.
Transit System Safety:

The safety and security of passengers, employees, contractors and the general public who come in contact with the transit system are the foremost priorities of the Transit Police Bureau. To ensure the safety of all stakeholders, the Transit Police Bureau exercises best practices in the following:

Staffing:

The San Mateo County Sheriff’s Office understands the unique nature of the Transit Police Bureau. The selection process for this specialty unit requires all applicants to undergo the following:

- Meet mandated, essential and desirable training requirements.
- Letter of Interest
- Oral Board Interview
  - Must have strong verbal/written communication skills
  - Positive community engagement
  - Strong knowledge of the San Mateo County Transit Districts’ roles/responsibilities
Maintaining Visibility (Engagement):

The Transit Police Bureau believes that maintaining high visibility deters and limits criminal activity while maximizing the safety of transit patrons. Below are some key aspects of daily police patrol duties which provide high visibility on the transit system:

2017 Visibility Statistics

Station Checks: 3,280
Subject Stops: 354
Dispersals: 597

Station checks: Transit Police proactively monitors the transit system in a high visibility capacity to deter crimes, promote safety and enforce violations. Station checks allow for positive community engagement by providing customer service assistance to patrons utilizing the transit system. Visible station checks provide transit patrons, visitors, and others visiting the transit system a strengthened sense of safety and security.

Subject stops are proactive contacts which are not initiated by a call for service. This allows the Transit Police to provide high visibility on the transit system and are tools for proactive policing for missing persons, warrant checks, and repeat transit violators.

Dispersals are initiated from a call for service for trespassing, disturbance, loitering, etc. on the transit system.
Maintaining Visibility (Enforcement):

2017 Enforcement Statistics (Arrests & Citations)

- Felony Arrests: 28
- Misdemeanor Arrests: 154
- Juvenile Referrals: 10
- Parking: 4084
- HISEP: 863
- Traffic: 558
- Trespassing: 63

Parking Citations: Transit Police enforces parking at all Caltrain parking lots, SamTrans Park and Ride lots, and all maintenance facilities throughout the transit system.

HISEP: In partnership with the U.S. Department of Transportation’s Operation Lifesaver, Inc. (OLI), Transit Police developed the High-Intensity Strategic Enforcement Program (HISEP) to target grade crossings where citizens engage in unsafe behavior. This includes trespassing along the rail line, walking around lowered gates at stations and grade crossings, vehicles stopping and blocking the right-of-way and fare evading.

Traffic Enforcement: Transit Police enforce all California Vehicle Code violations throughout the three counties.

Trespassing: The Bay Area has many unique challenges due to its economic makeup which has led to its housing crisis. Many homeless individuals set refuge and shelter on the Caltrain right-of-way. This poses a high safety concern for the Transit District. According to Operation Life Saver, California has the highest number of trespassing casualties in the United States. To prevent unsafe behavior on the Caltrain right of way, the Transit Police conducts homeless encampment abatement and enforcement on the right of way.

Arrests: Transit Police enforce all local and state laws; affects arrests for individuals who have violated those laws in or around the transit system.
Training:

The Transit Police Bureau understands the importance of receiving proper training to enhance staffing skillsets. Below are a few highlighted trainings.

**Railway Worker Protection:** On a yearly basis, every individual assigned or working in the Transit Police Bureau is required to take the federally mandated Railway Worker Protection (RWP) training. The objective of this training is to learn the requirements for working on or near Caltrain right of way. These requirements are intended to keep everyone safe and avoid harm to themselves and others, as well as to avoid damage to equipment and trains.

**Emergency Response Drill:** In collaboration with the Transit District the Transit Police Bureau coordinates a yearly emergency response drill. Allied first responder agencies participate in this yearly exercise. The objective of this drill is to test response procedures and coordination deficiencies between various agencies.

**Crisis Intervention Training:** Crisis Intervention Team (CIT) program is a model for community policing that brings together law enforcement, mental health providers, hospital emergency departments and individuals with mental illness and their families to improve responses to people in crisis. CIT programs enhance communication, identify mental health resources for assisting people in crisis and ensure that officers get the training and support that they need.

**Assets to the Transit Police Bureau:**
The Transit Police Bureau has an outstanding team, each member brings with them their experience, institutional knowledge and unique skillsets that enhances their ability to provide the best service to the District. The Transit Police Bureau Commander understands the unique environment and requirements for the staff members assigned in this unit. Due to this, specialized training and ancillary assignments are desirable for those applying to the Transit Police Bureau. These specialized training and ancillary assignments services enhance their ability to provide specific services to the District such as bomb detection and crisis negotiations at no additional cost to the Transit District in the normal course of their job scope.
### Specialized Training/Ancillary Assignments

<table>
<thead>
<tr>
<th>Number of Personnel</th>
<th>Type of Specialized Training</th>
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<tbody>
<tr>
<td>2 Team Members</td>
<td>Bomb Squad</td>
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<tr>
<td>3 Team Members</td>
<td>Crisis Negotiations Unit</td>
</tr>
<tr>
<td>1 Team Member</td>
<td>SWAT / TCAT</td>
</tr>
<tr>
<td>3 Team Members</td>
<td>K-9 Bomb Handlers</td>
</tr>
</tbody>
</table>

**Bomb Squad (Explosives Ordinance Unit):** The Transit Police Bureau is comprised of 2 team members who are part of the Sheriff’s Bomb Squad. These two team members are certified bomb technicians. All Bomb Technicians must complete the 240 hour Basic Course taught by the Federal Bureau of Investigation (FBI), Hazardous Devices School at Redstone Arsenal in Huntsville, Alabama. This course provides basic knowledge and certifies the applicant as a Bomb Technician through the FBI Bomb Data Center. The Bomb Squad responds to bombings, attempted bombings, actual or suspected improvised explosive device(s), incendiary device(s), military or civilian explosive(s), military ordnance, hoax device(s), fireworks, pyrotechnics or illegal ammunition, shock sensitive hazardous chemical(s), suspicious package(s), or any other explosive related incident. The Bomb Squad also conducts explosive canine detection sweeps, makes presentations and provides support to other units within the Sheriff’s Office, as well as all in county public safety agencies.

**Crisis Negotiations Unit:** The Transit Police Bureau is comprised of 3 team members who are part of the Crisis Negotiation Unit (CNU). Members of the unit possess excellent communication skills and have the ability to work under stressful conditions in a team environment. Prior to appointment, members attend a basic forty hour course in hostage negotiations where practical applications as well as the psychology behind hostage taking are taught. In addition CNU members are Crisis Intervention Trained (CIT) trained which helps when dealing with those with mental illnesses. The unit is activated throughout the county and remains on scene until a successful conclusion is reached.
S.W.A.T. / TCAT (Terrorism Counter Assault Team): The Transit Police Bureau has 1 team member who is part of the San Mateo County SWAT team and TCAT. The SWAT Team’s mission is to provide specialized support in situations posing a threat to the life and safety of the citizens of San Mateo County. Many of these situations involve law enforcement tactical operations in a high-risk environment.

The TCAT Team is a specialized emergency responder team that consists of tactical operators from established SWAT resources within this county. The team is capable of responding to, and operating in, a weapon of mass destruction environment as an immediate intervention team until federal resources can respond.

Community Outreach:

Over the past decade the San Mateo County Transit District has seen an influx of ridership on the transit system. Due to ridership growth, increased calls for service, geographical challenges, and limited resources, the Transit Patrol Bureau was limited in their ability to conduct strategic enforcement, training, and community outreach. The Special Enforcement Team (S.E.T) was created by the Transit Police Bureau to promote railway safety education, training, enforcement and allow dedicated Deputies to be assigned to special events serviced by Caltrain throughout the three counties.

The programs key focuses are:
- High-Intensity Strategic Enforcement
- Safety awareness for both Caltrain and SamTrans
- Community outreach
- Education
- Training
- Special detail events
- Homeless encampment abatement

Individuals living in the homeless encampments are given proper notification to vacate prior to dispersal and enforcement. Displaced individuals are given information on local shelters and programs where they can receive help. S.E.T actively works with local homeless advocacy groups and mental health services to relocate homeless individuals living in these encampments on Caltrain right-of-way.

- The S.E.T attends weekly meetings held by the San Francisco Mayor’s office geared towards homeless prevention and community development to relocate displaced individuals suffering from homelessness. This program partners closely with the Human Services Agency (HAS), San Francisco Police Department, SFSO, SMSO, San Francisco Public Works and the Homeless Outreach Team of San Francisco (H.O.T).
- The S.E.T has created an information pamphlet for each county with information on nearby shelters and programs for displaced individuals.
- Since the inception of the S.E.T, homeless living along the right-of-way has been greatly reduced.
Before the introduction of the San Mateo County Sheriff’s Office Special Enforcement Team, there was no required community outreach for railway and bus safety. The S.E.T has proactively worked to implement change and bring awareness to the community on the importance of railway and bus safety through education, training, and enforcement. As a result the S.E.T has accomplished the following:

- A 50% increase on H.I.S.E.P enforcement to deter and educate the public on the importance of railway safety at grade crossings.
- The S.E.T responds to crime trends to provide high visibility and limit criminal activity in particular areas. This approach maximizes safety for Caltrain and SamTrans patrons.
- The S.E.T educated students at local schools on the importance of safety while utilizing public transportation.
- The S.E.T is proactively working with local homeless advocacy groups and authorities to aid in reducing homelessness on the Caltrain right-of-way.
- The S.E.T provides educational safety courses for various allied Law Enforcement agencies, Transit District’s customer service department, TASI conductors, and G4S Security Guards.
- The S.E.T responds to pending calls for service which reduces the response times and increases coverage for the Caltrain and SamTrans Transit systems.
Special Events:

In 2017, the Transit Patrol Bureau worked 166 special events serviced by Caltrain throughout the three jurisdictional counties. These events take place at various Bay Area venues such as: AT&T Park, Levi’s Stadium, Stanford Stadium, San Mateo County Event Center and SAP Center and attracts thousands of additional Caltrain passengers. With championship sports teams, major events and mega venues comes the need to staff these events to enhance security to passengers, crewmembers, and visitors before, during and after the events.

In planning and managing major special events, Transit Police faces the following challenges and priorities:

**Challenges:**
- Ordinary crimes and incidents (fights, public intoxication etc.)
- Crimes, violence by protestors, possible terrorist attack, natural disasters

**Priorities:**
- Ensure that the event continues safely
- Ensure that the rest of the jurisdiction receives essential law enforcement services during the special event

Transit Police attends all service planning meetings and works in collaboration with the District to determine which events require overtime staffing. Each event is assessed accordingly to determine the threat and risk factors to effectively and efficiently define the appropriate staffing levels for each event (see matrix below).

- Time of Day
- Location
- Visiting Team
- Expected ridership
- Historical Crime Stats
- Outside factors (construction, political rally, previous incidents etc.)
# Staffing Levels Matrix

<table>
<thead>
<tr>
<th>Type of Event</th>
<th>Deputies</th>
<th>Sergeants</th>
<th>Community Service Officer</th>
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<tr>
<td><strong>Special Events: Sporting Event</strong></td>
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<td></td>
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<tr>
<td><strong>San Francisco Giants</strong></td>
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<tr>
<td>Week Day Games (Mon.-Thurs.)</td>
<td>2</td>
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<tr>
<td>Week Night Games (Mon.-Thurs.)</td>
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<td>Friday Night Games</td>
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<tr>
<td>Weekday High Profile Games</td>
<td>4</td>
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<td>0</td>
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<td>Week Night High Profile Games</td>
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<tr>
<td>Weekend Day High Profile Games</td>
<td>4</td>
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<td>Weekend Night High Profile Games</td>
<td>8</td>
<td>1</td>
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<tr>
<td><strong>San Jose Sharks</strong></td>
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<tr>
<td>All Games except playoffs</td>
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<tr>
<td>Playoff Game</td>
<td>4</td>
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<tr>
<td><strong>San Francisco 49ers</strong></td>
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<td>Stanford Football</td>
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<td>Pac 12 Championship</td>
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<td>Foster Farm Bowl</td>
<td>5</td>
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<tr>
<td><strong>Special Events: Concerts</strong></td>
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<tr>
<td><strong>Concerts &amp; Major Sporting Event (San Francisco &amp; Levi’s)</strong></td>
<td>Varies (2 or 4)</td>
<td>Varies (0 or 1)</td>
<td>Varies (0 or 1)</td>
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<td><strong>Special Events: Holiday Celebration</strong></td>
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<td>Martin Luther King Jr.</td>
<td>2</td>
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<td>Fourth of July</td>
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<tr>
<td>San Francisco Caltrain Station</td>
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<td>Fourth of July</td>
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<td>Redwood City Parade</td>
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<td>Holiday Train</td>
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<td>New Year’s Eve</td>
<td>7</td>
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<tr>
<td><strong>Special Events: Misc.</strong></td>
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<td></td>
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<td>Bay to Breakers *</td>
<td>14</td>
<td>1</td>
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<tr>
<td>San Mateo Makers Faire</td>
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<td>San Francisco Pride Parade</td>
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<tr>
<td>San Francisco Santa Con</td>
<td>2</td>
<td>0</td>
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*Numbers are subject to change due to safety factors
*Reserves volunteer for this event in addition to full-time Deputies.
March 2018
Monthly Progress Report

March 31, 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 has begun with the first poles going up in Segment (S) 2 Work Area (WA) 5. This work is expected to continue into S2WA4 next month. Foundation installation continued in Segment 2 and pitholing continued in Segments 2 and 4. Balfour Beatty Infrastructure, Inc. (BBII) submitted the Issued for Construction (IFC) Traction Power Facilities Segment 2 and Traction Power System design drawings for review.

Stadler’s Utah EMU manufacturing and assembly facility is scheduled to be ready for the first carshell arrival in August. Final Design Review meetings have been conducted for most EMU systems and the Design Packages are being finalized.

The Issue for Bid (IFB) Package for the Centralized Equipment Maintenance and Operations Facility (CEMOF) modifications is being assembled for release in May.

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 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 Differing Site Conditions for Segment 4 and 2 installation, the progression of the interconnections design, coordination between the PCEP and PTC projects, the utility relocation status, status of the tunnel contract and bidder questions and answers, 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 letters.
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

March 13 Funding Partners: CHSRA: Ian Ferrier; SFCTA: Luis Zurinaga

PCEP will be initiating a Lessons Learned Program and Alan Brick-Turin will begin to schedule interviews for the week of March 26. Three community meetings will be held this month in San Jose on March 15, San Bruno on March 21 and Millbrae on March 22. The revised SCADA Baseline Schedule has been submitted for review. The electric locomotives proposal has been delayed. The Buy America review in Salt Lake City has been rescheduled for March 19-21. The tunnel modifications pre-bid meeting was held on March 7.

March 27 Funding Partners: SFCTA: Luis Zurinaga

The OCS Pole installations will be starting over the weekend, and the team has moved over to Track 1 putholing after discussions with UPRR. The Jules Francard (Historic Eucalyptus) Grove increased Electrical Safety Zone impacts. The Amtrak proposal for overhaul services of electric locomotive was received Monday, March 26, which details scope and cost. The FRA waiver request pertaining to use of upper level passenger side doors in lieu of exit windows is to go before the FRA Safety Board April 10, and no public comments have been received. BBII is moving forward with design on interconnection options for Traction Power Substation (TPS) 1 and TPS-2. A settlement with Verizon has been reached for relocation of overhead lines. The Buy America review was conducted and preliminary indications are Stadler is meeting the requirements.

Systems Integration Meeting – Bi-Weekly

Purpose: To discuss and resolve issues with inter-system interfaces and to identify and address 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, SCADA and Caltrain Capital Projects project managers and resident engineers responsible for civil construction associated with the Los Gatos Bridge Project, East 25th Avenue Grade Separation Project and the South San Francisco Station Project is ongoing. Caltrain’s CEMOF modification project design is progressing. A draft Rail Activation Plan has been prepared and is undergoing committee review. Progress on activities including systems integration testing activities, FRA, FTA and safety certification are being tracked. Systems integration test plans are being developed.
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: SFCTA: Luis Zurinaga

The monthly meeting in March 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 due to absence of agenda items.

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

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, which is under development. 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

No changes were identified for consideration.

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>
<thead>
<tr>
<th>Milestones</th>
<th>Program Plan</th>
<th>Progress Schedule (March 2018)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Eight Miles of Electrification Complete to Begin Testing</td>
<td>11/21/2019</td>
<td>04/24/2020²</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>
</tr>
<tr>
<td>RSD (w/ Risk Contingency)</td>
<td>04/22/2022</td>
<td>04/22/2022</td>
</tr>
<tr>
<td>FFFA 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 the March 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></td>
<td>(A)</td>
<td>(B)(^1)</td>
<td>(C)(^2)</td>
<td>(D)(^3)</td>
<td>(E)</td>
<td>(F) = (D) + (E)</td>
</tr>
<tr>
<td>Electrification Subtotal</td>
<td>$1,316,125,208</td>
<td>$1,316,125,208</td>
<td>$15,343,801</td>
<td>$336,731,358</td>
<td>$979,393,849</td>
<td>$1,316,125,208</td>
</tr>
<tr>
<td>EMU Subtotal</td>
<td>$664,127,325</td>
<td>$664,127,325</td>
<td>$905,863</td>
<td>$88,694,844</td>
<td>$575,432,480</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>$16,249,664</td>
<td>$425,426,203</td>
<td>$1,554,826,330</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

- March
  - None

Future anticipated board actions include:

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

- May
  - None

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

- 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 construction contract
  - Change order approval requests

2.5 Government and Community Affairs

There were five 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 began in S2WA5 and will continue next month.
- Potholing at proposed OCS locations continued in Segments 2 and 4 in advance of foundation installation. BBII also continued to remove obstructions 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 S2WA3 Foundation and Pole Layouts IFC submittal.
- Continued design review coordination with local jurisdictions for the OCS 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 BBII’s 95% Systemwide Bonding and Grounding Design.
- Continued development of 95% Communications Systemwide Design.
- Received BBII’s IFC Traction Power Facilities Segment 2 for review.
- Received BBII’s IFC Traction Power System Design Drawings for review.
- 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 April.
- The PCEP team and BBII continue to work through Site Specific Work Plans (SSWP) for upcoming field work.
Continued tree pruning and removals.

**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.
- Continue coordination with UPRR on signal and OCS design.
- Continue coordination with the FRA on the constant warning solution.
- Continue review of BBII work plans for upcoming construction activities.
- Coordinate with PG&E on interconnection design and final design for PG&E infrastructure.
- Continue design reviews and coordination with local jurisdictions.
- Continue tree pruning and removals.

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

### Table 3-1 Work Progress by Segment

| Segment | Work Area | Foundations | | Poles |
|---------|-----------|-------------|| |
|         | Required  | Completed   | Required | Completed |
| 2       | 5         | 256         | 172      | 210        | 29 |
|         | 4         | 366         | 84       | 294        | 0  |
| **TOTAL** | 11       | 622         | 256      | 501        | 29 |

*Note:* Foundations needed do not match poles needed as guy foundations are needed in some locations for extra support of the poles.
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.
- ARINC issued Baseline Schedule Revision 8 for JPB review and approval.
- Preliminary Design Review comments issued. ARINC working on revised version of submittals and will respond by the end of March.
- 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

- The project team answered bidders’ inquiries and issued contract addendums.

Activity Next Month

- Continue response to bidder questions and preparation of necessary addendums.
- Open bids 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

- Final Design packages for EMU systems are being submitted for review. Most systems have had their Final Design Review meetings conducted and the Design Packages are being finalized.
- Stadler has been directed by Caltrain to engage 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.
- Carshell fabrication continues at the Stadler Altenrhein facility.

Activity Next Month

- Complete Final Design Reviews for those systems not heavily dependent on software development (e.g., Monitor and Diagnostic System and Train Control).
- Progress technical and commercial discussions related to Stadler implementing a Wabtec I-ETMS carborne system.
- First carshell will commence painting process.
- Continue to 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

- Assembling final design package for release of IFB.

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

- Held the monthly project DB Safety and Security Certification meeting, the Fire/Life Safety Committee meeting, and the EMU Safety and Security Certification meeting.
- Project staff participated in the BBII monthly “All Hands” contractor workforce meetings. Safety communication with project stakeholders remains a priority 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.
- Developed shunting procedure for use by the contractor and subs when travelling through Grade Crossings while en route to the work site.
- Conducted field inspections of pending work site location (TPS-2) in preparation of scheduled activities with contractor and Transit Police to support worksite security requirements.
- Provided inspection of new Drill Tech and NorCal equipment to be used on the ROW prior to being placed into service.
- Developed safe work practices guidelines for working in the Burlingame North and South yards to enable the contractor to work while a train passes on the adjacent track.
- 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.
- Performing a 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.
- Two design package audits were conducted: PGH Wong on the IFC package for Traction Power Facilities, and PGH Wong/F. W. Associates on the IFC package for Signal Systems.
- A Material Control audit was conducted of BBII’s SSF Warehouse and yielded three findings, which are still open.
- Two NCRs were issued against the BBII supplier of OCS Poles, Structural Steel Products, for rejected welds and inadequate Magnetic Particle and Ultrasonic Test reports. The subject poles were repaired, the reports corrected and the NCRs are closed.
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>3</td>
<td>55</td>
</tr>
<tr>
<td><strong>Audit Findings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit Findings Issued</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>Audit Findings Open</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Audit Findings Closed</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td><strong>Non-Conformances</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Conformances Issued</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Non-Conformances Open</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Non-Conformances Closed</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

**Activity Next Month**

- Three audits are planned and scheduled, two design packages and a procedural Stadler Design Control.
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 at this time.

Table 7-1 Schedule Status

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Program Plan</th>
<th>Progress Schedule (March 2018)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Eight Miles of Electrification Complete to Begin Testing</td>
<td>11/21/2019</td>
<td>04/24/2020²</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>
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<td>RSD (w/o Risk Contingency)</td>
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<td>12/09/2021</td>
</tr>
<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>

¹ Dates may shift slightly as the update of the March 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&lt;sup&gt;1&lt;/sup&gt;</td>
<td>12/09/2021</td>
<td>12/09/2021</td>
</tr>
<tr>
<td>RSD w/ Risk Contingency&lt;sup&gt;1&lt;/sup&gt;</td>
<td>04/22/2022</td>
<td>04/22/2022</td>
</tr>
</tbody>
</table>

<sup>1</sup> 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</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)(^1)</td>
<td>(C)(^2)</td>
<td>(D)(^3)</td>
<td>(E)</td>
<td>(F) = (D) + (E)</td>
</tr>
<tr>
<td><strong>ELECTRIFICATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrification (^{5})</td>
<td>$ 96,610,558</td>
<td>$ 695,955,996</td>
<td>$ 8,094,175</td>
<td>$ 203,406,652</td>
<td>$ 492,549,343</td>
<td>$ 695,955,996</td>
</tr>
<tr>
<td>SCADA</td>
<td>$ -</td>
<td>$ 3,446,917</td>
<td>$ 1,378,767</td>
<td>$ 1,378,767</td>
<td>$ -</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>$ 719,163</td>
<td>$ 13,385,710</td>
<td>$ 15,117,659</td>
<td>$ 28,503,369</td>
</tr>
<tr>
<td>Private Utilities</td>
<td>$ 63,515,298</td>
<td>$ 94,778,380</td>
<td>$ 2,593,850</td>
<td>$ 21,209,065</td>
<td>$ 73,569,315</td>
<td>$ 94,778,380</td>
</tr>
<tr>
<td>Management Oversight (^{6,7})</td>
<td>$ 41,506,257</td>
<td>$ 141,526,164</td>
<td>$ 1,290,707</td>
<td>$ 83,690,706</td>
<td>$ 57,835,458</td>
<td>$ 141,526,164</td>
</tr>
<tr>
<td>Executive Management</td>
<td>$ 7,452,866</td>
<td>$ 7,452,866</td>
<td>$ 86,903</td>
<td>$ 4,228,056</td>
<td>$ 3,224,811</td>
<td>$ 7,452,866</td>
</tr>
<tr>
<td>Planning</td>
<td>$ 7,281,997</td>
<td>$ 7,281,997</td>
<td>$ 38,086</td>
<td>$ 5,303,630</td>
<td>$ 1,978,367</td>
<td>$ 7,281,997</td>
</tr>
<tr>
<td>Community Relations</td>
<td>$ 2,789,663</td>
<td>$ 2,789,663</td>
<td>$ 6,416</td>
<td>$ 1,216,912</td>
<td>$ 1,572,751</td>
<td>$ 2,789,663</td>
</tr>
<tr>
<td>Safety &amp; Security</td>
<td>$ 2,421,783</td>
<td>$ 2,421,783</td>
<td>$ 71,000</td>
<td>$ 1,230,669</td>
<td>$ 1,191,114</td>
<td>$ 2,421,783</td>
</tr>
<tr>
<td>Project Management Services</td>
<td>$ 19,807,994</td>
<td>$ 19,807,994</td>
<td>$ 118,479</td>
<td>$ 9,252,384</td>
<td>$ 10,555,610</td>
<td>$ 19,807,994</td>
</tr>
<tr>
<td>Engineering &amp; Construction</td>
<td>$ 11,805,793</td>
<td>$ 11,805,793</td>
<td>$ 91,242</td>
<td>$ 3,621,749</td>
<td>$ 8,184,045</td>
<td>$ 11,805,793</td>
</tr>
<tr>
<td>Electrification Eng &amp; Mgmt (^{7})</td>
<td>$ 50,461,707</td>
<td>$ 50,461,707</td>
<td>$ 584,944</td>
<td>$ 25,094,885</td>
<td>$ 25,366,822</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>$ -</td>
<td>$ 331,987</td>
</tr>
<tr>
<td>Operations Support</td>
<td>$ 1,445,867</td>
<td>$ 1,445,867</td>
<td>$ 10,048</td>
<td>$ 623,532</td>
<td>$ 822,335</td>
<td>$ 1,445,867</td>
</tr>
<tr>
<td>General Support</td>
<td>$ 4,166,577</td>
<td>$ 4,166,577</td>
<td>$ 92,813</td>
<td>$ 2,578,810</td>
<td>$ 1,587,767</td>
<td>$ 4,166,577</td>
</tr>
<tr>
<td>Budget / Grants / Finance</td>
<td>$ 1,229,345</td>
<td>$ 1,229,345</td>
<td>$ 14,796</td>
<td>$ 724,518</td>
<td>$ 504,827</td>
<td>$ 1,229,345</td>
</tr>
<tr>
<td>Legal</td>
<td>$ 2,445,646</td>
<td>$ 2,445,646</td>
<td>$ 103,052</td>
<td>$ 2,654,224</td>
<td>(208,577)</td>
<td>$ 2,445,646</td>
</tr>
<tr>
<td>Other Direct Costs</td>
<td>$ 5,177,060</td>
<td>$ 5,177,060</td>
<td>$ 72,928</td>
<td>$ 2,495,993</td>
<td>$ 2,681,067</td>
<td>$ 5,177,060</td>
</tr>
<tr>
<td>TASI Support</td>
<td>$ 55,275,084</td>
<td>$ 55,275,084</td>
<td>$ 1,077,525</td>
<td>$ 8,220,934</td>
<td>$ 47,054,150</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>Required Projects</td>
<td>$ 17,337,378</td>
<td>$ 17,337,378</td>
<td>$ -</td>
<td>$ 379,915</td>
<td>$ 16,957,463</td>
<td>$ 17,337,378</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>$ 189,614</td>
<td>$ 1,791,841</td>
<td>$ 3,264,977</td>
<td>$ 5,056,838</td>
</tr>
<tr>
<td>Contingency</td>
<td>$ 276,970,649</td>
<td>$ 242,915,213</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 202,906,222</td>
<td>$ 202,906,222</td>
</tr>
<tr>
<td>Forecasted Costs and Changes</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 40,008,991</td>
</tr>
<tr>
<td><strong>ELECTRIFICATION SUBTOTAL</strong></td>
<td>$ 1,316,125,208</td>
<td>$ 1,316,125,208</td>
<td>$ 15,343,801</td>
<td>$ 336,731,358</td>
<td>$ 979,393,849</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 February 2018 and accrued for March 2018.
6. Cost this month for Management Oversight includes adjustments for decreases in agency labor ICAP against prior periods resulting in a reduction of $142K.
7. Cost this month is adjusted to report March 2018 accrual estimates and includes an offset for inaccurate accruals in the January and February 2018 periods.

Budget and Expenditures  8-1  March 31, 2018
## Table 8-2 EMU Budget & Expenditure Status

<table>
<thead>
<tr>
<th>Description of Work</th>
<th>Budget (A)</th>
<th>Current Budget (B)</th>
<th>Cost This Month (C)</th>
<th>Cost To Date (D)</th>
<th>Estimate To Complete (E)</th>
<th>Estimate At Completion (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMU</td>
<td>$550,899,459</td>
<td>$552,449,119</td>
<td>$61,140,941</td>
<td>$491,308,178</td>
<td>$552,449,119</td>
<td></td>
</tr>
<tr>
<td>CEMOF Modifications</td>
<td>$1,344,000</td>
<td>$1,344,000</td>
<td>$1,344,000</td>
<td>$1,344,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Oversight</td>
<td>$64,139,103</td>
<td>$64,139,103</td>
<td>$26,467,473</td>
<td>$37,671,631</td>
<td>$64,139,103</td>
<td></td>
</tr>
<tr>
<td>Executive Management</td>
<td>$5,022,302</td>
<td>$5,022,302</td>
<td>$2,673,965</td>
<td>$2,348,337</td>
<td>$5,022,302</td>
<td></td>
</tr>
<tr>
<td>Community Relations</td>
<td>$1,685,614</td>
<td>$1,685,614</td>
<td>$413,994</td>
<td>$1,271,620</td>
<td>$1,685,614</td>
<td></td>
</tr>
<tr>
<td>Safety &amp; Security</td>
<td>$556,067</td>
<td>$556,067</td>
<td>$322,591</td>
<td>$233,476</td>
<td>$556,067</td>
<td></td>
</tr>
<tr>
<td>Project Mgmt Services</td>
<td>$13,275,280</td>
<td>$13,275,280</td>
<td>$6,088,672</td>
<td>$7,186,609</td>
<td>$13,275,280</td>
<td></td>
</tr>
<tr>
<td>Eng &amp; Construction</td>
<td>$89,113</td>
<td>$89,113</td>
<td>$23,817</td>
<td>$65,296</td>
<td>$89,113</td>
<td></td>
</tr>
<tr>
<td>EMU Eng &amp; Mgmt</td>
<td>$32,082,556</td>
<td>$32,082,556</td>
<td>$12,238,959</td>
<td>$19,843,597</td>
<td>$32,082,556</td>
<td></td>
</tr>
<tr>
<td>IT Support</td>
<td>$1,027,272</td>
<td>$1,027,272</td>
<td>$391,478</td>
<td>$635,794</td>
<td>$1,027,272</td>
<td></td>
</tr>
<tr>
<td>Operations Support</td>
<td>$1,876,589</td>
<td>$1,876,589</td>
<td>$277,200</td>
<td>$1,601,388</td>
<td>$1,876,589</td>
<td></td>
</tr>
<tr>
<td>General Support</td>
<td>$2,599,547</td>
<td>$2,599,547</td>
<td>$1,116,995</td>
<td>$1,482,552</td>
<td>$2,599,547</td>
<td></td>
</tr>
<tr>
<td>Budget / Grants / Finance</td>
<td>$712,123</td>
<td>$712,123</td>
<td>$413,739</td>
<td>$298,385</td>
<td>$712,123</td>
<td></td>
</tr>
<tr>
<td>Legal</td>
<td>$1,207,500</td>
<td>$1,207,500</td>
<td>$975,025</td>
<td>$232,475</td>
<td>$1,207,500</td>
<td></td>
</tr>
<tr>
<td>Other Direct Costs</td>
<td>$4,003,139</td>
<td>$4,003,139</td>
<td>$1,531,038</td>
<td>$2,472,101</td>
<td>$4,003,139</td>
<td></td>
</tr>
<tr>
<td>TASI Support</td>
<td>$2,740,000</td>
<td>$2,740,000</td>
<td>$2,740,000</td>
<td>$2,740,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required Projects</td>
<td>$4,500,000</td>
<td>$4,500,000</td>
<td>$4,500,000</td>
<td>$4,500,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance Charges</td>
<td>$1,941,800</td>
<td>$1,941,800</td>
<td>$1,086,431</td>
<td>$855,369</td>
<td>$1,941,800</td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td>$38,562,962</td>
<td>$37,013,302</td>
<td>$38,989,352</td>
<td>$38,989,352</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forecasted Costs and Changes</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$(1,885,050)</td>
<td></td>
</tr>
<tr>
<td><strong>EMU SUBTOTAL</strong></td>
<td>$664,127,325</td>
<td>$664,127,325</td>
<td>$88,694,844</td>
<td>$575,432,480</td>
<td>$664,127,325</td>
<td></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 February 2018 and accrued for March 2018.
5. Cost this month for Management Oversight includes adjustments for decreases in agency labor ICAP against prior periods resulting in a reduction of $50K.

## Table 8-3 PCEP Budget & Expenditure Status

<table>
<thead>
<tr>
<th>Description of Work</th>
<th>Budget (A)</th>
<th>Current Budget (B)</th>
<th>Cost This Month (C)</th>
<th>Cost To Date (D)</th>
<th>Estimate To Complete (E)</th>
<th>Estimate At Completion (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrification Subtotal</td>
<td>$1,316,125,208</td>
<td>$1,316,125,208</td>
<td>$15,343,801</td>
<td>$336,731,358</td>
<td>$979,393,849</td>
<td>$1,316,125,208</td>
</tr>
<tr>
<td>EMU Subtotal</td>
<td>$664,127,325</td>
<td>$664,127,325</td>
<td>$905,863</td>
<td>$86,694,844</td>
<td>$575,432,480</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>$16,249,664</td>
<td>$425,426,203</td>
<td>$1,554,826,330</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.

---

Budget and Expenditures 8-2 March 31, 2018
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**

**Electrification Contract**

<table>
<thead>
<tr>
<th>Change Order Authority (5% of BBII Contract)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5% x $696,610,558 = $34,830,528</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Number</th>
<th>Description</th>
<th>CCO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EMU Contract**

<table>
<thead>
<tr>
<th>Change Order Authority (5% of Stadler Contract)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5% x $550,899,459 = $27,544,973</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Number</th>
<th>Description</th>
<th>CCO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SCADA Contract**

<table>
<thead>
<tr>
<th>Change Order Authority (15% of ARINC Contract)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15% x $3,446,917 = $517,038</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Number</th>
<th>Description</th>
<th>CCO Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 received $31 million in FTA section 5307 formula funding in January, which is part of MTC’s commitment of $315 million as noted in the figure below.

![Figure 10-1 Funding Plan](image)
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

<table>
<thead>
<tr>
<th>Number of Risks by Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Risks</td>
<td>13</td>
</tr>
<tr>
<td>Upcoming Risks</td>
<td>13</td>
</tr>
<tr>
<td>All Other Risks</td>
<td>67</td>
</tr>
</tbody>
</table>

Total Number of Active Risks = 93
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.
- Continue reviewing risks on project risk register with Systems Integration database.
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

- The Drainage and Stormwater Plan for Traction Power Facilities in Construction Segments 2 and 4 is under review by the SFWQCB in accordance with the permit requirements

Activity Next Month

- Respond to comments or questions from SFWQCB and obtain approval on the Drainage and Stormwater Plan for Traction Power Facilities in Construction Segments 2 and 4.

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 Segment 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 project master schedule.
- Continued to work on relocation design review for PG&E and coordinate with PG&E on permitting and work planning.
- Reached agreement with Verizon on the relocation of overhead fiber. Relocation for the corridor is scheduled to be completed by the end of 2018.
- Continued PG&E relocations in S2WA4.

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.
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.
- There are three active eminent domain actions in Segment 2, with other property owners either settling or in active negotiations to settle.
- Six offers were made in Segment 3, with three owners agreeing to sell.
- Staff obtained permit from PG&E for potholing and surveying so design can be finalized.
- UPRR is drafting a Purchase and Sale Agreement for the PS-7 site.

Activity Next Month

- Negotiations for all outstanding offers will continue.
- The remaining appraisals in Segments 1 and 3 will be completed.
- Staff will continue to work with PG&E and Central Concrete.
- 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.
- Staff will send two administrative settlements for Segment 3 parcels to FTA for approval.
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>
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<td>Escrow Closed</td>
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<td>Eminent Domain</td>
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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**

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<thead>
<tr>
<th>Type</th>
<th>Agreement</th>
<th>Third-Party</th>
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<td>Construction &amp; Maintenance(^1)</td>
<td>City &amp; County of San Francisco</td>
<td>Executed</td>
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<tr>
<td></td>
<td>City of Brisbane</td>
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<td></td>
<td>City of South San Francisco</td>
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<td></td>
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<td>City of Millbrae</td>
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<tr>
<td></td>
<td>City of Burlingame</td>
<td>Executed</td>
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<td>City of San Mateo</td>
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<td>City of Belmont</td>
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<td>City of Menlo Park</td>
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<td>City of Palo Alto</td>
<td>In Process</td>
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<td>City of Mountain View</td>
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<td>City of Santa Clara</td>
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<td>County of Santa Clara</td>
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<td>City of San Jose</td>
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<tr>
<td></td>
<td>San Francisco</td>
<td>In Process</td>
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<td>San Mateo</td>
<td>Executed</td>
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<tr>
<td></td>
<td>Santa Clara</td>
<td>Executed</td>
<td></td>
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<td><strong>Condemnation Authority</strong></td>
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<td></td>
<td>PG&amp;E</td>
<td>Executed(^2)</td>
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<td><strong>Utilities</strong></td>
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<td>Executed</td>
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<tr>
<td><strong>Transportation &amp; Railroad</strong></td>
<td>Bay Area Rapid Transit</td>
<td>Executed(^3)</td>
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<td></td>
<td>California Dept. of Transportation (Caltrans)</td>
<td>Not needed(^4)</td>
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<tr>
<td><strong>Trackage Rights</strong></td>
<td>UPRR</td>
<td>Executed(^3)</td>
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</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, 4 and 5 have been executed.
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

- Millbrae Community Meeting
- San Bruno Community Meeting
- San Jose Public Meeting
- San Jose (South) Community Meeting
- JPB Bicycle Advisory Committee Meeting

Third Party/Stakeholder Actions

None
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:

- $7,508,058 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 April 2018, we anticipate increasing our DBE commitments to firms who we are currently negotiating pricing on proposed work or Professional Services Agreements. Also we are anticipating award of 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:

- None

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

- Proposal for 18-J-S-066 – Overhaul Services of Electric Locomotive for PCEP – From Amtrak (March 26, 2018)

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 – 17-J-S-070 – On-Call Construction Testing & Inspection Services
- RFP – 18-J-P-0XX – 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

Upcoming IFB/RFQ/RFP to be Issued:

- RFP – 17-J-S-070 – On-Call Construction Testing & Inspection Services
- IFB – 18-J-C-071 – CEMOF Facility Upgrades for EMUs
- RFP – 18-J-P-0XX – On-Call Construction Management Services for PCEP

Existing Contracts Amendments Issued:

- None
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19.0 TIMELINE OF MAJOR PROJECT ACCOMPLISHMENTS

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

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<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
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</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>
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<tr>
<td>2004</td>
<td>Draft NEPA EA/EIR</td>
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<tr>
<td>2008</td>
<td>35% design complete</td>
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<tr>
<td>2009</td>
<td>Final NEPA EA/EIR and Finding of No Significant Impact (FONSI)</td>
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<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>
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Appendix A – Acronyms
<table>
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<th>Acronym</th>
<th>Description</th>
<th>Acronym</th>
<th>Description</th>
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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>
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<td>Aeronautical Radio, Inc.</td>
<td>EOR</td>
<td>Engineer of Record</td>
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<td>EMU</td>
<td>Electric Multiple Unit</td>
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<td>Endangered Species Act</td>
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<td>FEIR</td>
<td>Final Environmental Impact Report</td>
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<td>Caltrain Modernization Program</td>
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<td>Full Notice to Proceed</td>
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<td>Full Funding Grant Agreement</td>
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<td>Finding of No Significant Impact</td>
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<td>San Francisco Bay Area Planning and Urban Research Association</td>
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<td>UPRR</td>
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<td>United States Army Corp of Engineers</td>
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<td>U.S. Fish and Wildlife Service</td>
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<tr>
<td>VTA</td>
<td>Santa Clara Valley Transportation Authority</td>
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Appendix B – Funding Partner Meetings
### Funding Partner Meeting Representatives

**Updated July 25, 2017**

<table>
<thead>
<tr>
<th>Agency</th>
<th>CHSRA</th>
<th>MTC</th>
<th>SFCTA/SFMTA/CCSF</th>
<th>SMCTA</th>
<th>VTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTA Quarterly Meeting</td>
<td>• Bruce Armistead&lt;br&gt;• Boris Lipkin&lt;br&gt;• Ben Tripousis (info only)&lt;br&gt;• Ian Ferrier (info only)&lt;br&gt;• Wai Siu (info only)</td>
<td>• Anne Richman&lt;br&gt;• Glen Tepke</td>
<td>• Luis Zurinaga</td>
<td>• April Chan&lt;br&gt;• Peter Skinner</td>
<td>• Jim Lawson</td>
</tr>
<tr>
<td>Funding Partners Quarterly Meeting</td>
<td>• Bruce Armistead&lt;br&gt;• Boris Lipkin&lt;br&gt;• Ben Tripousis&lt;br&gt;• John Popoff</td>
<td>• Trish Stoops</td>
<td>• Luis Zurinaga</td>
<td>• April Chan&lt;br&gt;• Peter Skinner</td>
<td>• Krishna Davey</td>
</tr>
<tr>
<td>Funding Oversight (monthly)</td>
<td>• Ben Tripousis&lt;br&gt;• Kelly Doyle</td>
<td>• Anne Richman&lt;br&gt;• Glen Tepke&lt;br&gt;• Kenneth Folan</td>
<td>• Anna LaForte&lt;br&gt;• Maria Lombardo&lt;br&gt;• Luis Zurinaga&lt;br&gt;• Monique Webster&lt;br&gt;• Ariel Espiritu Santo</td>
<td>• April Chan&lt;br&gt;• Peter Skinner</td>
<td>• Jim Lawson&lt;br&gt;• Marcella Rensi&lt;br&gt;• Michael Smith</td>
</tr>
<tr>
<td>Change Management Board (monthly)</td>
<td>• Bruce Armistead&lt;br&gt;• Boris Lipkin</td>
<td>• Trish Stoops</td>
<td>• Luis Zurinaga&lt;br&gt;• Tilly Chang (info only)</td>
<td>• Joe Hurley</td>
<td>• Krishna Davey&lt;br&gt;• Jim Lawson&lt;br&gt;• Carol Lawson&lt;br&gt;• Nuria Fernandez (info only)</td>
</tr>
<tr>
<td>Master Program Schedule Update (monthly)</td>
<td>• Ian Ferrier&lt;br&gt;• Wai Siu</td>
<td>• Trish Stoops</td>
<td>• Luis Zurinaga</td>
<td>• Joe Hurley</td>
<td>• Jim Lawson</td>
</tr>
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<td>Risk Assessment Committee (monthly)</td>
<td>• Ian Ferrier&lt;br&gt;• Wai Siu</td>
<td>• Trish Stoops</td>
<td>• Luis Zurinaga</td>
<td>• Joe Hurley</td>
<td>• Krishna Davey</td>
</tr>
<tr>
<td>PCEP Delivery Coordination Meeting (bi-weekly)</td>
<td>• Ian Ferrier</td>
<td>• Trish Stoops</td>
<td>• Luis Zurinaga</td>
<td>• Joe Hurley</td>
<td>• Krishna Davey</td>
</tr>
<tr>
<td>Systems Integration Meeting (bi-weekly)</td>
<td>• Ian Ferrier&lt;br&gt;• Wai Siu</td>
<td>• Trish Stoops</td>
<td>• Luis Zurinaga</td>
<td>• Joe Hurley</td>
<td>• Krishna Davey</td>
</tr>
</tbody>
</table>
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Appendix C – Schedule
## Activity Name | Duration | Start | Finish
--- | --- | --- | ---
TRAINSET 4 | 525d | 08/27/18 | 08/28/20
TRAINSET 5 | 500d | 11/12/18 | 10/09/21
TRAINSET 6 | 460d | 01/28/19 | 10/30/20
TRAINSET 7 | 440d | 04/01/19 | 12/04/20
TRAINSET 8 | 433d | 05/13/19 | 01/06/21
TRAINSET 9 | 425d | 06/24/19 | 02/05/21
TRAINSET 10 | 405d | 08/19/19 | 03/05/21
TRAINSET 11 | 397d | 09/30/19 | 04/06/21
TRAINSET 12 | 389d | 11/11/19 | 05/06/21
TRAINSET 13 | 370d | 01/06/20 | 06/04/21
TRAINSET 14 | 362d | 02/17/20 | 07/06/21
TRAINSET 15 | 355d | 03/30/20 | 08/06/21
TRAINSET 16 | 350d | 05/04/20 | 09/03/21
TESTING & STARTUP | 247d | 09/10/21 | 08/22/22
PRE-REVENUE TESTING | 63d | 09/10/21 | 12/09/21
REVENUE OPERATIONS | 180d | 12/09/21 | 08/22/22
Revenue Service Date (RSD) w/o Risk Contingency | 0d | 12/09/21 | 
Revenue Service Date (RSD) w Risk Contingency (JPB Target) | 0d | 04/22/22 |
Revenue Service Date (RSD) w/ Risk Contingency (FFGA RSD) | 0d | 08/22/22 |
RISK CONTINGENCY | 256d | 12/10/21 | 08/22/22
ELECTRIFICATION SCHEDULE (BB) 040118 | 1910d | 07/07/16 A | 05/25/21
General | 1910d | 07/07/16 A | 05/25/21
Design | 1845d | 09/06/16 A | 05/24/21
Segment 2 WA's 5 | 455d | 09/07/16 A | 04/01/18
Segment 2 WA 4 & 5 | 536d | 11/16/16 A | 04/01/18
Segment 2 WA 4 | 611d | 11/16/16 A | 04/01/18
Segment 2 & 4 | 688d | 03/01/18 A | 04/01/18
Segment 4 | 1055d | 03/01/18 A | 01/11/19
Segment 2 | 1305d | 06/21/17 A | 01/11/19
Segment 2 WA's 1, 2 & 3 | 1283d | 06/21/17 A | 03/01/19
Segment 1 & 3 | 1685d | 06/21/17 A | 03/01/19
Segment 1 | 1255d | 11/06/18 A | 12/26/19
Segment 3 | 1096d | 01/23/17 A | 11/11/19
Permits | 1096d | 01/23/17 A | 11/11/19
Procurement | 1096d | 01/23/17 A | 11/11/19
All Work Areas | 1096d | 01/23/17 A | 11/11/19
Segment 4 | 821d | 03/01/18 A | 04/16/20
Segment 2 | 821d | 03/01/18 A | 04/16/20
Segment 1 | 821d | 03/01/18 A | 04/16/20
Segment 3 | 821d | 03/01/18 A | 04/16/20
Construction/Installation | 17684 | 11/02/16 A | 05/24/21
All Work Areas | 17684 | 11/02/16 A | 05/24/21
Segment 4 (8.8 Mi) | 14066 | 11/02/16 A | 08/06/20
Segment 2 (21.1 Mi) | 15406 | 11/02/16 A | 08/06/20
Segment 1 (6.8 Mi) | 16010 | 02/25/17 A | 08/06/20
Segment 3 (10.4 Mi) | 15766 | 02/25/17 A | 12/26/20
Testing & Commissioning | 661d | 06/27/19 | 05/22/20
All Work Areas | 661d | 06/27/19 | 05/22/20
Segment 1 | 661d | 06/27/19 | 05/22/20
Segment 2 | 661d | 06/27/19 | 05/22/20
Segment 3 | 661d | 06/27/19 | 05/22/20
Segment 4 | 661d | 06/27/19 | 05/22/20

**Notes:**
- Actual Level of Effort
- Progress
- Critical
- Prog Plan (C16.00)
- Risk Contingency
- Remaining
- Start Milestone
- Last Months Update
- Near Critical
- Finish Milestone
- Critical Milestone

**MARCH 2018 SCHEDULE UPDATE IS DRAFT UNTIL FINALIZED AT APRIL 2018 MONTH END**

**Filename:** _C16.06 042018_...
Appendix D – Standard Cost Codes
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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 (1)
60.01 Allocated Contingency
60.02 Relocation of existing households and businesses
70 ‐ VEHICLES (96)
70.03 Commuter Rail (1)
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) (2)
80.02 Allocated Contingency
80.03 Project Management for Design and Construction (1), (2)
80.03 Allocated Contingency
80.04 Construction Administration & Management (2)
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)

Approved Budget
(A)

Cost This Month
(B)

Cost To Date (C)

Estimate To
Complete
(D)

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

$ 14,256,739
$
2,500,000
$
8,110,649
$
3,646,090
$
2,265,200
$
1,344,000
$
421,200
$
500,000
$ 260,473,484
$
3,077,685
$ 93,455,599
$
$
2,200,000
$ 32,579,208
$
568,188
$
804,933
$
284,094
$ 107,343,777
$ 20,160,000
$ 502,766,044
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$
2,451,000
$ 23,879,905
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1,140,000
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$ 18,064,000
$
5,455,000
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2,090,298
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18,000
$ 35,675,084
$ 25,927,074
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8,748,010
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1,000,000
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8,134,924
$
8,140,000
$ 18,763,931
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130,350
$ 181,346,859
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556,000
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3,287,824
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1,797,957
$
628,000
$ 1,766,724,709
$ 156,947,587
$ 1,923,672,296
$
6,998,638
$ 1,930,670,934

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682,082
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11,243,284
24,198
81,763,053
81,763,053
192,917,077
280,180
146,132,409
37,360,527
3,419,257
2,555,769
3,156,049
12,887
372,966,332
372,966,332
2,878,272
375,844,604

Notes:
(1)
60.01, 70.03, 80.03 - Cost this month includes decreases in agency labor ICAP against a prior period resulting in an overall reduction of $192K.
(2)
80.02, 80.03, 80.04 - Cost this month is adjusted to report March 2018 accrual estimates and includes an offset for inaccurate accruals in the
January and February 2018 periods.

Appendix D – SCC

D-1

March 31, 2018


Appendix E – Change Order Logs
### Change Order Logs

#### Electrification Contract

**Change Order Authority (5% of BBII Contract)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Number</th>
<th>Description</th>
<th>CCO Amount</th>
<th>Percent of Authority</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><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>($654,563)</strong></td>
<td>(1.88%)</td>
<td><strong>$35,485,090</strong></td>
</tr>
</tbody>
</table>

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

#### EMU Contract

**Change Order Authority (5% of Stadler Contract)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Number</th>
<th>Description</th>
<th>CCO Amount</th>
<th>Percent of Authority</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>$27,544,973</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>$26,641,973</td>
</tr>
<tr>
<td>12/12/2017</td>
<td>STA-056-CCO 006</td>
<td>Prototype Seats and Special Colors (27,500)</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><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>1,549,660</strong></td>
<td>5.63%</td>
<td><strong>$25,995,313</strong></td>
</tr>
</tbody>
</table>

**Notes:**
1. When the threshold of 75% is reached, staff may return to the Board to request additional 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>Percent of Authority</th>
<th>Remaining Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>None to date</td>
<td></td>
<td></td>
<td>$0</td>
<td>0%</td>
<td>$517,038</td>
</tr>
</tbody>
</table>

**Total** $0 0% $517,038

**Notes:**
1. When the threshold of 75% is reached, staff may return to the Board to request additional authority.
Appendix F – Risk Table
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## 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>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>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>67</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>263</td>
<td>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.</td>
<td>Delay in testing of EMUs. Delay in Revenue Service Date. Additional costs for Stadler and BBII due to overall schedule delays.</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 as a result 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 braking system sequence priority.</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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Change order for extended vehicle acceptance.</td>
</tr>
<tr>
<td>ID</td>
<td>RISK DESCRIPTION</td>
<td>EFFECT(S)</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 241 | Balfour Beatty needs to build TP2 and Interconnection in time for PG&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  
  Risk of PG&E delay in interim power availability.                                                                                     | Delay in testing and increased costs                                                          |
| 247 | Timely resolution of 3rd party design review comments to achieve timely approvals                                                                                                                              | Delay to completion of design and associated additional labor costs.                          |
| 257 | 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. | Failure to follow the DB Management process will result in major interruption to train service and overall capital projects delay. |
| 267 | Additional property acquisition is necessitated by design changes.                                                                                                                                             | New project costs and delays to schedule.                                                     |
| 268 | 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                                                                                      | Delays to completion of construction and additional cost to changes in design.                |
| 213 | Unable to acquire property required to build PS-2.                                                                                                                                                           | Extensive redesign of existing and future facilities and utilities resulting in potential delay and additional costs to D/B contractor. |
| 240 | Property not acquired in time for contractor to do work.  
  Property Acquisition not complete per contractor availability date  
  <>Fee  
  <>Easement  
  <>Contract stipulates that if parcels are not available by contract date, there is only a delay if parcels are not available by the time contractor completes the Segment                                                                 | • Potential delays in construction schedule                                                    |
<p>| 295 | UP does not accept catenary pole offsets from centerline of track necessitating further negotiation or relocation of poles                                                                                      | Delay to construction and additional costs for redesign and ROW acquisition.                 |</p>
<table>
<thead>
<tr>
<th>ID</th>
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</thead>
<tbody>
<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>Delay in installation of catenary poles resulting in claims and schedule delay</td>
</tr>
</tbody>
</table>
|     |                                                                                                                                                                                                                  | 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  
<p>| 115 | Other capital improvement program projects compete with PCEP for track access allocation and requires design coordination (design, coordination, integration).                                                            | Schedule delay as resources are allocated elsewhere, won’t get track time, sequencing requirements may delay PCEP construction, track access requirements must be coordinated. |
| 136 | UP may not complete review of BBI design in accordance with agreed deadlines (90 days in Segment 4, 60 days in other segments).                                                                                      | Delays to completion of design and claims for delay.                                                                                                                                                    |
| 174 | Installation of electrification infrastructure may require the relocation of signals, which would affect the block design.                                                                                         | Cost and schedule impacts resulting from the design, construction, and testing of modified signal system and review of revised block design.                                                               |
| 260 | EMU Contractor’s facility is not completed before needed for vehicle assembly.                                                                                                                                     | Delay in commencement of assembly of EMUs delaying final delivery and systemwide testing.                                                                                                               |
| 261 | EMU electromechanical emissions and track circuit susceptibility are incompatible.                                                                                                                                   | Changes on the EMU and/or signal system require additional design and installation time and expense.                                                                                                       |
| 262 | Configuration changes from other capital projects could necessitate changes to electrification design.                                                                                                             | 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. |
| 265 | PG&amp;E must deliver interim power in time for testing for Balfour testing                                                                                                                                              | Delay in testing and increased costs                                                                                                                                                                     |
| 277 | Inadequate D-B labor to support multiple work segments                                                                                                                                                              | Additional cost and time                                                                                                                                                                                 |</p>
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<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>
<tr>
<td>56</td>
<td>Lack of O&amp;M support for testing and/or vehicle operations.</td>
<td>• Testing delayed.</td>
</tr>
<tr>
<td></td>
<td>Includes operational readiness and personnel hired and scheduled to be trained.</td>
<td>• Change order for extended vehicle acceptance.</td>
</tr>
<tr>
<td>88</td>
<td>Construction safety program fails to sufficiently maintain safe performance.</td>
<td>Work stoppages due to safety incidents resulting in schedule delay and additional labor costs.</td>
</tr>
<tr>
<td>161</td>
<td>Unanticipated costs to provide alternate service (bus bridges, etc.) during rail service disruptions.</td>
<td>Cost increase.</td>
</tr>
<tr>
<td>179</td>
<td>Risk that municipal reviews take additional time due to absence of municipal agreement.</td>
<td>Possible delay to: (1) to design review; (2) permit issuance; (3) construction within local jurisdiction right-of-way</td>
</tr>
<tr>
<td>183</td>
<td>Installation and design of new duct bank takes longer because of UP coordination</td>
<td>Schedule - Delay. May need to use condemnation authority to acquire easement.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost - Additional cost for PG&amp;E to make connections increasing project costs</td>
</tr>
<tr>
<td>250</td>
<td>Potential for municipalities to request betterments as part of the electrification project.</td>
<td>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.</td>
</tr>
<tr>
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</tbody>
</table>
| 259 | Work on 25th Avenue Grade Separation Project could delay Balfour construction schedule. | • Increased cost for BBI as catenary construction in this section was anticipated to be constructed under the 25th Avenue Grade Separation Project.  
• Potential delays in construction schedule  
• Risk is delay to BBI                                                                 |
| 266 | Relocation of Verizon must precede installation of foundations and connections to TPSs. Relocation work will be performed by others and may not be completed to meet BBII’s construction schedule. | Delay in progress of catenary installation resulting in claims and schedule delay                                                      |
| 270 | OCS poles or structures as designed by Contractor fall outside of JPB row         | Additional ROW Take, additional cost and time                                                                                           |
| 82  | Unexpected restrictions could affect construction progress:                      | • Reduced production rates.  
• Delay                                                                                                                                  |
| 119 | Coordination of electrification design with Operations                           | • Qualified individuals may not be available.  
• Training may take longer than anticipated.                                                                                           |
<p>| 253 | Risk that existing conditions of Caltrans-owned bridges will not support bridge barriers. The existing bridge conditions and structural systems are unknown and may not support mounting new work | Delays to issuance of permit for construction while negotiating and executing an operation and maintenance agreement for equipment installed on bridges; existing bridge deficiencies could result in additional costs to PCEP. |
| 78  | Need for unanticipated, additional ROW for new signal enclosures.                | Delay while procuring ROW and additional ROW costs.                                                                                     |
| 154 | Potential for encountering unidentified or unknown private crossings along the corridor. | Additional cost and time to acquire ROW by condemnation                                                                                   |
| 171 | Electrification facilities could be damaged during testing.                     | Delay in commencing electrified operations.                                                                                             |</p>
<table>
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<tbody>
<tr>
<td>195</td>
<td>Introduction of electrified train service will require training of first responders in working in and around the rail corridor. The new vehicles will be considerably quieter than the existing fleet and the presence of high voltage power lines will require new procedures for emergency response. A new training program will need to be developed and disseminated for: • Fire, police, and first responders • Local communities • Schools</td>
<td>Safety hazards resulting in incidents that delay construction and increase labor cost. Delays in RSD until training is completed as requirement of safety certification process.</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>ID</td>
<td>RISK DESCRIPTION</td>
<td>EFFECT(S)</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 245 | Failure of BBI to submit quality design and technical submittals in accordance with contract requirements  
• $3-$5M/month burn rate for Owner’s team during peak | Delays to project schedule and additional costs for preparation and review of submittals.            |
| 252 | Failure of BBI to order/manufacture long lead items prior to 100% IFC design document approval by JPB | Delays to project schedule and additional cost for contractor and JPB staff time.                   |
| 264 | Design coordination with other capital improvement projects is required           | Rework resulting in cost increases and schedule delays                                              |
| 10  | Delays in parts supply chain result in late completion of vehicles.              | • 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) |
| 12  | Potential for electromagnetic interference (EMI) to private facilities with sensitive electronic equipment caused by vehicles. | • Increased cost due to mitigation  
• Potential delay due to public protests or environmental challenge.                                 |
| 50  | Leadership and / or key personnel changes with car builder results in delays to completion of design and manufacture of vehicles. | • Cost Increase  
• Schedule Increase – not supported by a TIA                                                      |
| 51  | Damage during delivery of first six EMUs.                                        | Schedule delay                                                                                      |
| 54  | Infrastructure not ready for vehicles (OCS, TPS, Commissioning site / facility). | Increases cost if done off property                                                                 |
| 69  | Potential need for additional construction easements. Especially for access and laydown areas.  
Contractor could claim project is not constructible and needs more easements after award. | Increased cost  
Delay                                                                                              |
| 87  | Unanticipated HazMat or contaminated hot spots encountered during foundation excavations for poles, TPSS, work at the yards. | Increased cost for clean-up and handling of materials and delay to schedule due to HazMat procedures. |
| 93  | Unanticipated subsurface conditions affecting pole or TPSS installation.         | • Delay to take actions to remedy conditions or relocate foundations.  
• Increased cost for design and construction of remediation                                            |
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>Potential that DB contractor will have insufficient field resources (personnel or equipment) to maintain aggressive schedule.</td>
<td>Delay.</td>
</tr>
<tr>
<td></td>
<td>Multiple segments will need to be under 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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;&gt; grind rails</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;&gt; reprofile wheels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;&gt; sound walls</td>
</tr>
<tr>
<td>182</td>
<td>Compliance with Buy America requirements for 3rd party utility relocations.</td>
<td>• Increased cost</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 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</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&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%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;&gt; Risk is substation not relocations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&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>
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<tr>
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</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&lt;br&gt;• Cost increase&lt;br&gt;Not completing the grade crossing diagnostics and getting agreement from the cities on the results can result in delays to necessary approvals for the project and revenue service.</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 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>Delays in completing the grade crossing diagnostics and getting agreement from the cities on the results can result in delays to necessary approvals for the project and revenue service.</td>
</tr>
<tr>
<td>248</td>
<td>3rd party coordination&lt;br&gt;&lt;&gt;Jurisdictions, Utilities, UP, Contractors&lt;br&gt;&lt;&gt;D/B needs to provide timely information to facilitate 3rd party coordination&lt;br&gt;&lt;&gt;Risk is for construction</td>
<td>Delays in approvals resulting in project schedule delays and associated costs.</td>
</tr>
<tr>
<td>249</td>
<td>Coordination and delivery of permanent power for power drops along alignment&lt;br&gt;&lt;&gt;Risk is for construction</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>
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</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>Mitigation Timing</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 X</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>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>X</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>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 X</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>
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</thead>
<tbody>
<tr>
<td>AQ-2b: Implement BAAQMD basic and additional construction mitigation measures to control construction-related ROG and NOX emissions.</td>
<td>Pre-Construction</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>AQ-2c: Utilize clean diesel-powered equipment during construction to control construction-related ROG and NOX emissions.</td>
<td>Pre-Construction</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BIO-1a: Implement general biological impact avoidance measures.</td>
<td>Pre-Construction</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BIO-1b: Implement special-status plant species avoidance and revegetation measures.</td>
<td>Pre-Construction</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

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<tbody>
<tr>
<td><strong>BIO-1c: Implement California red-legged frog and San Francisco garter snake avoidance measures.</strong></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>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td><strong>BIO-1d: Implement western pond turtle avoidance measures.</strong></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>
<td>Ongoing</td>
<td></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>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>
<td>Ongoing</td>
<td></td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
<tr>
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<th>Status</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO-1f: Implement western burrowing owl avoidance measures.</strong></td>
<td>X X</td>
<td>Ongoing</td>
<td>Protocol surveys for Western Burrowing Owl were conducted from April 2017 through July 2017 at previously identified potentially suitable habitat locations. Note that all of these locations are in Construction Segment 4 (southern Santa Clara and San Jose). No Burrowing Owls were observed during the surveys. Construction in Segment 4 is anticipated to occur in 2018. Prior to construction activities in Segment 4, pre-construction surveys of the potential habitat areas will occur no more than 7 days prior to the onset of construction activities. In addition, protocol surveys were initiated in March 2018 at the previously identified potentially suitable habitat locations, which will allow work to occur during the 2019 breeding season, if necessary.</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 X</td>
<td>Ongoing</td>
<td>Nesting Bird surveys were conducted from February 1 through September 15, 2017 prior to project-related activities with the potential to impact nesting birds. No active nests were observed during this reporting period. Nesting Bird surveys were initiated on February 1, 2018 and continued throughout the reporting period. Active nests were observed during this reporting period, and no-disturbance buffers were implemented to avoid any impacts to active nests, and all project activities which occurred nearby active nests were monitored by agency-approved biological monitors.</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO-1h:</strong> Conduct biological resource survey of future contractor-determined staging areas.</td>
<td>X</td>
<td>X</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>BIO-1i:</strong> Minimize impacts on Monarch butterfly overwintering sites.</td>
<td>X</td>
<td>X</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>BIO-1j:</strong> Avoid nesting birds and bats during vegetation maintenance.</td>
<td></td>
<td>X</td>
<td>Upcoming</td>
</tr>
<tr>
<td><strong>BIO-2:</strong> Implement serpentine bunchgrass avoidance and revegetation measures.</td>
<td>X</td>
<td>X</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>BIO-3:</strong> Avoid or compensate for impacts on wetlands and waters.</td>
<td>X</td>
<td>X</td>
<td>Complete</td>
</tr>
</tbody>
</table>
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<table>
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<th>Status Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIO-5: Implement Tree Avoidance, Minimization, and Replacement Plan.</strong></td>
<td>X X X</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td><strong>BIO-6: Pay Santa Clara Valley Habitat Plan land cover fee (if necessary).</strong></td>
<td>X</td>
<td>Complete</td>
<td>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.</td>
</tr>
<tr>
<td><strong>CUL-1a: Evaluate and minimize impacts on structural integrity of historic tunnels.</strong></td>
<td>X</td>
<td>Upcoming</td>
<td>To be implemented prior to construction in tunnels.</td>
</tr>
<tr>
<td><strong>CUL-1b: Minimize impacts on historic decorative tunnel material.</strong></td>
<td>X</td>
<td>Upcoming</td>
<td>To be implemented prior to construction in tunnels.</td>
</tr>
<tr>
<td><strong>CUL-1c: Install project facilities in a way that minimizes impacts on historic tunnel interiors.</strong></td>
<td>X</td>
<td>Upcoming</td>
<td>To be implemented prior to construction in tunnels.</td>
</tr>
</tbody>
</table>
## Mitigation Monitoring and Reporting

<table>
<thead>
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<tr>
<td></td>
<td>Pre-Construction</td>
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<td></td>
<td>Construction</td>
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<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-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</td>
<td>X</td>
<td>Complete</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>
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<td>----------------------------------------------------------------------------------</td>
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</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>
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<tr>
<td></td>
<td>Pre-Construction</td>
<td></td>
<td>present for all exploratory trenching and subsurface testing work.</td>
</tr>
<tr>
<td></td>
<td>Construction</td>
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<td></td>
<td>Post-Construction</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Operation</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>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>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>
</tbody>
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<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><strong>GEO-1: Perform a site-specific geotechnical study for traction power facilities.</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. Geotechnical studies and results are submitted to JPB as completed.</td>
</tr>
<tr>
<td><strong>GEO-4a: Identification of expansive soils.</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. Geotechnical studies and results are submitted to JPB as completed.</td>
</tr>
<tr>
<td><strong>GEO-4b: Mitigation of expansive soils.</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. Geotechnical studies and results are submitted to JPB as completed.</td>
</tr>
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<tr>
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<td>Pre-Construction</td>
<td>Construction</td>
<td>Post-Construction</td>
</tr>
<tr>
<td>HAZ-2a: Conduct a Phase II Environmental Site Assessment prior to construction.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAZ-2b: Implement engineering controls and best management practices during construction.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>HYD-1: Implement construction dewatering treatment, if necessary.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>HYD-4: Minimize floodplain impacts by minimizing new impervious areas for TPFs or relocating these facilities.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYD-5: Provide for electrical safety at TPFs subject to periodic or potential flooding.</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
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<td></td>
<td>Pre-Construction</td>
<td>Construction</td>
<td>Post-Construction</td>
</tr>
<tr>
<td>HYD-7: Implement sea level rise vulnerability assessment and adaptation plan.</td>
<td>X</td>
<td>Ongoing</td>
<td>The JPB has initiated this measure and preparation of the sea level rise vulnerability assessment and adaptation plan is underway.</td>
</tr>
<tr>
<td>NOI-1a: Implement Construction Noise Control Plan.</td>
<td>X</td>
<td>X</td>
<td>Ongoing</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>X</td>
<td>Ongoing</td>
<td>The design requirements indicated in the measure are being implemented through the final design as described. Design is still in process.</td>
</tr>
<tr>
<td>NOI-2a: Implement Construction Vibration Control Plan.</td>
<td>X</td>
<td>X</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PSU-8a: Provide continuous coordination with all utility providers.</td>
<td>X</td>
<td>X</td>
<td>Ongoing</td>
</tr>
</tbody>
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</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>
<tr>
<td>Mitigation Measure</td>
<td>Mitigation Timing</td>
<td>Status</td>
<td>Status Notes</td>
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<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TRA-2a: Implement construction railway disruption control plan.</td>
<td>X X X</td>
<td>Ongoing</td>
<td>Minimization of railway disruption is being coordinated by the Site Specific Work Plan. A Construction Railway Disruption Control Plan is being prepared to document the measures that are being implemented.</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 X X X</td>
<td>Upcoming</td>
<td>This measure has not started.</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>X X X X</td>
<td>Upcoming</td>
<td>This measure will be implemented during project operation.</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>X X X X</td>
<td>Upcoming</td>
<td>This measure will be implemented during project operation.</td>
</tr>
<tr>
<td>Mitigation Measure</td>
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</tr>
<tr>
<td>NOI-CUMUL-2: Conduct project-level vibration analysis for Blended System operations and implement vibration reduction measures as necessary and appropriate for the Caltrain corridor</td>
<td></td>
<td>X</td>
<td>In Progress</td>
</tr>
<tr>
<td>TRA-CUMUL-1: Implement a phased program to provide traffic improvements to reduce traffic delays near at-grade crossings and Caltrain stations</td>
<td></td>
<td>X</td>
<td>Upcoming</td>
</tr>
<tr>
<td>TRA-CUMUL-2: Implement technical solution to allow electric trolley bus transit across 16th Street without OCS conflicts in cooperation with SFMTA.</td>
<td>X</td>
<td></td>
<td>Complete</td>
</tr>
<tr>
<td>Mitigation Measure TRA-CUMUL-3: As warranted, Caltrain and freight operators will partner to provide Plate H clearance as feasible between San Jose and Bayshore.</td>
<td></td>
<td>X</td>
<td>Upcoming</td>
</tr>
</tbody>
</table>
PENINSULA CORRIDOR ELECTRIFICATION PROJECT (PCEP)

Q3 Quarterly Update #14
January 1 – March 31, 2018

JPB Board Meeting
May 3, 2018
Agenda Item # 7b

Progression of Design

• Overhead Catenary System (OCS):
  – Complete design for Segment 2 Work Area 3 and Segment 4 Work Area 2
  – Continued design for other Segments 2 and 4 Work Areas
• Signal System:
  – Complete design of System Ductbanks for Segment 2 and 4
  – Continued submission and review of 65% signal design for Segments 2 and 4
  – Continued technical coordination with Union Pacific Railroad for systemwide signal system design
  – Met with FRA headquarters regarding proposed solution for Consistent Warning Time
Progression of Design

- Traction Power System:
  - Completed design of Traction Power Facilities plans in Segment 2
  - Completed design of Traction Power Substation 2 in Segment 4
  - Continued coordination with PG&E on design of interconnection
- Communication System:
  - Continued work on systemwide communication design

Issued for Construction Designs Completed During Quarter

<table>
<thead>
<tr>
<th>Design Discipline</th>
<th>OCS</th>
<th>Signal</th>
<th>Traction Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment 2</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Segment 4</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Systemwide</td>
<td>4</td>
<td>1</td>
<td>4</td>
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## Construction Progress

<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>Required1</td>
<td>Completed</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>256</td>
<td>172</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>366</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>622</td>
<td>256</td>
</tr>
</tbody>
</table>

**Note:**

1 Foundations Required do not match Poles Required as guy foundations are needed in some locations for extra support.
Unloading Cages in the Burlington Storage Yard

OCS pole on flatbed truck
OCS pole on flatbed truck

ELECTRIFICATION

OCS pole lifted off flatbed truck
Crew placing OCS pole on foundation

Installed OCS Pole
Other Electrification Contracts

• **Supervisory Control and Data Acquisition (SCADA) Contract**
  – Received and reviewed baseline schedule
  – Continued work on SCADA points list and database

• **Tunnel Modifications**
  – Advertised construction contract February 20
  – Received and answered potential bidders’ questions and answers
  – Bid opening May 11

• **Centralized Equipment Maintenance and Operations Facility (CEMOF)**
  – Progressed designed to Issue for Bid – civil portion only
Other Electrification Contracts (continued)

- **Pacific Gas and Electric (PG&E)**
  - Continued progress on power quality studies with PG&E
  - Continued coordination for substation improvements
  - Temporary power construction @ FMC in San Jose started in April
  - Continued PG&E utility overhead relocation in Segment 2 Work Area 4

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DISADVANTAGED BUSINESS ENTERPRISES (DBE)
As of March 31, 2018
- $7,508,058 has been paid to DBE subcontractors

Goal of 5.2% ($36,223,749) of the DB contract

- Contractor will receive incentives when they exceed the 5.2% goal
- A $300,000 incentive will be paid out for each 1% over the 5.2% goal, up to $900,000
ELECTRIC MULTIPLE UNITS (EMU)

Stadler

- Final Designs Reviews for major systems conducted and being finalized for Caltrain approval
- Carshell fabrication and splicing underway
- Subsystem (e.g. HVAC, Propulsion, Brakes, Doors, Wheelchair Lifts, Passenger Seats, Communication) component manufacturing underway
- Technical and commercial discussions with substitute PTC supplier (Wabtech) commencing
- Manufacturing and Final Assembly Facility construction underway in Salt Lake City, which is expected to be available for first car shell delivery in August 2018
EMU

Stadler’s Utah Manufacturing Facility

EMUS

Prototype Cab HVAC Unit
Upper Deck Assembly

Upper Carbody and Lower Carbody Subassemblies Coming Together
• 60% of components and subcomponents to be U.S. origin, plus final assembly in U.S.
• Caltrain conducted FTA required Pre-Award Audit May 2016
• Pre-Award Audit concluded Stadler’s plan is reasonable to achieve Buy America requirements
• Caltrain conducted Buy America review with Stadler in Salt Lake City March 19-21, 2018
• The current Buy America review concluded Stadler’s activities exceed Buy America requirements with a reasonable margin
SCHEDULE

MILESTONES

- Caltrain strategic plan makes electrification a priority
- Environmental Clearance
- Award Contract
- Groundbreaking
- First Electric Train Arrives
- Passenger Service with Electric Trains
- Electrification Infrastructure Construction
- Final System Testing
- Additional Capacity Improvements

*Please keep in mind that testing and construction will overlap as each Segment will be tested individually, prior to final system testing.

Note: Schedule Subject to Change
• Review Cost and Schedule Impacts of Risk Register
• 282 risks; 92 active; 190 retired
• Top Risk: BBII may be unable to develop grade crossing modifications that meet regulatory requirements prior to scheduled testing and commissioning of the consistent warning system
# BUDGET & EXPENDITURES

## BUDGET & EXPENDITURES (in millions)

<table>
<thead>
<tr>
<th></th>
<th>Budget</th>
<th>Current Budget</th>
<th>FY18 Q3 Costs</th>
<th>Costs to Date</th>
<th>Estimate at Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrification</td>
<td>$696.61</td>
<td>$695.96</td>
<td>$19.55</td>
<td>$203.41</td>
<td>$695.96</td>
</tr>
<tr>
<td>SCADA</td>
<td>$0.00</td>
<td>$3.45</td>
<td>$1.38</td>
<td>$1.38</td>
<td>$3.45</td>
</tr>
<tr>
<td>EMU</td>
<td>$550.90</td>
<td>$552.45</td>
<td>$0.42</td>
<td>$61.14</td>
<td>$552.45</td>
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<tr>
<td>PG&amp;E</td>
<td>$57.22</td>
<td>$88.49</td>
<td>$3.55</td>
<td>$18.09</td>
<td>$88.49</td>
</tr>
<tr>
<td>Separate Contract &amp;</td>
<td>$359.99</td>
<td>$359.99</td>
<td>$12.02</td>
<td>$141.41</td>
<td>$359.99</td>
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<tr>
<td>Support Costs</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td>$315.53</td>
<td>$279.93</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$271.88</td>
</tr>
<tr>
<td>Anticipated Changes</td>
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<td>$0.00</td>
<td>$0.00</td>
<td>$8.05</td>
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<tr>
<td>PCEP Total</td>
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<td>$1,980.25</td>
<td>$36.93</td>
<td>$425.43</td>
<td>$1,980.25</td>
</tr>
</tbody>
</table>

Note: Budget / Expenditures as of March 31, 2018
### Contingency Drawdown

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Amount</th>
<th>Contingency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Contingency</td>
<td></td>
<td>$315,533,611</td>
</tr>
<tr>
<td>Drawdown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executed Change Orders</td>
<td>$895,098</td>
<td></td>
</tr>
<tr>
<td>SCADA Contract</td>
<td>$3,446,917</td>
<td></td>
</tr>
<tr>
<td>PG&amp;E Supplemental #4</td>
<td>$31,263,082</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$35,605,097</td>
<td></td>
</tr>
<tr>
<td>Remaining Contingency</td>
<td></td>
<td>$279,928,514</td>
</tr>
</tbody>
</table>

Note: As of March 31, 2018
### Anticipated Contingency Drawdown

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Amount</th>
<th>Contingency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remaining Contingency</td>
<td>$279,928,514</td>
<td></td>
</tr>
<tr>
<td>Pending Contingency Drawdown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change Orders In Process</td>
<td>$8,045,864</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$8,045,864</td>
<td></td>
</tr>
<tr>
<td>Anticipated Remaining Contingency</td>
<td>$271,882,651</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** As of March 31, 2018

### Contingency Drawdown Curve

- **CHP01**: $316
- **CHP02**: $290
- **CHP03**: $232
- **Actual $280**
- **Required $223**
- **CHP04**: $193
- **CHP05**: $154
- **CHP06**: $136
- **CHP07**: $77
- **CHP08**: $39

**Contingency Hold Points (CHP)**

- CHP01: Determination of Baseline Budget Rev 4
- CHP02: Entry into Engineering
- CHP03: PG&E Substation Design Acceptance
- CHP04: Finish Segment 4A All Disciplines
- CHP05: OCS Acceptance Testing Completion - Segment 1
- CHP06: Construction & Testing Completion - All Segments
- CHP07: EMU Conditional Acceptance of 14th Trainset
- CHP08: Pre-Revenue Testing Complete

- **Baseline Budget**
- **Program Actuals**
- **Projected Drawdown**
COMMUNITY OUTREACH

- 7 Community Meetings re: Construction
  - (Atherton, SSF, Menlo Park, San Jose, San Jose (North), San Bruno, Millbrae)
- 25,745 Direct Mailers
- Website Updates: CalMod.org
“Did You Know” Public Education Campaign

- Share Caltrain history, highlight CalMod, spotlight electrification benefits
- Assets: Short cartoon, Facebook quiz, Social Media graphics

View video at CalMod.org/DYK

Did You Know? - Caltrain and the CalMod Program
QUESTIONS
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: CALTRAIN POSITIVE TRAIN CONTROL PROJECT UPDATE - APRIL 2018

ACTION
Staff Coordinating Council recommends that the Board receive the Positive Train Control (PTC) report April, 2018

SIGNIFICANCE
Staff will provide monthly updates covering PTC related activities during the previous month.

BUDGET IMPACT
There is no budget impact.

MONTHLY UPDATE

The Caltrain PTC project respectfully submits the following update for your review and comment:

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 4/5/18</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 30</td>
<td>In Process</td>
<td>Yes</td>
<td>Test Request submitted in April to FRA for review, approval</td>
</tr>
<tr>
<td>Pilot Installations (4) Completed</td>
<td>June 20</td>
<td>Starts May 4</td>
<td>Yes</td>
<td>Scheduled to do (4) pilots in 2018, (3) pilots 2019</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</td>
</tr>
<tr>
<td>Complete Critical Feature V&amp;V</td>
<td>Oct 30</td>
<td>In Process</td>
<td>Yes</td>
<td>V&amp;V has begun, 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>Material development starts July 3</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</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>(Lab, Functional and FQT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start of Designated RSD</td>
<td>Dec 18</td>
<td>Not Started</td>
<td>Not Started</td>
<td>Must complete (44) installs and receive FRA approval to run in PTC mode in Designated RSD area</td>
</tr>
</tbody>
</table>

Page 1 of 3
Major Wabtec activities completed in April:
- Wabtec mobilization completed, including locating in BCCF and start of vehicle installation material deliveries to CEMOF
- Key Wabtec personnel approved (Project manager and Test Manager)
- Approval of Wabtec baseline project schedule
- Completion of requirements to secure $21M FTA/FRA PTC grant (March 30th)

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 have agreed to share the management of an identified list of risk items which were identified during the contract negotiations. Risk review meetings between the JPB and Wabtec will be held on a quarterly basis, the first review tentatively to occur in May, 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>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>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>
</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)</th>
<th>(G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOSS PTC Project (Jan 2008 - Feb 2018)</td>
<td>$231.00</td>
<td>$239.88</td>
<td>$202.10</td>
<td>$202.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caltain PTC Project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intergrator WABTEC Contract</td>
<td>$43.01</td>
<td>$43.01</td>
<td>$0.19</td>
<td>$43.01</td>
<td>$-</td>
<td>0.45%</td>
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</tr>
<tr>
<td>Other Contractors</td>
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<td>$6.00</td>
<td>$6.00</td>
<td>$-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Changes</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$2.00</td>
<td>$-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caltrain Owner's Costs</td>
<td>$30.34</td>
<td>$30.34</td>
<td>$0.86</td>
<td>$30.34</td>
<td>$-</td>
<td>2.83%</td>
<td></td>
</tr>
<tr>
<td>Project Contingency</td>
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<td>$6.06</td>
<td>$6.06</td>
<td>$-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total PTC Project</td>
<td>$87.41</td>
<td>$87.41</td>
<td>$1.05</td>
<td>$87.41</td>
<td>$-</td>
<td>1.20%</td>
<td></td>
</tr>
</tbody>
</table>

5. Items of note in April – This section reports on PTC general progress and issues being tracked outside the Wabtec contract during the current reporting month.
1) The Back Up Central Control Facility (BCCF) was re-activated to serve as the project base of operations for Wabtec personnel, including project management, field testing, fiber audit, training and integration lab activities. A separate group of Wabtec personnel will be located at the CEMOF facility to support vehicle installation activities.

2) Submitted revised PTC Implementation Plan (IP) detailing the move from I-ITCS to I-ETMS to the FRA for review / approval, this is a key project submittal linking to the successful approval other documents required to achieve RSD.

3) Caltrain received and is reviewing the ARINC proposal for ROCS integration service support required for the PTC project. Scope of work in final review with expectatation to sign contract in next 1-2 weeks.

4) Began 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.

5) 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.

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

7) 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.

6. **Upcoming Key Activities in May**

1) Start of pilot onboard installations on Caltrain fleet – Wabtec will begin the installation of 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) Anticipated FRA approval for the designated RSD track segment (15 miles) required for achieving RSD in 2018.

3) Bringing ARINC under JP B contract for the CAD support required by Wabtec for the PTC contract.

4) Kickoff of the system-wide fiber audit to be conducted by Wabtec 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.

5) Receipt and review of the Wabtec V&V test plan and master training plan

6) Complete securing of $2.8M FTA/FRA testing grant and begin effort to secure additional grant funding

7) Reimplementation of the Funding Partners Oversight Protocol. A current list of standing mtgs will be distributed to the Partners.

Prepared By: Matt Scanlon, Deputy Director, Systems 650.622.7819
TO: Joint Powers Board

THROUGH: Jim Hartnett
Executive Director

FROM: Michelle Bouchard
Chief Operating Officer, Rail

SUBJECT: CALTRAIN FARE STUDY UPDATE

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

SIGNIFICANCE
Peninsula Corridor Joint Powers Board (JPB) staff will make a presentation to provide an update on the status of the Caltrain Fare Study including recommended next steps. Staff will also present an update on the on-going effort to develop a regional means-based fare program and considerations for Caltrain’s potential participation in the program.

BUDGET IMPACT
There is no budget impact associated with receiving this presentation. The budget for conducting the Fare Study is $275,000. The Fare Study is included in the Fiscal Year 2017 and Fiscal Year 2018 budgets.

BACKGROUND
The JPB is conducting a Fare Study to identify potential opportunities to maximize revenue, enhance ridership, and safeguard social and geographic equity. Simultaneously, the Metropolitan Transportation Commission (MTC) has been leading an effort to create a regional means-based fare program with large transit operators in the region. This item will include an update on both of these efforts related to Caltrain’s fares.

There have been multiple discussions with the JPB since August 2016 to seek feedback and receive input on the Fare Study. It was discussed that the Fare Study would be conducted in phases and serve to provide updated data and analysis to inform and support potential future fare changes at Caltrain. Since the first phase of the Fare Study commenced in spring 2017, staff has provided periodic updates to the JPB on the progress of the study.
In December 2017, staff provided a presentation to the JPB with an update on the Fare Study. It included key findings from the Purpose and Need for the Fare Study, Existing Conditions, and Research and Peer Comparison. The presentation also included an estimated demand elasticity of Caltrain riders based on the fare elasticity model. Additionally, staff recommendations on draft scenarios of potential changes to Caltrain’s fares to test and analyze were presented for Board discussion and input.

Following the December meeting, staff has incorporated feedback and input on the draft scenarios of potential fare changes to test as part of the Fare Study. Then, using the fare elasticity model, the draft scenarios have been analyzed, and results of this scenario testing and analysis will be presented to the Board for discussion in May 2018.

Fare Study Next Steps:
Staff has given thought to the potential next steps for the Fare Study and will seek Board input on them. The recommendation for the next steps of the Fare Study is outlined below.

In the near-term, staff concludes that there are several areas that warrant additional analytical study toward development of fare policy. These items can commence with the FY2019 budget and will focus the agency on the “pre-Electrification” era to FY2022. Staff is mindful of the coordination between this Fare Study and the Caltrain Business Plan. All of the recommendations for the near term support current Caltrain initiatives.

1. Develop a foundational Caltrain Fare Policy: staff proposes to begin to develop a foundational Caltrain Fare Policy to establish the principles and goals that will underlie and guide the agency’s pricing-related decisions. It is clear that this would greatly benefit the Agency, particularly as it considers new proposals for the fare structure (i.e., Regional Means-Based Fare program) as well as near-term budget issues are weighed. Staff will utilize the data collected in the first phase of the study to outline a Policy for the Board’s consideration. It is estimated that this process would commence in summer 2018 and wrap up with Board adoption in fall 2018, to be in place for development of the budget for Fiscal Year 2020.
   Elements that can be explored include:
   a. Research into how other agencies set or change fare policy
   b. Establish goals/principles for Caltrain’s fares (ridership, revenue, equity)
   c. Determine frequency of fare increases (ex: generally do smaller, more frequent changes)
   d. Establish procedures for fare increases (ex: use fare elasticity model, tie in to budgeting)
   e. Develop multi-year plan for Caltrain’s fares

2. Conduct a detailed Go Pass analysis/study: staff proposes to take a deeper dive into studying elements of the Go Pass Program. It is proposed that this would commence in winter/spring 2019, following development of and adoption of the Caltrain Fare Policy. It is anticipated to include research on the following:
   a. Value of Go Pass to companies
   b. Value of Go Pass to the Peninsula communities relative to Transportation Demand Management requirements, etc.
c. How other transit agencies structure and price their deep discount programs, especially those with variable pricing  
d. How to change the pricing and/or structure of the program to drive both ridership and revenue for Caltrain  
e. How to change the program requirements for companies to benefit Caltrain with data-sharing, etc.  

3. Parking Pricing Study: the Board has consistently noted that a revenue source that warrants additional analysis is the parking prices at Caltrain stations. This effort has lagged largely due to funding constraints. However, staff agrees that this is an important revenue consideration to explore for Caltrain. It is anticipated that it would commence in winter/spring 2019, following development of and adoption of the Caltrain Fare Policy.

The Caltrain Business Plan is moving ahead, and planning studies are being coordinated with the scope of that effort, including this Fare Study. Staff recommends that several of the longer-term issues related to fare policy be advanced within the context of the Caltrain Business Plan. These are farther reaching policy decisions that should be aligned with the scope of the Caltrain Business Plan. As such, staff recommends deferring these items into the larger Business Plan effort. These elements are:

1. Overhaul of the current Fare structure including the study of point-to-point vs. zone-based system; or adjustments to the Zone structure. Innovative fare products and pricing, such as off-peak discount  
2. Integration with regional and statewide ticketing innovations  
3. Technological improvements to fares (mobile ticketing, integrated ticketing with parking, etc.)  

Regional Means-Based Fare Study:  
At the December 2017 Board meeting, staff also presented an update on the on-going effort to create a regional means-based fare program, which would provide a discount for low-income transit riders at participating agencies. Since December, MTC staff has continued to work in partnership with staff from the large regional transit operators, including the JPB, to define and develop the potential program. JPB staff will present an update on recent developments to the program at the May 2018 Board meeting. It will include information on the potential program, its estimated budget impacts for the JPB, and other important considerations for the program and the JPB’s potential participation.

Prepared by:   Elizabeth Scanlon, Director of Planning  

650.295.6867
Overview

- Fare Study Update
- Update on MTC’s Regional Means-Based Fare Study
Study Overview
Study Overview

• Currently, Caltrain has no fare policy in place
• Fare Study objectives:
  - Identify potential opportunities to maximize revenue;
  - Enhance ridership; and
  - Safeguard social and geographic equity
• Explore the trade-offs with Caltrain’s current funding structure
• Promulgate policy
Estimated Elasticity of Demand for Caltrain’s System
Price Elasticity of Demand

• Demand elasticity is the relationship between the price of a good and the quantity of the good that is consumed
  - How price sensitive is a good?
• Elastic = a small change in price results in large changes in consumption (high price sensitivity)
• Inelastic = price changes have little effect on consumption (low price sensitivity)
• Best understood as a range of values, because demand elasticities generally increase as prices increase
Caltrain System’s Demand Elasticity

• Calculated using Caltrain’s new fare elasticity model.

• **Ridership demand for Caltrain is inelastic.**
  - Caltrain’s estimated range of demand elasticity: -0.1 to -0.3
  - Overall system elasticity: estimated to be -0.2
Caltrain System’s Demand Elasticity, cont.

• Caltrain’s higher income riders are estimated to have more elastic demand than lower income riders.

• Explained by difference between types of riders:
  - Transit-dependent riders (usually lower income riders in the US) have more inelastic demand for transit because they may not have mobility alternatives.
  - “Choice” riders have other transportation options and have more elastic demand for transit.

• Finding is consistent with trends observed in other transit systems, especially commuter rail.
Caltrain System’s Demand Elasticity, cont.

• Fare increases are unlikely to result in steep drops in ridership on Caltrain and should be revenue positive

• Equity implications of inelastic demand from lower income riders: riders with the least means to pay for Caltrain are *more likely* to stick with the system and absorb higher fares

• Resulting policy question: how much revenue *should* Caltrain generate from its fares?
Testing and Analysis of Potential Fare Changes
## Goals for Caltrain’s fares

<table>
<thead>
<tr>
<th>Goal</th>
<th>Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance Ridership</td>
<td>- Average weekday ridership</td>
</tr>
<tr>
<td></td>
<td>- Total annual ridership</td>
</tr>
<tr>
<td>Increase Operating Revenue</td>
<td>- Total annual revenue</td>
</tr>
<tr>
<td></td>
<td>- Total annual revenue per passenger</td>
</tr>
<tr>
<td>Safeguard Social and Geographic Equity</td>
<td>- Percentage of low income riders projected vs. percentage of low income riders in Caltrain-serving counties</td>
</tr>
<tr>
<td></td>
<td>- Caltrain’s average fare per mile vs. other transit agencies’ average fare per mile</td>
</tr>
</tbody>
</table>

Note: Title VI analysis would be updated/performed for any future proposed fare changes
Testing and Analysis of Five Scenarios of Potential Fare Changes

- Scenario 1: Increase the base fare by $0.25
- Scenario 2: Increase the zone fare by $0.25
- Scenario 3: Reduce the Clipper Card discount to $0.20, instead of current $0.55 discount
- Scenario 4: Remove the Clipper Card discount
- Scenario 5: Introduce a 25% discount off of the base fare for off-peak travel
Ridership Results

• All scenarios resulted in ridership declines compared to the baseline of September 2017
  - Due to highly inelastic demand, ridership losses are not expected to be substantial
  - Ridership is strongest under the lowest fare prices

• Results related to total annual ridership and average weekday ridership:
  - Highest: Scenario 5 – Off Peak Discount
  - Lowest: Scenario 4 – Removing Clipper Discount
Revenue Results

• All scenarios resulted in revenue increases compared to the baseline of September 2017
  - Due to highly inelastic demand, increased fares are expected to result in increased fare revenue for Caltrain (even with some ridership losses)

• Results related to total annual revenue and average annual revenue per passenger:
  - Highest: Scenario 2 – Increasing Zone Upgrade Fare and Scenario 4 – Removing Clipper Discount
  - Lowest: Scenario 5 – Off-Peak Discount
Social and Geographic Equity Results

- Social equity: Majority of scenarios resulted in very slight declines for social equity indicators compared to the baseline of September 2017
  - Only Scenario 5 – Off-Peak Discount resulted in ridership growth of low income passengers, thus resulting in positive social equity results

- Geographic equity: All scenarios resulted in similar performance and were slightly worse than the September 2017 baseline
  - Compared to other scenarios, Scenario 2 – Increase Zone Upgrade Fare resulted in slightly worse results
Summary of Analysis of Results

• Increased prices are expected to result in increased fare revenue for Caltrain
• At the same time, increased fares are expected to have ridership and equity impacts
  - Ridership is strongest under the lowest fare prices
  - Lower income riders are best served with lower income fares and off-peak discounts
  - Geographic equity is best served with low fares
Next Step Recommendations
Phase 2 Recommended Next Steps

1. Development of a foundational Caltrain Fare Policy:
   - Study peer agencies’ best practices for setting or changing fare policy
   - Draft a Caltrain Fare Policy for Board adoption, which would likely include the following:
     - Establishing goals and principles for Caltrain’s fares (ridership, revenue, equity), to guide decision-making
     - Determining frequency of fare increases
     - Establishing procedures for fare increases
     - Developing a multi-year plan for Caltrain fares
   - Timing: Fall 2018
Phase 2 Recommended Next Steps

2. Parking Pricing Study
   - Market study of parking pricing at Caltrain stations
   - Consideration of variable, demand-based parking prices

3. Go Pass Program Study:
   - Value of Go Pass to companies, to Peninsula communities
   - Peer agencies’ deep discount programs
   - Potential changes to Go Pass program, including program structure, pricing, and requirements

• Timing: Winter/Spring 2019
Other Recommended Next Steps

• Consider near-term opportunities to improve equity performance of Caltrain’s fare system, including:
  - Mechanisms to improve equity through changes to the current fare structure and pricing
  - Participation in potential regional means-based fare program
• Consider introducing an off-peak discount in the future, but only after off-peak train service is adjusted
• Coordinate with the Caltrain Business Plan regarding longer-term fare policy issues:
  - Fare structure (zone-based vs. point-to-point)
  - Integration with regional and statewide ticketing innovations
  - Technological improvements to fares
MTC’s Regional Means-Based Fare Program
MTC Means-Based Fare Study

• MTC study for region commenced in 2015
  - Caltrain staff continues to participate in regional conversations with MTC and transit operators

• Study goals:
  - Make transit more affordable for low-income residents
  - Move toward a more consistent regional standard for fare discounts
  - Develop implementation options that are financially viable and administratively feasible
MTC/Operators’ Current Proposed Program Framework

- Potential program is being developed, involving both MTC and transit operator staff
- Proposed as pilot program initially
- Agencies considering participation, pending Board adoption:
  - Bay Area Rapid Transit (BART)
  - Caltrain
  - Golden Gate Transit (Buses and Ferry)
  - San Francisco Municipal Transportation Agency (SFMTA)
MTC/Operators’ Current Proposed Program Framework, continued

• Fare Discount: 20% per trip discount offered to eligible persons

• Eligibility: Adults earning less than 200% Federal Poverty Level (FPL)
  - No cap on participation proposed; all eligible could participate in program

• Implementation: Centrally administered on behalf of all participating operators; participants would use a special Clipper Card
MTC/Operators’ Current Proposed Program Framework, continued

• Program Funding: SB 1 + LCTOP funds from MTC, estimated at $11 million per year
  - Funds from MTC would be used for administrative costs first, estimated at $3 million annually
  - Remaining funds from MTC would defray operators’ revenue losses, estimated at a total of $8 million annually to be distributed among operators
MTC/Operators’ Current Proposed Program Framework, continued

• Operators’ revenue losses depend on:
  - The level of discount offered
  - The number of participating riders
  - The number of participating transit agencies

• Revenue reimbursement formula for operators in development currently
  - Likely will refund up to 50% of operators’ revenue losses
MTC/Operators’ Current Proposed Program Framework, continued

- Proposed timeline for implementation:
  
  **2018:**
  - MTC adopts program framework
  - **Transit agency boards consider means-based fare discount program participation**: Recognizes that Board actions occur in multiple steps and that final program participation is subject to Title VI analysis
  
  **2019:**
  - Program design and development
  - **Transit agency boards approve program participation and adopt new fare change for program**
  - FY20: pilot program start-up
Considerations for Caltrain

- Weigh trade-offs: equity gains vs. potential revenue losses
- Regional effort/coordination makes Caltrain’s participation in program an actual option (Caltrain could not undertake this on its own)
- Equity benefits could be substantial for Caltrain:
  - Could provide a meaningful discount for Caltrain’s low income riders
  - Could also help attract new riders and increase low income ridership on Caltrain
  - Could help address current equity issues with Caltrain’s fare system
Considerations for Caltrain

- At the same time, need to consider Caltrain’s potential revenue losses, in light of recent fiscal issues
- Current estimated annual revenue loss for Caltrain from program with 20% discount:
  - With 100% participation: $1,750,000
  - With 50% participation: $875,000
  - With 25% participation: $437,000

Note: no participation cap is being considered; instead mechanism to limit revenue losses is the level of discount offered through the program. Pilot program would be implemented in FY20.
MTC’s Programming & Allocations Committee (PAC)

• April 2018 Programming/Allocation Meeting:
  - MTC/Operators’ Proposed Framework was presented to MTC Committee
  - Strong support for program conceptually
  - Commissioners requested MTC staff return to PAC in May 2018 with additional program options, including:
    - Considering which agencies participate
    - Level of discount offered
Caltrain Staff Recommendation

• MTC PAC in May, indicate support for program; an interest in participating; and support for continuing to develop and refine regional program framework
• Continue participating in program development with MTC and other operators
• Continue analysis of potential trade-offs for Caltrain regarding choice to participate or not participate
• Return to Board with additional information when program is further along in development and for consideration of adoption of fare program
• If appropriate, Board adoption of fare change to facilitate Caltrain’s participation in program (likely spring 2019)
Questions?
AGENDA ITEM #9  
MAY 3, 2018

PENINSULA CORRIDOR JOINT POWERS BOARD  
STAFF REPORT

TO: Joint Powers Board

FROM: Jim Harnett  
Executive Director  
Michelle Bouchard    Derek Hansel  
Chief Operating Officer, Rail    Chief Financial Officer

SUBJECT: FISCAL YEAR (FY) 2019 PRELIMINARY OPERATING BUDGET AND THE  
FY19 PRELIMINARY CAPITAL BUDGET

ACTION  
This report is submitted for informational purposes only. A presentation will be made  
during the Board meeting on May 3, 2018. No Board action is requested at this time.  
At the June 7, 2018 meeting, the Peninsula Corridor Joint Powers Board (JPB) staff will  
present a final FY19 budget proposal for Board consideration and adoption.

SIGNIFICANCE  
In the development of the Fiscal Year 2019 Preliminary Budget, staff attempted to  
address a number of issues that challenge the ability to achieve structural balance.  
These include increasing costs for “baseline” service, costs associated with legal  
mandates (including Positive Train Control), risks associated with certain  
uncontrollable expenses (including fuel), and Caltrain’s lack of a dedicated non-fare  
revenue stream. These challenges are exacerbated by member funding which has  
not been able to keep up with the demands of the system, and by a system  
operating at capacity during peak hour periods, which materially limits Caltrain’s  
flexibility to address its challenges through service modification.

The Preliminary Operating Budget, outlined in the attached document, makes a  
number of hard choices. Service levels in the Preliminary Operating Budget remain  
unchanged from the current service levels. On the revenue side, we have 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 - this will increase substantially in FY20. Position additions in the Preliminary  
budget total 2.4 FTEs - this additional cost is 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 the FY18  
forecast, and 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 members, this would leave a projected budget deficit of $6.6 million. As discussed during the special meeting held on April 4, 2018, staff recommends that the JPB member agencies agree to invest an additional $5.0 million in aggregate for FY18 operations. If all members agree and are able to provide such funding, that would leave a remaining projected deficit of $1.6 million. Staff will be proposing for consideration at the Board’s June 2018 meeting the establishment of a “Revenue Stabilization Fund,” which staff proposes to utilize to fund the remaining piece of the deficit.

On the capital budget, we are proposing that member 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 us to do a certain level of 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 our capital budget would fall well short of desired levels in these critical areas. If capital funding for members were continued at the FY18 levels, it would not be possible to do this work, which we believe could impact system-wide performance levels.

As was mentioned at the special session in April, this is an exciting time for Caltrain, and we have many positive things on which we are working and to which we look forward to. This Preliminary budget is an important step along the way towards that future, and we look forward to a robust discussion of the budget and how Caltrain will continue to serve as a critical mobility asset for the Peninsula and the broader San Francisco Bay region.

**Developing a Path to Fiscal Stability**
Without a dedicated source of non-fare revenue, the PCJ PB has, since its inception, been dependent upon its member agencies to bridge the gap between revenues from the farebox and operating expenses. This has become particularly challenging as the financial pressures that affect Caltrain’s operations also affect our member agencies - making it more difficult for them to meet their investment commitments to Caltrain when they have their own financial pressures. At the same time, fiscal stability is critically important for the agency – it ensures that we have the financial capacity to meet the needs of our riding public, the organizational strength to ensure our delivery of key capital projects and meet our operating objectives, and the fiscal health to demonstrate to our financial partners our ability to meet our obligations in a timely manner.

**Covering Operating Expenses from Recurring Revenue**
A first step to fiscal stability is demonstrating our ability to meet our operating expenses from recurring revenue; that is, to be able to pay our bills without dipping into operating reserves. Predictable repeatable operating investments from the JPB members is a part of this. Fare revenues and other non-fare revenues may be another important component. Ultimately, it may be necessary for the JPB to have a predictable and sizeable non-fare, non-member source of funding in order for it to fully address the mobility challenges with which it is charged. The Caltrain Business Plan will consider and recommend such revenue sources.

A seemingly easy fallback for an operation such as Caltrain (with its high farebox recovery and low price elasticity of demand) is to increase fares to cover increased costs of operations. Preliminary results from the continuing fare study seem to indicate that the vast majority of Caltrain customers would continue using our service at even sharply increased fares – such that fare increases would lead to increases in overall revenue, with modest impacts on ridership. This raises other issues, including issues of equity (what about the impact on our lower income and most transit-dependent ridership?) and the promotion of transit as an alternative to the automobile. As Caltrain’s fares increase, there is an increased need to consider income-based discounts for our lowest income ridership. It will also be necessary to face the reality that those higher fares may drive some “choice” customers back on to the region’s roadways.

Development of Non-fare Revenue

As one of the tools in stabilizing Caltrain’s financial situation, continued development of non-fare revenue and monetization of Caltrain’s assets will play an increasingly important part. Staff will work to continue our success in increasing advertising revenues, will initiate discussions revolving around naming rights for core assets that may have value, and will continue our efforts to create development opportunities for non-essential real estate assets. While these areas may ultimately produce significant revenue to support Caltrain operations, none of them is likely to be a difference-maker in the short-term.

Balancing Service/Organizational Needs and Fiscal Prudence

While the financial pressures faced by Caltrain are substantial, there is also a large amount of pressure from Caltrain customers and JPB members to maintain high service levels, deliver new capabilities, and increase our organizational capacity in anticipation of the significant changes associated with PTC and electrification. Caltrain staff will have to continue to focus on delivering our services in the most cost-effective manner possible. Likewise, the JPB Board and its members will need to consider how to balance the need to operate within a level of fiscal restraint with the service and organizational requirements which must be addressed.

BUDGET IMPACT - CALTRAIN’S OPERATING BUDGET

The FY19 Preliminary 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 FY18. Additionally, we have worked with staff of the JPB’s members to lay the groundwork for additional operating investments that could significantly lower the projected operating deficit.
A comparative schedule of the FY19 Preliminary Operating Budget shows the FY2017 actual, FY18 Revised Budget, FY18 Forecast and the FY19 Preliminary 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 PCJ PB.

**Fiscal Year 2019 Revenue Projections**

Total revenues for FY19 are projected to be $145.3 million, an increase of $9.2 million or 6.7% 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 82.2% of total revenue.

Revenue from Contributions for FY19 is projected at $25.9 million, a decrease of $0.6 million or 2.2% lower 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 14.0% of total farebox revenue in FY19.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</th>
<th>Change from FY2019 Preliminary Budget to FY2018</th>
<th>% of Change from FY2019 Preliminary Budget to FY2018</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>92,756,441</td>
<td>7,838,602</td>
<td>9.2%</td>
</tr>
<tr>
<td>GoPass</td>
<td>14,283,856</td>
<td>13,509,669</td>
<td>13,509,669</td>
<td>15,038,888</td>
<td>1,529,219</td>
<td>11.3%</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 preliminary budget reflects the approved fare increases for FY19.
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.

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.
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.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 Actual</th>
<th>FY2018 Revised</th>
<th>FY2018 Forecast</th>
<th>FY2019 Preliminary Budget</th>
<th>% of Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental Income - Stations</td>
<td>1,797,524</td>
<td>1,600,000</td>
<td>1,600,000</td>
<td>1,800,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Rental Income - Bike Lockers</td>
<td>22,801</td>
<td>60,200</td>
<td>60,200</td>
<td>11,000</td>
<td>(49,200)</td>
</tr>
<tr>
<td>Rental Income - Sales Commissions</td>
<td>40,595</td>
<td>80,000</td>
<td>80,000</td>
<td>62,000</td>
<td>(18,000)</td>
</tr>
<tr>
<td>Rental Revenue</td>
<td>1,860,920</td>
<td>1,740,200</td>
<td>1,740,200</td>
<td>1,873,000</td>
<td>132,800</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Misc. Operating Revenue</td>
<td>175,533</td>
<td>260,000</td>
<td>267,151</td>
<td>260,000</td>
<td>(7,151)</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Charter &amp; Special Movement</td>
<td>20,000</td>
<td>15,000</td>
<td>-</td>
<td>(15,000)</td>
<td>-100.0%</td>
<td></td>
</tr>
<tr>
<td>Shared Track Maintenance Revenue</td>
<td>2,170,651</td>
<td>350,000</td>
<td>317,759</td>
<td>350,000</td>
<td>32,241</td>
<td>10.1%</td>
</tr>
<tr>
<td>Other Non-Transit Revenues</td>
<td>334,594</td>
<td>162,000</td>
<td>247,217</td>
<td>162,000</td>
<td>(85,217)</td>
<td>-34.5%</td>
</tr>
<tr>
<td>Insurance Reimbursements</td>
<td>43,179</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Advertising Income</td>
<td>370,203</td>
<td>98,345</td>
<td>533,913</td>
<td>400,000</td>
<td>(133,913)</td>
<td>-25.1%</td>
</tr>
<tr>
<td>Other Interest Income</td>
<td>24,625</td>
<td>123,000</td>
<td>16,880</td>
<td>20,000</td>
<td>3,120</td>
<td>18.5%</td>
</tr>
<tr>
<td>Other Income</td>
<td>3,138,785</td>
<td>993,345</td>
<td>1,397,920</td>
<td>1,192,000</td>
<td>(205,920)</td>
<td>-14.7%</td>
</tr>
</tbody>
</table>

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.

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<tr>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AB434 - 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>AB434 &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>

Line 11 JPB Member Agencies
JPB has three member agencies: the San Francisco Municipal Transportation Agency, the San Mateo County Transit District and the Santa Clara Valley Transportation Authority. Funds from agency members are calculated based on an allocation methodology of average weekday boarding data including Gilroy, adjusted with
passenger data collected in FY2015.

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 Preliminary Budget.

**Fiscal Year 2019 Expense Projections**

Grand Total Expense for FY19 is projected at $151.9 million, an increase of $11.6 million or 8.3% over the FY18 Forecast.

Operating Expense for FY19 is projected at $124.2 million, an increase of $7.5 million or 6.4% 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 SOGR. TASI is paid on cost plus a Performance Fee contract structure.

<table>
<thead>
<tr>
<th>Description</th>
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<th>Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
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</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 Preliminary 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.

<table>
<thead>
<tr>
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<th>FY2017 ACTUAL</th>
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</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>
</tbody>
</table>

**Line 21 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.

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<tr>
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</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

**Line 22 Shuttle Service**
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 preliminary budget includes additional service to the Pacific Shores route.

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<tr>
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<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</th>
<th>Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<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>

Starting in FY19, Commute.org is taking over the administration for a handful of JPB contracted routes. Caltrain will provide administrative support, the bulk of which will be paid for with funds from the San
Line 23 **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.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Lubricants</td>
<td>8,600,952</td>
<td>10,599,289</td>
<td>9,911,789</td>
<td>10,765,356</td>
<td>853,567</td>
<td>8.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>FY18 Revised Budget</th>
<th>FY19 Preliminary Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price / Gallon</td>
<td>$2.00</td>
<td>$2.10</td>
</tr>
<tr>
<td>Projected Fuel Consumption - No. of Gallons</td>
<td>4,425,927</td>
<td>4,238,525</td>
</tr>
<tr>
<td>Projected Fuel Cost</td>
<td>$8,851,854.00</td>
<td>$8,900,902.00</td>
</tr>
<tr>
<td>Taxes</td>
<td>$1,747,435.00</td>
<td>$1,864,455.00</td>
</tr>
<tr>
<td>Total Projected Fuel Cost including taxes</td>
<td>$10,599,289.00</td>
<td>$10,765,356.00</td>
</tr>
<tr>
<td>Price/Gallon without taxes</td>
<td>$2.00</td>
<td>$2.10</td>
</tr>
<tr>
<td>Price/Gallon with taxes</td>
<td>$2.39</td>
<td>$2.54</td>
</tr>
</tbody>
</table>

Line 24 **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.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</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>-</td>
</tr>
<tr>
<td>Timetables and Tickets</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>

Line 25 **Insurance**
The JPB maintains Liability and Property insurance. Insurance costs are projected at $6.1 million for FY19, an increase of 11.1% 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. This preliminary budget will be updated with the final insurance premiums for FY19 and will be presented at the June 2018 Board meeting.
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.

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.

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.
**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 SamTrans as the managing agency for the three business units, 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 preliminary 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</th>
<th>FY2018 FORECAST</th>
<th>Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 Preliminary 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>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 SamTrans 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.
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 SamTrans 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”.

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 benefits each of the 3 agencies managed by SamTrans. Examples include the time charged by the Payroll Department to process the biweekly payroll or the cost to post recruitments 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). SamTrans 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.
Line 34 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.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</th>
<th>Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 Preliminary 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>
</tbody>
</table>

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.

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.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</th>
<th>Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Services</td>
<td>1,447,552</td>
<td>1,575,000</td>
<td>1,575,000</td>
<td>1,575,000</td>
<td>-</td>
<td>0.0%</td>
</tr>
<tr>
<td>Annual Audit Services</td>
<td>66,500</td>
<td>67,180</td>
<td>67,180</td>
<td>69,140</td>
<td>1,960</td>
<td>2.9%</td>
</tr>
<tr>
<td>Legislative Advocate</td>
<td>217,276</td>
<td>195,041</td>
<td>195,041</td>
<td>202,238</td>
<td>7,197</td>
<td>3.7%</td>
</tr>
<tr>
<td>Consultants - offsite</td>
<td>888,940</td>
<td>849,233</td>
<td>1,405,461</td>
<td>708,853</td>
<td>(696,608)</td>
<td>-49.6%</td>
</tr>
<tr>
<td>Consultants - onsite</td>
<td>1,625,747</td>
<td>2,567,555</td>
<td>1,557,318</td>
<td>2,569,769</td>
<td>1,012,451</td>
<td>65.0%</td>
</tr>
<tr>
<td><strong>Professional Services</strong></td>
<td><strong>4,246,015</strong></td>
<td><strong>5,254,009</strong></td>
<td><strong>4,800,000</strong></td>
<td><strong>5,125,000</strong></td>
<td><strong>325,000</strong></td>
<td><strong>6.8%</strong></td>
</tr>
</tbody>
</table>

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 PRELIMINARY</th>
<th>Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 Preliminary 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.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 ACTUAL</th>
<th>FY2018 REVISED</th>
<th>FY2018 FORECAST</th>
<th>FY2019 PRELIMINARY</th>
<th>Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Office Expense and Services</td>
<td>2,480,567</td>
<td>2,995,915</td>
<td>2,810,476</td>
<td>3,497,239</td>
<td>686,763</td>
<td>24.4%</td>
</tr>
</tbody>
</table>
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.

### 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.

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2017 Actual</th>
<th>FY2018 Revised Budget</th>
<th>FY2018 Forecast</th>
<th>Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
<th>% of Change from FY2019 Preliminary Budget to FY2018 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Debt Expense</td>
<td>1,301,972</td>
<td>1,298,675</td>
<td>1,298,675</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

### BUDGET IMPACT - CALTRAIN’S CAPITAL BUDGET

The Preliminary 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 Preliminary Capital Budget.
Details include the requested Board Authority and the corresponding Preliminary funding plan for each project.

Please refer to Attachment C – FY19 Preliminary Capital Budget Summary
This table shows the FY19 unconstrained capital budget.

**PRELIMINARY 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: $5,000,000
      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: $4,500,000
      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. PRELIMINARY 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 PRELIMINARY - 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
9. F40 In-Frame Overhaul PRELIMINARY - Request: $1,267,150
   Overhaul for Locomotives.

10. F40 Locomotive SOGR PRELIMINARY - 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 - $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. **PRELIMINARY 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.

28. **Security Network Voice Over Internet Protocol (VOIP) - Request: $38,462**
   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.

4. 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 Development & 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 an updated strategic plan of Caltrain to align with the Caltrain Business Plan.
## Statement of Revenue and Expense

### Preliminary Budget FY2019

<table>
<thead>
<tr>
<th></th>
<th>FY2017 Actual</th>
<th>FY2018 Revised Budget</th>
<th>FY2018 Forecast</th>
<th>FY19 Preliminary Forecast</th>
<th>Variance</th>
<th>% Inc (Dec)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OPERATIONS:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Farebox Revenue</td>
<td>92,428,889</td>
<td>98,427,507</td>
<td>98,427,507</td>
<td>107,795,329</td>
<td>9,367,822</td>
<td>9.5%</td>
</tr>
<tr>
<td>2 Parking Revenue</td>
<td>5,827,151</td>
<td>6,871,603</td>
<td>5,590,484</td>
<td>5,845,900</td>
<td>255,416</td>
<td>4.6%</td>
</tr>
<tr>
<td>3 Shuttle</td>
<td>2,083,528</td>
<td>2,461,000</td>
<td>2,461,000</td>
<td>2,683,400</td>
<td>222,400</td>
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<tr>
<td>4 Rental Income</td>
<td>1,860,920</td>
<td>1,740,200</td>
<td>1,740,200</td>
<td>1,873,000</td>
<td>132,800</td>
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<tr>
<td>5 Other Income</td>
<td>3,138,785</td>
<td>993,345</td>
<td>1,397,920</td>
<td>1,192,000</td>
<td>(205,920)</td>
<td>-14.7%</td>
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<td><strong>TOTAL OPERATING REVENUE</strong></td>
<td><strong>105,339,273</strong></td>
<td><strong>110,493,655</strong></td>
<td><strong>109,617,111</strong></td>
<td><strong>119,389,629</strong></td>
<td><strong>9,772,518</strong></td>
<td><strong>8.9%</strong></td>
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| **CONTRIBUTIONS:** |               |                       |                |                           |          |             |
| 9 AB434 & TA Shuttle Funding | 1,833,559 | 1,796,300             | 1,796,300      | 1,767,700                 | (28,600) | -1.6%       |
| 10 Operating Grants | 4,319,452 | 4,265,650             | 4,265,650      | 3,700,607                 | (565,043)| -13.2%      |
| 11 JPB Member Agencies | 20,448,014 | 20,448,014 | 20,448,014 | 20,448,014 | 0 | 0.0% |
| **TOTAL CONTRIBUTED REVENUE** | **26,601,025** | **26,509,964** | **26,509,964** | **25,916,321** | **(593,643)** | **-2.2%** |
| **GRAND TOTAL REVENUE** | **131,940,298** | **137,003,619** | **136,127,075** | **145,305,950** | **9,178,875** | **6.7%** |

| **EXPENSE**      |               |                       |                |                           |          |             |
| **OPERATING EXPENSE:** |               |                       |                |                           |          |             |
| 19 Rail Operator Service | 80,378,952 | 84,418,672             | 83,378,587     | 87,385,577                | 4,006,990| 4.8%        |
| 20 Positive Train Control | 276,691 | 900,000                | 900,000        | 1,442,000                 | 542,000  | 60.2%       |
| 21 Security Services | 5,434,038 | 5,882,760             | 5,865,760      | 6,172,151                 | 306,391  | 5.2%        |
| 22 Shuttle Service | 4,584,884 | 5,161,000             | 4,760,700      | 5,444,500                 | 683,800  | 14.4%       |
| 23 Fuel and Lubricants | 8,600,952 | 10,599,289            | 9,911,789      | 10,765,356                | 853,567  | 8.6%        |
| 24 Timetables and Tickets | 124,991 | 144,700                | 144,700        | 143,500                   | (1,200)  | -0.8%       |
| 25 Insurance | 7,105,001 | 6,108,156             | 5,500,000      | 6,108,156                 | 608,156  | 11.1%       |
| 26 Facilities and Equipment Maint | 2,503,026 | 2,975,921            | 2,800,227      | 3,158,276                 | 358,049  | 12.8%       |
| 27 Utilities | 2,033,313 | 211,500               | 202,045        | 2,065,720                 | 80,264   | 4.0%        |
| 28 Maintenance & Services-Bldg & Other | 1,172,622 | 1,509,598           | 1,490,658      | 1,529,098                 | 38,440   | 2.6%        |
| **TOTAL OPERATING EXPENSE** | **112,216,470** | **119,664,879** | **116,737,878** | **124,214,334** | **7,476,457** | **6.4%** |

| **ADMINISTRATIVE EXPENSE** |               |                       |                |                           |          |             |
| 32 Wages and Benefits | 7,807,444 | 10,003,789             | 8,500,000      | 11,507,399                | 3,007,399| 35.4%       |
| 33 Managing Agency Admin OH Cost | 5,752,429 | 6,051,231            | 5,899,231      | 5,899,231                 | 0        | 0.0%        |
| 34 Board of Directors | 10,819 | 14,600                | 14,600         | 14,600                    | 0        | 0.0%        |
| 35 Professional Services | 4,246,015 | 5,254,009           | 4,800,557      | 5,125,000                 | 324,443  | 6.8%        |
| 36 Communications and Marketing | 165,926 | 211,500              | 202,045        | 316,500                   | 114,455  | 56.6%       |
| 37 Other Office Expense and Services | 2,480,567 | 2,995,915         | 2,810,476      | 3,497,239                 | 686,763  | 24.4%       |
| **TOTAL ADMINISTRATIVE EXPENSE** | **20,463,200** | **24,531,044** | **22,226,909** | **26,359,968** | **4,133,059** | **18.6%** |

| **LONG-TERM DEBT EXPENSE** |               |                       |                |                           |          |             |
| 40 Long-term Debt Expense | 1,301,972 | 1,298,675            | 1,298,675      | 1,298,675                 | 0        | 0.0%        |
| **GRAND TOTAL EXPENSE** | **133,981,642** | **145,494,598** | **140,263,463** | **151,872,977** | **11,609,516** | **8.3%** |

| **PROJECTED SURPLUS/(DEFICIT)** |                |                       |                |                           |          |             |
| (2,041,344) | (8,490,979) | (4,136,388) | (6,567,027) |

Unrestricted funds Beginning Balance 29,335,789
Projected surplus/(use) of reserves (8,490,979) (4,136,388) (6,567,027)
Unrestricted funds Ending Balance 29,335,789 20,844,810 25,199,401 18,632,375
## I. SOGR

### Right of Way

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<tr>
<th>Item</th>
<th>Project Title / Description</th>
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<th>Proposed Budget</th>
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<th>State</th>
<th>STA SOGR</th>
<th>Members *</th>
<th>Other</th>
<th>Total</th>
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<tr>
<td>1</td>
<td>Guadalupe River Bridge Replacement</td>
<td>x 5,000,000</td>
<td>4,000,000</td>
<td>1,000,000</td>
<td>-</td>
<td>5,000,000</td>
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<tr>
<td>2</td>
<td>Marin St. &amp; Napoleon Avenue Bridges Rehabilitation</td>
<td>x 540,000</td>
<td>432,000</td>
<td>108,000</td>
<td>-</td>
<td>540,000</td>
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<td>System Wide Track Rehab - SOGR 2019</td>
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<td>4,400,000</td>
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<td>893,163</td>
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<tr>
<td>4</td>
<td>Tunnel 1 &amp; 4 Track and drainage Rehabilitation</td>
<td>x 4,500,000</td>
<td>3,600,000</td>
<td>547,887</td>
<td>352,113</td>
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### Signal & Communications

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### Rolling Stock

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<th>Members *</th>
<th>Other</th>
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<td>7</td>
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<td>3,319,948</td>
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<td>267,803</td>
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<td>3,319,948</td>
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<td>8</td>
<td>Bombardier Car SOGR</td>
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<td>F40 In-Frame Overhaul FY19</td>
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<td>Gallery Car Mid-Life Overhaul</td>
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### Station & Intermodal Access

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<td>San Francisco Restroom Renovation</td>
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### II. LEGAL MANDATES AND REQUIRED ENHANCEMENTS

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<th>Members *</th>
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### Total

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<th>State</th>
<th>STA SOGR</th>
<th>Members *</th>
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<tr>
<td></td>
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<td>17,034,655</td>
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<td>36,006,655</td>
<td>13,277,600</td>
<td>2,821,590</td>
<td>1,245,276</td>
<td>15,872,189</td>
<td>2,790,000</td>
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### iii. OPERATIONAL IMPROVEMENTS/ENHANCEMENTS

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<th>State</th>
<th>STA SOGR</th>
<th>Members *</th>
<th>Other</th>
<th>Total</th>
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<tbody>
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<td>25</td>
<td>Clipper CID installation and Relocation plan and construction</td>
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<td><strong>GRAND TOTAL</strong></td>
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<td><strong>1,984,390</strong></td>
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<td><strong>2,049,769</strong></td>
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### iv. PLANNING/STUDIES

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<th>State</th>
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<th>Members *</th>
<th>Other</th>
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<tr>
<td>32</td>
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<td><strong>3,365,000</strong></td>
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*This preliminary budget assumes $22.5 million or $7.5 million from each JPB partner, recognizing that full commitment has not yet been obtained. In the event that the funding commitments are not met, the staff will adjust the project requests.

**Notes**

1. Reserves designated for capital
2. FTA- project specific
## FY19 PRELIMINARY CAPITAL BUDGET

### Attachment C

#### i. SOGR

<table>
<thead>
<tr>
<th>Item #</th>
<th>Project Title / Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Guadalupe River Bridge Replacement</td>
<td>5,000,000</td>
<td>5,000,000</td>
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<tr>
<td>2</td>
<td>Marin St. &amp; Napoleon Avenue Bridges Rehabilitation</td>
<td>3,070,000</td>
<td>540,000</td>
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<td>3</td>
<td>System Wide Track Rehab- SOGR 2019</td>
<td>5,500,000</td>
<td>5,500,000</td>
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<tr>
<td>4</td>
<td>Tunnel 1 &amp; 4 Track and drainage Rehabilitation</td>
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<td><strong>Total</strong></td>
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#### ii. Signal & Communications

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#### iii. Rolling Stock

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<td>Bombardier Car Mid-Life Overhaul</td>
<td>8,418,000</td>
<td>3,319,948</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>
<td>2,534,301</td>
<td>1,267,150</td>
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<td>10</td>
<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>13</td>
<td>MP36 Mid-Life Overhaul</td>
<td>7,514,100</td>
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<td>14</td>
<td>MP36 SOGR</td>
<td>217,228</td>
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<td>15</td>
<td>Other MOE(Includes CEMOF, minor parts and activities)</td>
<td>1,276,220</td>
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<td>16</td>
<td>Switcher Locomotives SOGR</td>
<td>190,800</td>
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<td><strong>Total</strong></td>
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#### iv. Station & Intermodal Access

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<tr>
<td>17</td>
<td>CCF Quarters</td>
<td>300,000</td>
<td>100,000</td>
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<tr>
<td>18</td>
<td>South San Francisco Station Improvement</td>
<td>1,300,000</td>
<td>1,300,000</td>
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<tr>
<td>19</td>
<td>System Wide Station Improvements- SOGR</td>
<td>500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>20</td>
<td>Ticket Vending Machine Rehab Program</td>
<td>2,000,000</td>
<td>500,000</td>
</tr>
<tr>
<td>21</td>
<td>San Francisco Restroom Renovation</td>
<td>3,900,000</td>
<td>200,000</td>
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<tr>
<td></td>
<td><strong>Total</strong> <strong>Security CCTV Retrofit</strong></td>
<td><strong>9,300,000</strong></td>
<td><strong>2,600,000</strong></td>
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<td></td>
<td><strong>All SOGR Subtotal</strong></td>
<td><strong>65,249,528</strong></td>
<td><strong>36,006,655</strong></td>
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#### ii. LEGAL MANDATES AND REQUIRED ENHANCEMENTS

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<th>Project Title / Description</th>
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<tr>
<td>22</td>
<td>Transit Asset Management</td>
<td>600,000</td>
<td>600,000</td>
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<tr>
<td>23</td>
<td>Updated SRTP</td>
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<tr>
<td>24</td>
<td>Personal Credit Information Infrastructure</td>
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<td><strong>Total</strong></td>
<td><strong>1,445,000</strong></td>
<td><strong>1,326,831</strong></td>
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#### iii. OPERATIONAL IMPROVEMENTS/ENHANCEMENTS

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<th>Item #</th>
<th>Project Title / Description</th>
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<tr>
<td>25</td>
<td>Clipper CID installation and Relocation plan and construction</td>
<td>500,000</td>
<td>200,000</td>
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<tr>
<td>26</td>
<td>FY19 Grade crossing Improvements</td>
<td>400,000</td>
<td>400,000</td>
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<td>27</td>
<td>Right of way Fencing</td>
<td>938,800</td>
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<td>28</td>
<td>Security Network Voip</td>
<td>50,000</td>
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<td>29</td>
<td>Security Network Voip-media converter replacement</td>
<td>10,000</td>
<td>7,692</td>
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<td>30</td>
<td>Security Network Voip- ROW &amp; dist access layer switch</td>
<td>45,000</td>
<td>34,815</td>
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<td>31</td>
<td>Backup Central Control Facility Office Remodel</td>
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<tr>
<td></td>
<td>Emergency Transfer Switches at Stations</td>
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<tr>
<td></td>
<td>Millbrae Station Roof</td>
<td>100,000</td>
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<tr>
<td></td>
<td>San Francisco Crew Quarters and Tower Painting</td>
<td>100,000</td>
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</tr>
<tr>
<td></td>
<td>San Francisco Restroom Renovation</td>
<td>200,000</td>
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<tr>
<td></td>
<td>Station elevator alarm notification system</td>
<td>800,000</td>
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<tr>
<td></td>
<td>Station Enhancements and Renovations</td>
<td>300,000</td>
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<tr>
<td></td>
<td>Upgrade San Francisco Yard to LED</td>
<td>750,000</td>
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<tr>
<td></td>
<td>Visual Message Sign Replacement at Stations</td>
<td>700,000</td>
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<td><strong>Total</strong></td>
<td><strong>6,293,000</strong></td>
<td><strong>2,049,769</strong></td>
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**FY19 PRELIMINARY CAPITAL BUDGET**

### iv. PLANNING/STUDIES

<table>
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<th>Item #</th>
<th>PROJECT TITLE / Description</th>
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<td>32</td>
<td>Capital Contingency Funds - Engineering</td>
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<td>330,000</td>
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<tr>
<td>33</td>
<td>Capital Contingency Funds - Rail</td>
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<tr>
<td>34</td>
<td>Capital Program Management</td>
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<td>35</td>
<td>Capital Project Development</td>
<td>500,000</td>
<td>500,000</td>
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<tr>
<td>36</td>
<td>Grade Crossing Policy Development &amp; Program Management</td>
<td>500,000</td>
<td>350,000</td>
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<td>37</td>
<td>Historic Station Evaluation Study</td>
<td>300,000</td>
<td>100,000</td>
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<tr>
<td>38</td>
<td>Rail Corridor Use Policy</td>
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<tr>
<td>39</td>
<td>Regional Rail/ Mega Regional Rail Planning</td>
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<td>75,000</td>
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<tr>
<td>40</td>
<td>SF Station Building Corrosion Study &amp; Rehab</td>
<td>350,000</td>
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<tr>
<td>41</td>
<td>Station management Toolbox</td>
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<td>42</td>
<td>Updated Strategic Plan</td>
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<td></td>
<td>Caltrain Engineering Standards Update</td>
<td>750,000</td>
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<td></td>
<td>CCTV System Assessment Study</td>
<td>300,000</td>
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<tr>
<td></td>
<td>Fare Study Phase II</td>
<td>350,000</td>
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<td>GIS Support Platform</td>
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<td></td>
<td>Menlo Park Parking Grading Plan</td>
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<td></td>
<td>Rail Simulation and Planning Software</td>
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<td></td>
<td>Study to identify PCIPB sites needing Back-Up Power</td>
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<tr>
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<td>Transit Oriented Dev (TOD) Work Program</td>
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<td><strong>6,390,000</strong></td>
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**Grand Total Project Cost**

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### FUNDING

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<td>FEDERAL TRANSIT ADMINISTRATION</td>
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<tr>
<td>STA</td>
<td>2,821,590</td>
<td>2,821,590</td>
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<tr>
<td>STA SOGR</td>
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<tr>
<td>MEMBER AGENCIES</td>
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<td>OTHERS</td>
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<td>2,903,789</td>
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<td>TOTAL</td>
<td><strong>42,748,255</strong></td>
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**DEFICIT**

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PENINSULA CORRIDOR JOINT POWERS BOARD
STAFF REPORT

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

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 draft Business Plan for review and comment. Caltrain is also beginning its Business Planning process. This update will offer the Board an overview of the Authority’s draft 2018 Business Plan and update the Board on the joint planning efforts.

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